



RESEARCH REPORT

**THE FUTURE OF WORK AND NEW MODELS FOR SKILLS DEVELOPMENT IN
BANKING SECTOR**

Compiled by



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CHAPTER 1: BACKGROUND OF THE STUDY AND RESEARCH OBJECTIVES.

1.0 INTRODUCTION

The alliance between employment and technology has been evolving over the years, reaching new heights at every stage. This then renders challenges to the youth because the convergence of these two phenomena has threatened youth employment opportunities. Technology through Artificial Intelligence and automation is much appreciated and readily accepted by employers while job seekers always feel that their employment base is being threatened.

1.1. BACKGROUND TO THE STUDY

According to Glick, P; Huang, C & Mejia, N. (2016), youth are three times more likely than adults to be unemployed; worldwide, and almost 73 million youth are looking for work. In the wake of the financial crisis at the end of the last decade, the share of youth neither participating in the labour force nor enrolled in school has been increasing. According to the World Bank (2015), one third of the world's 1.8 billion young people are not in employment, education, or training (NEET), and only 40% of youth who enter the job market within the next decade will be able to get jobs that currently exist.

According to the Global changes Insight Report (2016), disruptive changes to business models will have a profound impact on the employment landscape over the next coming years. This, therefore, means that any future work models must deal with the need to adapt to technological advancements imposed by the unavoidable forces of change. Thus, affecting youth in their job searches and sustainability.

Henni (2021), averred that the financial industry has always been immune to innovations. However, the accelerated pace of digital transformation and the rise of tech-savviness among consumers require banking to evolve exponentially. However, in their theoretical model, the classical mechanism, Barbieri, Mussida, Piva & Vivarelli (2019) posited that if robots are adopted widely, they might replace workers in some or all their tasks. But according to the Global Changes Insight Report (2016) to prevent a worst-case scenario, technological change that is accompanied by talent shortages, mass unemployment and growing inequality, reskilling and upskilling of today's and future workers will be critical.

1.2 RESEARCH PURPOSE

To determine the impact of robots, automation, and artificial intelligence as they perform more tasks and create massive disruption of jobs. This study has been necessitated by the fact that job opportunities are being threatened by technology leaving our future youths jobless.

1.3 PROJECT OBJECTIVES

- To determine the extent to which the wider array of education and skills-building programs will be created to meet new demands.
- To determine how best we can prepare our youths for all these challenges.
- To determine how professional coaching can be utilized to nurture and develop youth and new leadership talent for the future world of work.

1.4 RESEARCH QUESTIONS

- To what extent will the wider array of education and skills-building programs be created to meet new demands?
- How best can we prepare our youths for all these challenges?
- How can professional coaching be utilized to nurture and develop youth and new leadership talent for the future world of work?

1.5 CONCLUSION

It is clear from the research study that automation, robotics, and artificial intelligence are already in the banking sector. It's therefore important for youth to learn new skills and adapt to the changing environment for them to secure jobs. This may not only apply to youths but also to the employed older generation for them to remain relevant on the job market.

CHAPTER 2: LITERATURE REVIEW

2.0. INTRODUCTION

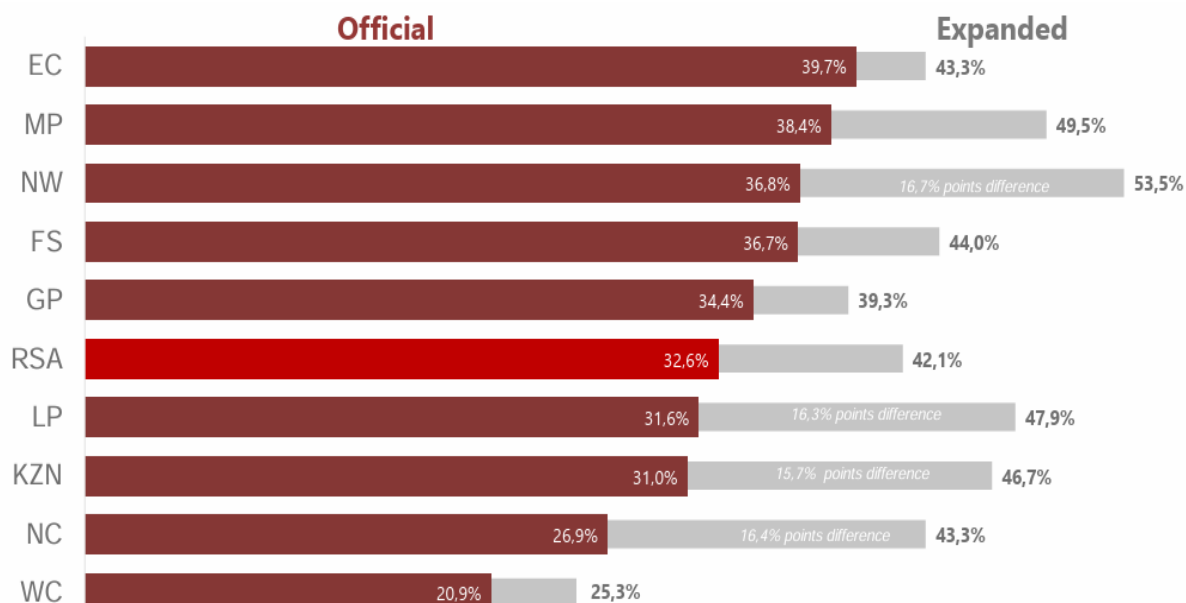
This chapter aims to give an outline of the difficulties faced by youths because of the advances in Artificial Intelligence (AI). The chapter starts by discussing youth and jobs since youths constitute a third of the world population. Apparently, the youth are the most affected by the introduction of technology in workplaces with the banking sector not spared. The next chapter discusses threats posed by technological developments. Technology can replace human labor either by directly displacing workers from the work they normally do or by increasing demand for new skills in industries. Technological factors influencing youth unemployment have also been discussed.

Also discussed is the evolution of AI from a general perspective such as the mechanization of systems and processes. Computer software has already automated some of the roles performed by white-collar workers in the banking services.

2.1. YOUTH AND JOBS

After years of exacerbated income imbalances across the globe, concerns about technology-driven loss of jobs, and heightening societal qualms, the economic shocks of 2020 have placed economies into a freefall, derailed labour markets and fully exposed the insufficiency of our social contracts. According to Gough (2016), youths constitute a third of the world population. Hence most of the sufferers are the youths. The last decade has underlined a new order in the labour market intrinsically linked to the new technological realities (Barbieri, Mussida, Mariacristina and Vivarelli, 2019). According to the Statistics South Africa (2024), the unemployment rate in the fourth quarter of 2023 had risen to 32.1 percent in South Africa. In addition, the youth (15–34 years) remain vulnerable in the labour market; the fourth quarter of 2023 results show that the total number of unemployed youths increased by 87 000 to 4,7 million while there was a decrease of 97 000 in the number of employed youth to 5,9 million. This resulted in an increase in the youth unemployment rate by 0,9 of a percentage point from 43,4% in Q3: 2023 to 44,3% in Q4: 2023.

The table below depicts the unemployment rate by province according to Statistics SA (Feb 2023).



Source: Quarterly labour force survey Q2: 2023

Even Hu, Jadoul and Reich (2021) posited that banks have reassigned talent from excess to under-staffed sections to help in saving costs and revitalise reputations. Some of these re-assignments required only short and quick training. But there has been massive re-orientation, from closed branches to customer-service operations. For example, Bank of America re-assigned more than 23,000 employees to support new business needs, including implementing the company’s Paycheque Protection Program (Hu, et al, 2021).

2.2. THREATS OF TECHNOLOGICAL DEVELOPMENT

Rapid technological advancements and innovation is threatening employment opportunities. Such a notion dates to the 1930s, when John Maynard Keynes averred his ‘technological unemployment theory’ – technological change causes loss of jobs (Keynes 1937). Keynes (1977) went further to state that technological changes can affect employment in two main ways:

- by directly displacing workers from tasks, they were previously performing (displacement effect).
- by increasing the demand for labour in industries or jobs that arise or develop due to technological progress (productivity effect).

However, Autor, Levy and Murnane (2003) postulate that technology can replace human labour in their day-to-day tasks, whether manual or cognitive, but (yet) cannot replace it in non-routine functions. But Goos and Manning (2007) argue that the impact of technology gives rise to the relative demand of well-paid skilled jobs, which typically require non-routine cognitive skills, and rising relative demand in low-paid, least-skilled jobs, which typically require non-routine manual skills.

2.3. TECHNOLOGICAL FACTORS CONTRIBUTING TO YOUTH UNEMPLOYMENT

The Economist (2015) averred that a robot anchored sewing machine could throw garment workers in low-cost countries out of employment. These manufacturers have succeeded in developing robots and materials-handling machines that can stitch pieces of fabric together, pick them up and push them to next stage. That same year, Foxconn, a firm headquartered in Taiwan (China) that manufactures iPhones and employs more than a million workers, announced its plan to have robots complete 70 per cent of its assembly-line work by 2018 (The Wall Street journal, 2015).

The huge desire to improve productivity, improve quality of goods and services, better working conditions and cost optimisation has resulted in firms incorporating workplace technology (Chang and Huynh, 2016). According to the ILO, in the nineteenth century, the Industrial Revolution brought the assembly lines to manufacturers, thereby influencing massive employment of low-skilled workers and making their tasks easier. The twentieth century brought about the computer revolution which replaced repetitive production tasks with machines. Now, the twenty-first century's, dubbed digital revolution, has ushered in a new scenario of advanced machines, further automating complex tasks, and jeopardizing skilled employees in positions once regarded difficult to automate. Acemoglu and Restrepo (2018) added that another example of automation comes from the development of the factory system in manufacturing and its subsequent evolution.

As alluded to by Acemoglu and Restrepo (2018), examples of automation are not just restricted to industry and agriculture. Computer software has already automated a few traditional tasks performed by white-collar workers in retail, wholesale, business services, and banks included.

The introduction of AI in banking applications and services has made the sector more customer centric and technologically relevant. AI is now used by banks to reduce cost and increase productivity. Intelligent algorithms are used to spot fraudulent activities and technology is redefining customer experience with exceptional benefits within the banking sector.

2.4. EVOLUTION OF AUTOMATION/ARTIFICIAL INTELLIGENCE

Using machines and computers in place of human beings continues, unabated (Acemoglu and Restrepo, 2018). Petropoulos (2017), however proposed that the industry should keep in mind that the era of AI is in its early stages and the penetration of robots in our economies and

industrial production is anticipated to significantly increase in tandem with the rapid, radical technological advancements.

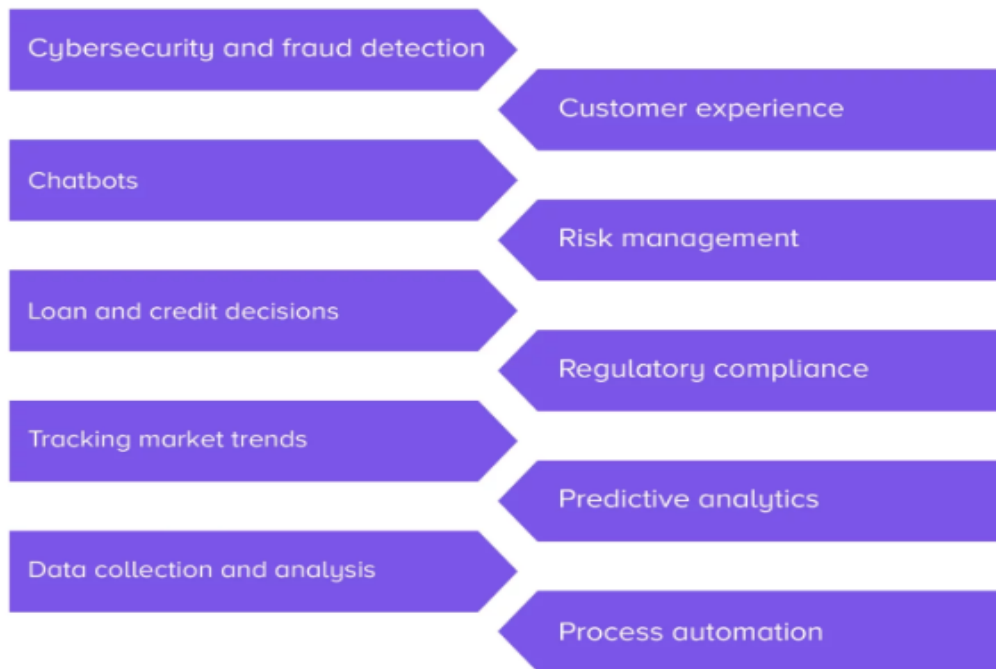
Computer software has already automated some of the roles performed by white-collar workers in the banking services. Software and AI-powered technologies can now retrieve information, coordinate logistics, handle inventories, prepare taxes, provide financial services, translate complex documents, write business reports, prepare legal briefs, and diagnose problems (Barbieri, Mussida, Piva and Vivarelli, 2019). As these examples illustrate, automation involves the substitution of machines for labour and leads to the displacement of workers from the tasks that are being automated. This displacement effect is not present—or present only incidentally—in most approaches to production functions and labour demand used in macroeconomics and labour economics (Barbieri, Mussida, Piva and Vivarelli, 2019).

Automation is not mainly about the development of more productive vintages of existing machines but involves the introduction of new machinery to perform tasks that were previously the domain of human labour. Moreover, our examples make it clear that automation does not directly augment labour; on the contrary, it transforms the production process in a way that allows more tasks to be performed by machines (Acemoglu and Restrepo, 2016).

2.5. ROLE OF ARTIFICIAL INTELLIGENCE IN THE BANKING SECTOR

According to Ada (2022), banking automation is any task that was once performed by an in-person teller, and which is now fully automated. This automation lets the teller focus on quicker, more high-profile tasks, and it provides the customer with a seamless, satisfying deposit interaction. As alluded to by Donepudi (2021), Machine Learning and Artificial Intelligence applications in the financial and banking sector have been thriving in the recent past to offer business solutions in front end and back-end processes to enhance efficiency and improve customer experience. At its most complex, banking automation can include a wide range of AI and cognitive computing technology to automate most tasks at a bank branch. Some Bank of America branches have become fully automated, with a single off-site banker available on FaceTime to respond to questions. These automation in banking examples demonstrate a few automation functions, but automation's ability to change the way your bank does business is almost limitless (Ada 2022). The diagram below depicts some of the AI uses in the banking and finance sector.

Applications of AI in banking and finance



Source (<https://www.leewayhertz.com/ai-use-cases-in-banking-and-finance>)

As posited by Mali (2018), some major applications of AI include classification, image recognition, object identification, and automated geophysical feature detection. Mali further states that banking and financial institutions, JPMorgan Chase, Wells Fargo, Bank of America, Citibank, and other leading U.S. banks have already implemented AI in their systems, helping consumers manage their daily banking needs more efficiently.

Research by Royal Bank of Canada (RBC) focused on six skill clusters that can be used to group occupations in Canada as depicted in Table 2.1 below.

Table 2.1: Skills clusters and the likelihood of disruption in their occupations.

Skills Cluster	Description	Probability of disruption
Technicians	High on Technical skills	Moderate
Crafters	Medium in technical skills, low in management skills	Very High
Doers	Emphasis on Basic skills	High

Solvers	Emphasis on management skills and critical thinking	Minimal
Facilitators	Emphasis on emotional skills	Moderate
Providers	High in analytical skills	Low

Source. RBC (2018).

The RBC study argued that as many occupations overlap in their skill requirements, it is relatively possible to complement skills within these clusters in ways that enable people to move to new jobs when their old jobs become automated (Ilkka, 2018). These clusters are shown in Table 1. This approach, thus, complements the view that there are key transversal skills and competences that are necessary for future.

2.6. DRAWBACKS OF ARTIFICIAL INTELLIGENCE IN THE BANKING SECTOR

Artificial intelligence is also expected to massively disrupt banks and traditional financial services. Some of its disadvantages are listed below. Mali (2018) highlighted some of the disadvantages of artificial intelligence outlined below.

2.6.1 Highly Expensive

Production and maintenance of artificial intelligence demand huge costs since they are very complex machines. AI also consists of advanced software programs which require regular updates to meet the needs of the changing environment. In the case of critical failures, the procedure to reinstate the system and recover lost codes may require enormous time and cost.

2.6.2 Bad Calls

Though Artificial Intelligence can learn and improve, it still can't make judgment calls. Humans can take individual circumstances and judgment calls into account when making decisions, something that AI might never be able to do. Replacing adaptive human behaviour with AI may cause irrational behaviour within ecosystems of humans and things.

2.6.3 Distribution of Power

There is a constant fear of AI superseding or taking over the humans. Artificial intelligence can give a lot of power to the few individuals who are controlling it. Hence, AI carries the risk and takes control away from humans while dehumanizing actions in several ways.

2.6.4 Unemployment

Replacement of the workforce with machines can lead to wide-reaching unemployment. Moreover, if the use of AI becomes rampant, people will be highly dependent on the machines and lose their creative power. Unemployment is a socially undesirable issue. Individuals with nothing to do can lead to the devastating use of their minds. Be it banking or any other sector; Artificial intelligence can effectively increase the unemployment rate.

Artificial Intelligence delivered to wrong hands can turn out to be a serious threat to humankind. If individuals start thinking destructively, they can generate havoc with these advanced machines.

The challenges introduced by the emergence of artificial intelligence revolve around a myriad of things. Artificial intelligence provides banks, financial institutions, and technology companies with significant competitive advantages. Nevertheless, it can completely transform the financial sector and make it faster, but this will only be possible if the financial industry can manage the security risk of systems based on AI.

2.7. HOW TO PREPARE YOUTHS FOR CHANGES BROUGHT ABOUT BY ARTIFICIAL INTELLIGENCE IN THE BANKING SECTOR: THE HUMAN CAPITAL THEORY

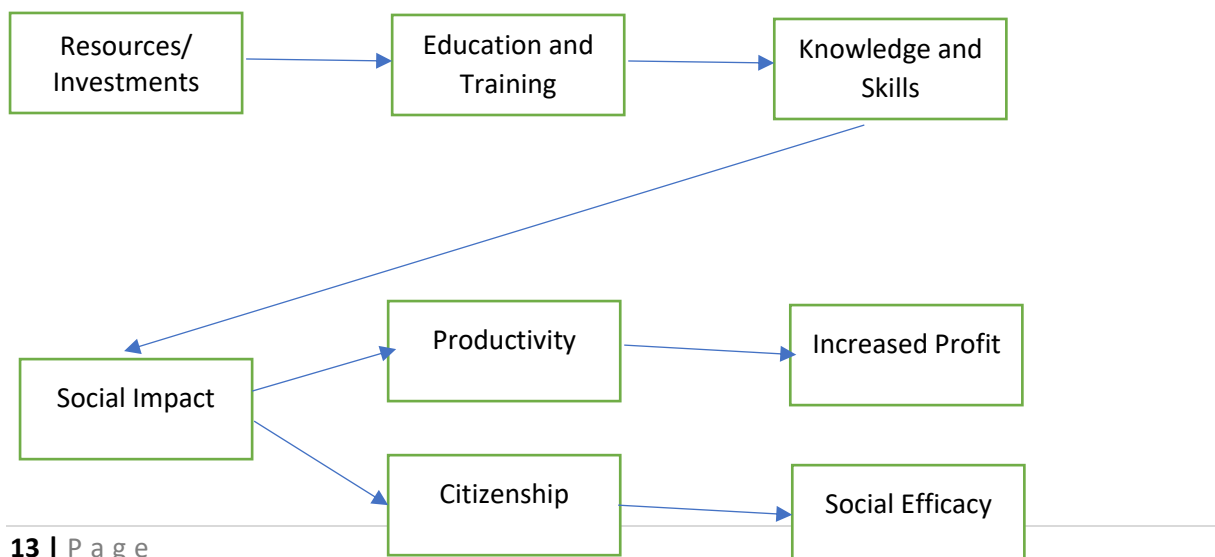
The United Nations (UN) defines youth (or young people) as people between the ages of 15-24 years old. Within the category of youth, the UN distinguishes between teenagers (15-19) and young adults (20-24) (United Nations, Department of Economic and Social Affairs and Youth, 2020). However, definitions of youth differ widely from country to country. In some countries surveyed by the OECD (2020), the upper bound is 29 or 30, although in a few countries, such as China, Mozambique, South Africa, Saudi Arabia, Singapore, United Arab Emirates or Ukraine, young age is considered to continue until the age of 34 or 35.

Access to online digital services has become so essential that several countries, including Costa Rica, Estonia, Finland, France, Greece, and Spain have formally recognised and accepted Internet access as a human right (Burns and Gottschalk, 2019). The world over, 71% of young people are online, versus 48% of the overall population (UNICEF, 2017), while one in three internet users around the world is under the age of 18 (UNICEF, 2017).

According to the African Development Bank Group (ADB) (2016), the level of the youth unemployment problem in Africa requires bold, ambitious approaches to successfully address the issue. Building on what was learnt and the Banks' strengths, the Jobs for Youth in Africa Strategy should address the full range of youth employment challenges, deploying a myriad of interventions, and partnering with likely institutions from across the continent (ADB, 2016). The institutions of higher learning should base their curriculum with industry expectations to produce relevant skills (Ditse, 2020). This is more critical now because most skills will become redundant not in the too far future. The banking sector continues to be affected by the new technological inclusion. Since the banking sector plays a very important role in the national economy as one of the major employers of the country this study has been carried out to explore how the employment of youths, precisely in the banking sector may be enhanced.

Through the Sustainable Development Goals (SDG) and the National Development Plan (NDP) the Government of South Africa has stated that it's education system should be able to provide skills that are critical for the economy and society at large, by 2030. Ditse (2019) maintains that the issue of skills gap in the banking sector in South Africa is a critical issue. Upskilling the current workforce and giving the graduates the skills that are important in the banking sector to cope with both current and future demands plays a critical role in the development of the country.

Figure 2.1. The Human Capital Theory



The theoretical framework used in this study is based on the Human capital theory shown in Figure 2.1 above. As posited by Ross (2021), Human Capital refers to educational attainment, knowledge, experience, and skills of an employee. It is the concept which recognises that labour capital is not homogenous.

2.8. CONCLUSION

Literature review of this chapter managed to identify some gaps such as the need to provide our graduates with skills in the banking sector so that they can cope with work demands. Access to technology, especially in the information technology, is the key ingredient to equipping our youths. The need to identify more gaps to find a holistic approach to solving this problem may not be overemphasized. The idea is to train youths and giving the right skills as demanded by the introduction of artificial intelligence in banks. Are the institutions of higher learning offering these skills as demanded by the banking industry? This is now the matter that needs to be investigated. As argued by some economists, the introduction of technology in the banking system does not necessarily throttle employment opportunities. For example, as alluded to by Bassein, Toil and Technology (2015), the introduction of Automated Teller Machines (ATMs) in 1990's did not lead to the decline of job opportunities in the banking sector. Of course, separate bank branches reduced the number of bank tellers per branch, but they opened more bank branches and tellers focussed on high value roles as per customer demands. Introduction of automation also creates more complex tasks that demand specialised expertise.

Automation and Robots will increasingly shape the way industry will work in the future, with enormous potential for improvements in productivity, increased national competitiveness and the improved quality, and remuneration of work. Governments and firms must work to create an environment that will enable workers, companies, and nations to reap the rewards of these improvements. This means supporting investments in research and development in robotics and, most importantly, providing education and skills re-training for existing and future workers (International Federation of Robotics, 2017).

CHAPTER 3: METHODOLOGY

3.1 RESEARCH PARADIGM

Generally, a paradigm is the whole system of thinking (Neuman, 2011). As expounded by Creswell (2007), a paradigm consists of accepted theories, approaches, traditions, frame of reference models, body of research and methodologies. A research paradigm is the way of regarding and understanding the world (Mbuyisa, 2018). According to Oates (2006), different research paradigms have different views about the nature of physical and social reality (ontology) and the nature of knowledge and how it can be acquired (epistemology). According to Shah and El-Bargi (2013), there are 2 major research paradigms known as positivism and interpretivism.

3.1.1 POSITIVIST APPROACH

Positivist approach is concerned with revealing the facts and presenting them by empirical means (Henning, Van Rensburg and Smit, 2004). Glicken (2003) postulate that positivism follows a belief based on the assumption that trends, methods, generalisations, procedures, are also applicable to social sciences. According to Morris (2005), a positivist researcher is of the view that it is possible to adopt and maintain a distant, detached, and non-interactive position. For the same reason positivists prefer to interpret an analysis of quantifiable data (Druckman, 2005). According to Perera (2018), positivists believe that there can only be a single reality that can be known and measured.

3.1.2 INTERPRETIVE RESEARCH

Reves and Hedberg (2003) noted that an interpretivist approach uses meaning versus measurement-oriented methodologies, such as interviewing or participant observation, that rely on a subjective relationship between the researcher and subjects. According to Collis and Hussey (2009), interpretivists seek understanding and interpreting everyday events, experiences, and social structures because they believe that social reality is subjective since it is shaped by participants and the aims of the researcher. The use of interpretive methods points to the use of qualitative data-gathering methods, which suggest that the data are generated mainly through interactions like conversations and interviews (Neuman, 2011).

3.1.3. Pragmatic Research approach

As suggested by Johnson and Onwuegbuzie (2004), a pragmatic approach is regarded as the philosophic partner of mixed methods research which provides a workable solution to multifaceted research problems and offers a practical orientation in relation to positivism and interpretivism. A conclusion can be drawn that quantitative methods of generating data are more applicable to the positivist paradigm, while qualitative methods are more applicable to the interpretive paradigm. Hence, this research will adopt both positivism and interpretivism paradigms since a mixed methods approach will be used. Also, the need to put analysis into context and obtain true meaning from observation and experiment has driven the researcher to adopt the pragmatic approach. Perera (2018) supported the pragmatic approach by stating that practical effects of the study must be considered through use of the best method that solves problems.

3.2. DATA TRIANGULATION

This research adopted a mixed method approach whereby both quantitative and qualitative approaches will be used. Leedy and Omron (2010) are of the view that quantitative approach is more formalised and explicitly controlled as compared to qualitative approach. Delpont and De Vos (2011) contend that the procedures, in qualitative approach, are less strict while the scope is most likely undefined. They contend that both qualitative and quantitative approaches have weaknesses and strengths. Thurmond, (2001) asserted that the benefits of the mixed method approach include enhancing confidence in research data, creating innovative ways of understanding a phenomenon, revealing unique findings, challenging, or integrating theories, and providing a clearer understanding of the problem.

Kennedy (2009) stated that although all research methods have their advantages and disadvantages, challenges often come about when researchers dwell on one research method. The concept of triangulation which is also known as mixed method comes into play by enabling researchers to combine several research methods to study the same aspect (Olsen, 2004; Kennedy, 2009). Cohen and Manion (2000) defined data triangulation as a method of explaining fully the richness and complexity of human behaviour by looking at it from more than one viewpoint. According to Modell (2009), data triangulation enables the researchers to eliminate bias in the study by integrating various theories, methods, data sources and researchers with complementary strengths and non-overlapping weaknesses. Mbuyisa (2017) posited that data triangulation cuts across quantitative and qualitative methods.

In this research the methodological data triangulation will be adopted. According to Rugg (2002), methods or methodological data triangulation involves the use of more than one method to gather data, such as interviews, observations, questionnaires, and other documents. This method enhances the results from one method to enhance, augment and clarify the results of another. The findings from interviews, questionnaires and observations will be compared to check and capitalise on any commonalities in the findings. Rugg (2002) went further to state that the core strength of methods triangulation is its potential to bring out unique differences or meaningful information that may have remained undiscovered with the use of only one data collection technique in the study.

Hurmerinta-Peltomaki and Nummela (2004) averred that, if only one research method is used, some important elements of the research problem will remain unresolved. Hence the combined method will be adopted to take advantage of the complementarities of the two methods. The use of mixed methods approach also reduces bias which may exist when one method is adopted.

The characteristics and differences between quantitative and qualitative approaches are shown in Table 3.1 below.

Table 3.1. Differences between quantitative and qualitative methods

Item	Qualitative	Quantitative
1.	The research design may adjust during the project. Often uses multiple methods simultaneously and sequentially.	The research design is determined before commencing of the study.
2.	Consistency is not expected.	Consistency is critical.
3.	Quality of relationship between researcher and respondents is crucial. Researcher is a participant.	Aims for neutral, objective relationship that does not contaminate or introduce unnecessary bias into the study. Research involvement is limited.
4.	Necessity for self-awareness and reflexivity. (need for extreme sensitivity on how and when to ask questions).	Aims for value free research.
5.	The research purpose is in-depth understanding and theory building.	The research purpose is to describe or predict, build, and test theory.

6.	Pre-tasking is common in participant preparation.	No preparation is desired to avoid biasing the participant.
7.	Human analysis following computer or human coding; primarily non-quantitative.	Computerised analysis-statistical and mathematical methods dominate.
8.	Researcher participation in data collection allows insights to form and be tested during the process.	Insights follow data collection and data entry, with limited ability to re-interview participants.

Adopted from Nani (2011:170)

3.2.1. QUANTITATIVE APPROACH

According to Lund (2005), the quantitative approach deals with numerical data and statistical analysis to provide quantitative information. Lund (2005) further states that quantitative research requires evaluating the data objectively which consists of numbers while trying to exclude bias from the researcher's viewpoint. Quantitative research was used in this study because according to Chube (2015), it utilises statistical data which enables comparison and analysis of information using statistical methods. Cooper and Schindler (2008) aver that quantitative data often consists of participant responses that are coded, categorised, and reduced to numbers so that the data may be manipulated for statistical analysis. Abawi (2008) posits that quantitative methods enhance data comparison since data are collected from many respondents, settings, and times. Abawi (2008) further asserted that quantification allows for more precision in data analysis and summarising data and making inferences become easy.

3.2.2 Qualitative approach

Qualitative research is inductive in nature, and the researcher generally explores meanings and insights in each situation (Strauss & Corbin, 2008). According to Lacey and Luff (2009), qualitative research is particularly good at answering the 'why', 'what' or 'how' questions. Atkins and Wallace (2012) and Tuckman and Harper (2012) agreed that qualitative research involves an inseparable relationship between data collection and its analysis is a coherent interpretation of data that is built. An advantage of qualitative design is its use of open-ended questions and probing which gives the participant the opportunity to respond using their own expressions rather than forcing them to choose from fixed responses, as quantitative methods

do (Chikumbirike, 2013). Schwandt (2007) postulates that to obtain an interpretive understanding and an explanation that enhances the researcher to appreciate the subjective meaning of social meanings, qualitative methods should be used.

3.3. RESEARCH DESIGN

Research design refers to the overall strategy chosen to integrate the different components of the study in a coherent and logical way, thereby, ensuring that the research problem is effectively addressed (De Vaus, 2006). According to Burns and Grove (2001), designing a study provides a structure and gives the researcher direction towards defining a plan that may be implemented to achieve the desired results. Glatthorn and Joyner (2005) explained that research design is a specific plan for studying the research problem.

For purposes of this study an empirical study which involves a descriptive survey design was used. This design allowed the researcher to come up with both numerical and descriptive data to measure the relationship between variables to be studied. According to Polit and Huggler (2009), a descriptive survey provides an accurate account of the characteristics, such as behaviour, opinions, abilities, beliefs, and knowledge of a particular individual, situation, or group. A survey can be described as an approach that seeks to obtain results that can be generalized across a given sector by collecting large amounts of data (Panneerselvam, 2010). A survey was best suited for this study because the population to be studied is large and it is difficult to observe the characteristics of everyone. Thomas (2006) avers that a survey is in line with the positivist approach which seeks to deduce general ideas and facts by testing existing theories about the subject matter. According to Sage (2011), survey research is very popular because of its versatility, efficiency, and generalisability. As pointed out by Cooper and Schindler (2008), the purpose of a survey is to extract comparable data across subsets of the chosen sample so that similarities and differences can be obtained.

3.4. POPULATION

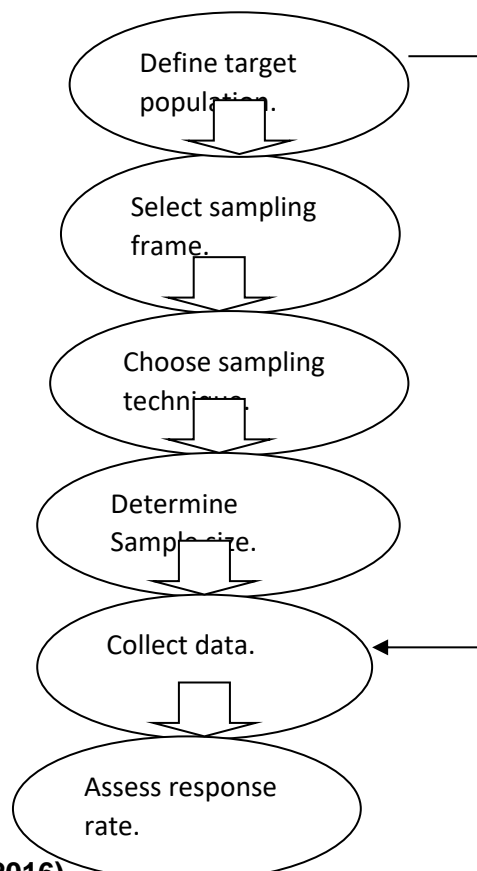
Martin and Guerin (2006) define a population as an aggregate or an entire group of people, events, or things under study. Wegner (2007) described a population as every possible item that contains data values of the random values under study. As stated by Chube (2015), in real life situation it is difficult to obtain all the complete list of survey elements from the survey population. Because of this reason only a sample will be drawn from the population. The target

population for this research will be composed of employees from banks, formal micro-finance houses and recent graduates in banking and finance in South Africa.

3.5. Sampling and sampling techniques

Sampling refers to the selection of a subset of persons or participants or things from a larger population, for the purposes of representing a particular population (Scott & Morrison, 2007). Naude (2007) concurs that sampling is a method used to select some units from a population and these selected units are going to be used to represent the whole population. Zindiye (2008) went further to state that the primary purpose of sampling is that by selecting some elements of a population, the researcher can draw conclusions about the entire population - thus a sample is representative of a larger population. According to Creswell (2009), the quality of quantitative research is not limited to the appropriate use of methodology and instruments, but hinges on the suitability of the sampling approach adopted by the researchers.

Figure 3.1. Sampling process step

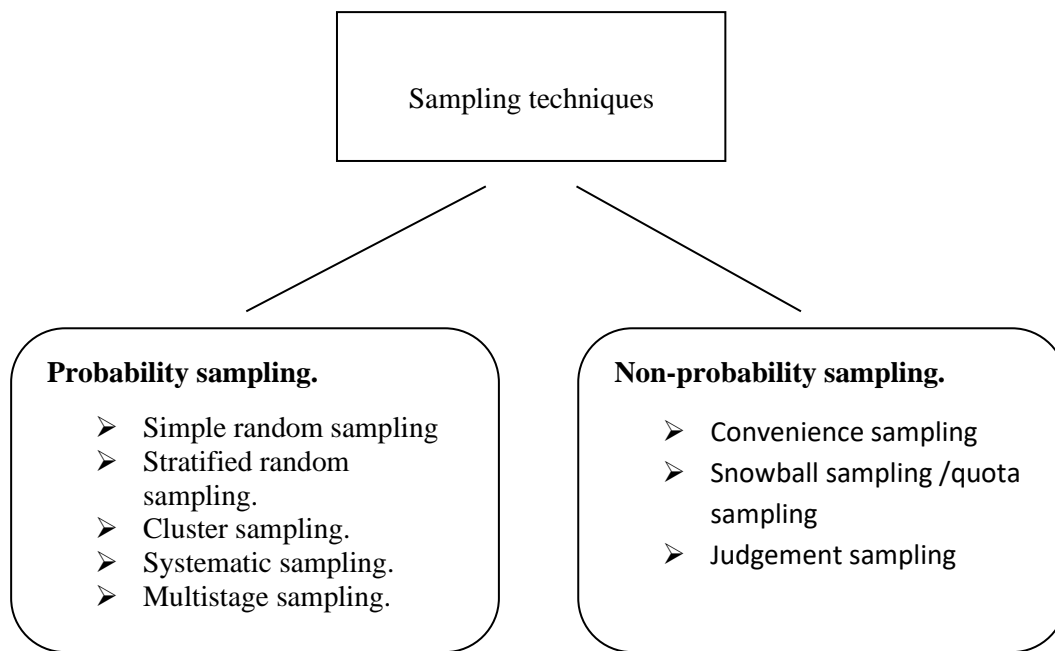


Source: Taherdoost (2016)

In general, there are two types of sampling: Probability and non-probability sampling.

The sampling techniques are shown in Figure 3.2.

Figure 3.2: Sampling techniques



As stated by Chube (2015), in real life situation it is difficult to obtain all the complete list of survey elements from the survey population. Because of this reason, only a sample will be drawn from the population. To determine the ideal sample size, Slovin's formula will be used to calculate the sample size. According to Ansar, Lukum, Arifin and Deng (2017), Slovin's formula is used when nothing about the behaviour of a population is known at all. Ansar et al (2017) further stated that if a sample is taken from a population, a formula must be used to consider confidence levels and margins of error. Thus, based on the Slovin's formula, the sample size is given by.

$$n = \frac{N}{[1-N(e^2)]}$$

Where:

n = sample size

N = total population = 205.

e = margin of error

Therefore, from Slovin's formula the sample size is.

$$n = \frac{213}{[1+213(0.05^2)]}$$

= 138.98858 which can be rounded off to 139.

Thus, the sample size is 139 bank and micro finance house workers.

In this research, stratified random sampling will be used. Saunders (2003) describes stratified random sampling as a modification of random sampling in which one divides the population into two or more relevant and significant strata based on known attributes. The sampling units in each stratum should be homogenous (Saunders, 2003). Bank workers and micro finance houses workers will be grouped into senior management, middle management, and general staff. As postulated by Leedy and Ormrod (2001), stratified random sampling enables the researcher to study in detail the behaviour of elements in each stratum. Dividing the population into strata has the advantage of improving the accuracy. Within each stratum a simple random sampling will be done to select respondents. To cater for the difference in numbers among strata, proportionate stratified sampling will be implemented. According to Bhat (2019), in this approach, the sample size of each stratum is directly proportional to the population size of the entire population of the strata. That means each sample from its strata has the same sampling fraction.

The sampling fraction was obtained using the Cochran's sample size formula:

$$n_h = (N_h/N) * n.$$

were,

n_h = Sample size for h^{th} stratum

N_h = Population size for h^{th} stratum

N = Size of entire population

n = Size of entire sample

h= is a number representing a particular stratum. In this case the strata will be senior management, middle management, and general staff.

3.6. Data collection instruments

Multiple data collection instruments will be used in this research with primary and secondary data sources. Mbuyisa (2017) averred that the use of multiple data instruments can work well to capture a diversity of data sources. Trochim (2006) distinguishes primary from secondary data by treating primary data as raw data that is collected directly from the field, while secondary data is data already available and in use in other institutions.

3.6.1. Primary data sources.

Direct interviews, questionnaires and observation methods were used to collect the primary data.

3.6.1.1. Interviews.

Interviews are methods of obtaining information using a set of prearranged questions (Preece, Rogers, and Sharp, 2002). According to Schneiderman and Plaisant (2005), interviews can be very useful since the interviewer can make follow up questions to pursue specific issues of concern that may lead to focussed and constructive suggestions. These interviews can be one on one, via email or a simple telephone call. As stated by Schneiderman and Plaisant (2005), the main advantages of the interview method of data collection in this study were that:

- a) One on one discussion with the participants lead to specific and constructive suggestions because follow up questions arose.
- b) Detailed information was obtained; and
- c) A few respondents were used to gather rich and detailed data.

Depending on the need and design, interviews can be unstructured, structured, and semi-structured.

(I) Unstructured Interviews

The unstructured type of interviews allows the interviewer to pose some open-ended questions and the interviewee to express his or her own opinions freely. The direction of the interview is determined by both the interviewee and interviewer. However, according to Preece, Rogers,

and Sharp (2002), it makes it difficult to standardise the interview across different interviewees, since each interview assumes its own format. Preece, Rogers, and Sharp (2002), also state that it is possible to generate rich data, information, and ideas in such conversations because the level of questioning can be varied to suit the context. Also, the interviewer can quiz the interviewee more deeply on specific issues as they arise although it is very difficult and time-consuming to analyse the data.

(ii) Structured interviews

In structured interviews, the interviewer uses a set of pre-planned questions which are short and clearly worded. In most cases, these questions are closed and therefore, require precise answers in the form of a set of options read out or presented on paper. This type of interviewing is easy to conduct and can be easily standardised as the same questions are asked to all participants. According to Preece, Rogers, and Sharp (2002), structured interviews are most appropriate when the objective of the study is clearly understood, and specific questions can be identified.

The use of unstructured interviews may entail the development of many follow-up questions which may waste time. To minimize wasting the respondents' business time, structured interviews will be adopted in this study.

3.6.1.2. Questionnaires

The use of self-administered questionnaires is one typical primary data source which was implemented in this research. Saunders (2009) states that questionnaires are the most widely used method of collecting survey data. The questionnaire used in this study was a structured one which made it possible to collect quantitative data. To ensure that the respondents did not divert from the main topic, simple closed questions were used. However, Ruane (2005) laments the low response rate that is sometimes associated with questionnaires. This challenge was dealt with by making the questionnaire as much encouraging to complete as possible by eliminating ambiguous and vague questioning. Wisker (2001) posited that, through use of the questionnaire, the researcher is assured of the following.

- Large amount of data will be collected from a large pool of respondents thus the researcher is able to compare different types of data.
- The anonymity of respondents is ensured and maintained throughout the research period.
- The questionnaire enhances time management as the researcher can deal with many respondents within a short time.

3.6.1.3 Observation

Observation has been the hallmark of much of the research conducted in anthropological and sociological studies and is a typical methodological approach of ethnography (Kawulich, 2012). Personal observation by the researcher enhanced better understanding of the opinions of the participants. Kawulich (2012) further states that there are three types of observations namely.

- **Participant observation** in which the researcher is both an observer and a participant and respondent.
- **Direct observation** in which the researcher just observes without interacting with the participants and,
- **Covert observation** in which those who are being observed are not aware that they are being observed.

In this research, the participant observation was utilised since the process is interactive and accurate data collection may be guaranteed.

3.6.2. Secondary data collection

Secondary data source provides the researcher with a guide and knowledge of what has been done in the past pertaining to the current study area. Srivastava and Teo (2006) pointed out that through comparisons with past research and scholastic articles, the researcher is confident that the findings are traits general to the study field. Use of journals and related studies from other researchers were utilised. Information from government sources, online reading and non-governmental organisations made the research easier because the researcher could work on the project from anywhere.

3.7. Data analysis

According to Myers (2009), data analysis is done to enable the researcher to focus on the most important data which has been collected. Attride-Stirling (2001) posited that data analysis makes it easy to evaluate the research and compare it with other studies conducted on the same study area. Since interviews, observations and questionnaires were used to collect data, the data analysis started by transcribing data from the interviews and observations followed by editing and coding of the data from the questionnaires. According to Zikmund (2003), editing includes checking of the data collection forms to check for omissions, legibility, and consistency in classification, as well as discarding uncompleted responses with missing data,

identifying potential errors in the data collection methods, and discussing its implications. Data was then converted to statistics to facilitate qualitative and quantitative analysis of responses. Results were transcribed, tabulated, and codified according to the most common responses provided by users to develop the data analysis. The results were then expressed as percentages after being classified into answer categories. The excel package and statistical package for social sciences (SPSS) was used to analyse and arrange some of the data.

Myers (2009) averred that the qualitative data analysis approaches help answer several questions to explore what the data means, the main themes that emerged and how the data contributes to knowledge in the field. A qualitative approach was employed for analysing the data from the interviews. This therefore means inferences and induction of findings were widely used in this research. Pie Charts were used as the most appropriate way of showing comparative and classified data in a simplified manner. Tables were utilised as they can be used to summarize huge amounts of information and enhance easy comparison of variables. They capture information and present it in rows and columns, and they also save space and time, thus making it more convenient to provide synthesised information.

As suggested by Braun and Clarke (2006) data analysis for qualitative data followed the format below.

- i. **Familiarising with the data:** Sourcing relevant information about the banking and micro finance institutions from several sources. This was followed by transcribing the data and checking for correctness. Reading the data set repeatedly to identify meanings and patterns.
- ii. **Generating initial codes:** coding the data and organising the initial codes.
- iii. **Searching for themes:** grouping related codes into themes.
- iv. **Reviewing themes:** farther analysis and refinement of themes.
- v. **Producing the report:** selecting vivid and convincing extracts. Analysis of the selected extracts, relating back to the research questions before the discussion and synthesis of the findings.

3.8. QUALITY OF THE RESEARCH

According to Mbuyisa (2017), the acceptance of the research findings is determined by the quality of the research. The results obtained by the primary data analysis were validated for correctness through validity and reliability of the research. As suggested by Morse and McNamara (2013), every research project must pay attention to reliability and validity for it to

contribute to the body of knowledge. Mahajan (2017) stated that while validity is concerned with what an instrument measures, and how well it does so, reliability is concerned with the faith that one can have in the data obtained from the use of an instrument.

3.8.1. Reliability

Reliability research refers to the research's ability to yield the same data when it is re-administered under the same conditions although it is difficult to obtain a replication of data when dealing with people (Robson, 2007). Polit and Beck (2010) asserted that reliability for quantitative research focuses mainly on stability and consistency. Reliability is seen as the degree to which a test is free from measurement errors, since the more measurement errors occur the less reliable the test is (Fraenkel & Wallen, 2003; McMillan & Schumacher, 2001, 2006; Moss, 1994; Neuman, 2003).

A pre-test was conducted after the initial questionnaire development to improve the accuracy of measures. This was done to make the questionnaire simple and understandable to the respondents and to ensure that the questionnaire was interpreted as intended. Based on the results obtained from the pre-test, some items were amended where necessary. The questionnaires were then initially issued to a random sample of 10 respondents selected from among colleagues before they were finally issued to the respondents.

3.8.2. Validity

Validity of the study refers to the degree to which the study accurately answers the question it was designed to answer (Bryman & Bell, 2011). Saunders, Lewis, and Thornhill (2011) further state that validity also refers to the quality of the research process and the accuracy of the results. Cooper and Schindler (2008) state that validity measures the degree to which a study succeeds in measuring intended values and the extent to which differences found reflect true differences among the respondents. Trochim (2006) suggests that to assure validity, one must ask him or herself whether the measures used in the research brought the valid results. For validity, all interview guides were pre-tested until the researcher was convinced that they would measure what they were designed to measure. Validity was also enhanced by making sure that the questions in the questionnaires were relevant to that of the proposed research objectives and literature review. The interviews were conducted using the same approach throughout the interview period. Notes were transcribed and confirmed with all the participants.

3.8.3. Credibility, confirmability, and transferability for qualitative data

- **Data credibility:** According to Padgett (2008), credibility can be demonstrated through triangulation. Where secondary sources present conflicting information, the information was verified with statistics from adopted official reports to ensure data credibility. In the absence of official reports, the conflicting information were discarded altogether. On interviews, member checking was done to ensure that information has been correctly captured.
- **Confirmability:** Moon, Brewer, Januchowski-Hartley, Adams, and Blackman (2016) state that to achieve confirmability, researchers must demonstrate that the results are clearly linked to the conclusions in a way that can be followed and replicated. By providing a detailed methodological description, the researcher enables the reader to determine confirmability, showing how the data, and constructs and theories emerging from it, can be accepted (Shenton, 2004).
- **Transferability:** From a positivist perspective, transferability relates to the extent to which the results of research study can be extrapolated, with confidence, to a wider population (Moon et al, 2016). Thick description was used in which the behaviour, experiences and context were explained so that the behaviour and experiences became meaningful to an outsider.

3.9. Ethical considerations

Permission to carry out this study was sought from BANKSETA of South Africa. Consent from the participants themselves was obtained before any interviews were done or questionnaires distributed. The participants and respondents were clearly informed of the purpose of this research. Where necessary, authorisation letters BANKSETA were shared with both participants and respondents.

Researchers must ensure that the data they obtain is kept secure and is only used for the purposes they were obtained. Although the willingness of the participants in the interviews could not be guaranteed, an explanation as to why data were being collected was always made and the consent of participants was also obtained. In addition, there are several guidelines, laid down by certain organisations such as the Market Research Society that, although not legally binding, encourage organisations and individuals to behave ethically when dealing with members of the public.

It is also an ethical requirement for the researcher to explain the purpose of the study to the respondents in the language they understand most before their consent is obtained. As suggested by Makore-Rukuni (2001), respondents should not be coerced, tricked, or ambushed into giving information to the researcher. In that vein, the respondents were informed of their right to be anonymous as they answer the questions put to them through either direct interviews or questionnaires. This encourages them to participate without fear of the unknown. Finally, the respondents and participants were assured that the results of this research would be reported fairly, truthfully, and accurately, and will be available to anyone wishing to see them.

3.10. CONCLUSION

This chapter outlined the blueprint of how the study was carried out. The research paradigm, research approaches, research design, population, sampling and sampling techniques, data collection instruments and procedures, as well as data analysis were stated and explained. The main tools of the quality of research namely reliability and validity were also examined and explained. The ethical considerations that were adhered to in carrying out this research were explored. The chapter rounded off with a brief analysis of the methods of data presentation and analysis that were employed in the study.

Chapter Four will focus on data presentation, analysis, and interpretation of the findings.

CHAPTER IV.

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 INTRODUCTION

This chapter reviews the results and analysis of the qualitative data, the compilation of the questionnaire and the results and analysis of the quantitative findings of the study. The findings were also discussed in the light of previous research findings and available literature, where applicable, to identify similarities and differences between this study and the previous studies and literature. A comprehensive description of the research methodology was given in Chapter 3.

4.1 Response rate

More than five hundred questionnaires were distributed, and 100 responses were received. This indicates a response rate of 25 %. Hence, this response rate of 25% was considered adequate for data analysis for this study.

4.2 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

The demographic data was used to show the characteristics of the respondents. The demographic data are presented in this section under gender, age, province, bank sector, skills, courses planned and skills on demand. Zindiye (2008) asserted that the demographic analysis is important since it gives characteristics of the respondents which can be used to draw analyses and conclusions. Questions related to this section are found in Section A of the questionnaire (Refer to Appendix 1).

4.2.1 Gender of respondents

This section delves into the gender of the respondents. The research sought to establish the distribution of males and females to ascertain most youths employed in the banking sector. This information would then be used to show the different behaviour of men versus women in

as far as skills needs are concerned in the banking sector. Their distribution is indicated in Figure 4.1 below.

Gender Distribution

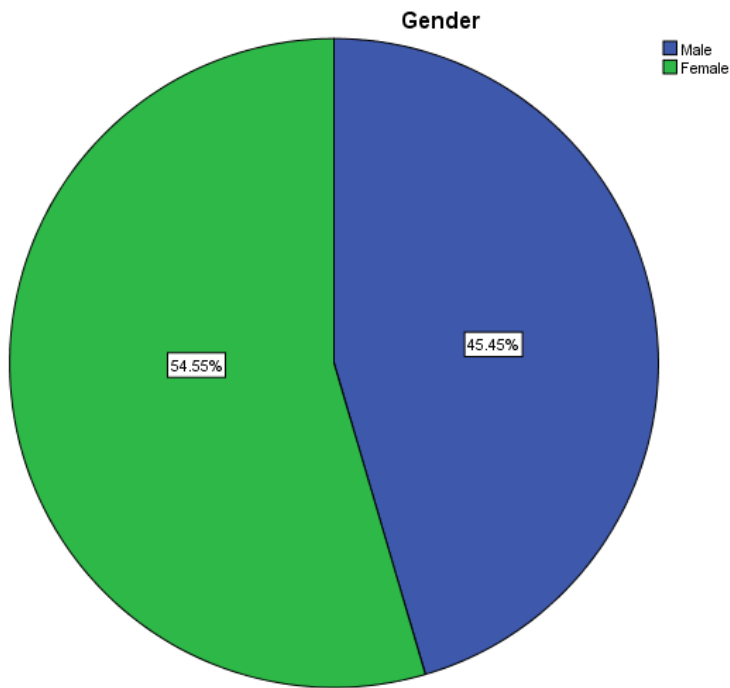


Figure 4.1: Source: Primary data (2022).

Out of the candidates who were interviewed, 54.6% were females while 45.4% were males. Apparently, there are more women in the banking sector than men. An apparent indication that employers are taking heed of the need to balance gender in the workplaces.

4.2.2 Age of respondents

This section discusses the age distribution of the respondents. Figure 4.2 shows the age groups of respondents in the banking sector.

Age Distribution.

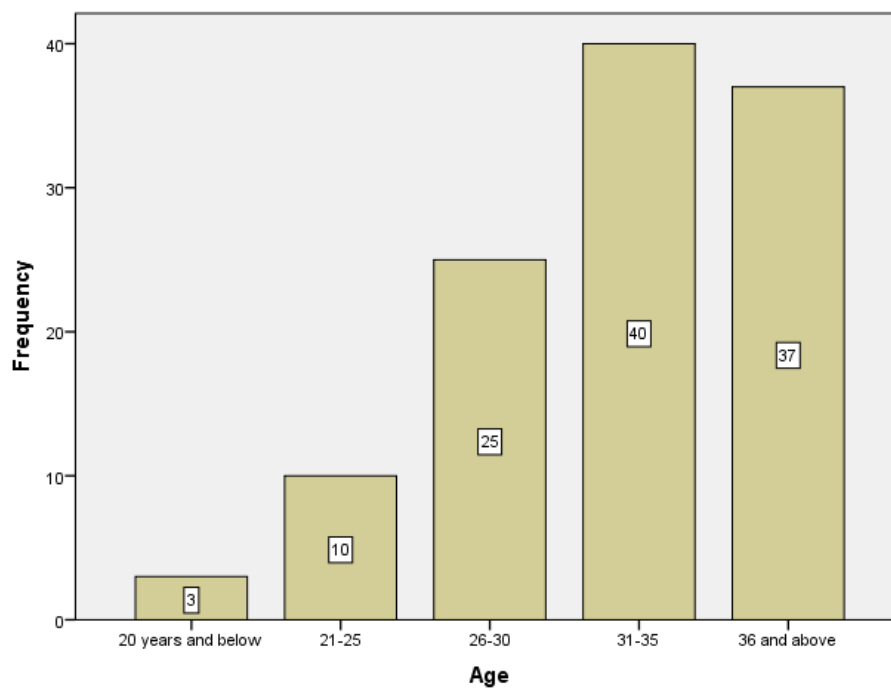


Figure 4.2. Age Distribution: Source: Primary Data

In terms of age distribution, the respondents were skewed to the right although the 31-35 age group had the highest number of respondents. The graph shows that there is a bigger number of youths employed in banks when compared to those above the age of 35 years.

4.2.3 Distribution of youths among the banks in South Africa

Another analysis is made on how the youths in the banking sector are distributed throughout South Africa. Figure 4.3 shows the results of this analysis.

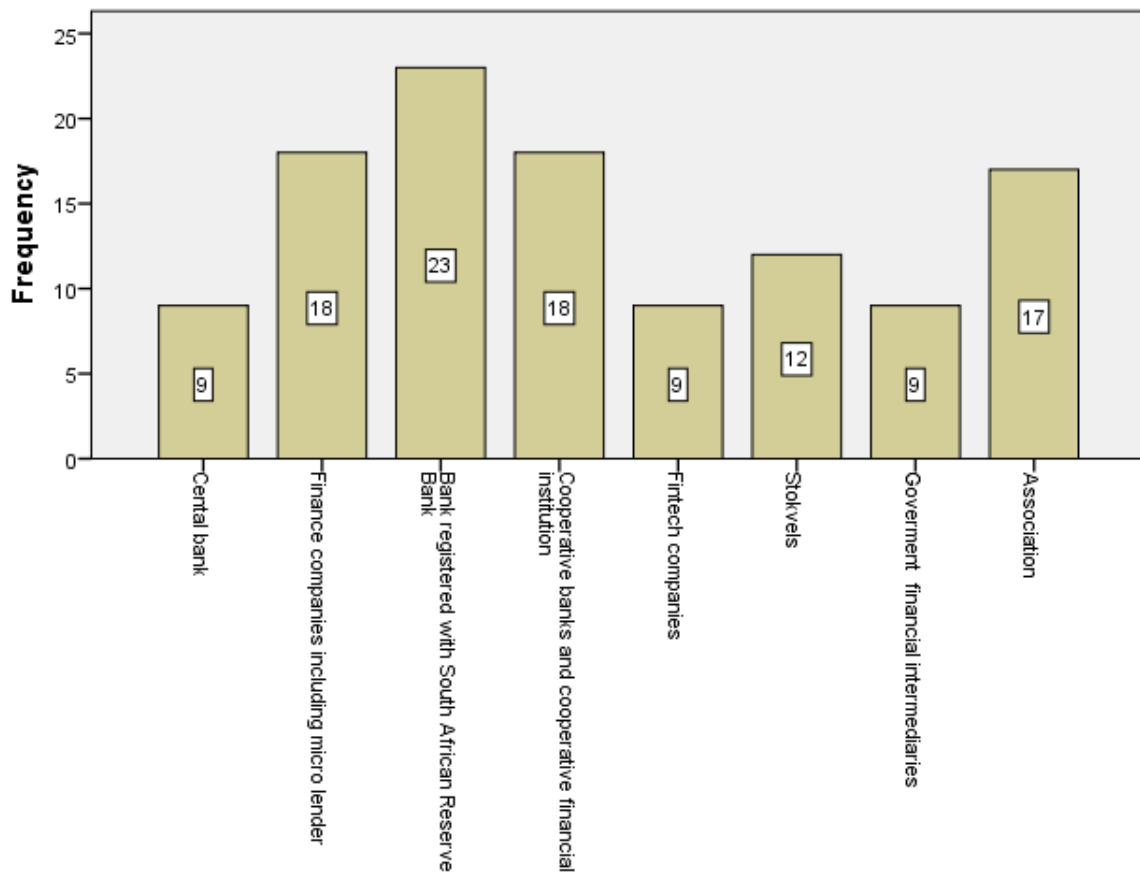


Figure 4.3. Distribution of respondents within the banking sector. Source: Primary data

Figure 4.3 shows that the respondents were evenly distributed across all the bank subsectors although Banks registered with South African Reserve bank had a bigger share.

4.2.4. Distribution of youths per province

This section looks at how the youths in the banking sector are distributed throughout the country, province by province.

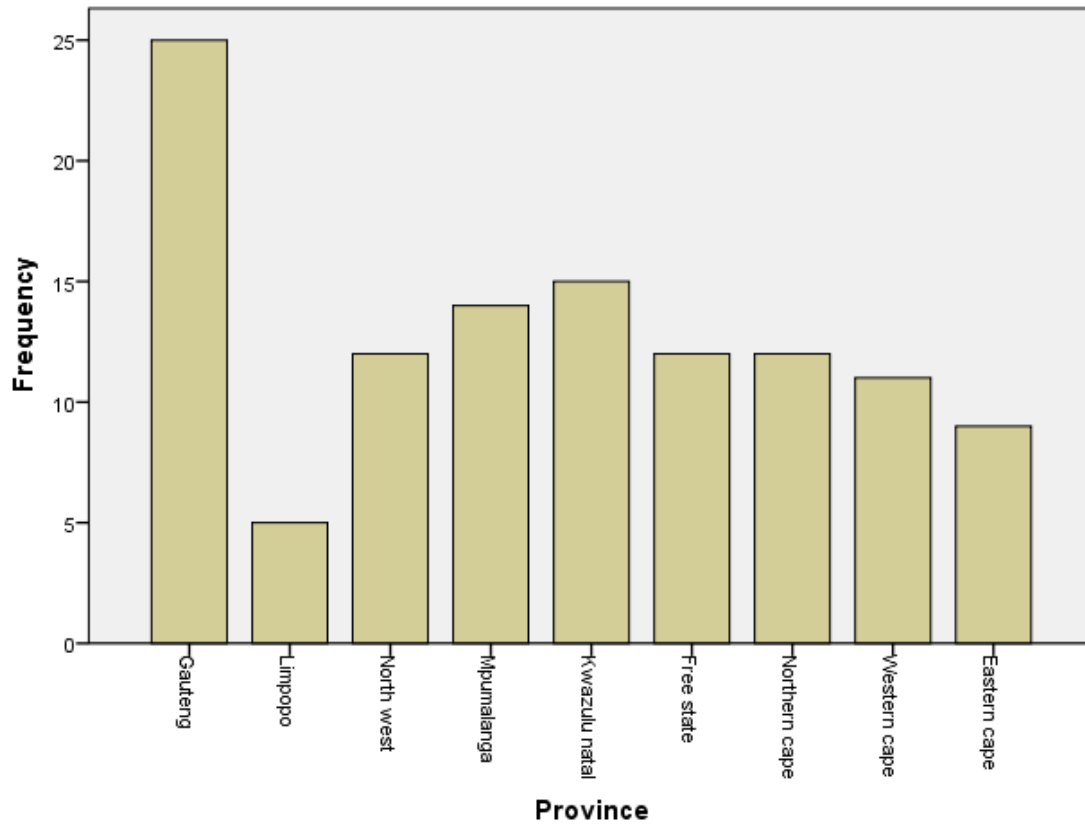


Figure 4.4. Distribution of respondents per province. Source: Primary data

As per Figure 4.4, most respondents were from Gauteng province which Limpopo had the lowest number. Apart from that, there is an even distribution of respondents across all other provinces of South Africa.

4.2.5. Ideal youth skills - Skills every youth should have

This section analyses the skills which every youth in the banking sector should ideally have. Figure 4.5 details these skills as per what the respondents would envisage.

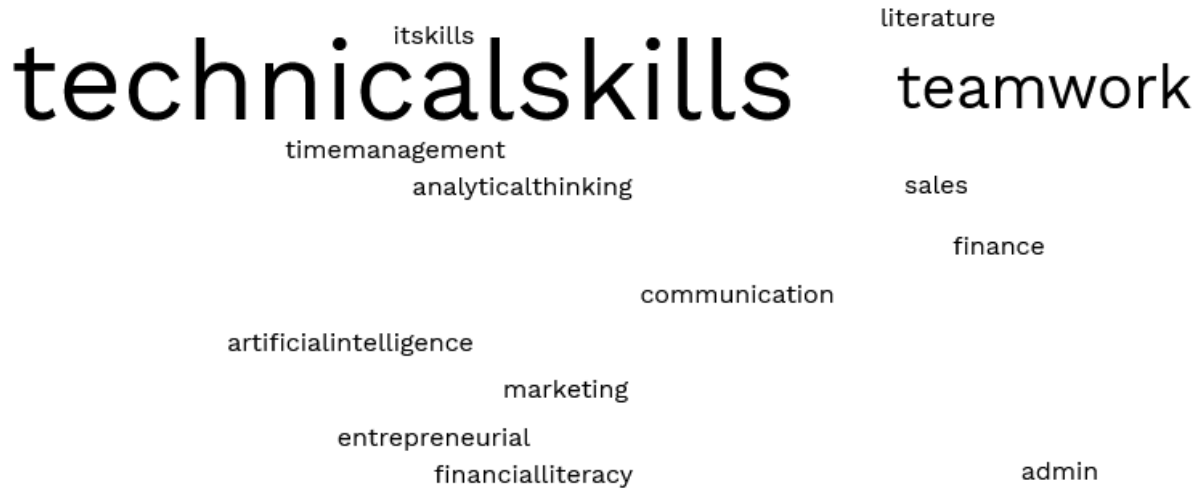
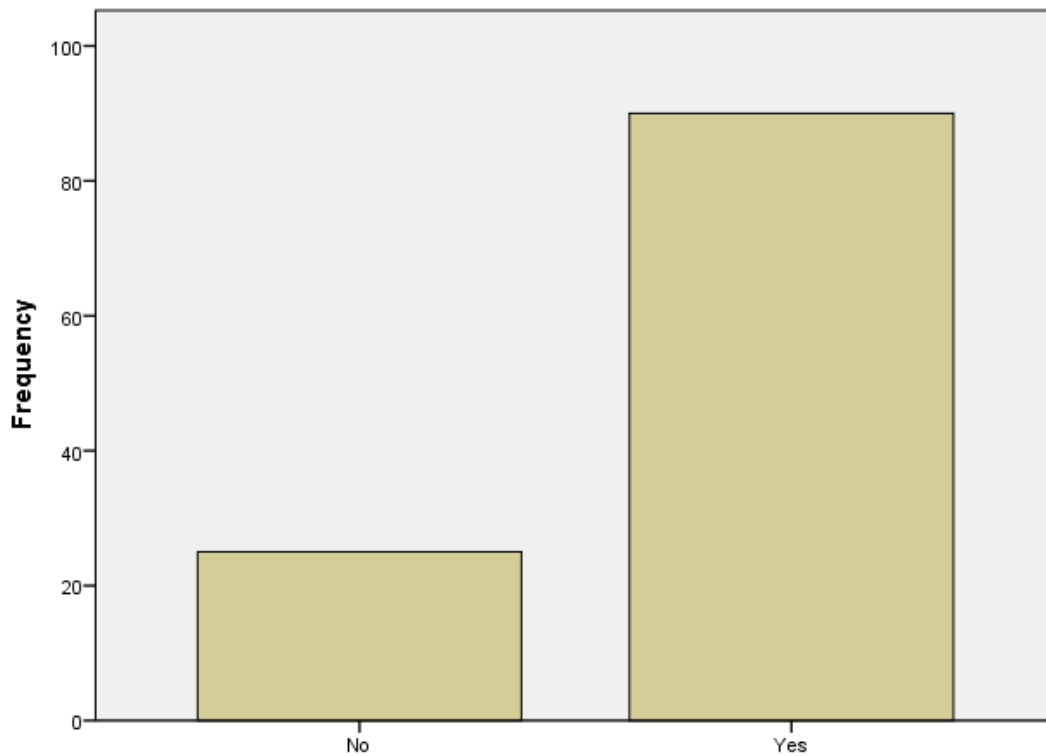


Figure 4.5 shows the skills that every youth should have: technical and teamwork skills. Other skills mentioned include IT, time management, sales and marketing, analytical thinking, and others.

4.2.6. Planned courses.

The respondents were also asked if they were planning to do any course. Figure 4.6 shows their response.



4.2.6. Any planned course. Source: Primary data

Most of the respondents were planning to do more courses. 75% of the respondents replied with a YES while 25% responded with a NO. Out of those who responded with a YES, they were then asked if they faced any challenges in the process and figure 4.6 shows the results. Lack of funding was the major challenge followed by non-relevant qualifications, and lack of support. Given that most of the sample came from with the banking sector, the lack of funding would emanate from lack of personal funds to finance the course, which are not on the WSP. For those that are university graduates, they get their funding either through the university or NSFAS. There are challenges when funds are channelled through the university as some students are unable to access funds. This information is shown in Figure 4.7.

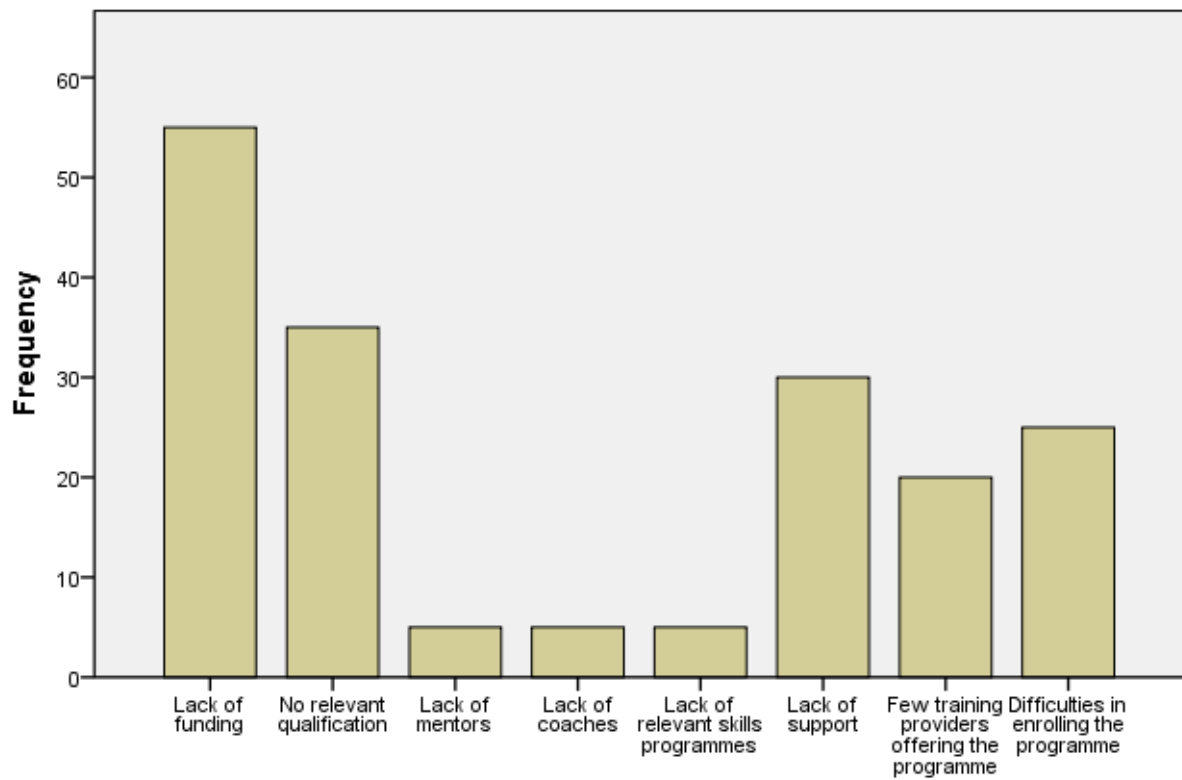


Figure 4.7. Challenges faced to pursue any courses. Source: Primary data

4.2.7. Skills required by youths in the banking sector.

The study also sought to know and understand the skills that are required by youths in the banking sector in South Africa. Figure 4.8 shows the results.

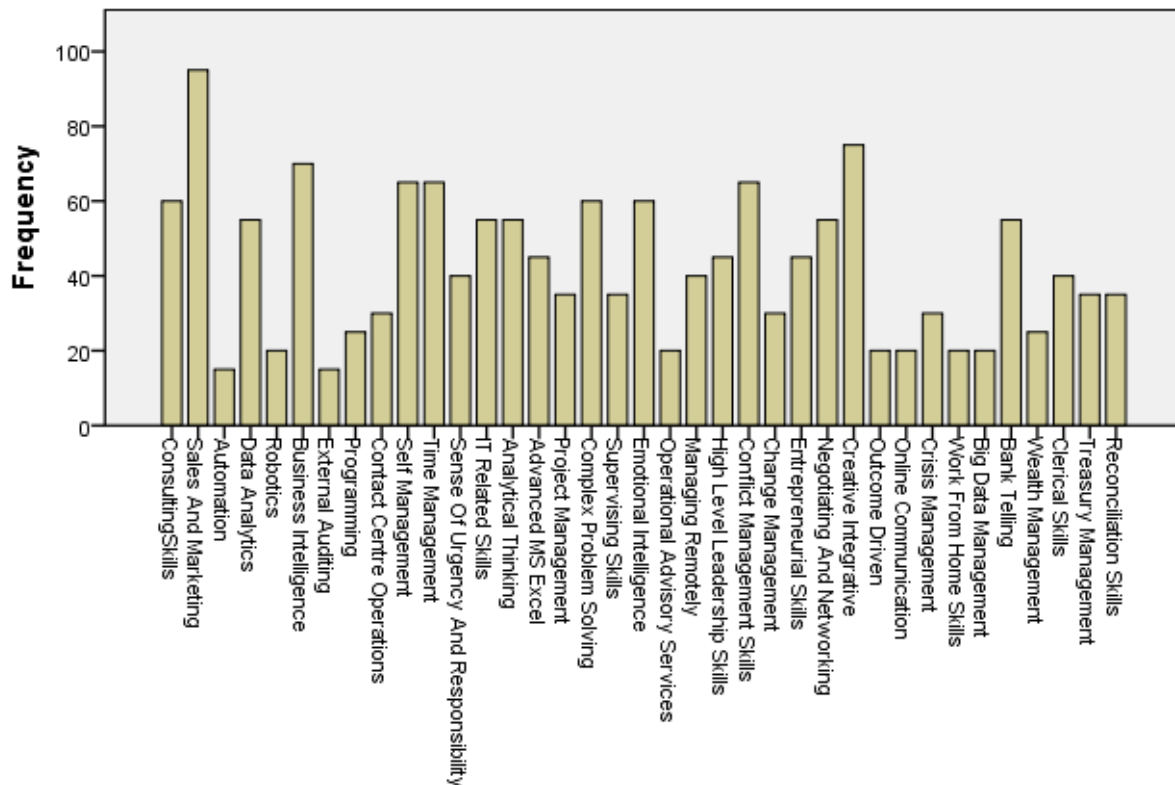


Figure 4.8. Skills required by youths in the banking sector. Source: Primary data

Figure 4.8 shows the skills that are required by the youths in the banking sector. Sales and Marketing was the most popular one followed by business intelligence, data analytics, and others. IT, data, digital transformation, and auditing were also mentioned.

4.2.8. Skills on Demand

The research also sought to bring out the courses on demand. Figure 4.10 shows the skills that are on demand.

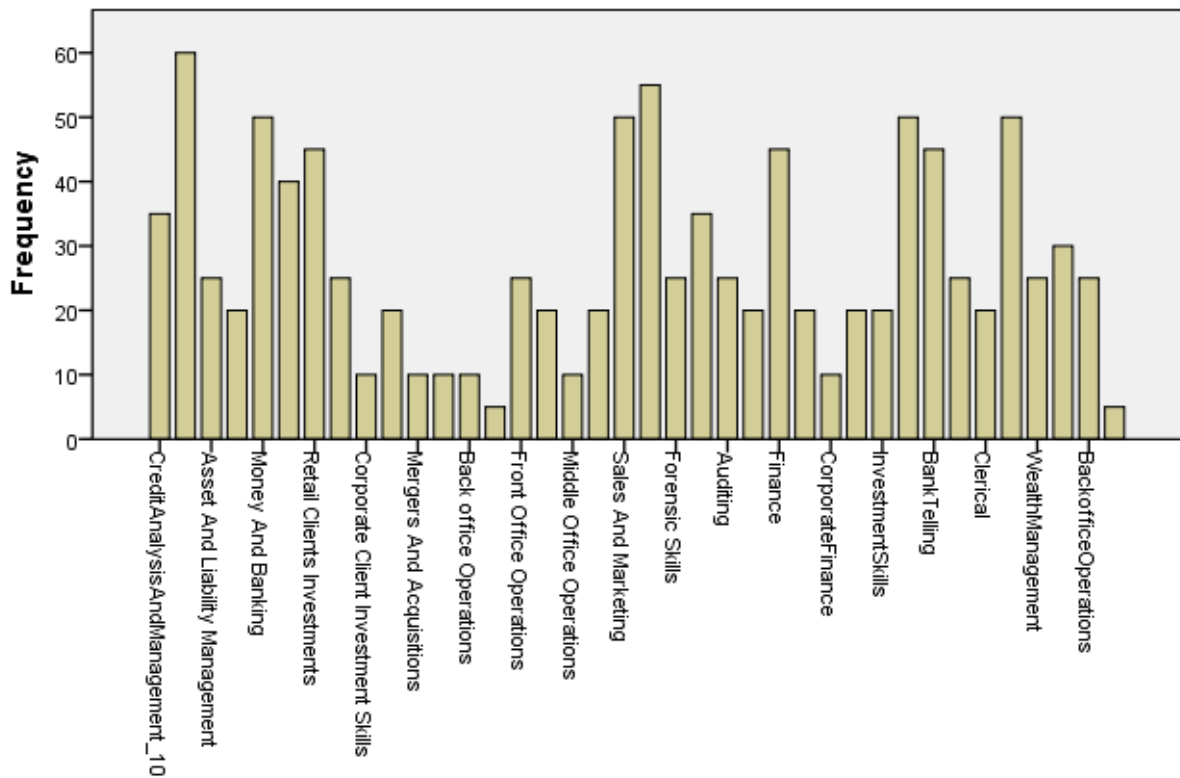


Figure 4.9. Skills on demand in the banking sector. Source: Primary data.

As indicated in Figure 4.9, the top five courses selected were customer care, sales and marketing, digital skills, IT, and retail banking. A crosstab analysis, Figure 4.10, was then done to determine if these skills vary from one bank subsector to the other and the graph below shows the results. The distribution shows that banking subsector is not significant in determining the skills on demand. Therefore, the skills that are on demand are the same throughout all the banking subsectors.

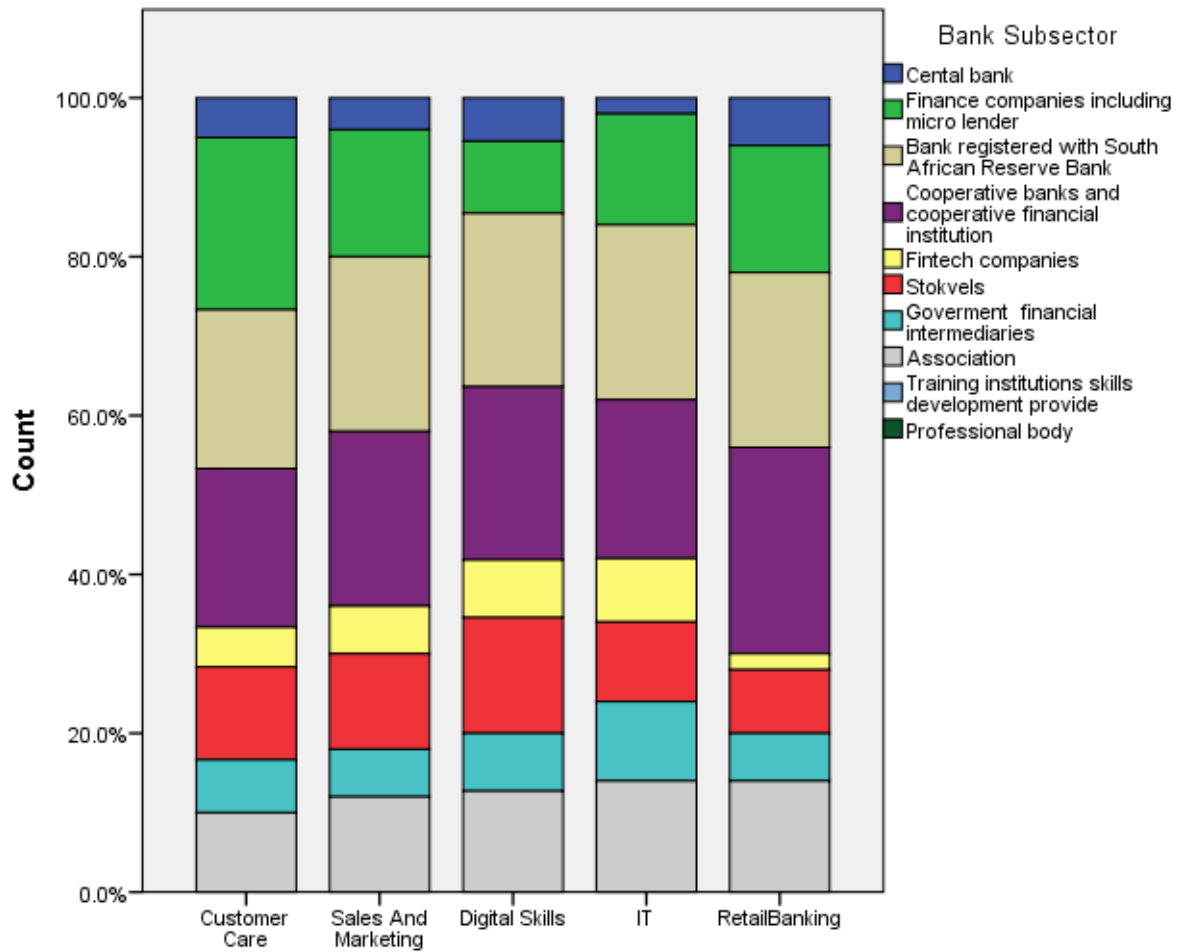


Figure 4.10. Cross Tabulation of skills on demand. Source: Primary data.

4.2.9. Skills required in the future

A study was also carried out to determine which courses will be required in the future. Figure 4.11 shows the results.

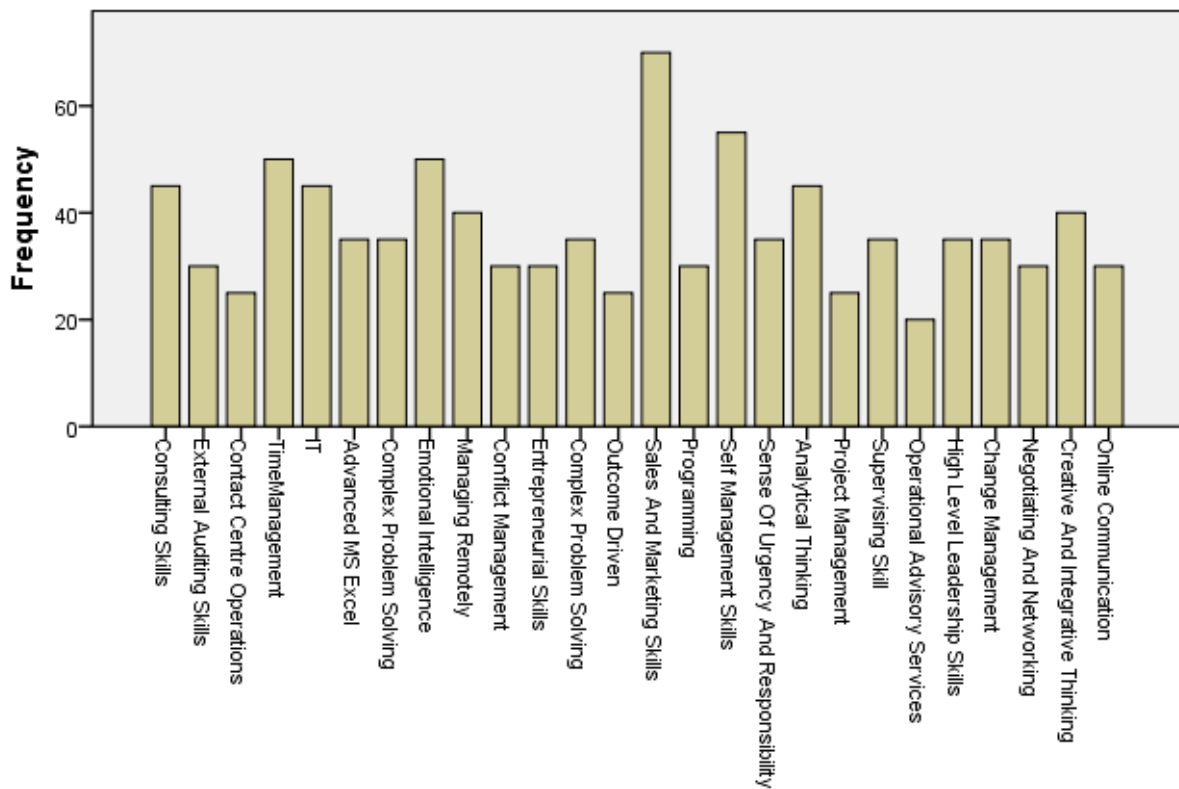


Figure 4.11. Skills required in the future. Source: Primary data.

Figure 4.11 shows that IT, digital, sales, and marketing will be dominant in the future. Other skills mentioned are finance, robotics, artificial intelligence, analytics, and inter-alia.

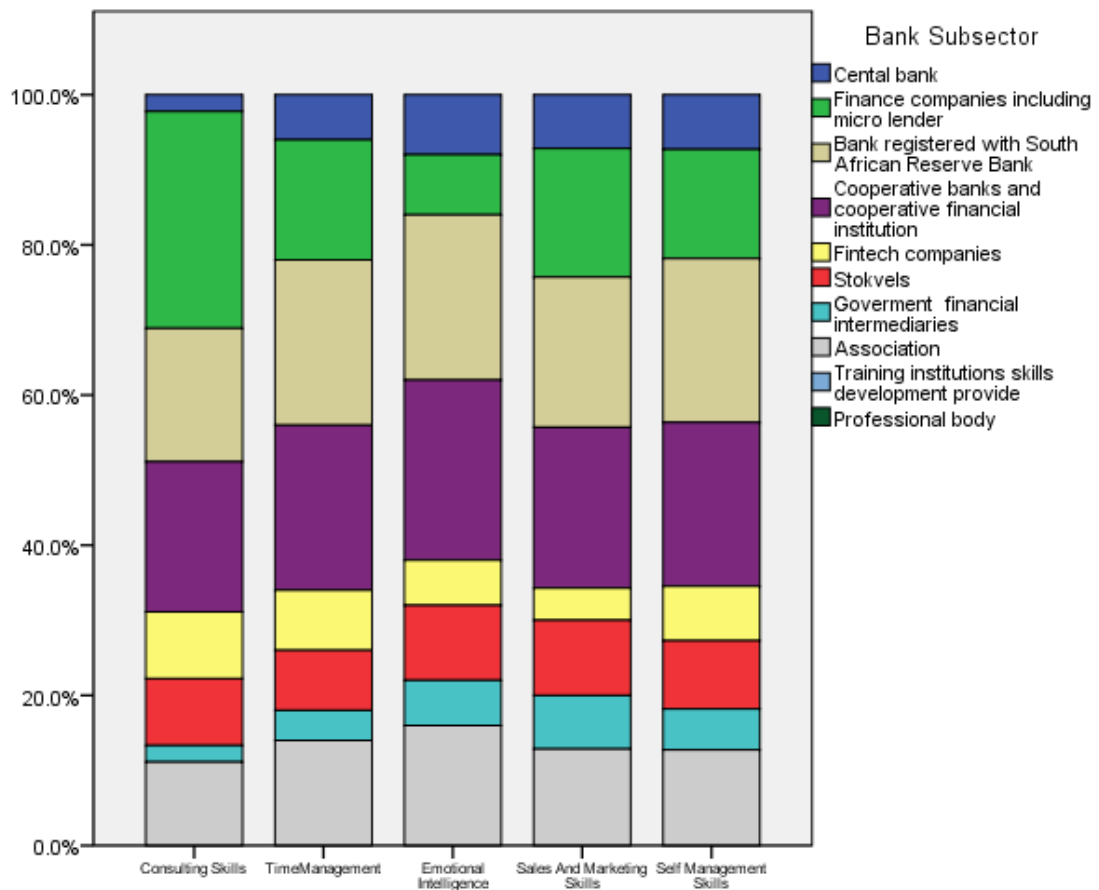


Figure 4.12. Crosstab for the skills that will be on demand. Source: Primary data.

The crosstab analysis of Figure 4.12 shows that the skills that will be on demand in the future will be the same across all the banks subsectors.

4.2.10. Occupations not demanded by the youths

Occupations not demanded by the youths were also studied. Figure 4.13 shows the findings.

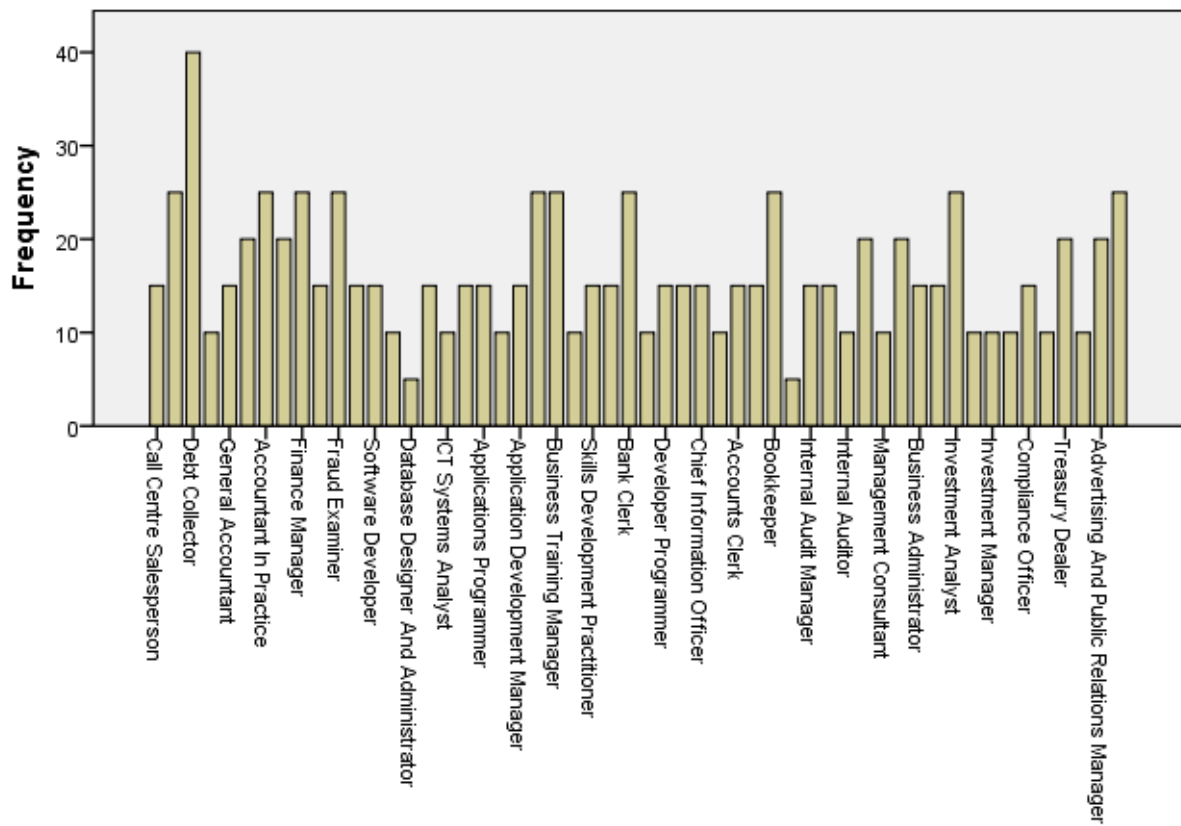


Figure 4.13. Occupations that are not on demand. Source: Primary data

The analysis of Figure 4.13 shows the occupations that are not on demand among the youths. Debt collection remains the most popular one.

4.2.11. Jobs affected by working from home during the pandemic

The study also sought to establish the extent to which the youths in the banking sector in South Africa were affected by working from home during the COVID-19 pandemic period. Figure 4.14 explains the scenario.

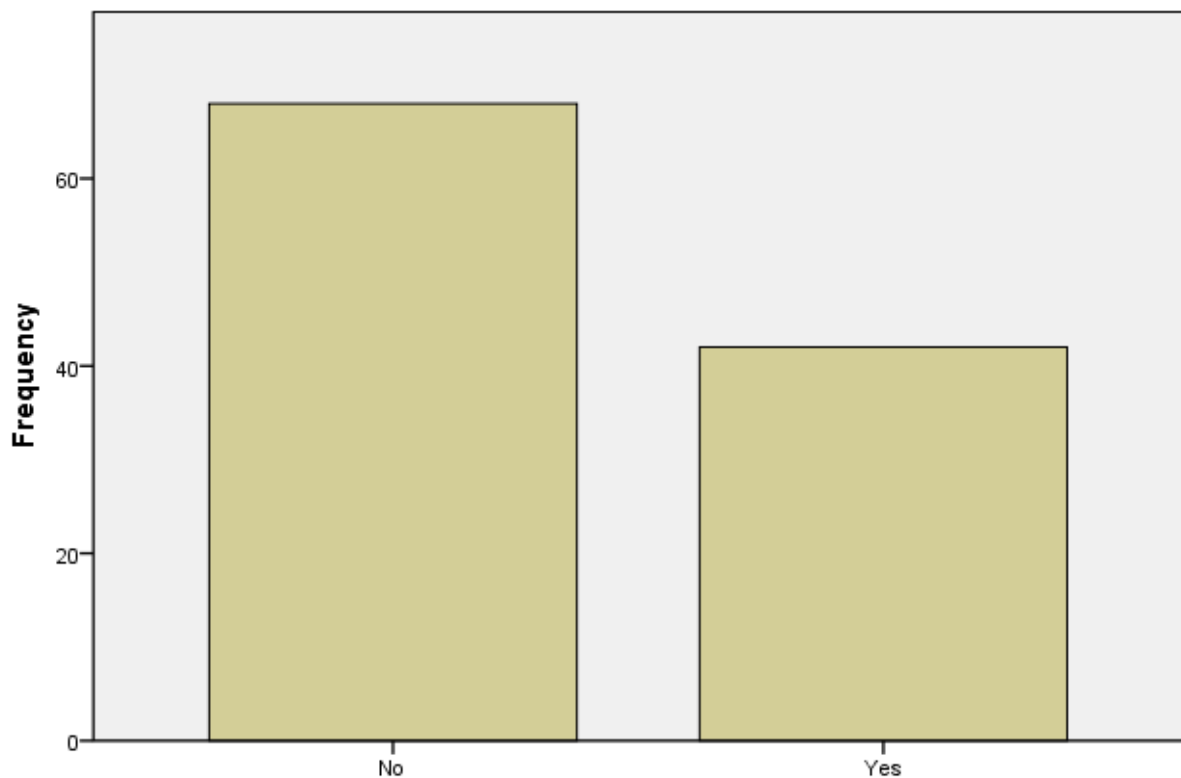


Figure 4.14. **Jobs affected by working from home during the pandemic. Source: Primary data**

The candidates were asked if working from home during the Covid Pandemic affected their jobs. The results above show that 60% were not affected whilst 40% were affected. This means that most of the youths were able to work during the pandemic period.

4.2.12. Programmes required to prepare the workforce for the future

A determination of what programmes are necessary for the future workforce in the banking sector was also made. Figure 4.15 shows the results.

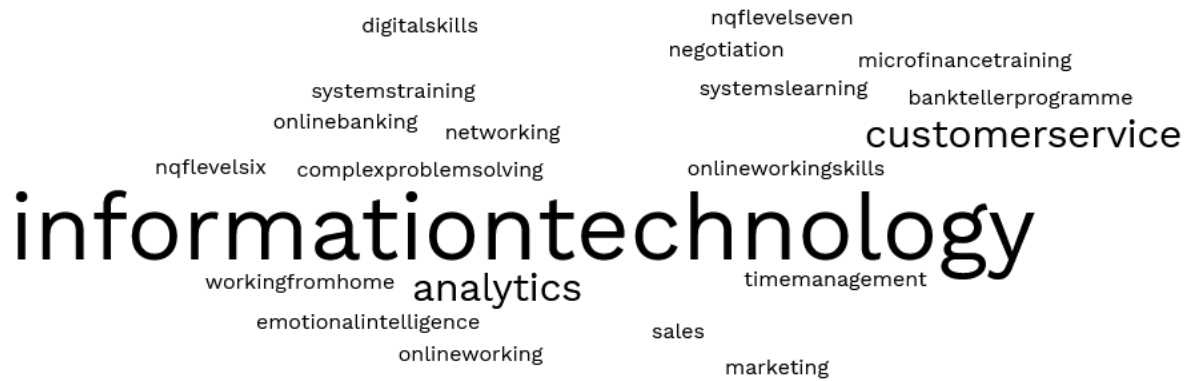


Figure 4.15. Programmes for the future. Source: Primary data

The above word cloud picture of Figure 4.15 shows the programmes that will be required to prepare the workforce for the future. IT, NQF level six and seven programmes, customer service, digital skills, and analytics were the common ones.

4.13. Ratings on drivers of changes that affect BANKSETA

The study also looked at what the drivers of change for the banking sector could be. This is shown in Figure 4.16.

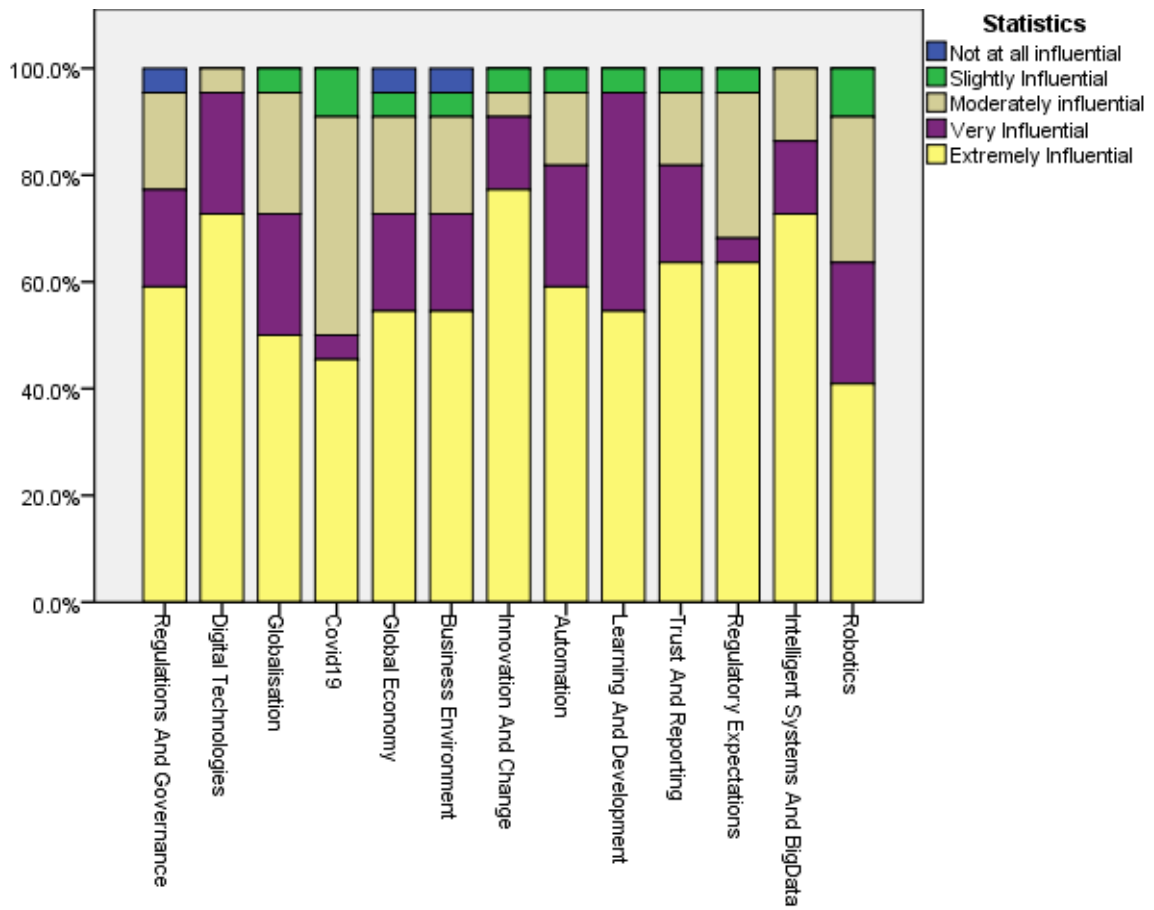


Figure 4.16. Drivers of change that affect banking sector. Source: Primary data

Figure 4.16 shows the ratings on drivers of changes that affect banking sector. The analysis shows that all of them are extremely influential.

4.14. Factors influencing current skills needs



Figure 4.17. Factors influencing current skills needs. Source: Primary data

Figure 4.17 explains the factors that influence the current skills needs. The most mentioned ones were funding, regulations, and low supply of skilled labour.

4.15. Skills programmes that will facilitate youth development and employment in the banking and alternative sectors

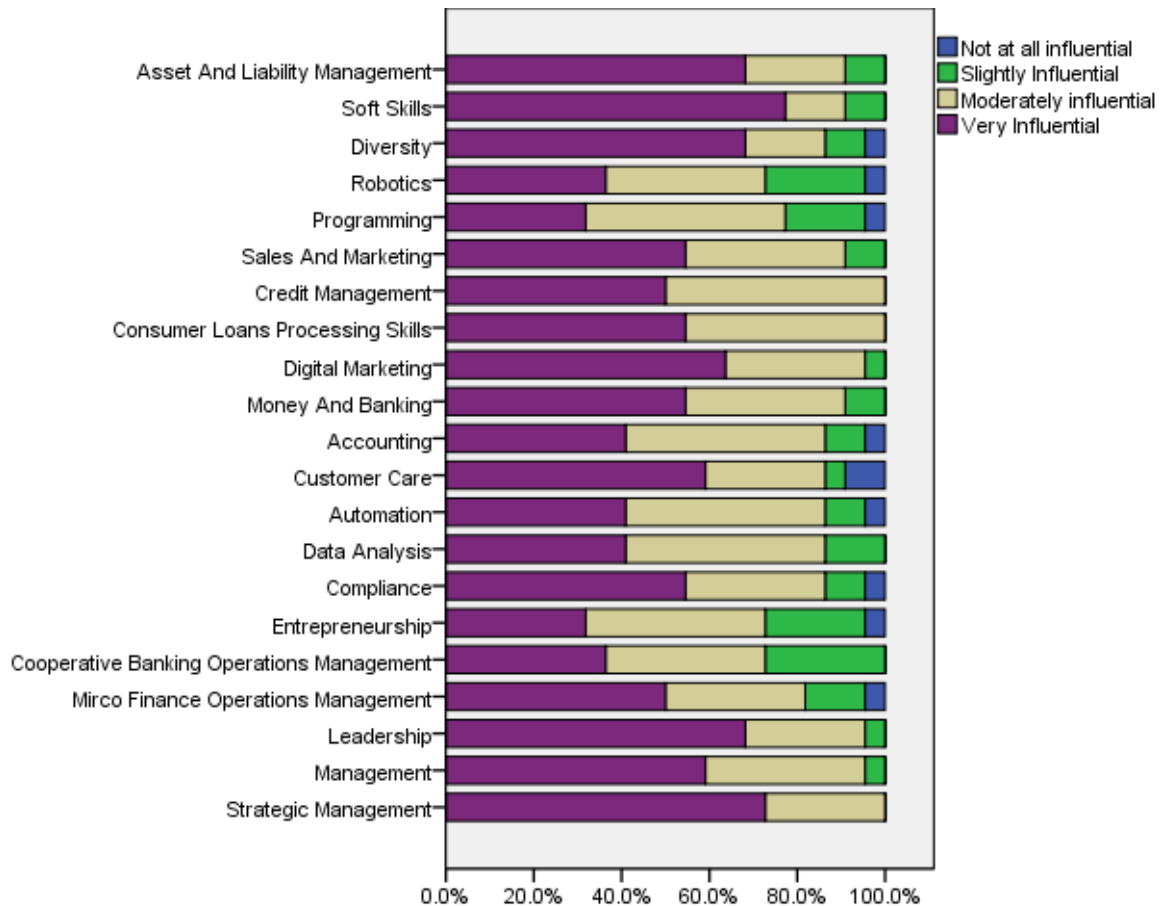


Figure 4.18. Skills programmes that will facilitate youth development and employment in the banking and alternative sectors. Source: Primary data

A look at the ratings on the skills programmes that will facilitate youth development and employment in the banking and alternative sectors was also done. As indicated in Figure 4.18, soft skills, digital marketing, compliance, leadership, strategic management, credit management, consumer loans processing and sales and marketing were the highly rated skills.

4.16. Skills development models best suited for youths in the banking sector

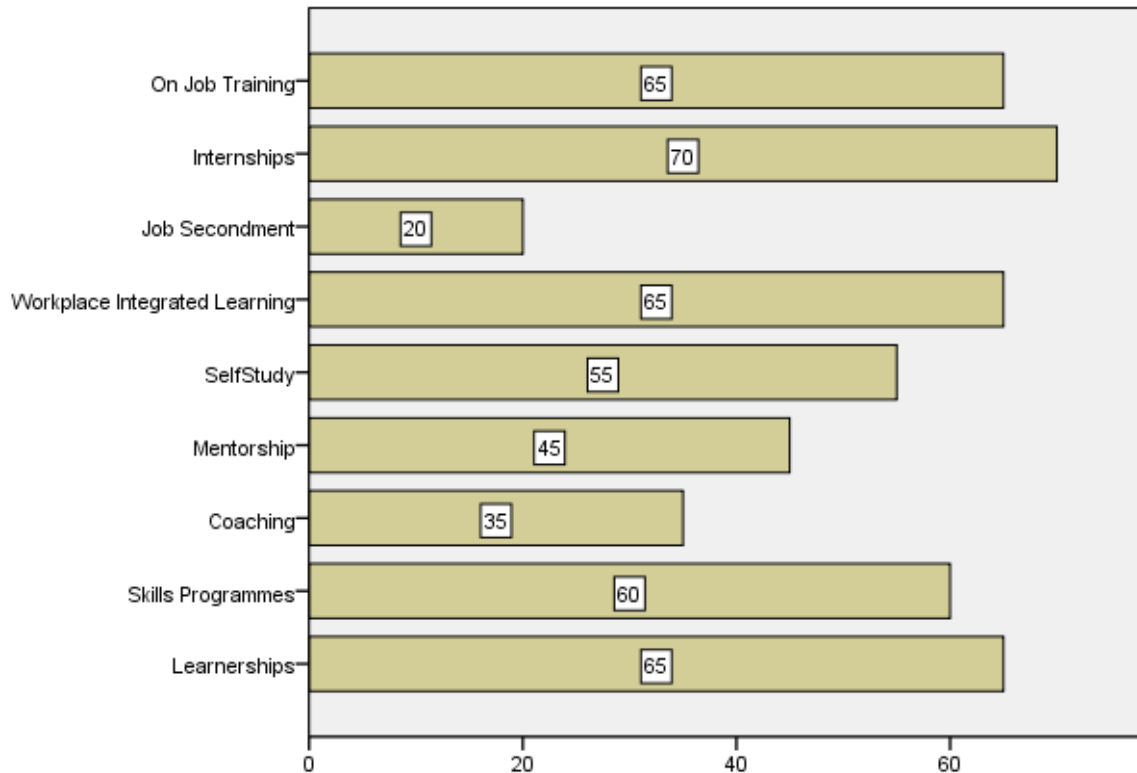


Figure 4.18. Skills development models best suited for youths in the banking sector.
Source: Primary data

Figure 4.18 shows skills development models that are best suited for youths in the banking sector. Internships, on job training, workplace integrated learning, learnership and skills programmes were in the top 5. However, respondents indicated that the internship programmes need to be lengthened and adapted in such a way that by the time the learner completes the programme they already on demand. The internship and learnership programmes should be monitored to ensure that the learner is indeed being capacitated.

4.3 CHAPTER SUMMARY

The focus of this chapter was on data presentation, analysis and discussion of findings based on research conducted within the banking sector. The results were presented as charts and

cross-tabulations using a statistical package for social sciences (SPSS) (Version 21). Analysis of demographic variables indicated that there were more women in banks than men. Most of the respondents are under the age of 40. The study also revealed that there were more youths in Gauteng province. The most preferred education advancements were in the field of sales and marketing, analytical, time management, soft skills, business intelligence, data analytics, strategic management, leadership, digital marketing, soft skills, customer care, diversity, assets and liability, IT, digital transformation, and others.

Lastly the chapter looked at the skills development models, internships, learnerships, on job training and workplace integrated learning were the most preferred options however they need to be lengthened and tailor made to the needs of both the employer and learners.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

1.6 INTRODUCTION

This chapter gives a summary of findings of the impact of robots, automation, and artificial intelligence on the employability of youths in the South African banking sector. The chapter also summarises the wider array of education and skills-building programs that can be created to meet new demands. The conclusion on how best preparations can be done for all these challenges is also given. Recommendations and framework for the preparation are outlined.

Summary of findings

Every youth should have the relevant skills and qualifications to be employable in the banking sector. This study showed that these include technical and teamwork skills, IT, time management, sales and marketing, and analytical thinking.

Those that were willing to take up relevant skills and qualifications highlighted the following as the challenges of acquisition: Lack of funding, no relevant qualification, lack of support, and difficulties in finding the suitable qualifications in line with new industry demands. Skills required by youths in the banking sector included sales and marketing, business intelligence, data analytics, IT, digital transformation, and auditing.

About 60% of youths were not affected during the Covid-19 pandemic pick whilst 40% were affected. Most of the youths were able to work from home which is a positive sign if an upward trajectory of remote working pursues.

On the ratings on drivers of changes that affect BANKSETA, the study showed that those that were considered were extremely influential except for regulations and governance, global economy, and business environments. The commonly mentioned factors that influence the current skills needs were funding, regulations, and low supply.

The study rated skills/programmes that will facilitate youth development and employment in the banking and alternative sectors. Strategic management, credit management and consumer loans processing were rated highly. The following skills development models were

best suited for youths in the banking sector: internships, on job training, workplace integrated learning, learnership and skills programmes.

1.7 Conclusion

Valuing today's youth is moulding tomorrow's leaders and investment in the future. Adolescence is the time of growth physically, cognitively, mentally, emotionally, and socially and is the most important developmental periods. Youth must be developed to suit the changes in the environment. Equipping them with the proper skills and qualifications enables them to prosper. This paradigm places young people's needs central to the program in which they are involved. In the current study focus was on development of skills for the banking sector.

The bankers of the future will still need to have and develop skills and competencies related to their profession such as corporate/retail banking, treasury, operations, compliance, and risk management as they remain relevant regardless of automation and financial intelligence among other developments. The other fields in which bankers will need to become lifelong learners is technology and innovation. Bankers of the 21st century will need to be smart users of the new technologies that increasingly penetrate the world of banking from the communications and tech industry.

As the policy response shifts from immediate relief of supporting the recovery while laying the groundwork for more sustainable, inclusive, and resilient economies, shortcomings in reaching young people need to be rectified. This is critical to prevent deeper economic and social scars and to promote a better future of work for all. The findings of the current study are in line with other studies that found that governments play a crucial role in providing tailored macroeconomic support to boost labour demand and support young workers in their labour market transitions (OECD, 2022).

This study identified key skills that the banking industry requires now and, in the future, to adapt to the technological advances. Digitisation, robots, artificial intelligence, and automation have changed the skills that employers require with many tasks having been automated (ILO, 2022). Identification of future jobs, skills, or tasks at a high risk of automation is important for employers for them to reskill, upskill or train their workforce to ensure that they have the required labour force. The current study identified jobs that are at high risk of automation or that will be in less demand or critical skills in the future.

As the banks are transitioning to automation, identified were skills required and those that were identified as less attractive in the future. These findings agreed with other studies that highlighted the importance of soft skills in the future world of work (The World Bank, 2019; PwC, 2017).

There are tasks that remain essential even with the advent of various new technologies, especially with the pervasiveness of online and digital banking, bankers will still need to build meaningful relationships with their clients. The use of technology enables bankers to free themselves from repetitive, routine tasks and to engage more creatively with their customers. They have thus more opportunities to differentiate themselves by focusing on client relationships and higher-quality services.

To help their organizations succeed in the marketplace, all banking professionals need to understand how local and global trends may affect the preferences and needs of their bank's clients in the coming years, and to keep an open mind. They should also know the most important business issues that keep them up at night. Whenever possible, they should offer valuable and creative solutions to these issues. The young professionals should invest the time and effort to build a meaningful network and to act as trusted advisors for their management and for their internal and external clients. Thus, they will be able to develop a winning personal value proposition for themselves and to contribute to a winning business value proposition for their bank.

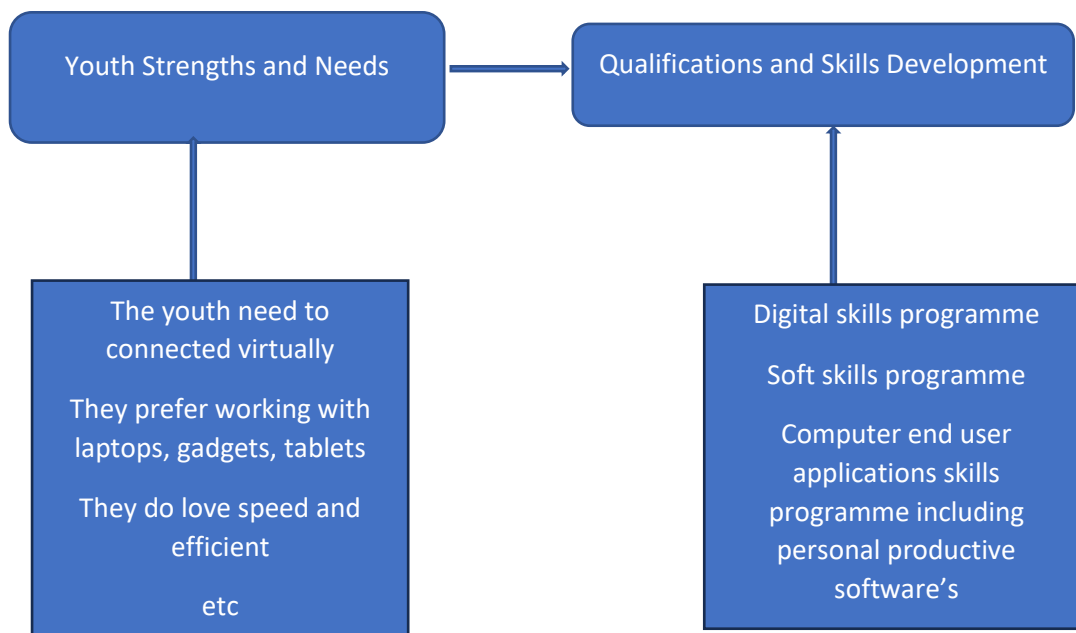
The banker of the future will need to have a growth mindset attitude and become a lifelong learner in many fields. Young people with a growth mindset attitude believe that their most basic abilities are not fixed and can be developed through dedication and hard work. The identification of required skills and qualification for growth sustainability of the banking sector is essential for development. They enjoy challenges and see failure not as evidence of unintelligence, but as a heartening springboard for growth and for stretching their existing abilities. These people are willing to step out of their comfort zones and put in the effort and practice to develop new skills and competencies. As a result, they will invent and reinvent themselves and maintain their own winning personal value proposition.

Increasing digitalization and automation of the economy and society is profoundly influencing the world of work, and the development is expected to continue and even accelerate in the future. The digital economy has considerable potential to promote the employment of young people in the banking sector, but much is required in the policy arena to transform this potential into actual decent work opportunities.

Recommendations

We recommend a strength and needs based framework for the youth to be relevant in the banking sector. The model aims to develop necessary skills for adulthood in line with changes in the industry. Figure 5.1 below shows a Strengths and Needs Qualification and Skills Development Programme (SNQSD) framework for youth development that can be adopted by BANKSETA.

Figure 5.1 SNQSD Programme for youth skills development.



Source: Author's Own

The strengths and needs development programme should revolve around research-based practices that have proven to be effective in the South African setup (Romer & Hansen, 2021). Ensuring that youth have access to programs where they can anticipate positive environments, experiences, and relationships is essential for effective SNQSD programmes (Hamilton et al., 2004). SNQSD programs will be more effective if they involve youth voice. Involving these benefactors' perspectives helps to present relevant and effective opportunities that build vital skills. This will also present an opportunity to highlight the needs of the changing environment and skills and qualifications required for one to be employable in the banking sector. Allowing youth to contribute will help to ensure acceptance and a willingness to take part in the program. Their participation in this regard will help them appreciate efforts and needs for them to fit in the banking sector considering the impact of robots, automation, and artificial intelligence on the job market for example.

The implementation SNQSD programmes especially to young people on graduate development programmes, internships and learnerships will improve their competency, confidence, character, and creativity.

We recommend that youth should be involved in hands-on projects in areas such as digitalisation, automation, robotics, savings, investments, programming, leadership, strategic management, customer care and sales and marketing. Such practical programs may be delivered through mentoring, coaching and on job training. Graduate development programmes and internship offer such an excellent opportunity for this to be realised. Learners will have opportunity to be enrolled in professional development programmes with relevant professional bodies.

We recommend that internship, graduate trainee programmes and learnership be lengthened depending on the needs of both employer and the learner.

We recommend that a dream school program be initiated. This program can be based on peer mentorship where students develop leadership and social skills throughout the school environment and express experiencing positive feelings while helping other students. This programme can be bank rolled together with career guidance events and expos.

Organized sports-based interventions are effective strategies for positive youth development. The aim will be to get a platform for the banking sector to push its agenda of the youth getting to train in relevant skills and qualifications. Sport participation has been shown to impact youth development outcomes positively (Bruner et al., 2021). Benefits of sports may include psychosocial and mental health benefits and individual growth across physical, career, competence, cognitive, and social domains.

We recommend that BANKSETA implements entrepreneurship programmes targeting young people in the banking and alternative sector to support and facilitate economic recovery and transformation in the industry. Young people in the alternative sector specially those developing third part payment services needs to be supported through skills, funding, and mentorship. The same applies with youth in the micro finance sector, they do require entrepreneurships skills, coaching and mentorship.

The transition to greener and more digital economies calls for a broad-based approach to digital literacy coupled with promotion of the acquisition of appropriate technical and digital skills by young people so that they can take full advantage of the new opportunities created. Therefore, digital skills programmes are strongly recommended.

BANKSETA, banking industry players and trade unions should partner with governments to review and adapt curricula; involve young people in workplace learning and apprenticeships;

and ensure inclusiveness in training in skills and qualifications in demand. Good-quality apprenticeships, well-designed internships (O' Higgins and Pinedo Caro 2021) and volunteering initiatives (O' Higgins 2020; O' Higgins 2022) can help to provide an entry to the banking industry for first-time jobseekers and young people leaving school or university. Therefore, partnership between BANKSETA, banking industry players, trade unions and banking professional bodies, is recommended to come up with strong robust occupational qualifications relevant to the banking subsectors.

Skills can be a driver of economic transformation. Skills development is a critical input in any effort aimed at transforming the economy, and it should accordingly be an integral part of strategies for economic upgrading. Sectoral approaches can facilitate stakeholder dialogue on skills development and help to identify and anticipate skills needs per subsector. BANKSETA should implement programmes per subsector recognising as well which sub sector contributes the most in terms of skills levy and those that really require transformation, growth, and support.

To ensure reskilling of those that are already working in BANKSETA should implement skills programmes both accredited and non-accredited for them to remain relevant in the industry. At the same succession planning should be encouraged amongst stakeholders to create employment for the youths.

BANKSETA should implement programmes in line with the unemployment per province. This will assist in alleviating and poverty and unemployment amongst youth.

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