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Factors that Influence In-Migration in the Gauteng Province

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A high in-migration rate has been identified as the cause of overpopulation in the Gauteng province. The purpose of this paper is to determine the socio-economic factors that influence the high rate of in-migration in the Gauteng province. The study used data from the 2001 census which recorded a total population of 425752 in the age group 15-35. Participants qualified if they had in-migrated to the Gauteng province between 2001 and 2011. Bi-variate analysis using chi-square was used to analyse the data. The results indicated that 43.1% of the respondents in-migrated to the Gauteng province between the ten-year period. The results indicate that these respondents believed that in-migrating to the Gauteng province would better their lives due to it being an urban area with seemingly better social opportunities. There was a higher number of men in-migrants than female in-migrants, although many wives followed their husbands. The study recommends that opportunities in rural areas, with programmes that intensely promote recreational activities should be created.

Keywords: *In-migration, Gauteng province, population*

1. Introduction

Migration according to Kainth (2010) is a geographical mobility between one unit to another, including a change of residence from the place of origin to the place of destination, which also is a factor of normal population change within a nation.

The concern of migration in the societies that welcome migrants is the impact that these migrants have. This includes changes to national socio-economic and political events that hinder development. Globally migration is now known to play a in shaping plans for social, economic and political development. (Sengupta and Chatterjee, 2011:25). While analysing the impact of migration around the world, Sengupta and Chatterjee (2011, 71) firstly note the impact of the brain drain phenomenon', In Central Asia, for example, the 'brain drain' began in the early 1990s, when students and scientists were pushed into working for donor and recipient countries due to receiving low-incomes. This resulted in the West not only having higher standards of living due to the in-migrants services, but also the problem of language

adaptation and untraditional cultural environment, caused an increase of illegal migrants to increase change of demographic structure of the population and infectious diseases for those that did not seemingly get jobs as expected (Sengupta and Chatterjee, 2011: 71).

Statistics South Africa (2011) illustrated the level of population change by percentage in South Africa to the Gauteng province in-migrants from 2001-2007, as follows: Western Cape by 16,7%, the Eastern Cape by 4,0%, the Northern Cape by 6,7%, Free State by 2,5% , KwaZulu-Natal by 7,0% , North West province by 2,4% , Mpumalanga by 8,3% and lastly Limpopo by 4,9% .The overall of in-migration of the population percentage changed to 8.2% in the Gauteng province.

“Comparing the population percentage changes in the three periods, 1996-2001 showed a change of 10.4% and, 2007-2011 showed a change of 6.7%. This shows that the changes occurred per province as migration occurred. The results show a noticeable decrease of -2% in the percentage share of the total population of Northern Cape from 1996 to 2001, Statistics (2011). However, both Community Survey 2007 and Census 2011 show an increase in the total population of Northern Cape (6, 7% and 8, 3% respectively). Gauteng, Western Cape, and KwaZulu-Natal show an increase in the population share of 15%, 10, 3% and 0, 1% in 2007 to 2011, respectively.

The percentage change levels may strongly be tied to transformation and livelihood strategies of the rural and peri-urban population. Others migrate for work, or health reasons. Some migrate to study. Women aged 15–35 years were very likely to conduct permanent migration for marriage reasons. Culturally, this is usually associated with a present wealth transferred from the destination household to the household of origin (Carol, Camlin, Rachel, Snow and Hosegood, 2014).

For older adult age groups, the likelihood of movement was less. Marriage-related reasons were still important for women and increasingly so for men, and employment was the driving force behind migration moving for reasons of union formation or dissolution were primary drivers of permanent migration among young women (Carol *et al.*, 2014). In other parts of the world, migration policies have been implemented due to the knowing of heavy influx of migrants in cities of developing countries. Should there be no policy implementation, problems of

accommodation, slums, squatter settlements, electricity supply, sanitation, traffic jams and overall a decline in quality and standard of urban life arise (Khan, 2010:133).

The trends of urbanisation are as follows: 47% of the world's population were located in urban areas in 2001, which increased by 3% to make a 50% in 2007. UNHSP have highlighted that globally, all of the population increases are absorbed by the urban areas of the less developed regions. This will mostly occur in Asia and Africa where the annual urban population growth is projected to be 2.4%. The rural population of these continents is projected to grow very slowly at just 0.2% per year and will remain nearly stable at 3.2 billion of the population (UNHSP, 2003:25).

2. Problem Statement

The high levels of urbanisation lead to problems of over-population, traffic congestion, the formation of slums, and pollution which could negatively affect the receiving areas. Now, as people migrate from rural to urban areas, it illustrates that the rural habitat lacks resources. Through this, the population density decreases and an increase is visible in the destination, hence the place of destination will experience the unevenness of change over time causing rural-urban peripheries. This results in a term called urbanisation (Khan, 2010: 139). This causes the density of the area where migrants are packed to increase as compared to other areas. The livelihood system of the urban area is different from that of the rural area as it has services and is industrialised and is greater in terms of development.

The problem arises when the area becomes overpopulated. Overpopulation is a condition where the size of the population exceeds the carrying capacity of its habitat, which is balanced by the size of the population and the available resources to sustain the resources provided in the environment for sustenance (Khan, 2010:141).

Problems that occur as a result of overpopulation include the formation of slums. According to UNHSP (2003, 8) the term 'slum' is generally used to describe a wide range of low-income settlements and poor human living conditions. The assurance of land is at the dweller's own risk because slum dwellers are usually 'informal settlers' and do not own the land they live on. Poor housing structures, unsafe houses, overcrowding, poor sanitation, and a lack of adequate water characterises slums.

Proper houses are not always available to migrants who move to urban areas; so, they often end up in sites peripheral to the cities. Usually, these migrants do not have the skills required for urban employment. This leads to poverty and crime. The main forms of crime in slums include drug trafficking and prostitution. Crime in the city can create a sense of insecurity in its inhabitants (UNHSP, 2003: 8).

Health problems are common in the poorer centres of urban areas, where diseases are caused by pathogens in water, food, soil, or air. Poor environment, housing, and living conditions are reasons for diseases like cholera, tuberculosis, diarrhoea and poor health. This also causes other problems to emerge, like water pollution as a result of a lack of sanitation, sewage treatment, poor drainage of runoff water. This, in turn contributes to the transfer of viruses and bacteria in the environment (UNHSP, 2003: 8).

3. Objectives of Study

- To assess if employment influences in-migration in the Gauteng province.
- To determine if education level has an impact on in-migration in the Gauteng province.
- To confirm if marital status, is associated with the level of in-migration in the Gauteng province.

4. Research Questions

- To what extent does the availability of employment in the Gauteng province will influence in-migration?
- How does the level of education impact on in-migration in the Gauteng province?
- Do Women tend to in-migrate due to marriage obligations with/to their husbands/males and what skills do students need for the acquisition of knowledge during workplace practice?

5. Literature Review

The literature review examines the various factors that may impact in- migration. Skeldon (1990) and other authors like Connell, Dasgupta, Laishley and Lipton (1976) have argued that migration is likely to occur due to an individual's level of fulfilment or discontent with the place of origination that particular point in time, and where there is a difference between a person's objectives and a place's service. Skeldon's concern (1990, 126) regarding migration

rates was that the rate of urban growth and the contribution of in- migration was seen to contribute to the problems faced in host urban areas. In the case of people moving from areas of lesser opportunities to areas of greater opportunities seemingly in the urban area.

Rambe (2018:2-3) further explains that since learning is a process of human adaptation, students need to be involved with workplace practice in order to reconstruct, improve and provide a balanced learning experience. According to Kolb and Kolb (2009:42), the educational and industrial learning space itself is multifaceted – both organisational and managerial performance has been entwined into the learning curve as a learning system and process of learning. This enabled the educational scholars to debate on the need to shift their primary focus from classroom learning to other forms of learning, including workplace practice.

5.1 Apartheid and migration

Connell et al (1976, 40) states that, in the context of migration, apartheid leveraged the movement of black people to urban areas. That was severely controlled by the white government, to lessen the movement of blacks from the rural areas, into the white urban areas hence the movement was temporary into the urban places. Urbanisation, which is defined as an increase in the proportion of people in urban areas, was firmly regulated. Thus, after the apartheid era, rural migrants were able to mobilise to urban areas and dwell in those areas for opportunities they had been restricted from for so long.

Kok, Gelderblom, Oucho, and Van Zyl (2006, 107) state that the creation of homelands and the laws regarding residence in the country effectively treated Africans in South Africa as foreign residents. Such that the rules allowing Africans to work in urban South Africa, were like the rules for the guest workers in European countries, where they could not obtain citizenship. Although these guest workers in European countries could have their families with them. In South Africa women were left in the homelands and men went to work in the urban areas.

5.2 Rural-urban migration

The UNHSP (2003, 25) add that the main features of urbanisation have been determined by political factors, such as civil war and repression as well as the economic, environmental and social factors. Due to the limited off-farm employment in the rural areas' migrants move to

seek seemingly greater employment opportunities in the urban areas. As a result, the UNHSP (2003,26) question, why poor rural populations continually move to the city, even when there are apparently no jobs for them and they have to live in slums with what might appear to be a lower quality of life in a vulnerable situation and separated from everything they know.

Apart from focusing on the expansion of secondary industry, Skeldon (1990, 126) and Connell *et al.*, (1976, 126) explain that, for people to move from one rural area to an urban area has generally been associated with some displeasure of the conditions in the rural areas and that their expectations could be realised in the area of destination (the urban areas). These are known as push-pull factors. Rural poverty, associated with the absence of credit facilities, pushes people out of rural areas. The 'push' includes a lack of educational facilities, a lack of rural employment opportunities, low rural incomes, and social tensions in communities. The availability of higher paid jobs, and better education, health services and entertainment can pull people towards urban areas.

Adding to Connell *et al.*, (1976), for Carley, Jenkins and Smith (2001,6) state that "although city life is attractive for many, its conditions can be difficult. The explosive growth of motor vehicle traffic and the spread of low-density suburban settlement patterns present challenges to urban governance. Urban sprawl reduces the rural land resource and can generate a range of negative causes which will pressure development. Then, in the absence of strong land use planning, people and businesses enter a brutal cycle of attempting to escape congestion by relocating to the urban fringe".

5.3 Education and migration

Looking into education, Connell *et al.*, (1976,61) state that educational status is a marketable commodity hence schooling is used specifically to gain better employment for an individual, and the location of such employment requires one to migrate. Education is viewed as an instrument to remove individuals from the rural land. Urban incomes rise substantially for the employed, and that increasingly educational qualifications are used by employers to select people for formal employment. The question remains as to how the pattern of migration shifts with different levels of education. Thus, Skeldon (1990, 161) proposes that migrants are readily absorbed into an urban labour force and that they contribute significantly to increasing levels of unemployment in the cities. "As a result, unemployment is probably the main problem and

is conceivably the root cause of many other problems such as crime and violence. It is the greatest single cause of poverty" (Skeldon, 1990: 161).

Connell *et al.*, (1976, 63) argue that the use of educational qualifications is a selection device for urban employment, and the high level of income that such employment offers is different to rural incomes. If this is so, then the increasing rates of schooling imply an increase in migration from the rural areas to urban ones, which also assumes an expansion of urban employment to match the increased output.

Connell *et al.*, (1976, 77) reasoned that there is some evidence that the proportion of migrants to towns is greatest in the population nearby villages at an early stage of urbanisation, but that in more distant villages at later stages. Ideas on urban opportunities eventually diffuse to the most distant villages: those closer to the town (urban area). Connell *et al.*, (1976, 77) also included that the choice of destination will be largely determined by the type of migration-seasonal, circular or permanent in which the migrant intends to partake.

As a result, Skeldon (1990:209), determined that migration results in the rapid growth of cities. Such that the traditional view is that migrants from rural areas flood cities with a multitude of people, swelling poverty-ridden squatter settlements and threatening the stability of a nation. Skeldon (1990, 152) further argues that the move of population from rural areas to urban areas in the majority of developing countries has not been particularly fast, and the principal component of the rapid urban growth has often been the natural growth of the urban-based populations themselves rather than the net addition of migrants.

5.4 Gender ratio of migrants

Historically more males migrated from neighbouring countries to South Africa than females because males were recruited by the mines for hard labour. One can assume that this is because of many of the in-migrants had moved to South Africa specifically for employment. (Kok *et al.*, 2006:176). One reason for migrating to South Africa is because South Africa is seen as a country of opportunities, where conditions are better than in the migrant's country of origin. However, Kok *et al.*, (2006, 181) explain that half of in-migrants did not have previous knowledge about their destination and therefore, are dissatisfied when they reach it.

5.5 Theories of migration

Although there are many theories of migration, this paper looks only at Ravenstein's laws and Lee's theory. Ravenstein identified a set of generalisations, which he called 'laws of migration' and stated that while females are more mobile than males in their countries of birth, males more frequently venture beyond these. He adds that migration is highly age selective where working-age adults display a greater propensity to migrate Cohen (1996). According to Ravenstein, the volume of migration increases with the process of the diversification of the economy and improvements in transport facilities. He also states that migration occurs mainly due to economic reasons.

Lee's proposed a comprehensive theory of migration in 1966. He begins his formulations with factors, which lead to the spatial mobility of the population in any area, and factors associated with the place of origin and factors associated with the place of destination, Intervening obstacles, and lastly, Personal factors. According to Lee, each place possesses a set of positive and negative factors. While positive factors are the circumstances that act to hold people within it or attract people from other areas, negative factors tend to repel them. In addition to these, there are factors, which remain neutral, and to which people are essentially indifferent. While some of these factors affect most of the people in the area, others tend to have differential effects (Cohen,1996).

6. Research Methodology

6.1 Research method

The study used quantitative data obtained from the 2011 South African census data. This was the third census to take place in a post-apartheid South Africa and provided the country with inclusive and nationally symbolic demographic data for the different areas of the country. This census data provides information pertaining to in-migration between different provinces and factors associated with it.

6.1.1 Data collection

The data was collected by 130 000 temporary employees of Statistics South Africa. The employees visited numerous metros, cities, towns, townships, informal settlements, villages, farms, and deep rural areas throughout the country. This paper looks specifically at the

information acquired from the Gauteng province as its main concern is to determine immigration in this particular province (Statistics South Africa, 2011).

The Statistics South Africa employees were tasked with recording the details of the people who were present in the country on the night of 10 October 2011. A list had to be compiled of all dwelling units for each EA in each EA census summary book. Each list worker had a minimum of four EA's to cover. These four or more grouped EAs were called supervisory units. Each list worker became the superior of the work of the enumerators in the EAs that they had listed. Following on the listing process, over 100 000 enumerators were recruited to count the people in each EA. Training of enumerators started in earnest after recruitment.

People living in households across Gauteng, as well as those in hostels, hotels, The poor, the rich, the homeless, those in transit at hotels, the young and the old, boys and girls, men and women, the disabled, the educated and the schooled, the wise, the blue collar, the white collar, those on the edge, the sick, the healthy, the unemployed and the employed, those in educational institutions, those in the province under whatever conditions, legal or not, it matters less, there is no difference among yourselves, hospitals and all other types of communal living quarters, and even the homeless, were all visited in preparation for the count (Statistics SA, 2011).

“Geographically, the country had to be divided into small pockets of land called enumeration areas (EA). The underlying principle for this sub-division is that an EA should be within easy reach of a fieldworker, and all households in that EA can be covered within the allocated number of days for the count. This process yielded 103 576 EAs, each containing an average of 150 households, or in the case of communal living quarters, an equivalent workload. One enumerator was allocated to each EA to visit all the households and individuals in the EA and complete a questionnaire or leave a questionnaire to be filled in” (Statistics SA, 2011).

Data was collected by the fieldworkers temporarily employed by Statistics SA, who visited dwellings of all types in South Africa to complete questionnaires about their employment statuses, educational levels and marital statuses. The questionnaire carried a subset of the census questions and sought to discover the whereabouts of each household member on census night (Statistics SA, 2011).

6.1.2 Study population

There are different types of informal settlements in South Africa. The first type of informal settlement is the low-density peri-urban which comprises of informal settlements from the

Winterveld area to the northwest of Pretoria. This type of informal settlement is constituted of people who were forcibly relocated from an urban area and literally “dumped” in the nearest homeland during the apartheid period. The other type of informal settlement can be attributed to land invasion which occurs on pockets of land that lie within the municipal boundaries. All informal areas outlined above share the same characteristics namely high-density areas, with poor infrastructure and services, like the rural areas (Abbott, Martinez, and Huchzermeyer, 2001).

6.1.3 Questionnaire design

According to Statistics SA (2011) the population aged 15-35 migrants had three questions which estimates of migration in any geographic area of the country, if the respondents have ever moved, on the month moved and the year moved in that area.

6.1.4 Data analysis

The data obtained during the census is quantitative. The software that the research used was the IBM Statistical Package for Social Sciences (SPSS) 23 using the chi-square to calculate the level of significance to see if there is a relationship between the variables, which is a descriptive, because the data obtained was from the 2011 census. The data was analysed through the level of the bi-variate which is meant to assess the level of association between dependent and independent variable known to be the relationship between internal migration (the response variable) and the different predictors of concern or objectives.

6.1.5 Variables

The outcome variables of the study since 2001 were measured using the Gauteng province and age group. The independent variables included levels of education, marital statuses, and employment statuses. For the highest level of education achieved by the in-migrants, the categories used included no education, some primary education, some secondary education, higher education, and other. Marital status was grouped into two categories: ever married (married, those living together, widows, separated and divorced) and never married. Five categories of population group were provided for: black African, coloured, Asian, white and other. Employment status included employed, unemployed, discouraged work seeker, and other (not economically active). Province of the previous residence was grouped for both male and female and place of residence was categorised as follows: urban areas, traditional areas and farm areas.

7. Result and discussion of the study

7.1 Respondents by age group

Table 1 shows the percentage of respondents who in-migrated to the Gauteng province by the different variables mentioned earlier. Starting with the age group variable, most of those who migrated to Gauteng were between the ages of 25 and 29, showing a high influx of young adults into the province. This age group is then followed by age group 30-34 in percentage of 47,18% which concludes that most of the in-migrants are between 20 and 34 years old. The results show that the differences between the age groups were significant with $X^2 = 11129.904^a$, ($p < .005$).

Table:1 Socio-economic variables

Variable	Did not migrate	Migrated	Total count	X2 Value	Significance
Age groups					
15-19	72.2%	27.8%	79579	$X^2 = 11129.904^a$	$p < .005$
20-24	57.1%	42.9%	109176		
25-29	50.42%	49.58%	119768		
30-34	52.82%	47.18%	98809		
35	55.7%	44.3%	18420		
Population group					
Black African				$X^2 = 4548.311^a$	$p < .005$
Coloured	58.3%	41.7%	354189		
Indian or Asian	68.9%	31.1%	13529		
White	45.1%	54.9%	10828		
Other	46.6%	53.4%	45133		
	23.8%	76.2%	2073		
Marital status					
Married	40.7%	59.3%	82858	$X^2 = 20677.144^a$	$p < .005$
Living together	43.1%	56.9%	60712		
Never married	64.8%	35.2%	277528		
Widower/widow	56.9%	43.1%	1062		

Separated	57.0%	43.0%	1660		
Divorced	47.0%	53.0%	1932		
Official employment status					
Employed					
Unemployed	45.3%	54.7%	185052		
DWS	64.0%	36.0%	94263		
OEA	66.6%	33.4%	16964	$X^2=18156.215^a$	$p< .005$
	67.0%	33.0%	129473		
Grouped level of education.					
No schooling	55.5%	44.5%	6122		
Some primary	55.1%	44.9%	13661		
Completed P	54.4%	45.6%	11458		
Some Sec	61.9%	38.1%	170244		
Grade 12	58.6%	41.1%	160315	$X^2=9279.115^a$	$p< .005$
Higher	40.2%	59.8%	62199		
Other	40.2%	59.8%	1753		

7.2 Respondents by population group

In terms of the population group, the table shows that a majority of those who in-migrated to the Gauteng identify as “other” . Table 1 also shows that the Indian or Asian population group is the second largest. The white population group was the third highest among those who in-migrated, followed by the black population. This difference was significant with $X^2= 4548.311a$, ($p< .005$).

7.3 Respondents by marital status

In the marital status, the population of those married was high compared to the population of those who lived together and the other marital population statuses. This shows that most of the in-migrants are married. The differences were significant., with $X^2= 20677.1442$, ($p<0.005$).

7.4 Respondents by employment status

The official employment status category shows that the employed were more likely to in-migrate to the Gauteng province. The discouraged work seekers (DWS) also followed those of the unemployed with a lesser percentage. It could therefore be concluded that most in-migrants are those who have moved due to job opportunities in the province. The differences were significant, with $X^2 = 18156.215a$, ($p < 0.005$).

7.5 Respondents by level of education

In the level of education, the population with the highest to in-migrate are those who have accumulated a higher education. The difference was significant, with $X^2 = 2979.115a$, ($p < 0.005$).

8. Conclusion

The aim of this study was to determine the different factors influencing in-migration in the Gauteng province.

The circumstances that influence moving to the Gauteng province can be economic, social, political, or environmental. Economic reasons for moving to a province include finding a better place of employment for one's career path. Social reasons for moving may include looking for better quality of life or to be closer to family and friends. In this research study, age and sex have also been considered to determine if these influence in-migration.

The married population group is the highest group to in-migrate compared to other marital statuses in the study, therefore, reasons that the more the people get married the more it is likely for them to move to other better places to start a new life with their new partners, this goes in favour for reasoning with the sex variable whereby males are more dominant to migrate than females. The results of the survey support Ravenstein assertion that migration occurs mainly due to economic reasons (Cohen, 1996).

This supports the argument stated by Skeldon (1990:174) from the literature that, most people migrate due to one spouse moving due to employment. It can be proven by the results of the study that the primary reasons for marital status high in-migration is the start of a marital union, or a person moving to stay with a spouse or to stay and live like married partners. Culturally, this is usually associated with a dowry or bride wealth transferred from the destination household to the household of origin.

The data obtained by the 2011 census shows that those who move to the Gauteng province tend to have accumulated a higher education. This research study is therefore allowed to go in favour with what Kok *et al.*, (2006, 100) argued on the cases that more people who migrate, migrate to seek better quality education and better improvements in their lives. The force mainly was schooling. On the other hand, 'work' was a primary driving force behind in-migration to urban areas.

Urbanisation attracts people to cities, and this leads to overpopulation which results in scarcity of houses, insufficient space for housing cause overcrowding and the development of slums, where sewage facilities are inadequate and health facilities are poor, leading to the spread of diseases. As a result, municipalities and local government face a serious resource crisis. This is because the land distribution in the Gauteng province is small compared to other provinces in South Africa (Khan, 2010: 133).

9. Recommendations

With all the issues surrounding in-migration in the Gauteng province, the first step to finding solutions is to firstly investigate the problems faced by people in their place of origin, otherwise known as 'pushfactors, as identified in Lee's migration theory.

Since most rural areas are assumed to have arable land, local governments of provinces with rural areas should allow a better flow of agricultural activities which include the young population, allowing school leavers to be employed so that they are not forced to seek work in the Gauteng province. In doing so, the demand for labour will be increased in rural areas and the overpopulation of the Gauteng province may be lessened. By providing additional programmes of choice of people may elect to remain in their localities rather than migrating.

In this paper migration has been shown to be selective of age, gender, level of education, professional status, marital status, etc. This study understands that the migration structure has been partly examined because of what happened during the apartheid era. To reduce the in-flow of migrants to the Gauteng province, there must be a direct proportion to the number of opportunities and the number of migrants to the intervening obstacles from both rural and urban areas. So that the volume of migration from the rural to the urban is not only associated with the high number of people from rural areas but also with the number of opportunities available. This study recommends that the Gauteng province and all the provinces should create more

jobs so that people can take good care of their families and lower the costs of basic health care with the goal of reducing diseases and population growth.

10. Conclusion

If the South African government would make the rural dwellers understand that not only urban areas can bring about better opportunities, by also developing opportunities and balancing service distribution in both the rural and urban areas this will be a major step in the right direction for reducing in-migration to the Gauteng province.

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The Impact of COVID-19 on South African Education and the Social System

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COVID-19 is not only a health problem but a global pandemic. In South Africa in particular, the public is not fully aware of the virus and how to prevent the spread, so is the continued increase in the numbers of those infected. Various countries implement different methods to prevent the widespread of the virus, with some guidelines from the World Health Organisation. South African government has imposed a number of regulations and restrictions on the public in a bid to prevent or limit the spread of the virus. This research seeks to investigate the impact of COVID-19 and national lockdown regulations on South African education, and how this has affected the social system. It is questionable whether the rights of the citizens as enshrined in the Constitution is breached as a result of the lockdown regulations? What resources have the government put in place to combat Covid-19 in the education sector? And whether these resources are adequately available to combat the pandemic? Conclusions and recommendations are made with regard to the questions raised.

Keywords: *COVID-19, Education system, Government regulations, constitutional rights, Social system, Inequality*

1. Introduction

It started as an anecdote, and yet today we cannot visit our friends and family members. The President of South Africa announced a 21-day lockdown that started on Friday 27 March to Thursday 16 April 2020. (Statistic South Africa. n.d.). Businesses, churches, and schools shut down, the entire country under lockdown, restrictions, or new rules like social distancing imposed on the people in a bid to prevent the spread of the virus.

Uncertainty loom, the safety of learners and teachers questioned, and whether schools shall ever reopen remain indeterminate. COVID-19 pandemic has brought a lot of trauma and anxiety to the public. The question remains for how long will people practice this lifestyle? While some parents, students, and teachers question the future of the academic year, others remain in doubt whether the virus exists, and if true, how deadly is the virus?

COVID-19 belongs to the coronavirus family; COVID-19 is closely related to SARS and MERS viruses (News Medical n. d). According to the World Health Organisation (WHO) (2020, 2), "COVID-19 is a disease caused by a new strain of coronavirus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disease was referred to as '2019 novel coronavirus' or '2019-nCoV.' The COVID-19 virus is a new virus linked to the same family of viruses as Severe Acute Respiratory Syndrome (SARS) and some types of common cold". Breathing droplets from a person suffering from COVID-19 who coughs out is considered as one of the means to catch the virus. The reason why the South African government imposes social distancing on the citizens - staying at least a meter away from the next person who may have COVID-19 (News Medical, n. d.).

The challenge of this research is to ascertain how COVID-19 has impacted on South Africa education and the social system. The research problem and objective of the research is provided. The research questions raised would be critically examined, and a literature review of the inception of the pandemic. According to the South African Constitution, everyone has the right to freedom of movement and the right to education; It is questioned whether the closure of schools and lockdown is an infringement of constitutional right? Other Acts of Parliament, like the Disaster Management Act (2002), State of Emergency Act (1997), and government regulations are critically examined. The effect of COVID-19 pandemic on

education and the social system is also examined, and possible recommendations advanced in this regard.

2. Problem Statement

Closure of schools and businesses, and subsequent categorizing lockdown into five alert levels by the South African government is intended to prevent the spread of the virus and to reduce the number of deaths resulting from COVID-19. This has impacted negatively on education and the social system – a complete shift in lifestyle. Schools and other learning institutions are forced to introduce completely different learning methods, students, without prior training, are compelled to learn and adapt to these new learning methods.

A national state of disaster declared on 15 March 2020 and a national lockdown affected the education system; it implied the closing of schools and a shift in the academic calendar, and style of learning. In terms of provinces, as a result of the disparity in per capita income, some rich provinces according to Nag (2018), like Gauteng and Western Cape, were quick to adapt to the new method of learning than other poor provinces like Limpopo and Eastern Cape. Institutions like TENEO education introduced the South African Curriculum – Online school for Grade R4-12 in which teachers deliver lessons through the digital medium in both English and Afrikaans languages. Through this method, parents can also access and observe their children, see if their children are attending classes, view upcoming tests and examination, and communicate with teachers (TNEO Education n.d.). Unfortunately, not every student and parent can easily gain access.

While some students are slow to learn and adapt to the new learning methods, others do not have the financial means to access these new learning methods. This may be a result of the fact that the students have either relocated to their countries or rural areas where accessing computers and the internet become difficult if not impossible. Although the result is not representative of the entire population, Statistic South Africa (2020) released a web-based survey to measure the impact of the COVID-19 pandemic in the country. The third round of the survey focused on the issues of migration and education for those residing in Gauteng province. Applying a non-probability and convenience sample, over half of 1.323 individuals were from Gauteng. About 6% of the respondents changed their provincial residence. A greater proportion moved between the dates of the announcement of the lockdown and the commencement of the lockdown (Statistic South Africa, 2020).

A quarter of the respondents indicated the need to be closer to their families and friends. About 12% of respondents travelled across provincial boundaries for the purpose of attending funerals. In the sample, 9% were international migrants, 22.06% born in Zimbabwe, and 22.6% born in Europe. 'One-third of respondents were born in countries that are part of the Southern African Development Community (SADC) region. Other areas featured were South America, North America, the rest of Africa (outside the SADC region), and Asia' (Statistic South Africa, 2020). These movements indirectly lead to an increase in the level of inequality since students who cannot afford or access the learning tools are bound to drop from school.

Although the government had restricted movements of citizens to prevent the spread of COVID-19 by imposing lockdown regulations, the spread of the virus remains on an increase. This is because while some citizens adhere to the lockdown rules and preventive measures, some directly or unconsciously breach these restrictive measures. One of the reasons raised to justify disrespect for lockdown regulations by some citizens is that it is unconstitutional, as it infringes on their right to freedom of movement.

3. Research Objective

The objectives of this research are to critically illuminate the origin of COVID-19; examine the impact of COVID-19 on South African education and the social system; examine the measure put in place by the government to fight the pandemic, whether these measures are adequate and effective. One of the objectives is also to examine if there is conflict in terms of the legislature and the executive with regard to the exercise of power; and how possible the virus can be controlled and prevented.

4. Research Question

The research examines the impact of COVID-19 on education and the social system, and measures put in place by the government to fight the pandemic. To achieve this objective, the following research questions are raised:

- What is the effect of COVID-19 on students?
- What resources have the South African government put in place to combat Covid-19 in the education sector, and whether these resources adequate?
- How can COVID-19 be controlled especially in schools?

- With the advent of COVID-19 and the lockdown regulations, it is questionable whether the rights of the citizens as enshrined in the Constitution are breached as a result? In other words, are government regulations on COVID-19 a breach of a constitutional right?
- What are the future prospects of education with reference to COVID-19?

5. Literature review

5.1 Mode of learning in South Africa before COVID-19 pandemic

‘The emphasis in the new curriculum after 1996 in South Africa was placed on the transition from the traditional aims and objectives approach, to Outcomes-based education (OBE) and Curriculum 2005’ (Mouton, Louw, and Strydom, 2013:3). After 1993, parents desperately need their children to be in school. Education in South Africa has been praised and encouraged, this is a result of the fact that the majority of South African parents are from the previously disadvantaged groups who never had access to a decent education. (Mbiza, 2018).

Before 2009 the South African education system was governed by the Department of Education. The Education system is now governed by two national sectors – The Department of Basic Education (DBE) in charge of primary and secondary institutions, and the Department of Higher Education and Training (DHET) in charge of tertiary education and vocational training, which includes Adult Basic Education and Training (ABET) centers, and Higher Education (HE) institutions. Each of the nine provinces in South Africa has provincial education departments in charge of the implementation of national policies on education. (Mhlanga and Moloi, 2020 p.3).

Although some higher institutions like the University of South Africa has been utilizing the digital system for Online Distance Learning; and some private high schools, like Valenture Institute operates completely online globally (Valenture Institute). However, the traditional model of learning in South Africa is a face-to-face whiteboard lectures; with the advent of digital technology, the focus has been on blended learning.

5.2 The outbreak of COVID-19

According to the Department of Health (2020), the outbreak of the virus began in December 2019 in the city of Wuhan in China. Coronaviruses are considered a large family of viruses that can cause illnesses to both humans and animals. In the case of humans, it can cause respiratory

infections and can lead to severe conditions like Middle East Respiratory Syndrome (MERS), and Severe Acute Respiratory Syndrome (SARS). COVID-19 is considered the most recently discovered coronavirus, which causes coronavirus disease (Department of Health, 2020).

People may become infected, but the symptoms do not manifest; the symptoms of COVID-19 are generally mild and begin progressively. At this stage, most people can recover from the virus without proper treatment (Department of Health, 2020). However, if proper treatment is not taken, it can subsequently lead to Pneumonia or difficulties to breathe; at this stage, the case is considered severe (WHO, 2020,2).

It has been noted that the symptoms of COVID-19 are similar to influenza or a common cold, and can include cough, shortness of breath, and fever (WHO 2020,2). Other common symptoms are tiredness and dry cough, aches, pains, sore throat, runny nose, or nasal congestion (Department of Health, 2020). Studies suggest that COVID-19 is transmissible mainly through contact with respiratory droplets, and not through the air. A person can catch COVID-19 if these droplets settle, for example, on a surface (News Medical, n. d.), or around the person and someone touches the object and then touches his or her eyes, mouth, or nose. A person can also catch the virus if he or she breathes in droplets from anyone who is suffering from the virus. It is, therefore, possible to catch COVID-19 from a person who has mild symptoms like a cough. (Department of Health, 2020). It has also been stated that symptoms of COVID-19 are estimated to appear within 2 to 14 days. During this stage, the infected person does not display any symptoms, and the virus is transmissible. (Worldometers n.d.).

Since COVID-19 has cold and flu symptoms and spread more rapidly in cold weather, it is not yet certain if hot temperatures prevent the spread of the virus (Centers for Disease Control and Prevention, 2019). People who are suffering from pneumonia or difficulties in breathing must seek medical attention. There is not yet any vaccine or treatment for COVID-19 (Department of Health, 2020). At the time of this research, South Africa records 459.761 cases, the total number of deaths 7.257. 287.313 recovered, and 539 in critical conditions. However, no new deaths, and no new cases recorded (Worldometers, 2020, July 29). For preventive measures, it has been recommended that everyone practice avoiding touching their nose, mouth, and eyes with unwashed hands; wash hands regularly with soap or hand sanitizer; avoid close contact especially with those infected with the virus; frequently clean and disinfect touched object and surfaces, and cover sneeze or cough with a tissue or a flexed elbow (Sacoronavirus, n.d).

5.3 School environment versus homes-schooling

Accordingly, about one million students are enrolled in 26 public universities; more than 7.000.000 are enrolled in over 50 higher vocational education and training institutions; and about 90.000 are enrolled in different private institutions. (Universities South Africa, n.d.). There are about 25.000 schools with 23.000 being public schools catering to over 12 million learners (Passmark, n.d.). The culture has always been getting up early in the morning, prepare and go to school, learn in classrooms, interact with other learners during intervals, come home do homework, class assignments and prepare to go to school the next day. However, the challenges faced by learners in a schooling environment would include bullying, truancy, low morale, and a high rate of learners drop out. (Mouton, Louw, and Strydom, 2013, p. 32-33). Although schooling environments are advantageous, there are certain disadvantages, for example, teachers may be inadequately trained with regard to outcomes-based assessment, lack of physical and learning support resources, teachers experiencing administrative overload, and the possibility of overcrowded classrooms (Mouton, Louw, and Strydom, 2013 p. 35).

Discounting conventional classrooms and encouraging homes-schooling requires a collaborative effort between the education departments, teachers, students, and parents. Some parents would prefer home-schooling for the interest of their children -security purposes. Where it is affordable, homes-schooling would imply a greater responsibility for personal development. Unnecessary competition, peer pressure, and bullying at school are avoided. However, with homes-schooling, learners and students are prevented from peer socialization opportunities, and the possibility for corrupt personality development (Kwach, n.d.).

In the midst of COVID-19 pandemic, most learning institutions have introduced at least, a degree of online learning to their learners and students. Higher Education and Training institutions like EDUCOR, for example, Damelin College introduced virtual classes for most of its programs; through the use of Microsoft teams to 'Go! Digital'. Other institutions adopted applications like zoom for video conferencing and websites with the use of tablets, laptops, and cell phones like main devices where learners, teachers, and parents can see through a web camera, and hear through microphones and speakers. Teachers share screen through this means and ask questions using the chat function. Applications like Skype, Zoom, Google Classrooms, and Microsoft teams are rapidly becoming part of school vocabulary. (Du Plessis. 2020).

The rapid improvement in technology has revolutionized distance learning, especially in the course of the COVID-19 pandemic. Educators, lecturers, learners, students, and parents are compelled to be more techno-literate as the medium of learning due to the lockdown restrictions (Du Plessis, 2020).

6. Research methodology

Since this research is intended to examine how COVID-19 has impacted on South Africa education and the social system, the research design will be exploratory in nature. A logical analysis of COVID-19 and its effect will be provided through a qualitative research method. This will include an analysis of the South African Constitution, other Acts of Parliament, and government regulations.

Secondary sources like reports, textbooks, articles, thesis, periodicals, reports and internet sources are also consulted to answer the research questions and to attain the objectives of this research.

7. National lockdown alert levels and implications

South Africa went into a national lockdown at mid-night Thursday 26 March 2020. After the imposition and implementation of the national lockdown regulations, South Africa progressively relax the lockdown restrictions. The country, at that stage, was considered to be at lockdown alert level 5. The government gradually adjusts to the various levels of lockdown based on the degree of containment and infection rate. At the time of this research, the entire nation was at lockdown alert level 3. However, different provinces may subsequently be placed under different lockdown alert levels, depending on the infection rate in that province (Sibanyoni, 2020).

7.1 Alert Level-5 Lockdown

This is the most stringent and difficult level. At this level government consider the possibility of the virus spreading at a very fast speed, considering the fact that no suitable medical facilities are in place, a reason for a national lockdown. Sectors permitted to operate during this level are only particular essential services like hospitals, ambulances, pharmacies, and security sectors. Transport services and private cars allowed to operate only at restricted times with stringent limitations on vehicle capacity and hygiene requirements like masks.

The inter-province movement of people is restricted, with exceptions like those traveling to attend funerals and transportation of essential goods. National lockdown level 5 witnessed the introduction and implementation of social distancing and quarantine (Pieterse, 2020). The Inter-province movement of people is restricted, with the exception of the transportation of essential services. The gathering of people is completely prohibited, with the exception of funerals (Sibanyoni, 2020); however, the maximum number of persons required to attend is not specified under this alert level.

Safety measures include social distancing – two meters away from the next person, to be applied in public places like pharmacies, sanitation, and the use of proper personal protective equipment like face masks and cloth. Curfews enforced between 8 pm and 5 am with the exception of essential service workers (Sacoronavirus.co.za n.d.).

7.2 Alert Level-4 Lockdown

At this level, all essential services allowed to operate. This includes financial services, global businesses like export markets, Postal and Telecommunications Services, Information Technology, and food retail stores with limitation on vehicle capacity, and hygiene requirements. Everyone confined at home from 8:00 PM to 5:00 AM. No inter-provincial transport except transportation of goods, and for funeral purposes. People allowed to do exercise, like walking running and cycling between 6:00 AM to 9:00 AM within 5KM of their residences, but not in groups. The wearing of masks is compulsory in all public spaces.

7.3 Alert Level-3 Lockdown

Implementation of level 3 lockdown implies the virus may spread, but at a moderate rate, which hospitals can accommodate. Sectors permitted to operate are takeaway restaurants, sale of liquors within restricted hours, grocery, and clothing, electronic, and bookshops permitted to operate at 50% capacity. Inter-province transport restrictions with limitations on vehicle capacity maintained. The nation moved to Level 3 lockdown alert at the start of June 2020 (Youtube.com). According to Disaster Management Act: Regulations (2020), Regulation 4 states that all businesses like supermarkets, retail stores wholesale, and pharmacies shall;

- (a) determine their area of floor space in square metres;

- (b) based on the information contemplated in paragraph (a), determine the number of customers and employees that may be inside the premises at any time with adequate space available;
- (c) take steps to ensure that persons queuing inside or outside the premises are able to maintain a distance of one and a half metres from each other;
- (d) provide hand sanitisers for use by the public and employees at the entrance to the premises;

As preventive measures, the South African government requires every person to keep ‘a distance of one-and-a-half meters from other people’, washing or sanitizing hands regularly, clean surfaces regularly and wearing masks in public places. Places of worship are limited to 50 persons depending on the size of the venue. (Sacoronavirus, 2020)

7.4 Alert Level-2 Lockdown

At this level, it is considered that the virus can still spread but at a moderate rate. This is because of the availability of moderate means to manage infected persons. Other sectors allowed to operate at this level include all retail, constructions, installations, and manufacturing companies, domestic air transport permitted. The rule of social distancing still applies.

According to the Disaster Management Act: Regulations: Alert level 1 during Coronavirus COVID-19 lockdown (Gazette 43727 of 20 September 2020), every person is expected to be confined to his/her place of residence between 00:01 until 04:00 except the person is permitted. With regard to attendance at funerals section 68(1) states that ‘attendance at a funeral is limited to 100 persons or less: Provided that not more than 50 percent of the capacity of the venue is used, with persons observing a distance of at least one and a half meters from each other’. Night vigils are strictly prohibited.

Section 69 of the aforementioned regulation limits gatherings at faith-based institutions to 250 persons; gatherings at social events are limited to 250 persons; gatherings for political events and traditional council meetings are limited to 250 persons and in the case of out gatherings 500 persons, with a provision that ‘no more than 50 percent of the capacity of the venue is used, with persons observing a distance of least one and a half meters from each other’ – the same applies to gatherings at conferences, live performances, and concerts.

The alert level allows for the partial re-opening of international borders. Section 75(3) states as follows:

From 1 October 2020, all travelers from the African Continent and from countries outside the African Continent with a low rate of COVID-19 infection and transmission will resume subject to -

- (a) the traveler providing a valid certificate of a negative test which was obtained not more than 72 hours before the date of travel; and
- (b) in the event of the traveler's failure to submit a certificate as proof of a negative test, the traveler will be required to quarantine at his or her own costs.

According to the Disaster Management Act: Regulations: Alert level 2 during Coronavirus COVID-19 lockdown (Gazette 43620 of 17 August 2020), every person is expected to be confined to his/her place of residence from 22:00 – 04:00 except a person is permitted. In terms of attendance during funerals, section 52 states that; 'attendance at a funeral is limited to 50 persons and will not be regarded as a prohibited gathering. Night vigils are not allowed. During a funeral, a person must wear a face mask and adhere to all health protocols and social distancing measures. Face masks remain mandatory in all public places.

With regard to other gatherings, section 55(2)(a) of the Disaster Management Act: Regulations: Alert level 2 during Coronavirus COVID-19 lockdown prohibits all gatherings, except a gathering at:

- A faith-based institution, which is limited to 50 persons or less, depending on the size of the place of worship: Provided that all health protocols and social distancing measures are being adhered to as provided for in directions issued by the relevant Cabinet member responsible for cooperative governance and traditional affairs.

7.5 Alert Level-1 Lockdown

At this level, all sectors are permitted to operate. Inter-city transport allowed, but restrictions on international transport maintained (Sibanyoni, 2020). However, strict hygiene conditions and rules must be followed. It is expected that since the South African government did not rate an Alert Level 0, or an Alert Level -1 Lockdown, allowing international flights and uplifting the rule of wearing masks would be considered as a national state of normalcy, with schools

resuming. This is the level at which, it is expected that COVID-19 can be cured or is under control.

According to section 66-68 of the Disaster Management Act: Regulations: Alert level 1 during Coronavirus COVID-19 lockdown, every person must be confined at home between 00:01 am to 04:00 am. Except the person has been granted permission or is attending to 'a security or medical emergency'. In public places, it is mandatory to wear a face mask in public places and in public transports. Night vigil is prohibited, and funeral attendance is limited to 100 persons provided not '50% of the capacity of the venue is used'. However, gatherings for conferences, worship, for example, is limited to 250 persons. International airports partially open, while all commercial seaports are open.

8. Effect of COVID-19 on the social system

Considering the abovementioned lockdown alert levels, one would state with certainty that the implementation of national lockdown measures as a result of the pandemic has impacted negatively on society.

'In Peddie in the Eastern Cape, children are eating wild plants to survive, as the Covid-19 pandemic and the lockdown take their toll. The number of households going hungry has doubled, according to new research' (Brown, 2020). The situation can further be understood from the expression of a woman who said 'my children will tell you the taste of every plant in this area, as for the last three months I have been feeding them these plants' (Brown, 2020).

According to the National Income Dynamics Study (NIDS), while 21% of respondents indicated that they did not have money to buy foodstuff in the previous year, 47% of household indicated that they did not have money to buy groceries in April 2020 (See Brown, 2020). While foreign nationals were also approaching Gift of the Givers for food, distress calls from workers in companies like restaurants, aviation, and hotel sectors is an indication of how massive job losses, as a result of lockdown, had spread hunger in society (Brown, 2020). Some of the lockdown restrictions have remained an indefinite condition for some businesses in the entire nation, for example, closure of some businesses and events like conference and convention centres, no more sit in restaurants, bars, and hotels. Venues for entertainment like theatres, cinemas, and sporting centres remain closed, including cultural and religious

gatherings. These have led to a tremendous increase in the rate of unemployment in South Africa, considering the number of workers laid off.

The negative impact of the lockdown due to COVID-19 on socio-economic activities in the country, especially the restrictions on inter-province transport cannot be underestimated. It is anticipated that further restrictions would be imposed on passengers to wear masks before entry into a vehicle, car, or train is allowed.

Table 1.1 COVID-19 Statistics in South Africa

Tests conducted	Positive cases	Recoveries	Deaths
4,229,709	677,833	611,044	16,909

Source: COVID-19 Corona Virus South African Resource Portal

A more disturbing factor in the above statistics is the number of deaths (16.900) within a period of five months. Therefore, the number of those infected by the virus (677.833) minus (-) the number of those recovered (611.044) from the infection is 66789 infected cases. This is to justify the fact that the infection rate remains on the increase. It should be noted that the statistics above were gathered at the time this research was being conducted. Therefore, the figures may vary before the publication of this article. It is also important to examine how COVID-19 and national lockdown have affected the transport industry, especially inter-province transports. The statistics from the table below indicates the distribution of respondents, in percentage, who changed their provincial residence during the lockdown.

Table 1.2 Percentage distribution of respondents who changed their provincial residence during the lockdown.

Provincial residence during lockdown	Percentage
Change of provincial residence during the lockdown	
Yes	5,9
No	94,1
Period of move	
In the few days between the announcement and the start of the lockdown	43,3
During April 2020	4,5
During May 2020	35,8
Since the beginning of June	16,4
Reason for move	
I returned to my usual province of residence after spending the initial lockdown period in another province	19,1
I wanted to be closer to family/friends	25,0
I did not feel safe in the province I usually live	4,4
It is cheaper to live here	1,5
Healthcare is better here	2,9
Other	47,1

Source: Statistics South Africa (2020, July 04)

9. The effect of COVID-19 on learners and students

In some homes where families barely survive with insufficient food, learners who depended on school meal became under-fed as a result of schools shutting down (NASCEE, n. d).

A high rate of school drop-out from primary, high schools, and tertiary institutions for the following reasons;

- Lack of the necessary resources for institutions to facilitate online learning.
- Some parents cannot afford the necessary learning tools for their children.

- Where the resources are available, students may find it difficult to adapt to the introduction of new learning methods and techniques.

A serious problem faced by learners and students in South Africa is not the COVID-19 pandemic, but the consequences of the lockdown and restrictions as a result of the virus. Lockdown restrictions have had a negative impact, emotional psychological, on learners, students, and teachers (Vorster, 2020).

Report indicates that many students could not learn in isolation, considering their acquaintances to a structured traditional classroom environment. At home, as a result of school shutdown, disadvantaged students struggle with piles of work. Some do not have access to study materials on time, and the stress of fear of not meeting up. Many students relocated to settlements that remain crowded with continued distractions, and family interruptions (Jansen, 2020).

There are about 19.7 million children in South Africa who are under 18 years; this makes up 34% of the population. Some of the challenges amplified as a result of lockdown restrictions include starvation and education. This is justified by the restriction; ‘the cost of food basket increased by 7% or R220’ in the month of March 2020, and the fact that about 2.5 million of these children attend some education and children development facilities where they were receiving meal every weekday (Vorster, 2020).

At home, learners and students have experienced loneliness due to separation from their mates, teachers, and even parents who became vulnerable and placed in isolated places. (Jansen, 2020). When schools resume, learners and students would find it difficult to catch-up, considering the fact that most of them have been without access to learning materials for over six months. The effectiveness of trying to recapitulate what was lost, what is to be done, coupled with the fact that learners and students need satisfactory emotional and psychological support at school, make the schooling environment scary. Jansen (2020) states some of the experiences expressed by learners as follows:

Those in elite schools had access to fully online education while many others depended on downloaded content from WhatsApp groups, which they accessed if and when devices and data were available. Many relied only on intermittent programming through radio, television and occasionally print material from the local school. What all these students had in common, though, was the experience of emotional distress experienced during the extended lockdown.

10. Are adequate resources being put in place to combat Covid-19?

The South Africa government in collaboration with the Department of Education has introduced new learning channels like Technical Vocational Education and Training (TVET) Online Courses, and National Open Learning System in a bid to assist students at home. A process is being developed where students can access past examination papers in preparation for their final assessments. The Department of Basic Education (DBE), in collaboration with provinces, prepared online and broadcast learning resources to promote reading for all Grades (South African Government, n.d.).

The Department of Basic Education (DBE) and South African Broadcasting Corporation (SABC) has launched a Coronavirus COVID-19 television and radio curriculum support program for learners. The main aim is to limit the impact of the lockdown on the academic calendar. Various support programs for learners have been introduced and are being broadcasted on all three SABC television channels and 12 radio stations.

The television schedule is as follows:

- SABC 1: Monday to Sunday - 05:00 – 06:00
- SABC 2: Monday to Friday – 09:30 – 11:00
- SABC 3: Monday to Friday – 06:00 – 07:00

It should be noted that, in order to reach wider audiences, the FREE STEM Lockdown Digital School has expanded into a community television since April 2020, and the learner support program made available on DSTV channels – Soweto TV (251), and 1KZN (261) (Gov.za, n.d.). Parents and learners are encouraged to visit the Western Cape Education Department's e-Portal which has been updated for homeschooling.

One cannot deny the fact that the South African government has been putting a lot of resources to combat COVID-19, for example, an increase in social grants. However, most households would not have yet received the COVID-19 special grant. This measure by the South African government did not benefit everyone in the country foreign nationals who do not have Identity Card are completely left out (Brown, 2020).

A report was released on 9 July 2020 by Oxfam in relation to rising prices; it was noted that 'one-in-three adults surveyed said they were going to bed hungry, and a fifth had lost weight during the lockdown because of a lack of food'. One of the reasons being price gouging and stockpiling of foodstuff and other basic needs. It has been indicated that there is a substantial

increase in hunger since the beginning of the lockdown restrictions. According to Statistic South Africa on the one hand, 2.688 respondents who reported hunger increased from 4.3% to 7% (See Brown, 2020).

Human Sciences Research Council and the University of Johannesburg on the other hand, based on 5.481 questionnaires, about 28% of respondents reported going to bed hungry since the lockdown restriction. (See Brown, 2020). This is an indication of an already existing gap of the unequal social situation; an indication that the resources put in place by the South African government to fight against the COVID-19 pandemic proves to be inadequate. This also directly hinder learners and students and their learning processes.

According to statistics, households with children are more likely to suffer from hunger than households without children. The situation is further aggravated by the loss of jobs resulting from measures to control the spread of the virus. Moreover, 30% of children live in households where no one is employed. Households use most of their finances to buy sanitizing products in a bid to prevent contracting the virus; this comes at the expense of basic needs like food (Jonah, et al., 2020).

Despite all the resources put in place by the government including the creation of learning Applications, the introduction of more learning programs on television and radio slots by the Education Department, it would be concluded here that these resources remain inadequate to assist the learning processes of learners and students.

11. Is lockdown to fight COVID-19 a breach of constitutional rights?

One of the reasons some citizens breach government regulation for the fight against COVID-19 is because they believe that they uphold the Constitution. Accordingly, restricting them from exercising their constitutional rights becomes unconstitutional. Freedom of movement, for example, is a constitutional right, but there seems to be a tussle between this constitutional right and the exercise of executive powers with regards to the fight against COVID-19.

According to section 10 of the South African Constitution (1996), everyone has the inherent dignity and the "right to the have their dignity respected and protected". Section 18 states that "[e]veryone has the right to freedom of association". According to subsections 21(1)(2), "[e]veryone has the right to move freely and to leave the country. Another important subsection of the Constitution is subsection 29(1) which bestows everyone the right to basic education, and further education. However, movements of people are restricted, churches closed, learners

and students are forced to stay at home since schools are shut down as a result of COVID-19. The issue raised here is whether these constitutional rights are not infringed by the government by imposing a national lockdown?

It is necessary to examine some Act of Parliament in order to justify the findings. To ascertain whether COVID-19 is a disaster, section 1 of the Disaster Management Act (2002) states:

Disaster means a progressive or sudden, widespread or localised, natural or human-caused occurrence which -

(a) causes or threatens to cause -

(i) death, injury or disease;

(ii) damage to property, infrastructure or the environment; or

(iii) disruption of the life of a community; and cope with its effects using only their own resources;

(b) is of a magnitude that exceeds the ability of those affected by the disaster to cope with its effects using only their own resources.

Accordingly, section 1 of the Disaster Management Act (2002) defines disaster management as a non-stop and a combination of multi-sectoral and multi-disciplinary procedure of preparing and implementing measures aimed at “preventing or reducing the risk of disasters”; “mitigating the severity or consequences of disasters”. Therefore, one would conclude here that a national lockdown could be to prevent or reduce the risk of the spread of COVID-19.

According to section 26(1) of the Disaster Management Act (2002), the national government (executive) has the power and responsibilities to coordinate and manage national disasters.

In terms of a declaration of national state disaster, section 27 of the Disaster Management Act (2002) states as follows:

(1) In the event of a national disaster, the Minister may, by notice in the Gazette, declare a national state of disaster if -

(a) existing legislation and contingency arrangements do not adequately provide

(b) other special circumstances warrant the declaration of a national state of

(2) If a national state of disaster has been declared in terms of subsection (1), the Minister may, subject to subsection (3), and after consulting the responsible Cabinet member, make regulations or issue directions or authorise the issue of directions concerning -

- (a) the release of any available resources of the national government, including stores, equipment, vehicles and facilities;
- (b) the release of personnel of a national organ of state for the rendering of emergency services;
- (c) the implementation of all or any of the provisions of a national disaster management plan that are applicable in the circumstances;
- (d) the evacuation to temporary shelters of all or part of the population from the disaster-stricken or threatened area if such action is necessary for the preservation of life;
- (e) the regulation of traffic to, from or within the disaster-stricken or threatened area;
- (f) the regulation of the movement of persons and goods to, from or within the disaster-stricken or threatened area...

Subsection 27(3) of the Disaster management act (2002) states that the powers mentioned under subsection (2) may be exercised only to the degree that it is important for the purpose of assisting and protecting the public and property, providing relief and dealing with destructive and other effects of the disaster.

Considering the power and duties of the national government with regards to disaster management, the Disaster Management Act does not give power to the government to declare a national lockdown, neither is the term “national lockdown” defined under the Act. It is important to note that the Disaster Management Act (2002) does not apply where “a state of emergency is declared to deal with that occurrence in terms of the State of Emergency Act” (Subsection 2(1)(a)).

South African Constitution (1996) under section 37 provides for a state of emergency.

Accordingly;

1. A state of emergency may be declared only in terms of an Act of Parliament, and only when;
 - a. the life of the nation is threatened by war, invasion, general insurrection, disorder, natural disaster or other public emergency; and
 - b. the declaration is necessary to restore peace and order.
2. A declaration of a state of emergency, and any legislation enacted or other action taken in consequence of that declaration, may be effective only
 - a. prospectively; and
 - b. for no more than 21 days from the date of the declaration, unless the National Assembly resolves to extend the declaration. The Assembly may extend a declaration of a state of emergency for no more than three months at a time. The first extension of the state of emergency must be by a resolution adopted with a supporting vote of a majority of the members of the Assembly. Any subsequent extension must be by a resolution adopted with a supporting vote of at least 60 per cent of the members of the Assembly. A resolution in terms of this paragraph may be adopted only following a public debate in the Assembly.
4. Any legislation enacted in consequence of a declaration of a state of emergency may derogate from the Bill of Rights only to the extent that;
 - a. the derogation is strictly required by the emergency; and
 - b. the legislation
 - i. is consistent with the Republic's obligations under international law applicable to states of emergency;
 - ii. conforms to subsection (5); and
 - iii. is published in the national Government Gazette as soon as reasonably possible after being enacted.

However, even though everyone has the right to freedom of movement as stipulated in the Constitution, these rights may possibly be limited under section 37, most especially, under section 36 of the Constitution of South Africa (1996). Subsection 36(1) states as follows:

The rights in the Bill of Rights may be limited only in terms of law of general application to the extent that the limitation is reasonable and justifiable in an open and democratic society based on human dignity, equality and freedom, taking into account all relevant factors, including –

- a. the nature of the right;
- b. the importance of the purpose of the limitation;
- c. the nature and extent of the limitation;
- d. the relation between the limitation and its purpose; and
- e. less restrictive means to achieve the purpose.

The Constitution provides for declaration of a state of emergency by Act of Parliament, however, the legislators omitted the definition of “state of Emergency“. One of the issues here is whether a national lockdown is tantamount to a state of emergency? Moreover, it is questioned whether according to the State of Emergency Act (1997, Preamble), COVID-19 is considered a “public emergency” or a “natural disaster”? However, it should be noted that where there is a conflict between the Constitution and any other law, the Constitution, as the highest law of the land, prevails.

12. How can the spread of COVID-19 be controlled especially in schools?

The protection of learners, students, teachers, academic staff, and also educational facilities should be considered as paramount. Preventive measures by the various institutions would go a long way to prevent the virus in school premises and campuses by any person gaining access into the institutions, who may have been exposed to the virus. This measure would avoid the possible spread of the virus in schools.

Learners who are infected or have symptoms of COVID-19 must not be sent to schools. Therefore, symptoms screening is recommended in schools and offices; this must be in accordance with the guidelines of the Department of Health. The establishment of a COVID-19 television and radio curriculum support program for parents, learners, and students is recommended.

COVID-19 could be a catalyst for the South Africa government to address the inequalities that exist in institutions with regards to learning facilities and sanitary infrastructures. Therefore, good toilets facilities are recommended, and the rule for social distancing observed; this also

means a reduction to the number of learners or students in a classroom, and screening students, teachers, and other employees would be required.

Precautions must be taken to avoid stigmatizing learners, students, or staff who may have been exposed to the virus and are cured (Prevention Web, 2020; Relief Web, 2020).

13. Conclusions and recommendations

Although the closure of schools followed by the lockdown was a necessary step, it is important to also note that early childhood development is very important; their long absence from schools may affect their health and future. Pre-conditions for the reopening of schools must be met. The impact of the lockdown has really created pressure and anxiety on the general public, learners, and families. Plans must be put in place to provide counselling and social support for parents from the relevant departments.

It would be accepted that many learning institutions are not prepared to start welcoming students back since health and safety cannot be guaranteed. This means no return to schools; may lead to a negative future impact on the South African labour force and the economy. There is the possibility that the prolonged stay of learners from the schooling environment, especially from impoverished and disadvantaged homes may drop from school.

Although the focus may be on how students and learners can possibly return to school, if everything remains the same, there would be the possibility of a high rate of school dropouts. The reasoning here is that most learners and students have not been familiar with online learning, training seems practically difficult if not impossible. While some learners may have financial difficulties buying data to access the internet, others may not have the means to purchase android cell phones, computers, and laptops.

Academic institutions have the responsibility to rethink means of maximizing output; this implies setting priorities on the innovation of some of their main functions and support services. Although not every student has access to a personal laptop, some institutions provide free data to students. This does not benefit all students; especially in cases where the institutions provide only one network for the students, for example, Vodacom Data. Not every student uses this network; it is recommended that institutions provide a variety of network service options for students to make a choice.

Considering that there has never been any online training for online learning, students should be allowed to submit their assignments even after the due dates; that is, a drastic change of

assessment methods and assessment deadlines, without compromising on the learning outcome and assignment quality. COVID-19 has caused a negative impact on South African education and the social system. If these government regulations persist, it may lead to an increase in the number of school dropouts, and deepen inequality. Although the South African government has taken a number of measures to combat the pandemic in the country, and in the education sector, these measures are considered inadequate.

General safety measures at home, offices, and schools should be maintained for the duration of the pandemic. Provinces should adhere to the disaster management plans for provinces as enumerated under section 39 of the Disaster Management Act of 2002. The South African government should initiate a training program where parents, learners, teachers, and administrators are trained on how COVID-19 can be transmitted; this should include training on a sanitation plan both at home and in schools.

Prevention is better than fighting to cure the virus. Therefore, parents, teachers, and administrators should be well informed on how to protect themselves and their families. Clear information and communication are very important; this would limit the myths, rumours, and wrong information regarding the virus and its infection. The spread of the virus may drastically reduce if the South African government embarks on free training and sensitization programs, and the production and distribution of free sanitizers, and masks to households and schools.

Embracing technology as a learning medium will provide equal opportunity for learners and students, provided it is accessible to all. If learners and students have to stay at home and study, in order to boost a reading culture, parents must be encouraged to be more involved in their children's education. Therefore, the Education Department should establish a system that will integrate the relationship between the department, learners, and parents. The department of education should ensure that online learning is 'user friendly' for learners, students, and parents and that it is easily accessible.

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Using SNSs to increase public engagement with radio stations: Jacaranda FM and Facebook

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The purpose of this study was to determine how Facebook is utilised for public engagement by a radio station in South Africa. The study draws from the Uses and Gratifications theory (UGT) introduced by Blumler and Katz in 1974. A quantitative research method was employed in the study of organisational communication, with content analysis used as the research design. The target population was a census of 116 comments made by Jacaranda FM on its Facebook page in the month of October 2017. The findings of this study suggest that there is a relationship between the radio station's comments on its Breakfast with Martin Bester (BMB) Facebook page and public engagement. It was further established that although UGT is largely audience-centred, the theory also applies to organisational communication behaviours since organisations like radio stations choose to use social media and have begun to be active users of social network sites because they are motivated to use such media for their benefit.

Keywords: *Radio, engagement, organisational communication, Uses and Gratification Theory, social media, social network site, Facebook, South Africa.*

1. Introduction

The prevalence of social media has raised research interests among scholars since the advent of this digital technology. This is more so because people and organisations can hardly do without social media today. Radio stations are not exempt from this and commercial radio stations are increasingly using social network sites to expand audience reach and to strengthen and increase the impact of content. In this paper, the use of social network sites (SNSs) is

conceptualised as an organisational communication behaviour and Facebook is considered a tool. The radio station under study is Jacaranda FM and this paper examines how this organisation has used Facebook as a platform to interact with its public to achieve organisational objectives. In this study, ‘public engagement’ refers to interactions with the station by members of the public who listen, read, visit or react to the radio station on its Breakfast with Martin Bester’s Facebook page.

Facebook pages of radio shows (like the Breakfast with Martin Bester Facebook page) are conceptualised in this paper as images or representations of radio stations. On SNSs, the radio show is usually depicted by the radio station’s logo or the show presenter’s profile picture, as in the case of Breakfast with Martin Bester show Facebook page. One assumption underlying this study is that exciting programmes emanating from radio broadcast stations are likely to expand their reach and attract more public participation if they are mentioned or appear in media vehicles with which the public engage (Paek *et al.*, 2013).

An assessment of this is essential when we consider that while it may be said that terrestrial radio broadcasting in developed economies has made good progress, and more ways to optimise the use of SNSs as complementary tools for terrestrial broadcast practices, the same may not be said about less developed economies (Safko, 2010). This is because the technology is basically transferred and the expertise to man the technology still leaves much to be desired within the ‘critical mass’. Nevertheless, if terrestrial broadcast media must be sustained and remain relevant in the digital landscape, it should be seen to be doing more with SNSs. This is necessary to gain and retain the attention and interest of audiences and users of SNSs for the accrual of social capital which eventually attracts advertising revenue - the live wire of commercial broadcasting. In line with this, Freeman, Klapczynski and Wood (2012) note that the use of social media like SNSs is increasingly becoming a necessary precondition for terrestrial broadcast stations to survive and remain relevant. Despite this, Kent and Taylor (2003) observe that media organisations are not taking full advantage of the interactive capabilities that new media platforms like SNSs afford.

This study takes on an organisational communication approach rather than a purely audience-centered approach as established by the uses and gratification theory. This is because the incursion of digital media into social space has caused a paradigm shift in the application of this theory to institutions and organisations more than ever before. The UGT theory is therefore

relevant not only for audience-based research but for media organization-based research as well. Organisations like radio stations are motivated to seek and choose to use other media like SNSs because of the benefits they look to derive from such media. The Facebook page of Jacaranda FM's Breakfast with Martin Bester show was examined to ascertain why the radio station engages the public on this specific social network site and to establish the nature of such engagement.

1.1 Problem statement

For the commercial radio broadcaster, radio broadcasting is a business, where the ultimate goal is to make profit. To achieve this, commercial radio stations aim to attract and hold the attention of audiences by offering appropriate, relevant and appealing content. In effect, relevant and appealing content attracts a large listenership, thereby attracting advertisers who become patrons to the station and pay for station airtime. This provides the revenue that sustains radio stations and allows most terrestrial commercial radio broadcasting outlets to make a profit. In the midst of a digitally competitive media environment, however, terrestrial radio stations are not only tasked with producing and offering relevant content but also with extending the delivery of this content in an efficient and cost-effective way to hold their audience and attract new ones.

With the advent of digital platforms, the production and dissemination of content has become seamless, creating an ever-stiffer competitive media market which cuts across local boundaries. Terrestrial radio stations, especially those in developing countries, are finding it tough to retain their audiences, let alone attract and hold new ones. This is especially so in the face of new competition from other forms of digital media like internet-only radio stations that are gradually perfecting the use of social media (Brady, 2016). To be sustainable in this context, the question of cultivating brand loyalty (positive feelings and attitudes towards a radio station that makes the audience prefer to tune to that station every time) becomes an issue for terrestrial radio broadcast stations. The problem therefore borders around a situation where one is not sure if the use of SNSs by terrestrial commercial radio stations in South Africa is superficial (a result of the bandwagon effect) or a major tool in engaging their audiences by reaching, building and maintaining relationships with them while considering the returns of social capital. Assessing the nature of Jacaranda FM's engagement on Facebook is therefore relevant in this regard.

1.2 Research objectives

The objectives of this study are to:

1. Identify why Jacaranda FM uses Facebook for public engagement.
2. Determine if there is any relationship between the station's use of Facebook and public engagement with the Facebook page.

1.3 Research questions

The objectives outlined above informed the following research questions which guided the study:

1. Why does Jacaranda FM use its Breakfast with Martin Bester show Facebook page for public engagement?
2. What relationship is there, if any, between Jacaranda's use of Facebook and public engagement with the Facebook page?

The scope of the study is limited to Jacaranda FM radio station and Facebook, the social network site most used by the station. Facebook is also the most used social network site in South Africa, with over 14 million users (Businesstech, 2016; Media Update, 2020). The Breakfast with Martin Bester show on Jacaranda FM was selected based on its number of followers on Facebook. There were over three hundred followers, more than any of the station's other shows. Breakfast with Martin Bester show was listened to for a period of one month. Although the geographical scope for this study is technically South Africa, the media scope is global considering the universal nature and use of Facebook on the internet.

This paper will be of great importance to terrestrial radio stations and the broadcast industry in general because through this study, station managers, media managers, producers and owners will have a better insight as to how radio stations can use SNSs to engage the public and how this can benefit radio stations. The findings will furthermore underscore the relevance and need for terrestrial broadcasters to engage with their audiences on SNSs. Consequently, this paper will contribute to the body of knowledge in organisational communication and social media engagement scholarship.

3. Literature review

This study locates its focus within a wider context of computer-mediated communication and digital media and how traditional mass media and public engagement interact through social media platforms. Ellison and Boyd (2013) note that the prevalence of social network sites (SNSs) is one of the most significant developments connected to social media. The advent of SNSs is intertwined with that of the Web 2.0 concept, which is essentially an interactive architectural application platform. This interactive technology embedded in Web 2.0 is a major attraction that has informed the choice of social media by people and organisations (Campbell et al., 2011) and it has generated different SNSs where people could connect and interact with others.

2.1 Theoretical/Conceptual review

This study draws from the Uses and Gratification theory propounded by Blumler and Katz in 1974. Blumler and Katz (1974) proposed that people are motivated to select specific media from the mainstream media of radio, television or print (newspapers, magazines etc.) to gratify specific needs. This makes them active users in what they seek to do with the media. The proliferation of digital media technology has made understanding what drives people's choice of media and what gratification is obtained from them more important. Major factors that have been found to motivate the use of social network sites include the desire to socialise, be entertained, and to seek self-status and information (Park, Kee, and Valenzuela, 2009). For LaRose and Eastin (2004), SNSs are mainly used to fulfil the social need to socialise with others because users desire a sense of belonging and community (Ellison et al. 2007: p. 2; Park et al. 2009: p. 731).

The application of the Uses and Gratification theory to radio and SNSs is still relatively new and there remains a lacuna in considering organisations as entities who also seek out and use specific media to gratify corporate needs.

Calitz, and Cullen (2012: p.2) define social media as “any tool or service that uses the Internet to facilitate conversation”. From this definition it can be concluded that social media refers to a collection of online communications channels devoted to virtual community-based interaction and the sharing of content. These communication channels include websites for social networking and various forums. Veerasamy and Govender (2013) note that the way organisations communicate with their brands have changed from mass media messages to

intimate conversations and social experiences on virtual network sites. Citing Giannini (2010), Veerasamy and Govender (2013) explain that this shift in the way organisations communicate demands that professionals now work harder and smarter to keep up with trends, particularly because their mass audiences are no longer passive consumers of media messages but active users of different forms of social media.

Social network site, which is the focus of this study, is a component of social media on the internet. Examples of social network sites (SNSs) include Facebook, Twitter, Instagram, Pinterest, Google+, Wikipedia, LinkedIn, Reddit, and so on. These SNSs are situated within the broader context of computer-mediated communication on the internet. They are probably the most important interactive online tools for individuals and organisations. By providing users with the opportunity to share information and their thoughts and interests, this creates more opportunities for interaction and participation within virtual communities and networks. For this reason, in this study, SNS is appropriately situated within the dynamic and interactive context of Web culture (Beer, 2008). In their seminal work, Boyd and Ellison (2008, p. 158) define SNS as:

“ a networked communication platform in which participants 1) have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system level data; 2) can publicly articulate connections that can be viewed and traversed by others; and 3) can consume, produce and/or interact with streams of user-generated content provided by their connections on the site.”

Krämer et al. (2014, 28) define SNSs as tools that highlight “(a) the importance of a dynamic profile that can be attributed to a person or an organisation as well as (b) the visibility of interpersonal connections and the content people share within the network”. From these definitions it can be concluded that Facebook, Twitter, Instagram, and Snapchat, among others, are all SNSs because these sites underline the characteristic nature of social network sites as tools employed by users to interact and generate content.

Extant literature is replete with how companies, non-profit organisations, and activists have used social network sites for different purposes (Paek *et al.*, 2013; Egbunike and Olorunnisola, 2015; Mutsvairo and Sirks, 2015). Other reasons for using social network sites include its use by journalists to: impact on news content (Gil de Zúñiga , Jung and Valenzuela, 2012; Asekun-

Olarinmoye et al., 2014); news sharing and democratisation (Papacharissi and de Fatima Oliveira, 2012; Holton et al., 2014; Boyd, 2015); to underscore the state of journalism and journalists' changing roles with the advent of social network sites (Thomas, 2013; Ponnann and Ali, 2015); for terrestrial radio's expansion into online space (Tufan, 2014; Zoellner and Lax, 2015), and so on. Many of these studies, however, focus either on news content or how journalists perceive or use social media. Little is known about how the use of social network sites helps radio stations to engage and develop relationships with the public or if there is any correlation between these stations' use of social network sites and public engagement (Lin, Sung and Chen, 2016).

Studies show that there is no consensus among scholars with respect to one definition for the term, 'engagement'. In marketing circles, for example, scholars refer to 'engagement' in terms of customer or consumer engagement or consumer-brand engagement (Malthouse et. al., 2013; Vivek et. al., 2014). O'Brien (2010) defines engagement as the "quality of user experiences" while Vivek et al. (2014) define it as the "intensity of an individual's participation in and connection with an organisation's offerings..." Multiple definitions indicate that engagement is manifested in the different interactions that people participate in, online or offline.

Although the term 'engagement' has been in use (especially in marketing circles) for over four decades, its use among scholars came to the fore only about two decades ago (Vohra, Anupama, Bhardwaj and Neha, 2016). The definitions and uses of the word (among scholars and marketing professionals alike) have assumed different dimensions over the years and its uses are increasing because engagement has become a key concern in scholarly research on organisations' and people's media use and participation in the public sphere (Couldry, Livingstone and Markham, 2010). Vohra and Bhardwaj (2016) note that the scope of engagement should be described in the light of previous research on the subject because it is often conceptualised as a multidimensional construct. Therefore, in a review of over fifteen definitions of engagement and how various scholars chose to conceptualise and define engagement, Vohra and Bhardwaj (2016) observe that scholarly definitions of the concept are based on the context in which it was studied, thus reflecting the different dimensions of the concept.

Like other business entities, radio stations have come to embrace the great potential of engaging or interacting with their audiences using social network sites. As Tufan (2014,91) rightly

observes, this is obviously because of the high interactive power of the web which drives SNSs and which is used not only in social media environments for communicating with radio audiences in a “friendly and quick way but also for creating a point of corporate image by existing in these environments”. Such relationships are produced by institutions and organisations like radio stations when they create their profiles to interact with the public. Indeed, research has shown that the most popular radio stations are very active in their use of social network sites like Facebook or Twitter (Tufan, 2014). It is obvious that such radio stations have gone beyond traditional ways of broadcasting because traditional methods present greater challenges to establish and build relationships with the audience. This is because the one-way communication model of terrestrial radio broadcasting - where the stations disseminate information without much feedback from the public - can no longer stand in the long haul. One of the strengths of using social network sites is that it integrates seamlessly with other media. Total dependence on terrestrial broadcasting is becoming obsolete and more challenging to the extent that the direct airing of commercials on the radio no longer affects the customer positively, as it used to (Tufan, 2014). This economic aspect is already being taken over by social media: peoples’ referrals of products and services using social media is gradually becoming the most important influencer of purchase intent (as against the million-rand commercial on the radio) (Qualman, 2009).

2.2 Radio Broadcasting in South Africa

South Africa operates a three-tier broadcasting system, consisting of public, commercial, and community broadcast stations (NAB, 2014). Commercial radio broadcasting in South Africa includes free-to-air-channels (terrestrial) and subscription services (satellite). The South African Broadcasting Corporation (SABC) is the country’s major broadcast provider, with 19 radio AM/FM stations (SABC, 2019). It was established in 1937 to broadcast in what were then the country’s official languages, English and Afrikaans (NAB, 2014). The country’s other official languages are indigenous languages. SABC now broadcasts in all 11 of the country’s official languages. In the 1960s, regional radio stations in South Africa commenced operations as radio FM music stations because of the high fidelity the FM band afforded (NAB, 2014). This encouraged the production and airing of popular music for the promotion of the people’s indigenous languages. In 1966, the SABC established an external mouthpiece, Radio RSA, to broadcast to the world in English, Swahili, French, Portuguese, Dutch and German (World Heritage Encyclopedia).

2.3 Brief history of Jacaranda FM in South Africa

Jacaranda FM was a product of the restructuring of SABC after a decision to stop further transmission of Springbok Radio in 1985 and later became a major force to be reckoned with in commercial radio broadcasting in South Africa. Springbok Radio was privatised along with the three regional radio services: Radio Highveld, Radio Port Natal and Radio Good Hope. Also included in the privatisation process were Radio Oranje and Radio Algoa. These six stations were the first to commence commercial broadcasting in South Africa. In 1990, Radio Jacaranda's transmitting signal was upgraded to stereo and its name changed. It became Jacaranda 94-97 in 1994 and was finally renamed Jacaranda 94.2 in 1997, when the station became privatised. South Africa's biggest black-owned media company, Kagiso Media, owns Jacaranda FM.

The radio station is the group's top performer and was the number one independent radio commercial station with over two million listeners by weekly audience figures in South Africa (Businesstech, 2016). In 2015 Jacaranda FM was the top independent private commercial radio by weekly listenership in South Africa (SAARF RAMS, 2015). By 2020 its weekly listenership had increased to 2 million. The radio station is technologically savvy in its use of social media and has the highest listenership for commercial broadcasting. These factors served as criteria for its selection in this study. The station's weekly cume - that is, the average number of persons reached by the station in one week (Monday-Sunday 6AM-6AM) - has been on an upward trend (Table 1). Table 1 shows that on the average, the total listenership for the radio station increased from 804 000 in 2012 to 1 000 000 in 2015.

Table 1: Listenership Figures for Jacaranda FM station

Estimated Listenership		
	7 Day	Av. Mon – Fri
May 2015	1 955 000	1 000 000
May 2013	1 855 000	909 000
Feb 2013	1 744 000	831 000
Dec 2012	1 796 000	835 000
Oct 2012	1 869 000	843 000
Aug 2012	1 771 000	780 000
Jun 2012	1 774 000	804 000

Source: SAARF RAMS (2015)

Jacaranda FM is featured on the DStv audio bouquet (Channel 158) in addition to its over-the-air broadcast. The DStv IS-7 Ku band satellite footprint affords Jacaranda FM coverage of the whole of South Africa, Botswana, Lesotho, Namibia, Swaziland, Mozambique, Zimbabwe, Mozambique, and the southern half of Malawi. In addition, the BMB website hosts live worldwide audio streaming. The radio station operates primarily from its headquarters in Midrand near Johannesburg and has other secondary studios.

4. Research methodology

A quantitative method of research was employed for this study. This is because the data mined from the station's Breakfast with Martin Bester's Facebook page was descriptive. Quantitative content analysis was therefore appropriate to analyse the meanings manifested in data collected from the station's Facebook platform. Facebook is both the SNS most used by Jacaranda FM in its radio programming and the most used SNS in South Africa (Media Update, 2020). The population of comments on the Breakfast with Martin Bester (BMB) Facebook page comprises 1 338 comments that were posted as text messages by Jacaranda FM and its listeners during the BMB show in October 2017. A target population of all 116 comments posted by the radio station on the show's Facebook page was used. A census of the study population which were all comments made by Jacaranda FM on its BMB show Facebook page in the month of October, 2017, was used because the total number of comments made by the station in the period was manageable enough to justify a census.

Quantitative content analysis (QCA) was used in the analysis of the data collected from the radio station's Facebook SNS during October 2017. The QCA was employed in the study because it allows for features of a text to be systematically categorised and recorded for analyses. Jacaranda FM was selected on the basis of it being the first private independent commercial radio station in South Africa and because of its national coverage and wide listenership. The period of the month of October was chosen because it is the start of a programming quarter at radio stations, during which time the station's activities are neither too heavy nor light (Bonini, 2014). The start of a quarter is the period in which stations schedule the shows that will air at the station for the next four months.

Before the analysis in this study, data were first coded. In the coding process, codes assigned to content were grouped into categories that related to engagement on the SNS. The codes were

based on the selected unit of analysis. The units of analysis were comments in form of words or sentences that were posted as text. The categories relating to engagement that was used in analysing data from the Breakfast with Martin Bester Facebook page are presented in Table 2.

Table 2: Framework for Quantitative Content Analysis

QUANTITATIVE CODING GUIDE FOR BMB AND PUBLIC ENGAGEMENT ON SNSs OF FACEBOOK	
CATEGORIES*	UNITS OF ANALYSIS
	Comments (text-words or sentences)
1. Type of posts	CAT1 (1) Comments
2. Reactions	<i>What are public reactions to the station's posts?</i> CAT4(1) Comment-comment,
	CAT4(2) Share
	CAT4(3) Like
3. Sentiments expressed	<i>What sentiments are expressed by the public to the station's posts?</i> CAT5(1) Positive
	CAT5(2) Neutral
	CAT5(3) Negative

*Categories adapted from Bonini and Sellas' (2014) content analysis model

3.1 Data presentation and analysis

Descriptive data of public interaction with the Martin Bester breakfast show Facebook page was obtained in October 2017. Data from categories 1, 2 and 3 was used to address the study's research questions. The data was presented and analysed in Tables 3 and 4 and in Figures 1 and 2. Frequency and simple percentages were used in the analysis. An attempt was made to determine whether there was any relationship between the BMB show's use of Facebook and public engagement with the station.

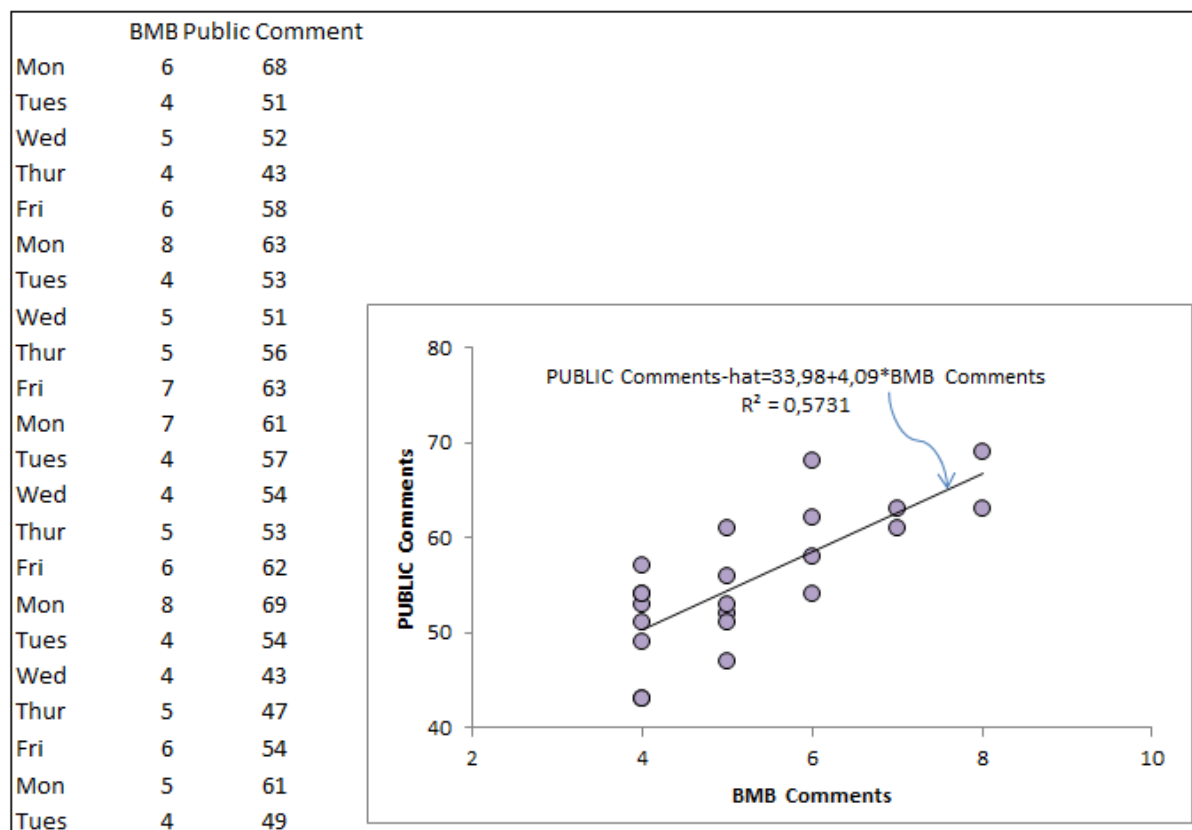
Table 3 presents the data of comments made by the BMB show and the public in the month of October.

Table 3: User count frequency of reactions to the posts made by the BMB show

BMB		October, 2017								
Engagement Type	BMB No. of Posts	Share count	Comment count	Like	Love	Wow	Haha	Sad	Angry	Total Reaction
Comment-comment	116	0 (0%)	849 (24%)	306 (8%)	39 (1%)	17 (1%)	11 (0%)	0 (0%)	0 (0%)	1222 (35%)
Video links	5	486 (14%)	373 (10%)	874 (23%)	215 (6%)	81 (2%)	98 (3%)	269 (7%)	11 (0%)	2407 (65%)
Total	121	486 (14%)	1222 (33%)	1180 (32%)	254 (6%)	103 (2%)	104 (3%)	264 (7%)	16 (0%)	3629 (100%)

Figure 1 depicts the BMB show's engagement with the public by comment in the month of October 2017.

Fig. 1: Scatterplot graph of the BMB show's engagement with the public via comments (October 2017)



In Figure 1, the slope of the line is positive because as the BMB show's comments increase, the public comments also increase. The model depicts a strong positive correlation since the points are relatively clustered along the slope or line. In Figure 2, the output of a regression analysis run on the data obtained from Figure 1 is presented.

Fig. 2: Summary output of regression analysis of the BMB show's engagement with the public in Facebook comments

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0,757							
R Square	0,573							
Adj R Square	0,552							
Standard Error	4,760							
Observations	22							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	608,295	608,295	26,847	0,000			
Residual	20	453,160	22,658					
Total	21	1061,455						
	<i>Coefficient</i>	<i>St Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 90%</i>	<i>Upper 90%</i>
Intercept	33,98	4,284	7,932	0,000	25,044	42,916	26,591	41,369
BMB Comments	4,09	0,789	5,181	0,000	2,443	5,737	2,729	5,451

Based on the regression output presented in Figure 2, the regression equation is stated as follows: $\text{Public comment-hat} = 33.98 + 4.09 \times \text{BMB comment}$. The intercept (public comments) and the slope (BMB comments) match what was depicted on the trend line in Figure 1. The R-squared of 0.573 of the variability in public comment is explained by BMB comment. The standard error is same as the residual standard deviation. This represents the typical standard deviation between the actual public comments and what the model predicted them to be. So, in this case, 4.760 is the typical miss or the typical fluctuation around the regression line.

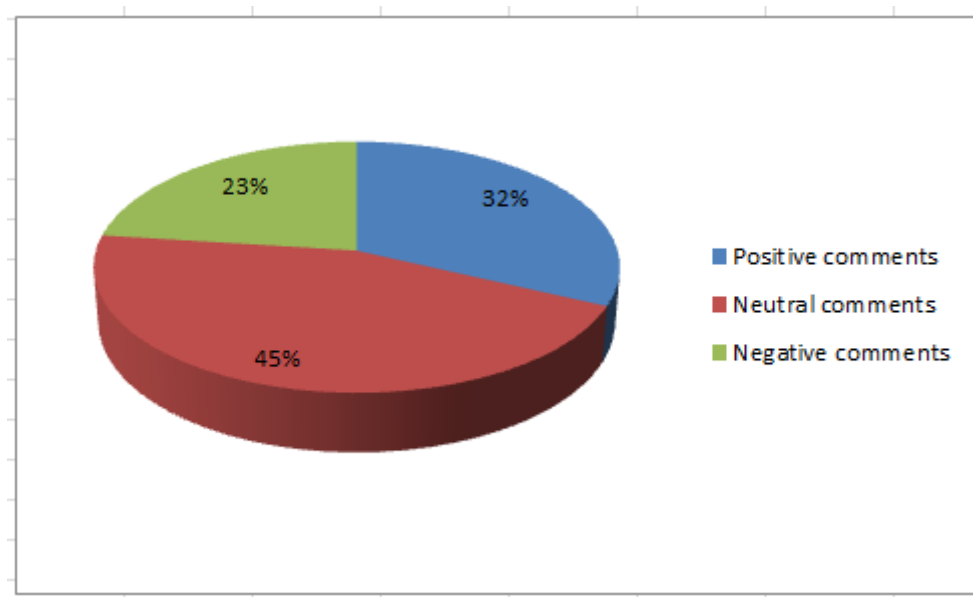
The p-value for the slope coefficient is significant at 0.000, which means that there is a relationship between the number of public comments and the number of BMB comments posted on the show's Facebook page. Since the data came out as a positive slope, it is correct to say that public comments made are associated with BMB's comments on the show's Facebook page in October 2017. Data pertaining to public reactions to BMB comments on its Facebook page is presented in Table 4.

Table 4: Aggregate sentiment scores expressed in comments made by the public in their comments on the BMB show's Facebook page

SOUTH AFRICA: BMB FM	
Sentiments	OCT, 2017
Positive comments	387 (32%)
Neutral comments	552 (45%)
Negative comments	288 (23%)
Total sentiments expressed	1227 (100%)

Table 4 shows that 45% of the total comments made in the month of October on the Facebook page of the BMB show were neutral. 32% of these comments were positive, and 23% were considered negative. This data is illustrated in Figure 3:

Fig. 3: BMB Engagement Sentiment/Emotion analysis in October 2017



4.Result: Summary

1. Jacaranda FM station adopted to use Facebook for radio programming and audience engagement because Facebook was found to be dynamic and to have attractive features for radio/audience engagement, making it an ideal networking tool.
2. Jacaranda FM in South Africa uses Facebook for audience engagement because there is a relationship between the station's use of the platform and the level of audience engagement received. There is a positive relationship between the number of comments

by Jacaranda FM on its BMB Facebook page and the number of comments by audience engagement because the p-value for the slope's coefficients is significant.

5. Discussion

The nature of engagement on the Jacaranda FM's Breakfast with Martin Bester's (BMB) Facebook page assumes the form of posts such as comments like text messages, videos or photos. The public engages with these posts in the form of comments, pictures, shares, 'like' or 'love' reactions. For the purpose of this paper, analysis was limited to only the comments posted by the station on the BMB show's Facebook page.

Park, Kee, and Valenzuela (2009) identify some of the major reasons why users use social network sites. The reasons include fulfilling a need to socialise and a need to seek information. The findings of this study suggest that as an actor in its Facebook social network, Jacaranda FM is motivated to socialise with other members of the network. This involves engaging with the audience by strengthening on-air radio content for the public on the Facebook platform in order to inform and entertain, thereby earning trust and loyalty from their audience. This aligns with Ellison et. al (2007) and Park et al.'s (2009) argument that underscores the need in people and organisations to be part of a community. Jacaranda radio station as part of a social network, engages with its audience to build relationships with members.

The radio station's desire to seek information by engaging with the public on Facebook is also important and cannot be overemphasised. By engaging and relating with the public, Jacaranda FM is in a position to acquire information in the form of user-generated content. This user-generated content can be used to create further appealing content for their target audience. When the audience are co-creators of content, it is more likely that they will want to engage with the station as it posts such content on Facebook. This further demonstrates that the need to socialise, as suggested by LaRose and Eastin (2004), is a predominant factor why organisations like Jacaranda FM use Facebook and other social media.

The findings of this study suggest that there is a positive relationship between Jacaranda FM's use of Facebook and the audience engagement they receive. This suggests that if the station used Facebook rigorously to engage the public, the public would correspondingly engage more with the brand. This supports Veerasamy and Govender's (2013) definition of social media as

a tool that facilitates conversations. Perhaps more important is this study's confirmation that radio stations, like individual entities, seek out and use media to gratify themselves, as put forward by the Uses and Gratification theory espoused by Park, Kee, and Valenzuela (2009). This gratification comes in the form of meeting a need to socialise and seek out information (LaRose and Eastin, 2004). In this case, the radio station is able to obtain information from its audience by engaging with them, in this way also generating new content that is then curated and used for station programming.

The findings of this study further suggest that the station can have a given number of comments which it can post on its Facebook network for robust or effective engagement. This benchmark can be used to predict the number of posts they need to publish to obtain a certain amount of comments or reactions from the audience. Posts of a high quality from the station that involves appealing, relatable and relevant content which attracts and holds attention will most likely generate positive reactions and sentiments in the audience rather than more of neutral comments as was the case in this study.

6. Conclusion and Recommendations

Radio stations have a presence on social network sites because that is where their audiences spend much of their time. Social network sites have features that make them ideal for radio station to use to garner public engagement. Facebook was employed by Jacaranda FM partly to engage with the public in order to expand its reach and cultivate its audience by attracting and holding their attention. Jacaranda FM should do more by posting very appealing, relatable, and relevant comments on its Facebook page. Such content inspires the audience and makes them want to engage with the station in a similar manner by comments to the station's comments. This explains the relationship between the radio station's activity and the activities of the public on the station's SNS.

This paper established that there is a positive relationship between Jacaranda FM's comments on its Breakfast with Martin Bester Facebook page and audience engagement. We therefore conclude that the station's activity on the social network site has a positive impact on the station in terms of expanding the reach as well as attracting and holding attention of listeners on its Facebook page.

Since the revenue from commercials is what sustains the radio station, it is beneficial for the station to have an extended audience on its SNS that its advertisers can reach. It is important, therefore, that the station continues to engage the public on Facebook. Doing so allows the station to drive traffic to its corporate website (dot.com) where it can expose its audience to more advertisements. This is important because radio can no longer be relevant as a solely terrestrial device. It must be seen to integrate effectively with social media in virtual space to have relevance in the digital media landscape. Based on the findings and discussions from this study, the following specific recommendations for broadcast practitioners and researchers are advanced: First, the radio station's social media writers should be more creative in crafting texts that will appeal to the public and attract them to share and engage with their posts. This will create more robust and effective engagement on the social network platform and will ultimately yield benefits for the station.

Second, station and social media managers should consider the positive correlation between the radio stations' SNS posts and audience engagement as established in this study. Quality content posted on a station's SNS will attract robust engagement and positive sentiments from the public. This, in turn, will impact positively on station's bottom-line. Third, more researchers should start looking to the application of UGT theory to organisations because like individuals, organisations too are motivated to choose specific media because of the gratification they seek to derive.

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The Contribution of Emerging Technologies and Skills to the Agricultural and Consumer Goods Sectors in Two Countries in Africa

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This paper investigates how emerging technology has impacted the ways of working and functioning of various industries in Africa. The research was conducted at a time when digital transformation may have been accelerated by the COVID-19 pandemic, which has resulted in a greater rate of adoption of emerging technology (social media, mobility, analytics, cloud computing and the internet of things [SMACT]). This qualitative research focuses on how African youth and entrepreneurs have developed their businesses and communities in the digital economy by exploiting emerging technology and skills. For Africans to overcome the market challenges caused by digital transformation, they need to acquire and leverage digital business skills tailored to their unique challenges.

This paper will be of interest to other researchers and industries on the African continent that are competing for global market share and the transformative development of their communities. Disasters and pandemics have become accelerators of the adoption of digital technology to sustain industries around the globe. The COVID-19 global pandemic (2020) has affected up to 49 countries, making it the largest health, social, and economic threat that the world has faced in the 21st century. The COVID-19 crisis has pushed both planned and unplanned innovation. This study explores the development of this social and cultural innovation in various consumer sectors in Africa.

Keywords: *Digital transformation, emerging technology, digital skills, business value*

1. Introduction

There are current reports that suggest that more companies are adopting digital transformation and leveraging emerging technology to improve every aspect of their business. Research by Accenture Technology (2015) found that companies will use software, intelligent and connected applications in order to drive revenue growth and defend their market position, in so doing companies will create new competitive frontiers.

A lack in the adoption of emerging technologies and developing digital entrepreneurship skills in intelligent and connected applications is directly affecting job opportunities available to young people and African transformative growth. The problem being described is as follows: Sustainable transformative development in Africa is severely challenged by lack of digital technology and skills, with young people making up 60 per cent of Africa's unemployed.

Emerging technologies such as cloud computing, the internet of things (IoT), mobility applications, artificial intelligence (AI), and social media can improve African businesses. "There is opportunity and financial loss due to failure in selecting the technologies that can best support and drive competitiveness in the marketplace' (Mubako,2017). "Business infrastructure has become digital with increased interconnections among products, processes, and services (Bharadwaj, El Sawy, Pavlou and Venkatraman, 2013)" (Mubako, 2017:12). Further to this is the need for emerging technologies to be utilised effectively to solve specifically 'African' problems and problems that often arise from African culture.

A failure to leverage digital capabilities through digital transformation may lead to the loss of important opportunities for Africa. There is also the possibility that with the help of digital solutions to increase global market share and transformative development of communities. African societies may find the tools needed to reduce corruption by increasing transparency and getting rid of inefficient management processes. Digital transformation may also aid in developing new services and reducing financial exclusion in African communities. In East Africa, for example, Africans who have no access to bank accounts are enabled to do financial transactions through mobile money platform such as M-Pesa which facilitates money transfer services and micro financing.

"The COVID-19 response by companies has accelerated the speed and scale of digital transformation; however, a lack of digital skills could jeopardise companies with misaligned talent plans." (Engler 2020). According to Engler (2020), due to the need for digital tools and processes in business, the companies need to prioritise acquiring workers with digital skills in order to gain more competitive advantage embedded in the new digital business models.

2. Objectives of Study

The objectives of this research are to investigate the impact and contribution of emerging technology on entrepreneurship in agriculture and consumer goods sectors in select African

countries and to analyse the emerging technology used by African entrepreneurs in the agriculture and consumer goods sector.

Another objective is to illuminate the digital entrepreneurship skills needed to improve aspects of business value, such as the digital facilitation of transactions, networking, and information exchange, all of which are key in business, thus contributing to business knowledge. This study will benefit business people in Africa who are competing globally for market share.

3. Research Questions

To achieve these objective, the following research questions are raised:

1. How have emerging technologies contributed to creating value in agriculture and consumer industries in Africa?
2. Which emerging technologies are used by African entrepreneurs in agriculture and consumer industries?
3. How do individuals' skill themselves to leverage emerging technologies for the agriculture or consumer goods industries?

4. Literature Review

In this section, key theoretical concepts that underpin this research will be addressed.

“Digital business strategy (DBS) is an organisational strategy formulated and executed by leveraging digital resources to create differential value” (Bharadwaj, El Sawy, Pavlou and Venkatraman, 2013). A DBS is a reimagined corporate strategy that has realigned IT and business strategies in one functioning strategy underpinned with an organizational digital culture.

“Digital technologies (viewed as combinations of information, computing, communication, and connectivity technologies) are transforming industries via individual digital entrepreneurship, business strategies, business processes, marketing capabilities, products and services, and key interfirm relationships in extended business networks” (Bharadwaj et al., 2013). “Two-thirds of business executives believe their organization is currently being disrupted by IT and 72 percent agree that they will be disrupted over the next 12 months.” (Accenture, 2015).

KASI Insight (2020) conducted over 3,000 interviews across eight countries: namely, South Africa, Nigeria, Ghana, Tanzania, Kenya, Ivory Coast, Ethiopia, and Cameroon on the impact of COVID-19 on African consumers. According to KASI Insight (2020), the COVID-19 pandemic threat in Africa prompted changes in shopping behaviour that mirrored global trends to some extent. “In Africa, COVID-19 is primarily an economic crisis, the health threat is considered secondary” (KASI Insights, 2020). According to KASI Insights (2020) most African economies are largely informal and have high unemployment rates along with limited job security therefore making COVID-19 a threat to people’s livelihoods. This demonstrates the severe impact of COVID-19 lockdowns on the ways of working (working from home) and livelihoods in Africa where most of the population rely on entrepreneurship of physical selling of goods to provide for their families.

“Pierson, (2010) stated that digital capabilities can determine methods of providing greater access to raw materials between countries by utilizing practices that will optimize efficiency through effective global supply chain management” (Mubako, 2017). Tilson, Lyytinen and Sørensen, (2010) inferred that digital architectures and web technologies provide new phenomena such as recursivity, scalability and flexibility. Such advantages need to be leveraged in Africa, but a lack of access, digital readiness and skills pose a threat to African entrepreneurs and businesses in applying technology effectively. Emerging technologies driving the digital transformation are listed below (Mubako,2017):

- Social media
- Mobility and consumerisation (use of mobile platforms and applications)
- Analytic/big data (use of computer-based data analysis)
- Cloud computing (use of shared and on-demand network-based access to servers, data storage and software services)
- Internet of things (IoT) and sensors (use of digitally connected instruments)
- Augmented reality (use of software that connects digital and physical elements)
- Cyber-physical service systems (CPSS) (use of computers that are connected to the surrounding physical world)
- Platform -based ecosystems (use of online value ecosystems)

- Drone technology (use of drones to survey and deliver products and services)
- Artificial intelligence (use of algorithms in business processes)
- Blockchain (use of digital ledgers for payments and record-keeping)

By using technologies such as social media, mobility applications, analytics, cloud computing and IoT (also known as SMACT), individuals and business can now interact, and collaborate across channels of operations and beyond traditional infrastructure (Mubako, 2017). The ‘intelligent edge’ (or edge computing) is promoting boundaryless value and information sharing in digital ecosystems that include partners such as suppliers, developers, customers and the connected things they use to conduct business. This forms the basis for business value to be gained from platform-based ecosystems. By sharing information and working together along the value chain in the ecosystem, the suppliers and customers benefit in the form better market access or ease of provision of services and goods.

‘Digital skills’ refers to an individual’s ability to apply technologies and digital business modelling. In the current digital economy, where business and IT personnel acquire and use business skills, individuals are becoming aware of the benefits of cross-functional skills. According to Engler (2020), technology skills are central in IT but need to be spread across organizational functions of businesses and relationships. “These are to be applied to customer relationships, sales and services, marketing and commerce, collaborating and human resources reskilling” (Engler 2020).

“Workers with limited digital skills will find themselves at a disadvantage vis-à-vis those who are better equipped for the digital economy, incumbent local firms will meet stiff competition from digitalized domestic and foreign ones, and various jobs will be lost to automation” (UNCTAD, 2019). This supports the argument that African entrepreneurs need these skills to improve the value of their businesses and to offer better products or services to their communities.

“Even if nontechnology companies don’t need employees to be quite so digitally literate as the tech giants, they will need to identify their requisite skills and prioritize a way to acquire them

if they hope to unlock the value of the competitive advantage embedded in the reimagined business model” (Engler, 2020).

“Ecosystem networking involves communication and information exchange for mutual benefit, whilst collaboration is a process in which entities share information, resources and responsibilities to jointly plan, implement, and evaluate a program of activities to achieve a common goal” (Camarinha-Matos, Afsarmanesh, Galeano and Molina, 2009). This statement by Camarinha-Matos et al. (2009) emphasizes the benefits of a fully functioning ecosystem a great example of such an ecosystem is the Google Playstore, where application developers and customers collaborate to produce and consume mobile applications on a digital marketplace. Building relationships with consumers and growing brand loyalty are the positive outcomes of ecosystems.

New digital business models driven by emerging technologies are contributing to the global marketplace. These emerging technologies and digital networks contribute to the global marketplace in the following ways:

1. Digital networks offer access to more products, including data.
2. Increased market participation due to financial inclusion of previously excluded communities due to lack of infrastructure (like banks in rural areas).
3. Innovation drives more competitiveness for Africa and the international markets.
4. New and unique digital products can be offered on new online markets.
5. Closer relationships with customers allow for better production planning and negotiation.
6. “Digital data can be used for development purposes and for solving societal problems, including those related to the Sustainable Development Goals (SDGs).” (UNCTAD, 2019)

According to UNCTAD (2019) digital economy report, emerging technology help improve economic and social outcomes and can be a driver for innovation and productivity growth for its use cases in Africa. Digital platforms and ecosystems facilitate transactions, networking as well faster as information exchange that can lead to better sales and revenue. In Africa, key

disadvantages to accessing emerging technologies may include time-to-market factors, customer expectations, and the cost of computer and telecommunication infrastructure.

‘Smart’ agriculture refers to the use of technology to provide precise measurements on the inputs required to have a good yield or to determine precisely what the environment requires for successful crop and animal farming or conservation which is SDG related. “Creating a ‘smart’ future requires innovative ideas to leverage ubiquitous digital connectivity, smart sensors, artificial intelligence, Internet of Things (IoT), access to all human knowledge, and entrepreneurship to capture opportunities for the best quality of life”(Lee and Trimi, 2018).

5. Methodology

This study followed a phenomenological descriptive approach to try to understand individuals’ experiences of the phenomenon of emerging technologies in business from an African perspective. Data was collected based on the responses obtained from a small number of individuals to observe their views of the topic of emerging technologies in business from an African perspective (Creswell, 2012). This research approach allowed for a subjective assessment of the interviewee’s reported experiences with digital capabilities. Qualitative research has been recommended as an effective design approach for attempting to understand how individuals perceive and interact with their environment (Yin, 2014). Confidentiality was emphasised to all participants to recruit the right participants and elicit honest answers to the interview questions. Using purposive sampling, five participants from two African countries (South Africa and Uganda) were selected to participate in the study. The researcher identified three key characteristics that participants were required to possess to participate in this study. Participants needed to fulfil at least two of the following inclusion criteria: (a) the participant is an African entrepreneur; (b) the participant is involved in sustainable community development; (c) the participant has incorporated SMACT in their business.

6. Findings

6.1. Demographics

The results of this research are based on findings obtained from five entrepreneurs from two African countries (Uganda and South Africa). These entrepreneurs operate in the consumer-oriented and agriculture industries. The respondents were interviewed to ascertain their

experience regarding the challenges and opportunities offered to them by the digital economy and current business environment in South Africa and Uganda.

Section A of the interview questionnaire gathered the demographic information presented in Table 1.

Table 1: Demographics and Industry

Interviewee Number	Participant Label	Title	Sector	Age	Sex
1	Respondent 1	Chief Executive Officer (CEO)	Agri Tech / Conservation	41	Male
2	Respondent 2	Chief Finance Officer (CFO)	Software Engineering	37	Male
3	Respondent 3	Managing Director	IT Consulting	35	Male
4	Respondent 4	Chief Executive Officer (CEO)	Real Estate	36	Male
5	Respondent 5	Sales Operations Manager	Beauty	36	Female

- Respondent 1 is the chief executive officer (CEO) of an agricultural technology (Agri Tech) startup for beekeeping and conservation. He holds a Bachelor of Commerce degree and has obtained his masters in conservation.
- Respondent 2 is the chief financial officer of a software development firm. Respondent 2 has an ACCA diploma in accounting.
- Respondent 3 is an executive manager for an IT consulting firm. He earned a bachelor's in business computing degree and a Master of Business Administration degree.

- Respondent 4 is an owner of a real estate investment company. He holds a bachelor's degree and Master of Science degree in project management.
- Respondent 5 holds a fashion and beauty diploma and multiple certifications and is a sales operations manager for a beauty studio.

7. Discussion and Analysis

This section organises the detailed findings into two major research categories. The common themes are demonstrated in subsections to support the analysis.

In Section B: (Emerging technology and business value) of the interview questionnaire addresses the following research question: How have emerging technologies contributed to creating value in agriculture and consumer industries in Africa?

7.1 Theme 1: Data drives digital transformation (DT)

The Interviewees' responses focused on the importance of customer data (knowing what their customers need, connecting with them) and relationship building as key drivers for DT in their sectors. Respondent 2 stated that "Consumer insights drives DT, the ability to know what the customer desires". Respondent 2 mentioned emerging technologies like Artificial Intelligence (AI) and Machine learning (ML) that he considered to lead the drive of DT with the capability of collecting and analysing behaviour of the customer. Respondent 4 stated that the ability to acquire customer-related information more quickly and reliably drives DT and being able to respond to customer demands. According to Respondent 1, "Connectivity, access, and mobile penetration drives DT. There are new technology trends in agriculture for better yields and data drives improvements down the value chain". Respondent 5 stated that "In this economy, relationship building which involves directly communicating and interacting with customers is important, so this is [the] main driver for digital transformation".

The answers from the interviewees suggest that maintaining customer relationships and using data provides a competitive business advantage. Although the interviewees were from diverse educational backgrounds and industry sectors, they shared the same views.

7.2 Theme 2: Emerging technology has a relationship with business value and shopping habits in Africa have changed.

The responses in the interviews indicate that digital skills have become essential during the COVID-19 global pandemic. With many countries under lockdown and the enforcement of social distancing, the interactions between businesspeople and consumers became less physical, taking place online. Communication turned digital, and meetings were held online. According to KASI Insights (2020), the COVID-19 pandemic threat in Africa saw changes in shopping behaviour. These changes mirror global trends to some extent. The video conferencing interviews further confirmed that there was a change in shopping habits in 2020.

Respondent 2 noted that: “There is change in traditional cash purchases in Uganda to mobile money and people are using WhatsApp as online shopping tool for ordering delivered groceries to homes”. Respondent 1 further explained that “people have started to shop online rather than go to the shops. Takealot and Netflorist are examples of the use of online shopping as their order volumes have gone up”. Respondent 5 believes that “the COVID-19 pandemic has forced consumers to buy on platforms. It has accelerated the adoption of shopping on online and mobile platforms for essentials, but bulky products are not offered on these platforms.”

There is a consensus among these responses that to some extent, mobility and ecommerce are shaping new shopping habits in Africa. The trend of using online shopping methods is based on necessity due to lockdowns that unfortunately restrict movements to the shopping centres, this has put reliance on ecommerce shopping and delivery services for retail goods.

7.3. Theme 3: The impact of the 2020 COVID-19 pandemic on communication and collaboration

In response to interview questions regarding how communication and collaboration have changed in the face of global lockdown, a consensus that digital technology has become the preferred tool used to connect in work, business and learning was observed.

Respondent 3 said: “We use all available resources for communications WhatsApp, Google Hangouts and Zoom the key is to be available and open as possible”. Respondent 1 mentioned the Ayoa app and described WhatsApp as “an effective social and sales platform”. This respondent also explained that “Google Suite and Zoom video meetings platforms are good for documents and sharing on projects”. Respondent 4 noted that in real estate sectors, email

communications remain important for tracking of official communications but that he also uses WhatsApp. Respondent 2 stated: “Our employees can work from anywhere as long as [they] have good internet connectivity for Microsoft Teams, WhatsApp and Zoom”.

The answers from the respondents show that common digital tools for communication are trending across sectors in Africa. With social distancing measures in place and working from home having become the norm, digital communication has become is a global trend.

The following section assesses the responses to interview questions in Section C (Digital skills and entrepreneurship) of the interview questionnaire. In this section, the respondents were asked how they digital skills could be acquired to promote business value and themselves in digital business. The question was posed as follows: What are the emerging technologies and how does each individual skill themselves to leverage emerging technologies for digital entrepreneurship? When reviewing the interview records, common perspectives and themes emerged. These are highlighted next.

7.4. Theme 4: Entrepreneurs are open to upskilling and see how it benefits their business value.

The interviewed entrepreneurs indicate they value skills that will improve customer relationships, marketing, and growth and that will provide resilience in tough market conditions. It is evident that remote working and communication has been mastered due to the regulations for global lockdowns and limitations of physical meetings in countries. The responses gathered demonstrate that African entrepreneurs are aware of sophisticated emerging trends, such as Machine Learning (ML) and Artificial Intelligence, as well as programming and data.

Respondent 1 explained that “IT programming is important to learn if it adds value to the business. We are learning ecommerce, IoT for monitoring bee activity because we are disruptors in traditional bee keeping and conservation. The benefits of learning digital skills include staying connected using the web and data for both social and business reasons.”

According to Respondent 2: “IT skills is a factor in modern business, and it is formulated on all the levels; we are not an IT-driven company, but we are customer-driven using IT. I am very interested in learning new skills like AI and ML.” The respondent stated that AI skills

will provide customer and product insights and help their suppliers and other stakeholders in the gas supply industry. The respondent said the benefits of acquiring digital skills is learning how to market efficiently, generate business and create interest in our products like Alibaba and Amazon.

Respondent 5 said the following: “The applications that add value are those that provide a way to directly interact with customers and maintain Business to Customers (B2C) relationships. For collaborating with suppliers, we are looking into drop shipping via an ecommerce website and App.”

7.5. Theme 5: Upskilling and learning emerging skills is important to remain relevant in the digital economy.

This theme of the importance of learning emerging skills to remain relevant in the digital economy, as the most of the five respondents noted that digital transformation (DT) affected their business sectors. DT provides an opportunity to offer new value propositions and opens new sales channels for their customers (product and services online offerings). However, the respondents believe that as Africans, acquiring the new digital skills are negatively affected by the high costs of access to training and time taken to then apply the skills in the market.

Respondent 2 noted that IT skills are a factor in modern business, and it is formulated on all the levels of a business processes. The respondent said “we are not an IT-driven company, but we are customer-driven using IT.” This indicates the use of IT skills and the need for the technology skills in the marketplace.

Respondent 3 said that “Learning new skills in this digital economy will only make you more resilient adding to differentiation and more opportunities. It is very important as the technology changes goal posts rapidly. Learning new skills as an individual fosters relevance”.

Respondent 4 noted that learning digital skills has improved his decision making for his real estate business. These skills have kept his business afloat and marketable. He explained that by using third-party tools, he is able to forecast expenses and interest payments.

Respondent 5 said that in the beauty industry, consumers need to buy and book services and this is now made easier through mobile applications and websites. The respondent stated that

being connected to customers online and knowing how and what to offer customers is important to make sales.

8. Conclusion and Recommendations

This research's first objective aimed to uncover views of the impact of emerging technologies in the agriculture and consumer industries in Africa.

Technology such as SMACT provides platforms to collaborate and co-create value between entrepreneurs and their customers. The responses were focused on communication, direct interaction and data leaning to providing services and products that customers' needs through online connections. On analysing the emerging technologies used by African entrepreneurs in the agriculture and consumer goods sector, it is evident the technologies can create habit forming and repeat actions such as weekly shopping and ordering online. This is attractive to entrepreneurs in the consumer goods sector, the beauty sector, ecommerce and gas supply and tech sectors.

Another objective was to investigate the skills African entrepreneurs need to succeed in the digital economy. The responses gathered from the five respondents demonstrate an open and positive attitude towards gaining new skills related to emerging technology. The constraints of access to emerging digital technology include the cost of applications and courses for upskilling. It was determined that data constraints and consumptions costs are not geared for sole proprietors or small businesses in Africa. Despite this, the entrepreneurs interviewed for this study have some experience in using digital tools for communication and seek to learn and make use of emerging technologies in other aspects of their business processes. As such, a recommendation is that government and civic communities make affordable facilities to empower entrepreneurs with knowledge-driven development to increase Africa's competitiveness in the digital economy. On this basis, it can be said that African entrepreneurs want to follow global trends and adapt to new ways of creating and delivering value to their communities.

This research has demonstrated that there is a link between emerging technology and business value. Business leaders must be able to demonstrate the tangible business impact of digital transformation to their teams, stakeholders and customers. It is important to consider studies

that have been done locally, both in Africa and South Africa (KASI Insights, 2020), that show how shopping habits shifted due to the COVID-19 pandemic in affected communities and business. The report indicates a shift from traditional walk-in shopping to online contactless shopping for food and essential consumer goods.

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The Predictive Modelling of Academic Performance Using Neural Networks

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The growth and development of predictive models in the current world has influenced considerable changes. Today, the predictive modelling of academic performance has transformed more than a few institutions by improving their students' academic performance (Lall and Makombe, 2020). Contextual information on predictive modelling of academic performance in private higher education institutions is provided in this article. Academic performance forms a significant factor in academic institutions and is also a measure of their output. There are various factors which influence learners' academic performance, such as test and assignment marks. This article outlined the use of different algorithms for students' academic performance predictive modelling, and the results obtained in the experiments conducted in this research led to selection of the neural network algorithm for classification purposes, compared to other algorithms utilized in the research, whose performances were lower than that for neural networks.

Keywords: *Private Tertiary Education Providers, Data Mining, Algorithms, Simulation and Modelling, Sequential Data, Predictive Model, Data Mining Techniques, Knowledge Discovery in Databases (KDD).*

1. Introduction

In South Africa, public higher education providers are institutions that have been established and funded by the state through the Department of Higher Education and Training (DHET). Public providers include universities, universities of technology, and comprehensive universities. Private providers are owned by private organizations or individuals (Lall and Makombe, 2020).

Roby (2003) mentions that proficiency tests, student achievement, and student attendance can be controlled to a certain extent by students and parents. While to a certain extent, the testing climate and curriculum used can be controlled by lecturers, socioeconomic factors are more

difficult to assess. There was a statistically significant relationship between student attendance and student achievement in Ohio at the fourth, sixth, ninth, and twelfth grade levels. The correlation of student attendance and student achievement was moderate to strong, with the most significant relationship occurring at the ninth-grade level, when comparing attendance and achievement rates (Roby, 2003).

Student poverty and a lack of sufficient funding were cited as key reasons for student academic failure and progression difficulties, and there was use of interpretive methods to explore the academic experiences of South African university students who despite receiving financial assistance for their studies, continued to be classified 'at-risk' of academic failure and exclusion (Mngomezulu, Dhunpath and Munro, 2017).

An ostensibly positive outcome (such as receiving financial assistance) could have unintended negative academic consequences, including increasing students' risk of academic exclusion, by virtue of the tendency for such funds to be utilized to ameliorate family poverty. To this effect, private tertiary education providers needed a more systematic approach to handle this. Examples of approaches that can be used include the provision of more bursaries and loans. This student support would aid in improving academic success rates (Mngomezulu, Dhunpath and Munro, 2017).

Students' class attendance and participation plays an important role in today's higher and tertiary education. Several previous studies have shown that class attendance is an important predictor of academic outcomes which conclude that students who attend more classes generally earn higher final grades (Kirby and McElroy, 2003).

There was analysis of a fuzzy expert system which transformed crisp data in a fuzzy set automatically and also determined the total student marks for both semesters 1 and 2, in the research conducted by Yadav (2012). A fuzzy logic-based expert system that periodically evaluated student performance and supplied students with feedback on progress was evaluated and the system utilized the service data grid service agents to reveal the distributed and heterogeneous grid databases (Patel, Sajja and Patel, 2014).

Yassein , Helali and Mohomad (2017) mention that the adoption of data mining techniques for educational purposes ensures that learners are well equipped with the skills and knowledge

they need to pass their assessments. If educational institutions can predict students' academic performance early before their final examination, then extra effort can be taken to arrange proper support for the low performing students to improve their studies and help them to success (Yassein, Helali , Mohomad, 2017). It is important to observe that there are continuous pressures on being placed on private tertiary educational institutions to be able to achieve continually increasing higher education outcomes such as improved pass rates.

Performance of the predictive models varied according to the semester and the machine learning algorithm in use, and that the decision of which model to apply and the best moment for that depended on the specifics of the semester (Munoz, Luiz Antonio Buschetto Macarini, Cristian Cechine, Matheus Francisco Batista Machado, Vinicius Faria Culmant Ramos, 2019).

A study was done on the impact of classroom attendance on academic performance of university students in an Organic Chemistry course. The findings of the research concluded that attendance had a significant effect on the academic performance of students (Ayodele ,2017).

2. Problem Statement

Private tertiary education institutions rely on observations of signed class attendance registers to take note of and highlight any poor class attendance records. Doing this for all learners on a regular basis is a huge task. Identifying and using of a data mining technique appropriate to the scenario could improve on this system. For this reason, modelling and simulation for the proposed predictive modelling task was done.

3. Research Questions and Objectives

The primary research question to be addressed in this study was: How can a computational predictive model be designed and developed to assist in the prediction of academic performance using neural networks?

The following sub-questions were also to be addressed by the research:

1. What is the most accurate algorithm for predicting academic performance?
2. How is a computational predictive model designed and developed to assist in modelling student academic performances?

3. How is the predictive model implemented and evaluated?

Looking at more specific research questions relating to the primary research question, the following objectives were identified:

1. To use the algorithm with the best accuracy value and area under the curve in modelling student academic performance.
2. To design, develop, and implement the proposed predictive model.
3. To evaluate the effectiveness of the predictive model.

4. Literature Review

The focus of this research was placed on a computational model which predicts learners' academic performance, in private and tertiary education institutions in South Africa. Further in this section, there is review of some previous work done by Roby (2003) which is related to the effect of class attendance on the academic performance of learners in private and tertiary education.

Compiled and reported information may lead to suggestions for dealing with the problems of poor student attendance and its relationship to student achievement, Mboweni L, (2014). Some evidence already exists that infers attendance is higher in smaller schools, Cotton, (1996). Adaptive models have advantages such as the ability to learn a signal processing task from acquired examples of how the task should be resolved and the ability to continuously track changes in the environment under study, Larsen (1999).

Other variables could be the focus of continued analysis, such as student socioeconomic status and aptitude and their relationship to attendance patterns and student achievement at private tertiary institutions. Student age, perceived relationships with teachers, and the perceived value of attending private tertiary institutions are other variables to consider for student attendance/student achievement research.

In Great Britain, it was noted that school attendance was one of the most important factors associated with progress toward literacy for children in British schools in the research concluded by Tymms and Merrell (2007). There is a large scientific literature underpinning current knowledge about the characteristics of students who are truant, Reid (2012) as well as

about interventions that may reduce truancy, Pigott, Kelly, McCrea and Maynard (2013). This work accepts that students not only are compelled to attend, but also benefit from attending school. So, it is particularly critical to understand and address the characteristics and modifiable risks for truant behaviour. These risks include those associated with the student, the family, the local community and the school.

The Genetic Algorithm and Decision Tree are used in Distance learning for analysing student academic performance, these concepts form the basis of the GATREE System (Pierrakeas and Kalles, 2006), which has been built on top of the GALIB library (Wall, 1996). The genetic operators on the tree representations are relatively straightforward. A mutation may modify the test attribute at a node or the class label at a leaf.

A technique to produce fuzzy rules based on the ID3 approach and to optimize results with greater accuracy was the aim of the research conducted by Lanjewar and Chaware (2014). In that research there was application of the ID3 derived rules on the students' database available with the instructors so as to predict their final year's marks (Lanjewar and Chaware, 2014).

The Fuzzy C-Means clustering technique was combined with the deterministic model on a dataset of B.Tech students who appeared in semester-1 and semester-2 examinations (Yadav and Singh, 2012). The experimental results showed that the Fuzzy C-Means algorithm was the best model for modelling academic performance in educational domain (Yadav and Singh, 2012). Therefore, the fuzzy C-Means clustering algorithm served as a good benchmark to monitor the progression of students modelling in educational domain. The rule based Fuzzy Expert System was more efficient model in comparison to existing fuzzy expert systems for modelling academic performance evaluation (Yadav and Singh, 2012).

Raheela and Pathan (2014) used four academic batches of marks obtained from the Computer Science and Information Technology (CS&IT) department at NED University (Pakistan) in their study. They used HSC marks, marks in MPC, Math's marks in HSC, marks in various subject studied in the regular course of a programming language, CSA, Logic design, Data Structures, and so forth for their analysis.

The reasons for the identification of a student at risk of dropouts or attrition early enough were to be able to provide necessary support and interventions for the student, reducing student

dropouts, increasing retention, performance and graduation rates (Connolly and Olugbenga Wilson Adejo, 2017).

An artificial neural network (ANN) is designed based on the biological neuron approach. It has many inputs and a single output. An ANN is composed of numerous simple processing elements that are layered and interconnected (Sarker, Sanjida and Acharjee, 2017). Neural networks have a number of advantages which include their adaptability, increased learning ability, and generalization ability (Sarker, Sanjida and Acharjee, 2017).

There are several applications of an ANN such as the solving of various problems in society by using inputs. Some of these applications include weather forecasting, making stock market predictions, validating data, forecasting sales, and conducting customer research. These are examples of applications that can predict any type of problem using various algorithms implemented in ANN (Eldon, 1994).

Some of the disadvantages of an ANN are as follows (Eldon, 1994):

- They are prone to overfitting;
- Model development is empirical;
- Many ANN systems do not describe how they solve problems;
- There is no single standardised paradigm for ANN development.

5. Methodology

The Knowledge Discovery in Databases (KDD) methodology was used. This method allows for the extraction of knowledge from data. The following research methods were used in this research:

1. Literature study: A thorough literature review was conducted to identify the various factors that influence academic performance.
2. Modelling and simulation were done using the ANN technique and the computational predictive model was designed based on the observed data.
3. Case Study: Data was harvested from a private tertiary education provider's system whose study thereof was used to validate the suggested computational predictive model.

The factors for this study were as follows:

- Study hours per week
- Bursary (whether the student had a bursary or not)
- Class attendance
- Student workload (number of modules registered for)
- Full-time study or attending through part-time classes.
- English language proficiency and its influence on academic success
- Student poverty (Stdpyty) referring to the number of employed parents or guardians.
- Final marks obtained.

These factors were used because no research has been conducted in South Africa where these factors have been used to predict academic performance in private tertiary education using artificial neural networks.

9. Data Collection Methods

A data collection method is a process of assembling and administering data, then analysing the responses and finally, writing the conclusive reports. As this study followed a quantitative approach, a questionnaire with closed-ended questions was used for data collection.

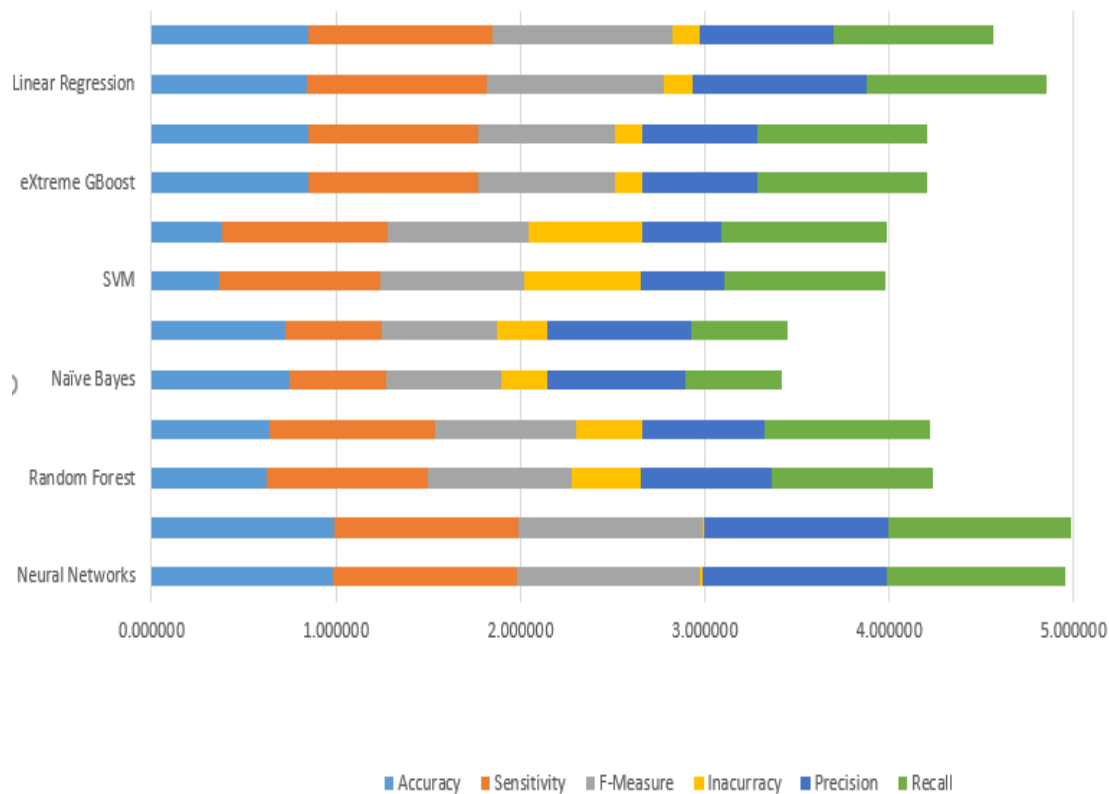
Questionnaires were administered in an anonymous manner after the conclusion of the ethical clearance procedure. Participants were briefed on the purpose of the study and were also requested not to include any form of identification details on the completed questionnaires. The same information was also emphasised in an anonymous letter that accompanied the questionnaire.

10. Experimental Results and Findings

This section describes the experimental results obtained in this study.

7.1. Performance Statistics for Different Algorithms Used

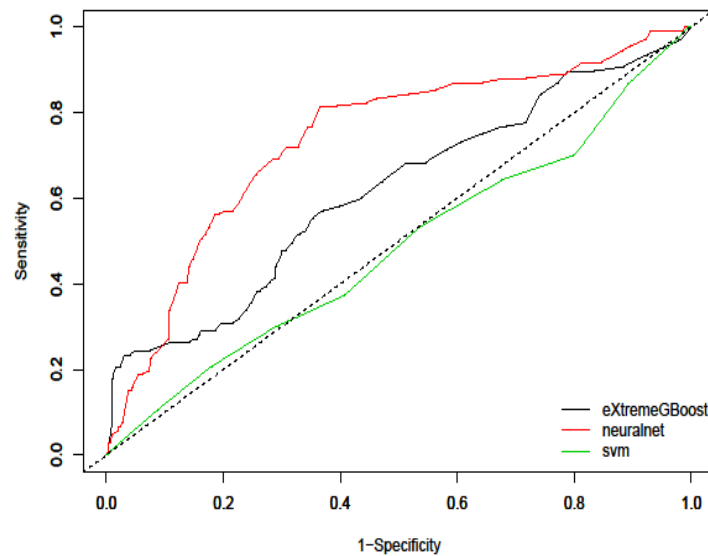
The following chart demonstrates the different accuracy, sensitivity, and F-measure values obtained from the experiment conducted. Inaccuracies are also shown for each of the six algorithms used in this research. Figure 1 shows that the neural networks algorithm had the best accuracies and the least inaccuracies, and it also had high precision and F-measure values (where a good classifier has an F-measure value of close to 1, whilst the worst classifier has an F-measure close to 0).

Figure 1: Performance statistics for different algorithms used

Source: Lall and Makombe (2020). A Predictive Model for the Determination of Academic Performance in Private Higher Education Institutions.

7.2. Receiver Operating Characteristic (ROC)

The purpose of the Receiver Operating Characteristic (ROC) curve is to primarily assess the accuracy of a continuous measurement that is performing a binary outcome prediction (Zou, O'Malley and Mauri, 2007). The best classifier has an Area Under the Curve (AUC) of close to 1, and the worst classifier has an AUC close to 0. Shown below are the AUC values for three classifiers obtained which had the best predictive performance and one with the worst predictive performance.

Figure 2: ROC curves for two best classifiers and one worst classifier

Source: Lall and Makombe (2020). A Predictive Model for the Determination of Academic Performance in Private Higher Education Institutions.

The following values were obtained for the AUC. This was done for three classifiers: two of the best classifiers and the worst classifier observed.

Table 1: AUC values for two best classifiers and one worst classifier

Algorithm	AUC
eXtremeGBoost	0.62
Neuralnet	0.86
Svm	0.43

Source: Lall and Makombe (2020). A Predictive Model for the Determination of Academic Performance in Private Higher Education Institutions

7.3. Selected Algorithm

The ANN algorithm was chosen for the predictive tasks due to its predictive performance and low misclassification errors obtained. The support vector machine algorithm had the lowest accuracy and AUC values in the experiment conducted.

The researcher identified that the neuralnet algorithm, which had weights generated locally and made use of the compute and net. result functions outperformed all other classifiers with an F-

measure close to 1. It was concluded that the neuralnet algorithm outperformed the other algorithms in the predictive tasks of academic performance.

8. Experimental Plots Obtained

This section provides a detailed description of results obtained in the experiments conducted.

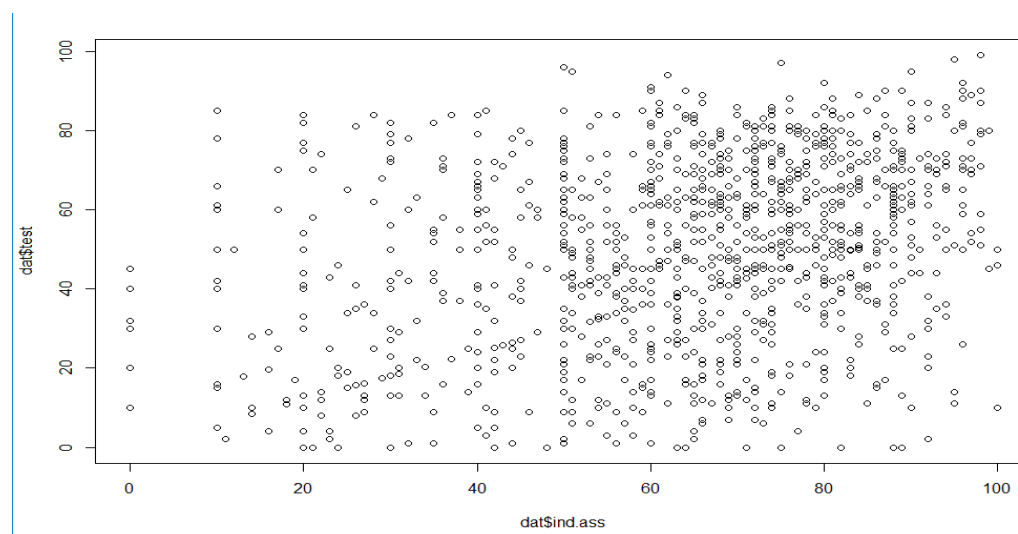
8.1. Scatterplots Obtained

The following scatterplots were obtained in this study.

8.1.1. Scatterplot of Test and Individual Assignment Marks

An overview of this scatterplot suggests that for both tests and individual assignments done most of the students performed well. According to this scatterplot, the approximate range for tests with most students' marks is 40 to 80, and that for the individual assignments is 50 to 90. This suggests that students generally performed better in individual assignments than in tests. Figure 3 demonstrates this.

Figure 3: Scatterplot of test and individual assignment marks

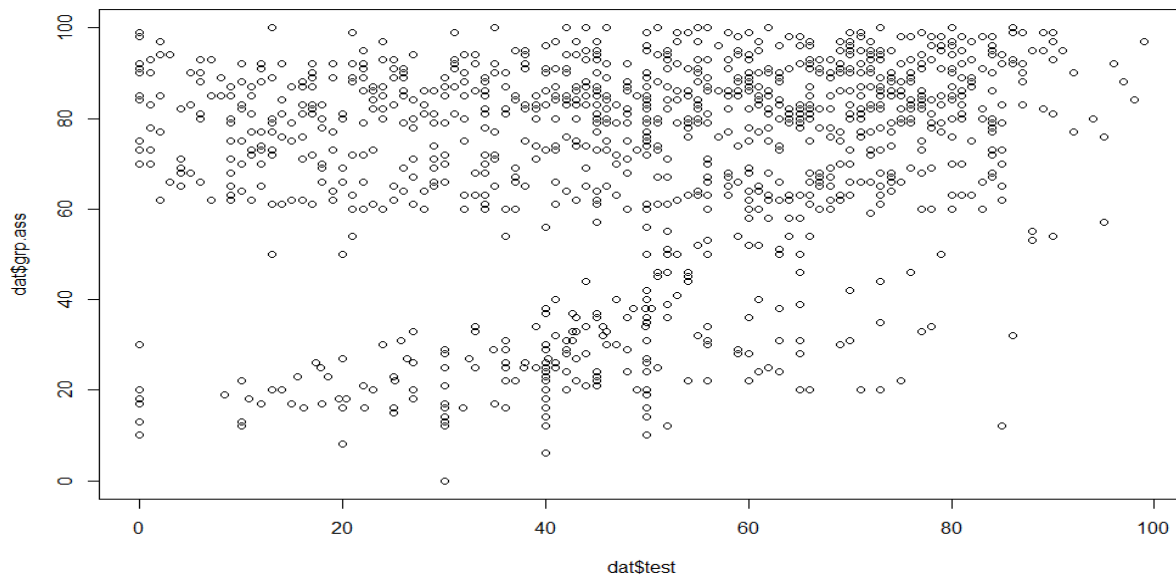


Source: Lall and Makombe (2020). A Predictive Model for the Determination of Academic Performance in Private Higher Education Institutions

8.1.2. Scatterplot of Test and Group Assignment Marks

Figure 4 demonstrates the scatterplot which was obtained for both test and group assignment marks. Figure 4 shows the proportion of students who did well in comparison to those who did not do well.

Figure 4: Scatterplot of Test and Group Assignment Marks



Source: Lall and Makombe (2020). A Predictive Model for the Determination of Academic Performance in Private Higher Education Institutions

8.2. Confusion Matrix Experimental Results

Results obtained in the experiment are provided in Table 2 for both the training and testing dataset, also showing the accuracies and misclassification errors that were obtained using a neural network which had specifically the simple learning rate algorithm.

Table 2: Neural Network Algorithm with simple learning rate confusion matrix results

Confusion matrix	True Positive	False Positive	False Negative	True Negative	Misclassification Error
Training data	5478	88	86	3636	0.0187338501
Test data	1223	17	23	1059	0.0172265289

8.2.1. Predictions of Neuralnet Using Weights Gained

Figure 5 shows the predictions of a sample of 6 elements from the dataset, 6 students. These are the computed values which show the predicted value of whether a student will pass or fail

a module. The simple learning rate algorithm was used for these predictions. In Figure 5, the predictions are given next to the numbers in square brackets, for example, [3,] shows a value of 0.5961648 which means that the student is predicted to pass as the value is above 0.5. Prediction values from 0 to 0.4999999 mean that a student will fail, whereas values above 0.5000000 mean that a student will pass.

Figure 5: output\$net.result

```
> head(output$net.result)
      [,1]
[1,] 0.4566725
[2,] 0.6010540
[3,] 0.5961648
[4,] 0.4566725
[5,] 0.4566725
[6,] 0.5130902
> |
```

Source: Lall and Makombe (2020). A Predictive Model for the Determination of Academic Performance in Private Higher Education Institutions

9. Recommendations on the Research Findings

The researchers made the following recommendations based on the results obtained in the research conducted:

- The neural network algorithm is recommended for use in a predictive model for academic performances due to its performance compared to other algorithms.
- Results obtained in this experiment show that group assignments affect the students' pass rate. As a result of this, private education institutes are encouraged to ensure that their students complete and submit group assignments.
- It is suggested that private education institutions provide bursaries to deserving students as the results demonstrate the effect of bursaries on academic performance.
- Extra classes should be made available to students who would have been predicted to fail so that their academic performances can be monitored and improved.
- Psychological support should be made available to students who have been predicted to fail so that they can be better prepared to perform better in their academic work.

10. Conclusion

For a more accurate assessment of a student's academic performance, several factors should be considered. The presence of adequately qualified lecturing staff, resources for conducting

research, administration services, and technology, all play a role in a student's academic performances. It is therefore recommended that these factors be a part of a future research to provide a more accurate response to the research objectives. As result of low academic performance statistics, private tertiary education providers are under pressure to improve their academic performances.

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Apathy: A Conundrum to Sustainable Community Development A Reflection Based on Student Social Workers' Experiences in Community Engagement Exercises in Zinyoka Village in Alice in the Province of the Eastern Cape, South Africa

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The community development concept has conceivable benefits both at micro and macro levels of development. Realistically, the developmental paradigm is seen as a model that is capable to transform the livelihood of most South Africans. To date, communities have been involved in various community work projects/programmes, for example, gardening, poultry, and piggery among other projects. However, there are numerous confounding variables which seem to interfere with the implementation of the derivative strategies designed to augment community development/community work projects. To further understand community participation in community work projects, the researcher conducted a study on community members in Alice who were part of a garden project that he facilitated during his community engagement commitment. The study followed an interpretive and descriptive design in which data was collected through in-depth discussions with 10 community members who were purposively selected from a garden project in Alice. The researcher then utilised thematic qualitative techniques to analyse the data. Qualitative methodologies helped tremendously in promoting a deep understanding of the factors underpinning the challenges encountered in community development.

The findings revealed a lamentable resistance to community work programmes (CWPs), especially among young people and grown men. Unlike before independence, when people were sceptical about community development citing hidden colonial agendas, today's community members are simply not keen to participate in community projects despite their essence as sources of knowledge and income. On the contrary, grandmothers are enthusiastic about community development programmes, and their participation is far above that of youth and men. For the grandmothers who were part of a garden project in Alice, community work programmes have transformed their psychosocial well-being tremendously, as they get to interact with their peers and at the same time work to make ends meet. Ironically, this compromises their physical well-being considering their age and some of the tasks that they

undertake. To this end, this paper suggests that community developers, organisations, and government institutions should stimulate collaboration and the inclusion of community members in the designing and planning of community development programmes as this will go a long way in promoting participation and transparency and curbing the challenge of community apathy.

Keywords: *Community work, apathy, dependence syndrome, community development, sustainable development.*

1. Introduction

Community and stakeholder participation lie at the core of community development (Mkhize, Madumi and Manona, 2018). Adato and Haddad (2002) underscore that ever since the shift to democracy, South African public works programmes have been considered to involve community participation and targeting the poor. These programmes should inform and allow the equal participation of community members in their planning and implementation (Republic of South Africa, 1997). Put succinctly, the coming of democracy in South Africa ushered in the alteration of ideologies in educational, medical, economic and social spheres. Public platforms underwent rigorous review and were redefined and redirected to meet the needs of all (Bortz, Jardine and Tshule, 1996). Promoting the involvement of community members remains at the core of community work. Community work is a part of social work methods that involves the work performed by social workers in communities. Social workers are trained to work directly with community members in activities earmarked to transform their livelihoods. Murray (1955, 39) describes community engagement as:

“a process by which a community identifies its needs or objectives, orders (or ranks) them, develops the confidence and will to work at them, finds the resources (internal and/or external) to deal with them, takes action in respect to them, and in so doing extends and develops cooperative and collaborative attitudes and practices in the community”.

Swanepoel (1992) describes community engagement/work as a fundamental aspect of social work profession that involves the cooperation of individuals towards addressing identified community needs. Community work entails consolidating the human and material resources of the community to achieve a shared goal (Khawula, 2016).

Community work and community development are terms that are often used interchangeably, but Swanepoel and De Beer (2013) assert that community development has been an integral part of community work from the early 1900s. Accordingly, Mansvelt (2018) also reckons the connection between the two concepts but argues that community development is sometimes viewed as an ever-changing aspect which uses various techniques and skills to address people's needs. Regardless of their definitions, both 'community work' and 'community development' simply seek to address problems that often affect the psychosocial functioning of individuals, groups and communities, such as poverty, unemployment, inter alia. Recognising drawbacks, identifying resources appropriate to meet people's needs, cultivating and establishing individual and group relationships, and forecasting and performing actual programme activities are some of the exact undertakings in community engagement (Bello, Lovelock, and Carr, 2017). This process requires a lot of training. Therefore, the community developer and/or social worker's proficiency in dealing with communities relies on their ability to balance their individual and professional knowledge and other systematic obstacles that impact the lives of service consumers.

1.1 Problem statement

The lack of participation and involvement of community members in community development projects remains a major factor besetting sustainable development. Despite the contribution of community development programmes in addressing poverty and other social ills, the uptake of this community intervention strategy remains fragmented (Adato and Haddad, 2002). Many community development initiatives lack continuity and tend to die soon after the departure of community workers. Perhaps community members need to be conscientised about the essence of community development projects to ensure sustainable development. This paper explores the undercurrents of this phenomenon to ensure that poverty eradication strategies suffice.

1.2 Research objectives

- To investigate the factors that interfere with the implementation of strategies designed to enhance community development/community projects.
- To explore challenges in community involvement in the implementation of community work programmes.
- To examine the impact of community work programmes (CWPs) on community

members in Alice.

1.3 Research questions

- What could be the reason for the low uptake of community development projects?
- What hinders the success of community work programmes?
- In what way do community work programmes impact the livelihoods of community members in Zinyoka village in Alice?

1.4 Study Aims:

This study sought to gain a pragmatic understanding of citizen participation in community engagement programmes as seen through their attitudes and behaviours. Information was obtained through observations and interviews with community members in Zinyoka village in Alice in the Eastern Cape. These helped to reveal how the community members perceive the notion of community development programmes in South Africa and could be treated as feedback on the progress that has been made as far as community development projects are concerned. This could be important for policymakers interested in Community Development Work Programmes (CDWP), particularly those who are predisposed to the idea that these are sufficient for poverty alleviation and development.

1.5 Contextualisation of Study

The present study took place during a range of community visits that the researcher carried out in 2018 when he was facilitating a garden project to empower community members in Alice both psychosocially and economically. Participants on the community work programme in Zinyoka village were encouraged to grow vegetables and other crops to improve their diet and generate extra income. The garden project and community work programme activities enabled members of the community to engage in vegetable production while also allowing them to exercise and converse on various aspects of life. Garden project participants in Alice were encouraged to produce diverse vegetables (beetroot, butternut, cabbage, spinach, potatoes and onions) that they could sell to retail operators in and around Alice. This increased the likelihood of some households escaping from poverty and malnutrition. Although the community gardeners expressed concerns over the recent seasonal variations, highlighting the problem of water supply and general climate change which impacted negatively on their activities, overall, the garden project offered community members, and women in particular, a new lease on life.



Figure 1: Some of the participants who took part in the garden project

2. Literature Review

2.1 Education and participatory change

Community involvement remains a focal point for sustainable development. Hawkins and Wang (2012) stresses that community workers should recognise the participation mechanisms utilized by communities to improve the management and success of sustainable development initiatives. Trevithick (2009) explains that social work students are taught to grasp social challenges and intervention strategies such as casework (working with individuals), group work (family interventions) and community work (large scale interventions). However, Tan (2009) postulates that most emerging social workers often rely too much on casework or working with individuals compared with other intervention strategies like community work (Tan, 2009). Perhaps this inclination toward casework practice is the reason why community work projects often die prematurely. Tan (2009) suggests that casework reliance by upcoming social workers might have been informed by the way social work education is structured and delivered, thus, community social work can be regarded as a method that is yet to achieve its relevance among emerging practitioners. Regardless of this challenge, education remains essential in empowering student social workers with relevant analytical and thoughtful aptitudes to augment their capacities.

Institutions of higher learning, and the field of humanities in particular, should promulgate

clear career prospects for students to be able to think critically and to usher them to become citizens with befitting aptitudes to transform their lives and those of people surrounding them. Agi, Gbawa and Jaja (2019) emphasise on conscientising community members about participation to ensure sustainability of community development programmes. Mansvelt (2018) further asserts that community training is important for establishing interventions and practices that address community needs. Social work education therefore expected to promote people-oriented service delivery that results in discernible and sustainable development to service consumers (individuals, groups and communities). Mansvelt (2018) further posits that education and training are essential aspects for effective community development interventions. Education on social, political and economical dynamics of an environment should be considered as a starting point for development and community transformation. Within the context of community emancipation, education incorporates sectors such as health, life skills training, inter alia (Campbell, Ross and MacGregor, 2016).

In South Africa, community participation and the developmental paradigm concepts are clearly articulated in the White Paper for Social Welfare where local government institutions have been entrusted with the overall process of community transformation (Department of Social Development, 1997). The Social Welfare White Paper provides guidelines on distribution of resources and the active involvement of individuals, groups, families and communities in processes of development (Department of Social Development 2013 p. 13). The guidelines have been cascaded down to institutions of higher learning which offer social work training to ensure synergy in the processes of training and community work activities. Social work students at Fort Hare University are therefore required to work within the surrounding communities. This experience is further intended to strike a balance between their theoretical knowledge and practice.

3.2 Community development as a process

Community development may perhaps be described as the process of community capacitation, furtherance and restoration (Swanepoel and De Beer, 1997). Swanepoel (1992) views community work as an undertaking intended to develop communities through vigorous involvement of members and implementation of community-driven strategies.

Mansvelt (2018) asserts that the model for community development received a cold response

across segments of the South African population before 1994 as people were sceptical about change. This assertion is in line with Swanepoel and De Beer (1997) who explained that the process of community development encountered huge structural impediments from the onset of its implementation in South Africa. The authors describe how politicians and community members strongly criticized community development initiatives, describing them as a colonial tool meant to further foreign agendas. Mansvelt (2018) therefore states that in South Africa, the process of community work required robust contextual analysis to meet widely held cultural values to stand a chance of achieving its intended goals.

During apartheid, community engagement followed strict and asymmetrical (residual and remedial) models of welfare provision. These models served to further and maintain discriminative welfare services as they focused predominantly on white people (Moyane, 2016). In the mid-1980s, however, Swanepoel and De Beer (2013) point out that the provision of welfare shifted from being entirely remedial to a more developmental process. However, this strategy faced a general misconception from local communities who thought state community development initiatives were a part of the then apartheid government's plan to stifle their reform initiatives (Phago and Molosi-France, 2018). On the other hand, the then regime of apartheid did not institute practical basis for community development, thus stakeholders in welfare struggled to shift from remedial to community development as the induction process was poorly executed (Swanepoel and De Beer, 2013).

In some instances, the designing of community projects was often placed entirely in the hands of professionals thereby neglecting community members. This reduced the likelihood of community members' involvement in the projects. Primarily, government initiatives for development struggled to promote a sense of ownership among community members (Swanepoel and De Beer, 2011). This validates the point made by Swanepoel and De Beer (1997) - that the success of community work is deeply connected to grassroots participation. Participation is critical in ensuring the sustainability of community projects. In addition, Swanepoel (1997) highlights the significance of observing the principles of community development throughout the stages of interventions. The principles include promotion of people-oriented intervention, participation, empowerment, a sense of ownership and release, learning, and transformation (Trevithick, 2009). Importantly, Swanepoel embraces Korten's (1990) people-centred stance to development which supports the involvement of community

members in planning and designing of development initiative. Perhaps this is what is lacking currently in the execution of the development model in South Africa.

From a legal perspective, statutes have been put in place to support the execution of the developmental conception. Key legal measures include the Municipal Systems Act (2000) which promotes the enactment and utilization of mechanisms that spearhead the fulfilment of people's needs. Secondly, the White Paper on Social Welfare (1997) puts the general populace of South Africa at the centre of development and emphasises the creation of clear enabling opportunities for people to play an active role in projects that directly impact their lives. In this respect, the Department of Social Work and Social Development at Fort Hare University has an amicable relationship with its surrounding communities. The department annually deploys third-year students to communities around Alice with a mandate to work in unison with community members in various developmental projects. This paper aims to reflect on the experiences of these student social workers in their community engagement exercises.

4. Theoretical Framework

3.1 Community Development Theory

Mansvelt (2018) points out that upcoming social worker tend to rely too much on casework methods. This can be identified as one of the reasons why community social work seems to struggle in achieving its relevance in some parts of the country, To this end, social workers have been implored to consider their role as facilitators in the process of sustainable development. Community development is rooted on the utilisation of community structures and resources to respond to community needs and empower individuals (Mendes, 2009).

This study used community development theory to analyse and examine the process of community work in the Zinyoka community in Alice because the theory promotes a participatory approach whereby community structures are involved in development process. Community development theory is deeply linked to the discipline of sociology, where the focus is on societal or large-scale intervention which differs from psychology-based theories of therapeutic social work practice (Tan, 2009). The theory hinges community development to the involvement of community structures and the community's people to achieve sustainable development. It explicitly recognises the role of the social worker as a facilitator in community development (Tan, 2009).

According to York (1984), the attentions of community development theory is the organisation of community agencies, empowerment of community members, and mobilisation of resources to achieve the desired developmental change. This theory is appropriate for exploring the participation of community members in development projects in Zinyoka (Alice, Eastern Cape Province of South Africa) as it promotes equal distribution of resources, community participation and human development in the process of sustainable development and citizen empowerment.

5. Research Methodology

4.1 Methods and Study Settings

The present inquiry utilised qualitative techniques, approach and design. The inquiry was explorative and interpretive in the sense that the outcome is a product of the interpretations made by the researcher. Creswell (2016) underscores that individuals are sophisticated beings that experience and understand similar occurrences in very different ways, and their reaction or actions in the world are thus often very different, thus an exploration of community members' response to community work projects was suitable for this study. The study inquiry followed a case study design in which a relatively small sample was thoroughly probed to solicit participants' sentiments and observations regarding their acceptance of and participation in community development projects. A sample was used, as assessing the overall participation of the community members in the community development programmes was not feasible. The researcher utilised a non-probability sampling methodology to select participants. Succinctly, a purposively selected sample was used to answer research questions (Creswell, 2016). The researcher aimed not at generalising the results, but to gain a comprehensive understanding of the challenge of community apathy. This provides a starting point for further research using either a quantitative approach or mixed design.

To gather data, the study employed a semi-structured interview guide/schedule as a research instrument. The interviews consisted of open-ended questions. Ten in-depth interviews were conducted with community members who were part of a garden project in Alice. These in-depth interviews provided the researcher with an opportunity for further questioning, thus allowing him to gather as much information from the research participants.

The study considered it pertinent to interview those who were involved in the garden project

and community work programmes, regardless of their gender. The researcher purposively interviewed individuals that were accessible and knowledgeable enough to comprehend the probing questions concerning the adoption and involvement of community members in community development programmes.

Data collection was performed at the Alice community garden, and the data was collected over a period of a few days. A commendable number of people are involved in the CWP. The researcher had a good relationship with most of the participants as he repeatedly visited them during community engagement practices. The engagement visits are an academic prerequisite for social work students. The research, therefore, is entrenched in the outcomes of community engagement practices. The data collection was conducted in IsiXhosa and the principal researcher can relatively comprehend and speak the language, therefore he consulted his fellow local students to interview the participants of the study. With the consent of the interviewees, the interviews were recorded and then categorised for the purpose of analysis. The researcher also employed his social work and research knowledge to evaluate the participants' non-verbal cues as they took part in the in-depth interviews. Creswell and Clark (2017) also recognise the use of observation skills in research processes.

Only ten community members that were purposively selected from the garden project participants were involved in the in-depth interviews. The researcher was guided by the principle of saturation, which proved this number sufficient to answer the key aims of the study. Sechelski and Onwuegbuzie (2019) posits that data collection in qualitative research utilises the principle of saturation whereby the researcher stops data collection when they reach a point of satisfaction. The information gathered from the participants was sufficient to substantiate relevant conclusions on the subject under inquiry. This was further appropriate as the qualitative research approach respects the quality of information generated more than the quantity of the information gathered.

6. Data Analysis

The analysis of data followed the ethos and principles of the qualitative approach. Creswell and Clark (2017) outline the principles and procedures that are involved in the process of data analysis. Creswell (2016) establishes that data analysis entails the arranging and organising of raw data into interpretable sets to meet the stated objectives of a study. In this respect, the

researcher used a content thematic analysis technique to make meaning of the collected data. This technique employs a rigorous examination of the data and identifies themes that emerge to answer to the research questions. According to Braun and Clarke (2006), the thematic analysis technique helps the researcher in putting together piles and piles of raw data from the field into well organised and coded data which will lead to themes. This allowed the researcher to thoroughly analyse data patterns. Thematic analysis can also be used to address various types of data, from tributary sources (such as media) to transcripts of focus group discussions or interview sessions. In this context, verbatim quotes and analogies from the participants, together with the researcher's understanding of the participants' sentiments, were all used to inform the assortment of themes. Archer (2018) supports the use of verbatim quotes to substantiate research arguments.

7. Ethical and Legal Requirements

The study followed all stated research protocols to ensure that it was scientifically and administratively sanctioned. Creswell (2014) emphasises that a scientific inquiry should be ethically aligned. This resonates with De Vos et al (2011) who outlined some of the ethical protocol that research has to observe to meet scientific standards. This research emanated from the outcomes of community engagement practices carried out by the researcher to promote community development in communities around Alice in the Eastern Cape. The researcher, like other senior students, had a letter from the head of the Social Work Department at Fort Hare University that allowed him to take part in the community engagement. The letter provided ethical clearance for the exercise. The researcher had a good understanding of the community's leadership, which happens to have a good rapport with the institution of Fort Hare, particularly in the context of students' community engagement practices. As a way of maintaining privacy and confidentiality, pseudonyms were used in the verbatim quotes from the participants. BoVee-Akyurek, Chenail and Erolin (2019) point out the importance of ensuring privacy and confidentiality of information disclosed by research participants.

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8. Research Domain and Justification of Choice

The study information originates from the researcher's community practices carried out in June of 2018 in the Zinyoka Village (Alice, Eastern Cape). The area of study is located approximately 3-5km from Fort Hare University and Alice's administrative centre. A poor community response to community engagement practices triggered the researcher's interest in

examining the community members' perceptions of community development programmes (CDWPs). The aim was to explore whether they felt their basic needs were being addressed by CDWPs and to assess to what extent their lives have been transformed by participating in community projects. All of the members who were part of the garden project formed part of the research domain.

9. Findings

This section presents the results related to the attitudes, views and knowledge of the ten garden project participants who partook in the inquiry. The information shared was categorised using the code method. This led to the development of the themes presented in the findings of this study.

8.1 Demographics

Table 1 outlines the demographic information of the ten research participants.

Table 1: Demographic Profile of the Participants

Number	Pseudonym	Gender	Age	Level of education attained
1	Nomvula	Female	39	Grade 10
2	Buhle	Female	58	Grade 10
3	Babalo	Female	53	Matric
4	Sikhanyiso	Female	50	Matric
5	Thandi	Female	49	Grade 10
6	Lutho	Female	40	Grade 11
7	Simangele	Female	35	Grade 11
8	Thabo	Male	48	Matric
9	Khaya	Male	23	Grade 11
10	Dladla	Male	51	Matric

Table 1 reflects a gender disparity in the participating community members, where fewer men participated in the initiative than women. This is not a coincidence but a true reflection of how community development projects are perceived and accepted by community members. Men

involvement in community work projects remains problematic as some of them who are not formally employed are preoccupied with alcohol in taverns (Mkhize, Madumi, and Manona, 2018). Despite the asymmetrical representation of gender, the researcher focused on the participants' ability to provide relevant and data-rich information. The age range of the participants added to the research's validity, reflecting how the youth are not so keen on participating in community developments projects whereas elderly people are more forthcoming. The study findings point out that youth participation in community work projects is fragmented.

9.2 Study Themes

The themes derived from the data analysis exercise are presented in Table 2.

Table 2: Study Themes

Number	Theme
1	Community apathy
2	Lack of men involvement
3	Older persons' livelihood compromised
4	Lack of youth involvement in community development projects

9.2.1 Community Apathy

Community development projects are becoming increasingly important, both as a source of psychosocial support and employment (Mkhize, Madumi and Manona, 2018). At the individual level, community projects have improved the standards of living of the people that took part in a garden project in Alice. Through community work programmes, many people are now able to feed and clothe themselves. However, the outcomes are not uniform across the board as some community members have not yet grasped the significance of these community work programmes. There are some members that withdrew from the garden project and they were not able to see the benefits of the garden project. This resonates with Kang'ethe's (2014) assertion that some community members lack the zeal to work for themselves. Kang'ethe (2014) argues that the key obstacle to community development in some sections of the country is dependence syndrome. Dependence syndrome is seen when people become reluctant to work while relying on handouts and government support initiatives such as social grants. This

dependence syndrome has been aggravated by people's misconceptions of government social grants. Phago and Molosi-France (2018) express that social grants are good; however, some segments of the population are relying too much on them that they are no longer keen to work.

Community members from Zinyoka village who participated in the garden project were asked to share their views about community work programmes. One of the participants, Buhle, shared the following:

"The garden project is essential to us as we are now able to feed our families and even sell some of our products, but some members are no longer active ever since the community development workers left. They are dispirited to continue working hence some portions in the garden are idle".

According to another participant:

"CWPs involve a lot of commitment and hard work, as such some people are not interested in working, and they depend entirely on social grants. Abanye abafuni kusebenza, so bayatya ezo grants zabantwana (some individuals think the child support grant is enough for them, hence they are not interested in working)".

The first narration attests to the impact of community development programmes. However, it also reveals a dichotomy in terms of acceptability and participation. Some segments of the population see the garden project as a conduit to financial freedom, while other in other sections of the community it is yet to achieve its relevance.

The findings from the current study point to a problem of community apathy whereby some individuals from Alice were not eager to partake in CWPs. Coupled with dependence syndrome, community apathy has made some men and women docile and reluctant to change their circumstances. They are reluctant to partake in community development projects. These projects have nonetheless nourished many households. The garden project, for instance, has allowed some community to sell surplus produce to retail outlets.

9.2.2 Lack of involvement of men

The research findings from the interviews that were conducted with 10 participants who were part of a garden project in Alice established that the participation of men in community work projects in that area is fragmented. However, the involvement of men in community development projects is crucial considering that some of the tasks require physical strength and tenacity. This is not to say that women are unable to perform these tasks, but having the whole community working in unison is critical for sustainable development. Perhaps men need to be

conscientized and educated about the benefits of CWPs. Through CWPs, people can learn vocational skills and become self-reliant. CWPs also provide networking opportunities. Men are important in community development; first as heads of households, and secondly, as participants in development (Leonard, 2019).

The community members of Zinyoka village were asked to share their views on the uptake of community work programmes. One of the participants, Dladla, said: “*Amanye amadoda haafuni kusebenza, abanye bathi umsebenzi webafazi lona* (Some men are just lazy to work, and some think community projects are for women, hence they are not forthcoming)”. Another participant, Lutho, revealed the following: “*Amadoda afuna ‘white collar jobs’ so abafuni kuenza eziCWPs* (Most men are into white collar jobs; hence they are not willing to partake in community work programmes)”.

The above portrayals on men’s reluctance to participate in community engagement projects in Alice Township reveal the challenges experienced in CWPs. The findings reveal how the patriarchy system has disempowered men because patriarchal privileges allocate a higher status for men; thus, men think that by participating in CWPs they would have lowered themselves (Puckett, 2018; Agi, Gbawa and Jaja, 2019). As such, the study notes a great need for the strong conscientisation of communities so that they fully comprehend the essence of CWPs and are able to develop a sense of ownership.

9.2.3 Compromised livelihoods of elderly people

The findings reveal that the elderly people are the driving force of community work projects. Elderly are important for instilling morals and good values to the upcoming generation. They are a yardstick of what is right in any given society (Kang’ethe, 2010a). The study findings show a rather worrisome scenario because the elderly people should be resting and enjoy their old age, but they are at the fore of community development projects. Mkhize, Madumi, and Manona (2018) reports that the elderly people are leading in terms of participation in community projects or development initiatives. They seem to be the age group that has most fully grasped the significance of CWPs. Although these community development projects help the elderly emotionally and psychosocially by allowing them the opportunity to meet with their peers, it is perturbing to think that the elderly are the ones working flat out to provide for their families when they should be resting and enjoying their old age. When asked about this, Granny

Babalo had the following to say, “*Mina, ndisebenzela amaZukhulu bami* (I work to provide for my grandchildren). The money from the grant is not enough so I have to work.”

This paper applauds the wonderful work being done by the grandmothers across Alice but laments the pain and challenges that they face in trying to provide for their families. Singh and Srivastava (2014) mentions that the elderly people continue to make positive contributions to community development. This entails that much work still needs to be done to cushion the elderly and to link them with resources and facilities that can assist them, for instance some are not receiving the old age grant.

9.2.4 Lack of youth involvement in community development programmes

The findings from the interviews that the researcher did with 10 participants in Alice indicate that youth participation in community development programmes is far below expectations. According to Marks and Erwin (2018) youth participation in community development projects and programmes remains a concern for sustainable development. The study findings from Zinyoka community established that youths are more interested in sport and office-based opportunities. The youths in Zinyoka village in Alice are predisposed to the idea of earning a lot of money, whereas community development projects offer more skills development and capacity building. This is supported by Bello, Lovelock and Carr (2017) who expressed that the youth are not patient and disciplined enough to nature a business initiative. Considering the prevailing economic challenges, community work projects can be an alternative, the youth remain adamant to participate in community projects. There is therefore a dire need for robust intervention to address the problems of apathy before the situation gets out of proportion (Campbell, Ross and MacGregor, 2016).

In this study, the participants were requested to share their opinions on the participation of the youth in CWPs. One participant explained the lack of participation of the youth as follows: “The youth are hypnotised with buying label clothes and classy commodities; hence they get frustrated when they fail to purchase such things because CWPs mainly focus on skills development”.

The participation of the youth in community work programmes is critical to the success of these programmes as the youth are the future community leaders. There is a need for the robust

mobilisation of the youth for them to fully comprehend the significance CWP's. Puckett (2018) also noted the importance of youth involvement in development initiatives.

10. Discussion of Findings

The outcomes of the study indicate that community engagement projects are helpful and instrumental in assisting families in the Zinyoka village in Alice. Essentially, community work projects promote community social functioning and psychosocial benefits, thus allowing community members to sufficiently fulfil their basic needs of food, shelter and safety (Kang'ethe, 2018). More so, they offer a platform for networking and interaction between community members themselves. CWP's offer a platform for community members to meet and work together while promoting personal wellness through sharing experiences. According to Trevithick (2009), group processes have an empowering effect, and they are useful in driving out the fear and nervousness associated with loneliness. The group concept offers community members tangible opportunities to learn, support, counsel and/or even assist one another. This implies that should the youth get involved in these projects, they will also get a chance to learn good morals and values from the elderly and other participants of their age. Kang'ethe (2014) argues that community work projects/programmes help human capital as they provide participating members an opportunity to learn and develop communal capital.

The findings of this study indicated that community projects are helpful at various levels but that there are some members of the community who share varying views of the projects. The study findings indicated that community apathy is major challenge in the success of community work programmes because a number of men and youths are reluctant to participate in community work projects. Accordingly, Kang'ethe (2014) asserts that some community members do not participate in CWP's because of personal challenges, while some just lack the enthusiasm to work for themselves. The findings from the interviews also mentioned about people's overreliance on social grants as one of the reasons why community members in Alice were not so keen on participating in the garden project. According to Khawula (2016), social grants are a noble initiative to help citizens, but the problem is some segments of the population have become reluctant to work. The findings of this study also pointed out that men involvement in community work is low. Campbell, Ross and MacGregor (2016) affirm the need for men to be involved in interventions like community work projects so that they can be able to address their psychosocial needs. A great need therefore exists to better understand, and devise means to overcome the barrier of apathy to ensure effective engagement in social

projects aimed at tackling community needs.

The findings of this research indicate that although the youths are struggling to find employment, they are reluctant to participate in community engagement projects. As a consequence of their reluctance to participate in CWPs, Ramukumba (2018) reveals that some of the youths have turned to drug abuse and crime, which affects their psychological functioning. According to Huppert (2009), psychological welfare is the combination of feeling good and functioning efficiently. In the presence of perpetual unemployment, the youth's mental wellness is compromised, especially when life challenges are severe or prolonging and interfere with a person's capacity to function effectively (Huppert, 2009). Undoubtedly, community engagement projects remain a conduit to psychosocial well-being, but apathy remains a cankerworm that impacts negatively on the implementation of CWPs in South Africa.

The study findings indicate that elderly people in Zinyoka village are being denied an opportunity to enjoy their old age as they work relentlessly in CWPs to put food on the table for their grandchildren. Elderly women continue to be the driving force in community work projects. However, Kang'ethe (2010) asserts that in cultural African societies, the elderly are respected both for their age and the roles they play as counsellors and intermediaries. According to Manomano (2013), the elderly are supposed to be protected and provided with basic needs such as food, shelter and clothing as per the provisions of the Constitution of the country, which provides for the fulfilment of all the rights and freedoms of all people. Kang'ethe (2018) relates the abandonment of elderly individuals to the ever-increasing poverty levels in the nation of South Africa, as well as cultural decay. This paper points out that a possible explanation for the prolonged challenges in community development projects is apathy. As such, the phenomenon of community apathy needs to be accorded the attention it deserves across the board.

11. Conclusion

Community participation in CWPs is pivotal to the achievement of sustainable development. Therefore, it becomes pertinent that efforts and resources be channelled towards addressing challenges of over reliance on social grants or dependence syndrome and community apathy. This study established that apathy besets the success of community work programmes in Alice

in the Eastern Cape. The study revealed that the participation of men and youths in community work programmes is fragmented despite the problem of high unemployment rate in the country. Inadequate community participation pronounces a huge blow to sustainable development initiatives in Zinyoka area of Alice. Ironically, the study findings showed a massive response from elderly women who are supposed to rest and be left to enjoy their old age. Elderly people should be afforded the respect and love they deserve within communities and across all sectors of life. The researcher believes that an over-reliance on social assistance and/or donor driven systems has hatched challenges for our communities, with members lacking the zeal to work for their own development.

12. Recommendations

The study recommends, therefore, that community members should be educated about the importance and benefits of CWPs. Through education, community member participation can improve. Community participation is central to community engagement process, thus student social worker should devise ways that promote adoption of community work projects by community members. The study also recommends that institutions of learning should provide enough supporting structures to supplement student efforts during community work engagements. Supporting structures will go a long way in building relationships between the institution and the community. In addition, such structures will assist the students that will takeover the projects when other students graduate. To address apathy, the study recommends that all stakeholders including the government should establish community development competence training to ensure facilitators and community are empowered to spearhead sustainable community development initiatives. Governments and non-governmental organisations should promote community solidarity among the youths, men, women and the elderly to enhance the macro-level change of communities. Community apathy is an indicator that there is need to increase public awareness about community work development. Lastly, the study recommends that community workers recognise people's problems and promote participatory change.

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The Economic Significance of Taxi Rank Businesses: A Narrative of East Rand Mall Taxi Rank Businesses

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The taxi industry in South Africa is a topic that has dominated social conversations since the Apartheid era. The industry has also seen a lot of changes in terms of governance, ownership, associations, and safety and security. The industry has grown considerably over the years with an upsurge of new settlements, new malls and plazas, and South Africans' growing need for public transport to take them from home to work and schools.

The taxi industry's contribution to the economy of South Africa should not go unnoticed as it hires thousands of people as drivers to ferry people from their homes to work on a daily basis. More so, it should be highlighted that the taxi is one of the most affordable, flexible, and convenient mode of transport for many South Africans. Notwithstanding all the positives associated with the taxi industry, there are many challenges that need to be surmounted for the industry to grow and contribute more to the economy of the country and to also be a safe business to operate.

Taxis, under various taxi associations, operate in various spaces in ferrying people from different places across the country. One of these places are taxi ranks, wherein one can find various people running businesses to serve awaiting passengers. The various businesses found in taxi ranks across South Africa exist to serve customers. These businesses, like the taxi industry, contribute a lot to the economy of South Africa. This study is ethnographic in nature. Using the East Rand Mall taxi rank as a point of departure, this research incorporates responses from business owners at the taxi rank in its findings.

Keywords: *Business, commuters, economy, industry, rank, mall, passengers, transport.*

1. Introduction

The taxi industry in South Africa plays a significant role in ensuring people are able to travel to and from home and work on a daily basis. (Abuhamoud, Rahmat & Ismail, 2011: 51). Its importance can therefore not be overemphasised. But the problems associated with the industry can also not be ignored. There are many stakeholders in the taxi industry. These stakeholders include taxi owners, drivers, passengers, communities, shopping centres, businesses (those in and round taxi ranks), the government, and investors. (Woolf & Joubert, 2013: 6&7; Maeko 2020; Mmadi, 2012, 30). Most of the stakeholders work together to ensure the stability and efficiency of the taxi industry by contributing to it in various ways.

There is no doubt that a taxi business is a lucrative business, particularly in developing countries where millions of people use public transport to travel to and from home and work every day. The Department of Transport (2020: 04) in its Taxi Industry Empowerment Model noted that “the taxi industry generates about R50 billion in revenue annually and spend more than R20 billion on fuel alone”. The taxi business therefore provides a source of livelihood to taxi owners and drivers, and by extension, the passengers and the families of these stakeholders. It is not only the taxi owners, drivers, and passengers who benefit from the taxi industry but also businesses in and around the taxi ranks. There are several businesses situated around taxi ranks across the country. This study will focus on one taxi rank: The East Rand Mall taxi rank.

To demonstrate the significance of a phenomenon, it is important to use a recognisable place, person, event or period or relevant example. For instance, when demonstrating the importance of sports in social cohesion and nation building one can refer to the 2010 FIFA World Cup in South Africa which brought not only South Africans together but Africa as a whole. When one tries to demonstrate how to make peace with the opposite site one can refer to the likes of Nelson Mandela and Chinua Achebe as one had leadership skills and the other influential in his writing. In this study, the East Rand Mall taxi rank was adopted as a case study to discuss and demonstrate the importance of taxi ranks to the economy of South Africa. The study is explorative and descriptive in nature as it explores the economic significance of taxi rank businesses and describes the nature of their existence.

There is no doubt that taxi ranks play a vital part in economic growth. (Department of Transport, 1999; Mmadi, 2012: 137). It is the opinion of the author that the East Rand Mall

taxi rank demonstrates just how important taxi ranks are as spaces for economic activity. The rank encompasses various informal businesses which include taxi transport, a barber stall, various food providers, fruit and vegetable stalls, an ice cream seller, pool soccer, and independent car washers. All these businesses are discussed in detail in the study to provide a better understanding of how each contributes to the economy. First, a literature review is provided which details the background of the South African taxi industry, the issues surrounding the taxi industry today, and how these issues are being dealt with. It is important to provide this literature review as it outlines how academics have reported on these matters and it justifies why their studies could have focused taxi rank businesses in any shape or form.

2. Objectives

This study is informed by the following objectives:

Primary objective:

- To highlight and emphasise the economic significance of taxi rank businesses to the South African economy.

Secondary objectives:

- To present the nature of taxi rank businesses in South Africa.
- To theoretically highlight the socio-economic importance of taxi rank businesses.
- To demonstrate the ways in which taxi rank businesses have changed the lives of many people.
- To emphasise the need to encourage young people in South Africa to start their own businesses.

3. Literature review

The South African taxi industry is a diverse, multifaceted and complex industry because it has various stakeholders with different vested interests.

4. The nature of the taxi industry in South Africa

Woolf and Joubert (2013, p.2) note that there is a plethora of literature on the South African taxi industry, specifically concerning its detailed operations. Some of the early work on the South African taxi industry comes from Dugard (1996, 2001), Khosa (1994), McCaul (1990) and Pirie (1992), all of whom provide historical contexts for the emergence of the taxi industry and its relationships with other modes of transport (e.g., bus and train) and the government

(Woolf and Joubert 2013, p. 2). Schalekamp and Behrens (2010) and Venter (2011) provide a critical view of the government's failed measures to engage with the taxi industry in its formalisation attempts. Some of the ramifications of these failed attempts are currently evident as the country grapples with the challenges of the Coronavirus (Covid-19).

In April (2020), the government announced that taxi drivers would only be allowed to carry a maximum of seven passengers. Government introduced this measure in the hope of curbing the spread of the virus. This was met with widespread criticism by many taxi owners and drivers who alleged that they were not properly consulted prior the announcement of the regulation. The taxi owners and drivers' concern around the socio-economic ramifications of that April regulation was evident in the sense that they could no longer generate what they normally generate daily in normal times. They then resorted increasing taxi fares to make up for the lost seats. Maeko (2020) reports that some operators have begun inflating taxi fares during level 5 of lockdown. This was found to be notable in Limpopo, KwaZulu-Natal, and the North West provinces.

A taxi is the most dominant mode of public transport in South Africa as people see it to be more convenient than other public modes of transport. Many South Africans consider taxi fares to be reasonable and even if there are price hikes, many get used to the new prices as time goes by. As such, the taxi in South Africa is one of the top on the list of modes of transport used to travel to work, for visits and for business purposes. (Mmadi, 2012: 63, 81). The taxi follows the private car with 24.0% with the latter accounting for with 33.7%. (South African Government, 2020). This also provides taxi rank businesses with customers. At taxi ranks, commuters are able to pay for various products and services while they wait for their taxi to leave.

The South African Taxi Business Overview of 2018 indicates that taxis operate an unscheduled service on fixed routes, meaning that they do not operate like busses in terms of departure times (e.g., Putco busses traveling from Dennilton in the Limpopo Province to Pretoria start at 03h00 and end at 08h00, and then resume at 12h00 until 18h00) (SA Taxi 2018, p. 12). The taxi routes are managed by taxi associations and taxis normally depart from fixed terminals but stop anywhere along their route to pick up and drop off passengers SATaxi 2018, p. 12).

As indicated earlier, the main terminals for taxis in South Africa are taxi ranks (normally located near malls, plazas, and shopping complexes) where a lot of businesses can be found. According to the 2018 South African Taxi Business Overview, the taxi fares for each route are determined by regional taxi councils (SA Taxi 2018, p. 12). As previously indicated, taxi fares are affordable as the industry services the lower income population of the country (SA Taxi 2018: 12) and these fares are paid in cash. To a certain extent, the relationship between taxi owners and taxi drivers determines the nature of the taxi industry in South Africa. This is unpacked in one of the sections in this part of the study.

According to SA Taxi (2018), in 2018, the average minibus taxi fare was R16.00, as compared to a train ticket at R9.50 and bus ticket at R17.80. An Uber ride can cost anywhere between R200 and R280 travelling between the East Rand and Johannesburg. For many years, in some areas of the country, taxi owners opted to employ conductors to manage fares (however very seldom nowadays). This is done differently in other parts of the country, passengers themselves manage the cash from all passengers in the vehicle and pass the cash on to the driver (SA Taxi 2018: 12). The latter is now a daily practice by passengers who also organise change amongst themselves so that the taxi driver doesn't have to look for change while driving. According to SA Taxi (2018), as cited in Wasserman (2019), minibus taxis is the most used modes of transport to work, schools and universities in South Africa.

5. A look at taxi violence

This section of the study contextualises taxi violence in relation to taxi ranks. Taxi ranks determine to some extent the routes that taxis under a specific association use. There is a risk that goes with this approach as it not regulated and as such when violence erupts, some taxi drivers may block the routes and entrances to selected taxi ranks.

Taxi violence is manifested in various ways that negatively impact stakeholders (taxi owners, taxi drivers, passengers, and the general community). Taxi violence is fuelled by various social elements that most South Africans are exposed to daily. Dugard (2001,1) explored the various contexts in which taxi violence manifests itself. These scenarios are revenge violence and vigilantism, hostels and hostel residents, ex-combatants, and state security forces (police and military).

Dugard's study (2001) is important because it provides an outlook on taxi violence from the 1980s to the early 2000s. Dugard (2001, 5) starts by referring to the Cape Peninsula taxi war which lasted three years (1990-1992), before providing a timeline for instance of a type of taxi violence cases. The Cape Peninsula taxi war took place between the Langa, Gugulethu, and Nyanga taxi associations. Again, Dugard's (2001) study is important because it provides a historical background to the taxi violence in the Western Cape Province today which arises when various associations with a particular vested interest compete against each other for travel routes.

Dugard's (2001) study can be related to a study by Piper and Wheeler (2016), as both studies explore the nature of taxi violence in the townships of the Western Cape. Piper and Wheeler (2016, 31) report that taxi violence in the townships in the Western Cape centre around the licencing process and access to lucrative taxi routes, with the more established association refusing entrance to other associations. Piper and Wheeler (2006:11) provide a succinct example of how taxi violence manifests by explaining how when a second, less formalised association begins to operate taxis in a lucrative route, the more formal group retaliates by attacking their cars or even committing murder. This type of a situation then spirals into a series of retaliations and counterretaliations between the different taxi groups (Piper and Wheeler 2016, 31).

It has to be borne in mind that taxi ownership is a considered a lucrative business in South Africa. Some of those involved in the business may therefore feel compelled (based on their own assertions) to do whatever it takes to protect their business interests. This speaks to the issues around 'third forces' involved the taxi violence between various taxi associations in South Africa, as is discussed later in another part of this section.

Barrett (2003, 8) indicates there are no reliable police statistics on casualties associated with taxi violence. However, Barrett (2003, 8) highlights a series of major conflicts: in areas of the Northern Province in the vicinity of Polokwane, in Soshanguve outside of Pretoria, in the Eastern Cape in East London, in Empangeni in KwaZulu-Natal, and in Soweto. The main concern raised by the Mail and Guardian (1998; in Barrett 2003: 8) regarding violence in the taxi industry is that taxi drivers and passengers have always been the main victims of taxi violence, although many taxi owners are known to have been at the receiving end too.

6. Legislation and policy on taxi industry and businesses

Every economic sector or industry is governed by legislation to ensure fair labour practices, to ensure fair competition, and to protect taxi businesses and customers. The type of legislation set to promote the above principles are basically meant to level the playing field in the taxi industry. Barrett (2003,10) indicates that employees in the taxi industry (drivers) and marshals are protected under the Basic Conditions of Labour Relations Act (BCEA) of 1997. More so, Barrett (2003,10) posits that those employees employed by the minority of owners who own more than ten vehicles are also, in principle, covered by the Wage Determination 452 for the Road Transportation Trade in Certain Areas of July 1988. All taxi industry workers are protected under the Labour Relations Act of 1995 (LRA). In accordance with this Act, taxi drivers have the right to join any bargaining council of their choice, the right to access the dispute-resolving mechanisms set up by the LRA, and the right to external facilitation on matters concerning their employment arising from the employer (Barrett 2003,10).

Fobosi (2019,102) describes a challenging scenario facing taxi drivers and it relates to their rights as employees. According to Fobosi (2019), the South African Transport and Allied Workers Union (SATAWU) finds it impossible to organise the minibus taxi industry employees because taxi drivers continue to face intimidation from taxi owners. This problem is exacerbated by the fact that SATAWU is required to go beyond traditional workplace concerns. For instance, it is expected to approach taxi drivers and other concerned parties and hear their daily concerns i.e their social conditions and other demands. (Fobosi 2019,102). Fobosi (2019, p. 102) further notes that SATAWU has, without intention, contributed towards the growth of precariousness in the industry by remaining focused on the workers in the formal public transport sector.

7. The behaviour of taxi drivers towards passengers

In South Africa, there have been lot complaints about taxi drivers by people who use taxis on a daily or frequent basis. These complaints relate to issues of speeding, the issuing of change to passengers, long queues, the untidiness of taxis, overloading, the taking different routes without consulting passengers, playing loud music, among others (Arrive Alive, 2020; SABC News, 2020; Barrett 2003: 27, 38).

To better understand the issues raised above, it is important to provide a clear picture of what passenger's experience daily when travelling by taxi. Speeding and sneaking in between cars when trying to reach a destination in time to return to take another load is one of the issues raised by passengers over the years. At times, it is difficult to tell a taxi driver to drive safely and avoid sneaking in between cars because that may lead to a scuffle between them. Other taxi drivers may be considerate and gentle in their response. The manner in which taxi drivers behave towards their passengers is not only compounded by the socio-economic situation many taxi drivers find themselves in but can also be influenced by the arrangement made with their employers (Schluter et al. 2020, pp. 2-10).

Issuing change can also cause an argument between the taxi driver and the passenger(s). The taxi drivers do not get fully involved in giving change once the taxi has left the rank. The person who sits in the front is supposed to give change to the other passengers. In some cases, people come with big bank notes like R100 or R200, making it difficult to issue change. This can also be experienced when passengers get into the taxi along the route and sometimes carry large amounts of money with them (and having note left with the taxi from the rank), making it more difficult to give change. Normally, these passengers hitchhike because they struggle with transport where they stay or just do not want to go to the taxi rank to catch a taxi (Statistics South Africa, 2003).

The long queues in the morning to catch a taxi to work can be a major borne of contention it can be argued between taxi drivers and passengers. In the morning, passengers flock to the taxi ranks and hotspots in the morning to catch a taxi to work. The long queues that await them are a bone of contention between these passengers and the taxi drivers. Passengers often also get frustrated when they have to wait until the taxi is full for them to be ferried to work. This happens when the taxi drivers prioritise the rules of their association over their passengers' time (Statistics South Africa, 2003; Barrett, 2003).

Passengers sometimes tell taxi drivers to keep their taxi tidy. This is something that does not always go down well with the taxi drivers. It should be said, however, that this is good advice. Passengers deserve to travel in a clean and tidy taxi for health and safety reasons. The taxi drivers are aware of this and so it should not take a passenger to remind them of this (Ntshingila, 2020).

Overloading is a major concern for passengers as it poses a safety risk. Overloading a taxi is even more dangerous when a taxi driver speeds and can be an indication that the driver does not take the safety of the passengers into consideration. Overloading is also a transgression of traffic rules. Although every driver should know this, common sense should also apply. If an accident occurs, the passengers could hurt one another in the process, whereas filling the taxi to an acceptable level can at least limit the impact of an accident (Arrive Alive, 2020). Overloading also poses health risks to passengers as oxygen can be limited crowded spaces. The passengers may not have access to sufficient oxygen when they are forced to sit in groups of five instead of groups of four (Arrive Alive, 2020).

8. The relationships between taxi owners and their drivers

Barrett (2003, p. 9) reports that drivers account for the most workers in the taxi industry, and further notes that wage-employed drivers are employed by individual owners, operate differently from owner-drivers, and are paid in four different ways. Barrett (2003, p. 9) lists these as follows:

- Some drivers receive no basic wage but pay a fixed percentage of the week's takings to the owner, keeping the rest as income.
- Under the 'wage/plus system', the driver receives a basic wage and pays a portion of the takings to the owner, keeping the rest as income.
- A fairly uncommon system is where all the takings are handed to the owner and the driver receives a regular wage.
- The driver may hand over all takings to the owner, except the takings of one designated day in the week.

The manner in which drivers are compensated determines the relationship between them and the taxi owners. The initial agreement entered into at the start of the business relationship between the drivers and the employers is not followed upon as set in the agreement, not because it is in most cases entered into formally, but probably and primarily because of socio-economic factors. (Mmadi, 56,63,80,81) The owners and the drivers don't always maintain a good working relationship and often accuse one another of unjust or unfair labour practices. Barrett (2003, 9) attests to this, reporting that taxi owners claim that almost half of their takings are stolen by drivers. Taxi owners therefore very often publicly justify the low wages paid to drivers by arguing that the drivers pocket large sums of cash. The drivers, on the other hand,

claim that owners get to take more than what is generated (Barrett 2003, 9). Mndebele and Cabe (2019) cite Fobosi (2019) the Department of Employment and Labour should have labour inspectors enforcing labour regulations in the taxi ranks and ensure compliance with the sectoral determination for the taxi sector. All taxi owners should ensure that employees have contracts of employment and that fair labour practices are enforced. (Mndebele and Cabe, 2019).

9. Research methodology

In this study, the researcher employs both qualitative quantitative methods of participant observation as the main methodology for his research. Hossain (2011) acknowledges the emergent nature of qualitative research, and posits that as opposed to predetermined design, it provides for the process and the outcomes of the research to evolve. The research is mainly concentrated on semi-structured interviews with the business owners at East Rand Mall taxi rank in Boksburg.

The research is also informed by other data collection techniques, such as:

- Observation
- Convenient sampling among respondents in the form of conversations
- Desktop research

This study followed a constructivist approach. Creswell (2014,8) notes that the goal of the research that takes this approach is to rely as much as possible on the participants' views of the situation under study. The questions become broad and general so that the participants can develop their own meaning and understanding of a situation in discussions or interactions with others. Mertens (2009) is of the view that under the theory of social constructivism, individuals seek to understand of the world in which they live and work. In this instance, the researcher refers to taxi rank business owners, more specifically those at the East Rand taxi rank. The taxi rank business owners at the study area started by gaining an understanding of the context they are operating in (by context the researcher refers to the taxi industry); the environment, challenges, opportunities, and demand their products. They still have grapple with the constant changes in the business environment they are operating in particularly in terms of demand for their products in times Covid-19. The East Rand Mall rank is not always busy as it would

during normal times. As such, the business owners at the rank have to adopt to the changes posed by unforeseen events like the outbreak of the Covid-19 pandemic.

10. Research design

A qualitative approach was adopted for this study. The information generated through the researcher's observations and narratives from the target population yielded numerical data.

10.1 Target population

A 'target population' refers to the individuals a researcher is interested in (Explorable, 2017). The individuals of interest in this study possess varying characteristics in the sense that they operate different businesses. The target population for this study consists of the businesspeople at the East Rand Mall taxi rank. These include fruit and vegetable sellers; *pap and vleis* sellers; barbers; employees at the food and drinks kiosk, bakery container and poll soccer corner; shoe repairers; and vehicle washers.

10.2 Data analysis

The data gathered/generated by this study can be summarised into numbers and or percentages. This numerical data is then turned into qualitative information by analysing this data and explaining what it means to the businesses at the East Rank Mall taxi rank.

10.3 Validity and reliability

'Validity' refers to how accurately a concept is measured. To ensure reliability in the study, observations were made of businesses at East Rand Mall taxi rank. Voluntary narratives were then noted down to compare with and supplement what the researcher had observed.

11. Findings and discussion

At the East Rand Mall taxi rank, one can find various informal businesses that serve commuters. These include fruit and vegetable sellers, *pap and vleis* sellers, a barber stall, a food and drinks kiosk, a bakery container, poll soccer a shoe repairer and vehicle washers. These types of businesses can be classified under the category of survivalist businesses.

The fruit and vegetable sellers at the East Rand Mall taxi rank sell various vegetables, including sweet potatoes, tomatoes, cabbage, beetroot, lettuce, green and red peppers. Fruits on offer include almost everything, like oranges, bananas, pawpaws, assorted citrus fruits, peaches, guavas, mangos, and many others. There is one big seller of fruits and vegetables at the rank. By selling fruits and vegetables, he can support and sustain himself and his family. This seller contributes to the economy of Ekurhuleni because he purchases his stock in bulk at the one of the fruits and vegetable markets in Gauteng. There is a demand for these fruits and vegetables both at the market where he buys his stock and at the taxi rank. The fruit and vegetable seller pays for transport to get his products to the taxi rank. Taxi commuters buy fruits and vegetables from him every day because food is a basic need. The commuters need to work to be able to buy his fruits and vegetables. The fruit and vegetable business at the East Rand Mall taxi rank is very lucrative because there a lot of people who commute from the rank every day. These commuters include workers, students, and other businesspeople. As a result, the seller is able to create jobs. He has hired two people to help him while he attends to other business matters. The two people that work under him earn some money to pay for their basic needs and support their families.

The businesses that provide *pap and vleis* are very much profiting from the commuters, taxi drivers, other business owners and their workers, and the employees of the East Rand Mall. The demand for *pap and vleis* is always high at the East Rand Mall taxi rank as people flock during lunch time to get pap, beef stew, chicken, salad, gravy, and even drinks. This means that the business owner must prepare enough food based on the measured and existing demand for these types of foods. The owners of these businesses at the mall employ about two people to assist them in preparing and cooking the food. In this way, the owners create jobs for others, allowing them to earn an income and support their families. Most of the business owners and workers at the rank are come from other provinces. The majority originate from Limpopo and KwaZulu-Natal. The customers of the *pap and vleis* businesses at the rank want fresh and warm food and know they are guaranteed that type of a meal. The provision of *pap and vleis* is very profitable, and on some days, the demand exceeds the supply. The following table outlines the prices of the food offered at the East Rand Mall taxi rank.

Table 1: Cooked food prices at the East Rand Mall taxi rank

PRODUCT	PRICE
Pap	R 10
Chicken	R 15
Pap and chicken	R 25
Beef stew and pap	R 45
Salad	R 10
Gravy	R 10
Beetroot	R 10
Can of cooldrink	R10

The *pap and vleis* businesses at the East Rand Mall taxi rank contribute to the South African economy by adding to the demand for raw food from South Africa's vegetable and meat markets. The raw food bought from meat and vegetable businesses is taken to the taxi rank where it is cooked and turned into finished products before being sold to customers at the rank. The business transactions they make by selling food can only happen if there is a demand for food. These businesses pay tax and contribute to the country's gross domestic product (GDP). As previously indicated, they also employ two people, who in turn go and spend their earnings on other basic goods and pay tax in the process.

The bakery business owners provide baked goods to the taxi drivers, other taxi rank business owners, commuters, and the mall workers. They provide for commuters, taxi drivers and other taxi rank business owners food that they would not always be able to prepare in the morning before leaving home. Most customers find it more convenient to carry some extra cash with them to buy bread, scones, vetkoeks, tea and coffee at the mall before starting work. This triggers a high demand for the morning food. The taxi drivers account for the highest percentage of the demand for baked foods in the morning and for *pap and vleis*. This is no surprise as many taxi drivers live in the townships and have to be up early (by 04h00 at least) to start operating and only go home at around 22h00 (at the earliest). As such, they do not have time to prepare food in the morning or for lunch. The bakery stall at the East Rand Mall taxi rank is very busy between 05h00 to about 11h00. The following shows the amounts charged for baked food at the East Rand Mall taxi rank.

Table 2: Prices charged for baked food at the East Rand Mall taxi rank

PRODUCT	PRICE
Vetkoek	R2
Bread	R 8
Scones	R 1
Tea	R 5
Coffee	R 6

At the bakery container, one can find two female entrepreneurs who are passionate about the food they offer. Their prices (reflected above) reflect who they are targeting taxi drivers, other taxi rank business owners, commuters, and the mall workers. Much like the *pap and vleis* providers, they are aware that these are the prices that customers are willing to pay for food sold on the streets. It must be said that in winter, the demand for these ‘morning foods’ increases significantly; for instance, many people resort to drinking a lot of coffee in winter. Some may drink a cup at home and then buy another at the taxi rank as it comes with free milk.

The profitability of the bakery businesses at the East Rand Mall taxi rank means that they play an important role in growing the economy of the East Rand while improving the livelihoods of themselves and their families. They also pay taxes through the procurement and purchase of the raw materials they use to bake the food they provide. The bakery container owners buy most of their raw material at the Trade Centre, situated across Rietfontein Road and North Road. The high demand for their products means they have to stock up almost all the time. They pay taxes in the purchase of goods and services so that they themselves can also provide people with a service.

There are vehicle washers at the East Mall taxi rank. The vehicle washers are mainly young men from various townships around Boksburg. They provide car wash services inside the rank. They mainly serve taxi drivers, but they also accommodate people with private cars. These vehicle washers charge various prices for washing taxis and cars, depending on what the owner of the car wants. A complete wash is normally done for R70. This is a reasonable fee as compared to prices elsewhere. The ‘wash and go’ is R40. This is for when a driver just wants to remove dust from their taxi or car and continue with their trip. As with many car washes services elsewhere in the country, the car washers at the rank are flexible in the sense that they are considerate of what the customer can afford as they themselves are providing car wash

services as a means for survival. For most of the East Rand Mall taxi rank car washers, washing cars is their only economic activity for survival. They also fall within the category of a survivalist type of sole trader in terms of the types of business ownership. The car washers at the rank are informal service providers. By washing cars, these car washers are able to put food on the table and pay for other basic necessities they might need at any given time. They also buy food from the food sellers at the East Rand Mall taxi rank. They contribute to the South African economy through the purchase of car wash materials at various supermarkets and other tuckshops in the East Rand. The car washers are also able to assist their families back home as like many of the business owners at the taxi rank, some of the car washers come from other provinces.

Table 3: Car wash prices at the East Rand Mall taxi rank

Complete Wash	Outside Wash Only	Wash and Go
R70	R45	R30

Then there is the barber, shoe and clothing repairmen, and the ‘haircut and shoe fixer men’, as they are known. These three men operate under a green tent and provide a haircut and shoe repair service. They have been operating at the East Rand Mall taxi rank for some time now and are known to be reliable as they service taxi drivers and commuters at the rank. They charge a price according to the hair cut requested by the customer. They do not specialise in hairstyles like ‘straight back’, ‘straight line’, or ‘dabrats’, but offer a *chiskop*, cut, and trimming. The *chiskop* is done for R15, a cut is R20, and a trim is R6. The demand for their services, particularly for the *chiskop*, is always high.

They are able to make almost a thousand rand each day with the low prices they charge. These men also fix torn trousers, jeans, shirts, and t-shirts. The prices they charge to fix these depends on the level of damage on one's clothing. The lowest they may charge is about R15 to repair a torn pair of trousers or jeans. These men are able to fend for themselves and their families back home. They contribute to the economy of the East Rand by providing barber and clothing repair services. While they may not operate a formal business, the men provide good services. They satisfy their customers, and this is reflected in the high demand for their services on a daily basis. The table below provides a better breakdown of prices the three men operating under the green tent charge their customers.

Table 4: Prices for haircuts and shoe and clothing repairs by the ‘green tent men’ at the East Rand Mall taxi rank

Service	Price
<i>Chiskop</i>	R 15
Cut	R 20
Trim	R 6
Clothing repair	R10-30
Shoe repair	R10-15

There are other businesses at the East Rand Mall taxi rank that sell chicken and various household goods. They sell washing liquids, soaps, salt, cutlery, baskets, steel wool, reflectors, etc. These traders can normally be found just outside the taxi rank, where people normally stop to buy whatever product they might need from them. They charge reasonable prices for their goods and are therefore popular with most of the East Rand Mall taxi rank taxi drivers, commuters, fellow businesspeople, and mall workers.

12. Conclusion and recommendations

The study discovered that even though the businesses at the East Rand Mall taxi rank might not have a major impact on the country’s economic growth, they still contribute significantly to improving the socio-economic standard of many ordinary South Africans. The East Rand Mall taxi rank businesspeople are able to survive and send their children to school with the earnings they make by providing products and services to people at the East Rand Mall taxi rank. The contribution of the East Rand Mall’s taxi rank businesses to the economy and to the improvement of the livelihoods of other South Africans suggests that taxi ranks perform an important economic function. The socio-economic impact of taxi rank businesses discussed in this research provides an argument for why the government should provide stimuli to support taxi rank businesses such that they can grow and yield more jobs. The example of the East Rand Mall taxi rank businesses further justifies the need for greater investment in taxi rank business across the country - by not only the government but also the private sector and families themselves. The study therefore recommends that the government and the private sector provide more funding to taxi rank businesses so that they can grow alongside the increasing number of people using public transport and the resulting business opportunities this provides.

The South African taxi rank businesses are very important to the South African economy as they not only generate jobs but also trigger the start of other businesses. As the most preferred mode of public transport in South Africa, taxis ferry millions of people to various places of work every day, and these people need to be provided with basic goods and services prior to their journey. There is therefore a demand for these goods and services at taxi ranks across South Africa. Many people are even serviced by businesses across the road from the rank before boarding their taxis. The taxi industry has indirectly allowed people to start businesses and operate them at various taxi ranks across the country so that they can support their families. These businesses always need resources to operate and as such, have to stock goods. In turn, they are able to generate revenue through the provision of products and services to those at the taxi ranks.

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Challenges facing the implementation of public policies in South Africa since the dawn of democracy.

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This article discusses the challenges facing the implementation of public policies in South Africa since the dawn of democracy. Public policy plays an important role in any regime, whether it be a monarchy, aristocracy, timocracy, oligarchy, democracy, theocracy, dictatorship, or tyranny. Countries with democratic governments are more progressive than countries with non-democratic governments. Democratic governments associate democracy principally with development (in terms of entitlement to rights, health, equality, level of education, employment, and income) more fully than other forms of government do. These indicators are crucial and influential in the formulation of policies. The dawn of democracy in South Africa, for example, not only represented a political shift but also the hope of transforming the lives of millions of South Africans. Because of this, the article supports the notion that public policy strengthens democracy. Based on this idea, democracy's desirability in South Africa is derived from its ability to have public policy. The essence of public policy is to capture the intentions of the government. Without a public policy, there can be no governance. To govern, there must be a set of guidelines. Public policy provides those guidelines.

This study followed a qualitative research method, which enabled the researcher to interact with the research participants. The researcher purposively sampled forty-five (45) research participants for semi-structured in-depth interviews. The data obtained from these interviews was analysed using thematic analysis. The results of the study showed that there are numerous challenges in the implementation of policies. These include the government's inability to involve the public in policy planning, formulation, and implementation, the public's failure to follow public policies, the exclusion of people's cultural and value systems, a lack of trust in leadership, insufficient capacity, bureaucratic systems, setting unrealistic goals, and corruption. The implications of the findings were examined, and recommendations were made for improved policies and practices in this area. The article concludes that studies show that when the government makes policies, they should be guided by the needs of the community as such policies are intended to address community problems.

Keywords: *Public policy; implementation; democratic; dispensation*

1. Introduction

South Africa is still considered as a new democracy and a developing country (Tebele, 2016:10). “The birth of a democratic state founded on the values of human rights and equality following the end of the apartheid system in 1994 necessitated a government that would be accountable, open, and responsive to the needs of the people of South Africa” (Thipanyane, 2016:126). The period between 1994 and 1999 can be characterised as the country’s transition to democracy. Nelson Mandela held the presidency in during this period. According to the South African Human Rights Commision (2006: 1), the Mandela government encouraged policymaking, nation building and reconciliation

Since the democratisation of the country, the South African government has been relatively involved in both making and implementing policies to meet the transformation agenda of every administration towards the achievement of a better life for all (Gumede, 2015:8). The study conducted by Freedman (2013) acknowledges this reality by pointing out that the South African government is built on a foundation of democracy. For this reason, the democratic practice goes beyond elections to improving citizens’ lives. Teshome (2008) agrees that democratisation is more than the mere expansion of political rights.

The democratic government based its legitimacy on the concept of constitutionalism, where all people, representatives of the people, and institutions would be subject to the Constitution of the country. The Constitution of the Republic of South Africa (Act No. 108 of 1996) was promulgated in 1996 and was the basis upon which the democratic South Africa would function and be governed (Lues, 2014:792). Section 195 (1) (e) of the 1996 Constitution supports this viewpoint by stating that people’s needs must be responded to through policymaking. However, it is also imperative to remember that without proper implementation, good written policies serve no purpose (Maphalla, 2013:8).

Given South Africa’s history of polarisation and racism, violent political conflict, and extreme antidemocratic tendencies, twenty-six (26) years of democracy have not fully met the expectations of the citizens. As a result, many citizens are not satisfied with the government’s implementation of policies (Linde and Peters, 2020:292). Because of the current social ills

facing South Africans, it is important to discuss the challenges facing the implementation of public policies in South Africa since the dawn of democracy. This paper seeks to bring these challenges to the attention of the government.

2. Problem Statement

According to Tebele (2016), public policies are needed to address the public problems that the country still faces today. This is confirmed by Makhetha (2015), who states that every public policy should look towards the present and future and aim to lessen, if not eradicate, the social ills faced by South Africans. According to Mthetwa (2014:1), with the transition of South Africa from a once Apartheid regime to democratization, old policies required reformulation to reflect the new democracy which included the new founding provisions of the South African Constitution Act 108 of 1996 (Cloete, 2011:75). Since South Africa is a developing country, there are many factors that must be taken into consideration when drafting and implementing its policies. These factors include considering the socio-cultural, socio-economic, and socio-political aspects (*ibid*, 2011:70). The study conducted by Tebele (2016) suggests that, South Africa needs to consider and re-evaluate the developmental policies in order to deal with contemporary issues at the core of meeting citizens first.

Therefore, in one of the African National Congress (ANC)'s policy documents, they address policy problems that the country still faces today. Some of these problems include "extreme levels of impoverishment and chronic diseases in the country, prevailing inequality, and educational backlog" (Tebele, 2016:10). "However, reports from the former Public Protector Thuli Madonsela stated that in spite of the fact that the ANC as government has policies set up to eradicate South Africa's social ills, it has signally failed in the implementation of its policies" (Tebele, 2016:11). The former Public Protector Thuli Madonsela stated that regardless of large investments in infrastructure and services, delivery rates and quality have often been inadequate and unfair (Cook, 2019:10). Examples of this include shortages and the incorrect supply of school workbooks by the National Department of Basic Education to Eastern Cape schools. This failure meant that certain rights of pupils were violated (Kota, Hendricks, Matambo and Naidoo, 2017:3). Another example of the government's failure in implementing policies is shown in the Public Protector's report on systematic investigations into allegations of poor service delivery and maladministration by the municipalities which have given rise to community protests (Masuku and Jili, 2019:1).

The exacerbating problem is that the South Africans still struggle with issues of quality housing, electricity (maintenance and stability), potholes, and a high level of youth unemployment (Public Protector South Africa, 2016). From these few examples, it is evident that South Africa's new political regime does indeed have problems and challenges related to the implementation of its public policies. "The problem with these policies seems to be that although they describe the 'what', they do not explain the 'how'. It is crucial for policymakers to explain the 'how' because the primary focus of public policy implementation is putting policy into effect" (Tebele, 2016:12). "As such, there needs to be course of action put into place in terms of how to go about implementing policy" (Think Tanks and Civil Societies Programs, 2014:21). "For instance, the National Development Plan (NDP) is a well-designed national policy formulated to eradicate social ills that have been plaguing South Africa as a country" (Executive Summary-National Development Plan 2030, 2012).

"However, there is no course of action presented as to how to go about implementing these policies" (Executive Summary-National Development Plan 2030, 2012). "The only item offered in the document are the goals that this particular policy aims to achieve, the duration that it should take for the NDP to be correctly implemented and yield results, and a description of the stakeholders" (Tebele, 2016:12). "It is therefore generally accepted by the government and its critics alike that the policy scene in South Africa in the period since 1994 has been characterised by poor execution" (Paul, 2010: iv). "Poor policy implementation continues to complicate the existing problems" (Bidandi, 2007).

3. Research objectives

The following are the objectives of the article:

- To determine whether public policy implementation can positively serve as a tool for strengthening democracy.
- To evaluate the impact of public policy implementation on citizens' welfare.
- To identify the challenges of implementing public policy in South Africa since the dawn of democracy.
- To recommend mechanisms that can be used to overcome the challenges of implementing the public policy.

4. Research questions

The following are the research questions of the article:

- What can the government do to ensure that the implementation of public policy positively serves as a tool for strengthening democracy?
- What is the impact of the implementation of public policy on the welfare of citizens?
- What are the challenges of implementing public policy in South Africa since the dawn of democracy?
- What mechanisms can be used to overcome the challenges of implementing public policies?

5. Literature review

5.1 Reasons why the South African government fails to implement public policies successfully

It is important to consider relevant studies that have been done on the failure of the implementation of public policies. This may inform policy changes and help to identify key messages for policy practitioners in South Africa. Hence, a better understanding of the reasons why the South African government fails to implement public policies successfully is of paramount importance. This may assist in overcoming and preventing these failures to implement public policies successfully. According to Maluleke (2015), there are numerous reasons for the failure of implementing policies. Some of these are discussed below.

5.1.1 Time factor

Time is the most important resource which determines the success of the implementation of public policy (Signe, 2017:20). Khan and Khandaker (2016:539) point out that, public policy is defined as a series or pattern (of government activities) or decisions that are intended to solve relevant social and economic issues. Stewart, Hedge and Lester (2008) emphasize the proper implementation of public policies for public benefit, with Khan and Khandaker (2016:539) stating that a successful policy provides a positive correlation to its implementation. Policy-implementors do not have enough time at their disposal to investigate the problems encountered by citizens which have to be addressed through the implementation of policy. These problems should be clearly identified for the successful implementation of policy.

Silima (2017) is of the view that officials should always conduct research in the communities to find out what problems the communities are facing. Maluleke (2015) asserts that, “this requires a shared understanding among participants concerning the implied presuppositions, values, and assumptions that underlie the whole implementation process”. Silima (2017) further points out that the disadvantage of collecting information is that it is time consuming, expensive, and unrelated to community values. In this regard, Brynard, Cloete and De Coning (2011:138) argue that, “public policy implementation fails because of the fact that it is time-consuming and challenging to implement in such a manner that will gratify everyone involved, namely, the relevant stakeholders, politicians and the general public”. Marzuki (2015) posits that participation is time consuming and has the potential to slow down decision making. This leaves the government with no choice but to implement policies without reaching the agreement with the public and relevant stakeholders. This might lead to the public’s dissatisfaction and disapproval over the implementation of the policy, especially concerning the issue of quality.

Quality service delivery is compromised in the implementation of public policy. This statement is supported by Bob (2018) who pointed out that potable flushable toilets in Khayelitsha, Makhaza area were installed by the City of Cape Town Metropolitan Municipality after the public demanded the provision of sanitation. According to Robins (2014), “in the early springtime of 2011, an occurrence known as the ‘toilet wars’ erupted. In the course of the run-up to the local government elections, photographs spread in the media of uncovered flush toilets in poor township locations” “The campaigners recognised that they had toppled onto a political goldmine and started organising around the problem of open toilets, opposing that people had to hide themselves in blankets while using the toilets in public” (Robins, 2014).

5.1.2 Public view coupled with a lack of public consultation

McNabb (2010:141) asserts that, “the traditional public administration approach has been of the view that public officials merely implement policies that are formulated by the elected leaders, the congress, and the president”. “The contemporary view of public administration demands that public officials and the public should participate in the influencing and shaping of public policies” (McNabb, 2010:141). South Africa is a democratic country, and everyone can get involved and take part in the implementation of public policy (McNabb, 2010:141). Malakoane, Heunis, Chikobvu, Kigozi and Kruger (2020) point out that, “since the advent of democracy, the South African government has been putting policies in place to strengthen

public institutions and deal with public concerns”. Cochran and Malone (2014) agree that, “public policy entails decisions and actions designed to deal with a matter of public concern”.

Lekalake and Nkomo (2016) are of the view that, “both perceptions of the extent of democracy in South Africa and public satisfaction with its implementation have declined significantly since 2011”. When the public is involved in the implementation of policies, problems usually occur because people have different needs and demands. Conflict can occur when the people and the government have differing views and opinions. This can result in the failure of the implementation of public policy. Cochran and Malone (2014) further state that, it is evident from public opinion that people worry about their economic well-being the most. The e-tolling policy was implemented on Gauteng roads in 2013 and was followed by much controversy. TollfreeGP (2011) criticises the system as it is very costly, too complex and therefore not correctly implementable, as well as being a threat to the general economic wellbeing of the province.

Labour unions, car rental companies and motorists are against the implementation of this policy and the policy-implementors are now busy reviewing the policy to find a solution. The public was not consulted by the government during the planning of the e-tolling policy. “Citizen engagement is crucial in directing policy to the most pertinent issues within the receiving locality” (Imurana, Haruna and Kofi, 2014:1). Oginni and Moitui (2015) believe that, in democracies citizen engagement is valued, which enables a smooth, consultative public policy process. As a result, this smooth consultative process ensures quality inputs, better decision-making processes, and effective implementation as well as making provisions for good feedback mechanisms (Oginni and Moitui, 2015).

5.1.3 Human resources

According to Marume, Mutongi and Madziyire (2016), “policies cannot be declared as being effective in themselves, nor can they be implemented by their mere statement, that is, they are not self-executing, without staff, access to information, and authority”. In other words, a lack of human resources (people, expertise, and experience) makes the implementation of public policy fail. Consequently, policy-implementors fail to implement policies because of their inability to understand the intentions of the policy. This statement is supported by Koma (2010) who pointed out that without the requisite knowledge and skills, human resources fail to implement policies effectively. FitzGerald, O'Malley and Ó Broin (2019) assert that,

“incompetence refers to another form of human error, where the political actors do not have the skill set to achieve the preferred outcome.”

Nepotism is no exception to incompetency in public institutions. Gjinovci (2016) supports this viewpoint by stating that, “nepotism is a common accusation in politics when a relative and close friend of a powerful political figure raised to power, not possess the necessary skills and knowledge, which are necessary for positions”. Nwankwo (2017) argues that “in the Republic of South Africa, nepotism is viewed seriously as the cause of positioning incompetent recruits to the high positions of strategic nature as well as the cause of the lack of successful public policy implementation”. Twala (2014) posits that, “in South Africa’s post 1994 constitutional democracy, the African National Congress (ANC) dominated tripartite alliance has consistently utilised the practice of cadre deployment in public institutions”.

Shava and Chamisa (2018) are of the view that, “the positive policies that were designed to improve the country’s economy were accompanied with a policy of cadre deployment that advocated for ANC party loyalists to occupy prominent positions in the public sector. This political patronage implemented via state jobs led to poor performances in government institutions and in the nation as a whole”. Booysen (2012) reiterate that, “the election or appointment of public functionaries who are not adequately qualified and based on political patronage and nepotism is a constraint on the efficient and effective performance of government institutions”. These are the challenges mostly experienced in local government.

Reddy (2016) believes that, “the local sphere of government is particularly crucial as it signifies grassroots governance and local democracy, which are considered to be closest to the people, and more importantly, it is at the coalface relative to the delivery of services”. However, Habib (2015) indicates that, “traffic lights are often not functioning; water pipes are constantly broken or even leaking; portholes are multiplying; telephones are often unanswered and there is widespread urban decay throughout the municipal areas resulting in a depreciation of property values and loss of potential income for the municipalities”. “The quality of material used for constructing the Reconstruction and Development Program (RDP) houses is usually poor-quality material” (Mashwama, Thwala and Aigbavboa, 2019:1698). Reports done by Moolla and Block (2011) show that, “roofs, walls, doors, floors, and windows are mostly of a poor standard and that most are reported to be crumbling, pulling off, and breaking without any external influence due to poor material and workmanship”.

This is evidenced by Chirume (2018) who reported that during 2018, Port Elizabeth residents received poorly built RDP houses from the Nelson Mandela Bay Municipality. “Residents of Jacksonville, Port Elizabeth, said that they have been living in temporary homes in the yards of their RDP houses for years because their houses were substandard, and some were built on a waterlogged site” (Chirume, 2018). People’s furniture and other valuables were severely damaged by water that was seeping up from the ground. Some units had leaking roofs. This is evidence of the government’s failure to implement the RDP houses skilfully and knowledgeably. “The aim of the RDP is to have an integrated, coherent socio-economic policy that would address problems brought about by the lack of equitable development under apartheid. The issues are poverty, unemployment, health, provision of water, electricity, and good education. In addition, the construction of housing for the millions who, due to legacy of apartheid, could not afford to own properties” (Parliamentary liaison office, 2017).

5.1.4 Financial resources

Without money, policy is unimplementable and is simply a government’s democratic promise to improve the welfare of the public. Maluleke (2015) acknowledges this reality and points out that, “many policies remain impossible dreams that are incapable of implementation because of an absence of financial resources” (Morris and Scott, 2003:2). According to Marume, Mutongi and Madziyire (2016:2), a lack of financial resources not only hinders policymaking, but it also limits the effective implementation of policies. The study conducted by Qiu, Sawadogo-Lewis, Ngale, Cane, Magaço and Robertson (2019) reiterates that limited financial resources severely impact the implementation of policies.

The failure of policy implementation affects development in developing countries. Mavhungu (2011) is of the view that, “the non-payment of services continues to pose a serious financial challenge to municipalities. These services have a direct and immediate effect on the quality of lives of the people in South Africa”. Hence, the non-payment of services undermines quality service delivery and the infrastructural development which sustains a high standard of living for South Africans. For example, “South Africa is a water scarce country, the demand for water is on the increase” (Viljoen and Van der Walt, 2018). “Poor water infrastructure increases the use of water in the agricultural sector and in some regions, water lost during conveyance may be as high as 40 per cent” (Sleet, 2019). “South Africa’s water infrastructure is poorly maintained and at risk of failure” (Sleet, 2019). “This is due to a variety of factors, including a

lack of funding which compromises the provision of water that is already of a poor quality” (Sleet, 2019).

5.1.5 Corruption

“The word corruption is derived from the Latin word *corruptus*, which means corrupted and, in legal terms, the abuse of a trusted position in one of the branches of power (executive, legislative and judicial) or in political or other organisations with the intention of obtaining material benefit which is not legally justified for itself or for others” (Šumah, 2018). In its simplest form, “corruption is commonly defined as the abuse of public power for private gain” (Cuervo-Cazurra, 2014). Corruption has contributed greatly to the failure of policy implementation in developing countries. According to Ntoyanto (2019), “corruption in South Africa is a cancer which has persistently eroded at, and undermined socio-economic development efforts, poverty alleviation and good governance in the country”. This statement is supported by Naidoo (2013) who pointed out that, “South Africa’s political transition to a non-racial democracy has been blemished by frequent incidents and allegations of government corruption, involving elected officials and public servants”.

The study conducted by Jetter, Agudelo and Sramirez (2015) found that, “there is a relationship between corruption and democracy. Corruption also leads to inequality”. “Corruption undermines national development; it is not only in the implementation of government projects or programs but all other parts of governance of the country” (Damoah, Akwei, Amoako and Botchie, 2018:25). Graycar (2017) believes that, “corruption demoralises government and weakens the whole endeavour of policy formulation and its implementation. It diminishes services and causes fiscal stress, but most of all it undermines trust and corrodes legitimate community expectations”. Corruption allegations in South Africa dominate through theft and greed. For example, “implementation failure may arise in a situation where huge amounts are earmarked for a project but the officers in charge of implementation steal such amounts (or a substantial part of the amounts)” (Makinde, 2005).

Policy-implementors may be tempted to steal public money for their own benefit rather than using the money allocated for implementing the public policy. For example, in 2012, the former African National Congress (ANC) premier Cassel Mathale of the near-bankrupt province of Limpopo was alleged to have used public money for personal gains rather than for providing services to the public. This is despite having spent millions of rand of taxpayer’s money to buy

expensive vehicles for use on official trips. Mathale has bought two expensive cars during the two years he has been premier. Regardless of these allegations, Mathale still works for the government (Bailey, 2013).

5.1.6 Values of the people

The values of the people should be considered and respected when the government implements public policies. This includes the culture, tradition, and beliefs which the democratic society upholds (Abolafia, Dodge and Jackson, 2014:1). This statement is supported by Muers (2018) who pointed out that, “value systems are very closely linked to culture and are the set of fundamental beliefs held by an individual or group about what is valuable, what is fair, what constitutes right and wrong, who deserves what, and similar ethical matters”. FitzGerald et al. (2019) agree that public policies are the instruments through which values are authoritatively allocated in society. Muers (2018) further asserts that, “culture and values need to be at the heart of thinking about public policy”. “Democracies have become accommodative and sometimes managed to achieve stability by effectively prioritising cultures and value sets” (Muers, 2018).

Muers (2018) reiterates that, “culture and values drive policy outcomes. This is because in a democratic system, the government is forced to give independent value to the idea that a policy has been developed and implemented in a way that accords with people’s accepted standards of behaviour and fairness”. For example, the study conducted by Mkhize, Taylor, Udert, Gounden and Buckley (2017) revealed that, “in South Africa, 15 million people, most of whom live in rural areas, have no access to basic sanitation”. Statistics South Africa (2011) confirmed that, “approximately 749,000 households in the country have no toilet system at all, while approximately 8,240,000 have flush toilets connected to a sewage system”.

According to United Nations Water (2015), about 7 out of 10 people without improved sanitation are based in the rural areas. Some 2.4 billion people remained without access to improved sanitary facilities and services in 2015. Both situations have serious health impacts. The KwaZulu-Natal province is not exempt from these problems. Therefore, the provision of toilets to the KwaZulu-Natal people is not debatable. Mkhize et al. (2017) further state that, “the sanitation policy of South Africa emphasises that sanitation is more than just the provision of toilets, but is a cohesive approach that embraces organisational, technical, financial, environmental, social and educational frameworks”. McConville and Rosemarin (2012) emphasised that the latter can only be realised if people are part of proper planning and are

involved in choosing the sanitation process. It is only then that sanitation sustainability can be realised. Providing people with toilets is insufficient, since measures also need to be taken to ensure that people accept, understand, and properly use and maintain the toilet.

However, providing toilets to some families in the deeply rural areas of KwaZulu-Natal becomes problematic. This is because such families still uphold to their cultural values wherein daughter-in-laws are prohibited from sharing a single communal toilet with their mother- or father-in-laws (Kaufmann, 2017:1). This means that the Department of Human Settlements, Water and Sanitation would fail to implement the sanitation policy effectively and efficiently as they will have to provide two toilets to every household. Muers (2018) moreover points out that, “values and culture are extremely powerful in determining outcomes”.

6. Research Methodology

This study used a qualitative research methodology to arrive at an in-depth understanding of the challenges facing the implementation of public policies in South Africa since the dawn of democracy. This is because the goal of qualitative research is a deep understanding of the particular (Carter, Lubinsky and Domholdt, 2011:61). Bloomberg and Volpe (2012) support this view by pointing out that the qualitative study is described as a method that seeks to promote a deep understanding of social activities. Consequently, qualitative methods are used to answer questions which seek explanations by the research participants. “Qualitative research is exploratory and seeks to explain ‘how’ and ‘why’ a particular social phenomenon, or program, operates as it does in a particular context” (Mohajan, 2018:2). This method generally allows the explanation of words, emotions, and the reactions of the respondents to be reported ‘as is’ (Merriam and Tisdell, 2016:1). Respondents in this study were requested to elaborate on specific questions. These comments and answers were analysed qualitatively to build and add value to the research objectives. The aim was to arrive at a generally acceptable conclusion within the research study.

6.1 The target population and sampling process

The researcher conducted research and drew conclusions from the target population. A sample was required to be representative of the targeted population selected, since the study was designed to make a qualitative analysis. The sampling technique which was adopted in the case of this research study was purposive sampling. The main goal of purposive sampling is to focus on particular characteristics of a population that are of interest, which will best enable the

researcher to answer the research questions (Ellene and Kumar, 2019:23). The researcher used the purposive sampling technique to select four sets of participants for the study. These sets included: the general public, contractors, government officials leading and/or involved in government projects, and project management practitioners. The participants were selected based on two criteria: first, their knowledge of policies and government policies and project failure in South Africa; and second, their experience in strategic planning and operational processes in public institutions.

6.2 Sample size

The sample size refers to the number of participants included within in a study (Institute for Work and Health, 2008). The sample size for this study is forty-five (45). The sample size per each category is as follows: senior management = five; middle management = thirty and the public = ten. The researcher targeted the general public because they are the main beneficiaries of government policies, and even though some of them might not possess technical know-how in the implementation process, they follow the implementation and the outcomes of government project closely; hence, their perceptions of project performance are important. The Gauteng Department of Health, the Limpopo Department of Education, and the Bushbuckridge Local Municipality were selected for this study.

6.3 Data Collection

The study adopted a qualitative research method. The qualitative data was collected by means of semi-structured interviews, where participants were required to answer all of the research questions. Semi-structured interviews allow participants the freedom to provide an in-depth knowledge and location-specific data for a study (Damoa, Akwei, Amoako and Botchie, 2018:21). Choy (2014) is of the view that conducting in-depth interviews is one of the most common methods of carrying out qualitative research. One of the main advantages of this method is that the interview becomes broad and open-ended, allowing the participants to raise issues that matter most to them. The interviews were conducted in participants' offices and on Skype by pre-booking an appointment. The initial idea was to conduct all interviews face-to-face, but some of them had to be conducted through Skype and telephonically because of the busy schedules of some participants during the daytime. Each interview lasted between 45 and 60 minutes. The interviews were recorded for later analysis.

The interview guide was designed to include the scope and capacity for answering the research questions that were to be examined (Morris, 2015:1). The interview guide consisted of questions that helped the interviewer to remain on track and remain consistent throughout the interviews with different respondents. Once the interviews were finalised, the information sourced from the interviews was classified and analysed to support the objectives of the study.

6.4 Data Analysis

According to Sileyew (2019), “descriptive research portrays an accurate profile of persons, events, or situations. This design offers researchers a profile of described relevant aspects of the phenomena of interest from an individual, organisational, and industry-oriented perspective”. Therefore, this research design enabled the researcher to gather data from a wide range of respondents on the challenges facing the implementation of public policies in South Africa since the dawn of democracy. This helped in analysing the responses obtained on how it affects the welfare of citizens. Data analysis is central to a credible qualitative study (Maguire and Delahunt, 2017:3351).

Codes in research study refers to a short word or phrase which describes the meaning and context of the whole sentence, phrase, or paragraph (Saldaña, 2015:3). When researchers code data, they analyse individual sentences and paragraphs of the data and decide on its interpretation (Linneberg and Korsgaard, 2019). Malek, Lim and Tahir (2019) agree that, “analysing data requires one to transcribe the interviews, read and reread them, and interpret meaningful open codes”. Then one must look for any similarities or differences, or plausible and spurious data, as well as classify the interviews into the themes. This is what is termed ‘thematic analysis’, wherein the data is collected through interviews is analysed.

Themes underline the concepts, patterns, and ideas of what the participants have said during interviews. The patterns that emerge provide significant information about the research questions. Braun and Clarke (2013) support this statement by pointing out that, “thematic analysis is a flexible data analysis plan that qualitative researchers use to generate themes from interview data”. Themes explain a large portion of the data. They do not summarise the participants’ answers but provide bigger and broader interpretations of these. In this study, the emergent themes were presented as the final and most important output to help the researcher to identify patterns in the data. The research questions which researchers use in their interview schedule become their themes.

The researcher chose to use thematic analysis as it was thought to be the best method for analysing the challenges facing the implementation of public policies in South Africa since the dawn of democracy. “The goal of this analytical method was to identify (categories, patterns), describe, analyse, and report themes within the data” (Braun and Clarke, 2006). The researcher organised the themes according to the research questions as follows:

- Government ensuring that public policy implementation positively serves as a tool for strengthening democracy.
- The impact of the public policy implementation on the citizens’ welfare.
- The challenges of implementing public policy in South Africa since the dawn of democracy.
- Mechanisms that can be used to overcome the challenges of implementing the public policy.

The themes were then refined, defined, and organised into a coherent framework that explains policy implementation (Damoah, Akwei, Amoako and Botchie, 2018:21). “Thereafter, as a way of understanding the perceptions, opinions, and experiences of the participants with regard to the challenges facing the implementation of public policies in South Africa since the dawn of democracy, an interpretation of the developing themes was derived by relating the participants’ accounts to the available literature and by integrating and comparing the responses captured in the different data sets. In the paragraphs that follow, the researcher discusses the themes that emerged from the data analysis and how each would have emerged from the data” (Rangongo, Mohlakhwana and Beckmann, 2016:5).

6.4.1 Theme 1: Government ensuring that public policy implementation positively serves as a tool for strengthening democracy.

Participant 1:

From the interviews with this participant, it emerged that public policy implementation positively serves as a tool for strengthening democracy in terms of political accommodation. The participant indicated that policies are not self-executing and that human resources are mandated to implement policies. The participant stated that the government should employ public officials (from senior officials to junior officials) based on merit, so that implementation may run smoothly. The participant elaborated that political appointments based on patronage

and nepotist systems should be avoided. The participant was of the view that this is not a new suggestion in South Africa. There are arguments for eliminating political appointments in South Africa, however the government has failed numerous times to address these political appointments. The participant gave a very important emphasis by pointing out that the government can do better by sticking to the approach of capacity building. They should rather train those who have been appointed on the political basis than condemn their non-expertise as political accommodation is an essential tool for democracy.

In Participant 1's view, employing the qualified officials does not cure the challenge of human resources to implementing policies positively. This is because qualified officials might show signs of a skills gap wherein, they lack the skills required for a job and the skills employers need. The participant emphasised that the recruitment process should not be compromised because of political accommodation. Those who are qualified yet possess a gap in their skills should be skilled and equipped through capacity building. The participant argued that some skilled and knowledgeable public officials are lazy to implement policies because they find their work to be repetitive and boring. The participant suggested that ethics education should play a significant role in this regard by guiding the values, behaviours and decisions taken by the public officials to implement policies successfully.

Participant 2:

Based on the responses obtained from Participant 2, it emerged that public policy implementation positively serves as a tool for strengthening democracy when the government policies focus on promoting the general welfare of the public. These policies deal with matters of inequality, unemployment, and poverty. For example, policies such as the South African Social Security Agency (SASSA), trade and industry policies where people can own companies, and be provided with housing, social grants, free education, and basic services. The participant stated that this is what the public voted for in terms of the government's social responsibility to its citizens to strengthen democracy. The participant was also of the view that public consultation should be promoted so that there is participation from the public at large to direct the implementation of policies.

Participant 3:

It emerged from interviews with Participant 3 that the government do have strategies for ensuring that public policy implementation positively serves as a tool for strengthening

democracy. This includes the government's approach to solving African problems without copying Western policies. The respondent argued that although the South African democracy is dominated by Western beliefs which influence policy implementation, it is not debatable that the African beliefs can address some of the socio-economic issues faced by South Africans. The participant further expressed the belief that the government needs to implement policies that are intended to solve the African problems. In other words, the values and beliefs of people should be presented and shared before the implementation of policy. The people of South Africa have constitutional and human rights emphasising their values and beliefs to be included in policy implementation. Traditional leaders, for example, still uphold the cultural values and beliefs needed to develop their communities. They are aware of the community problems.

6.4.2 Theme 2: The impact of the public policy implementation on the citizens' welfare

Participant 1:

It emerged that the participant perceived the impact of the public policy implementation on the citizens' welfare to be positive when the government fulfils its mandate to serve the people. The participant stated that servant leadership views the government's role as one of stewards responsible for the development of communities in their care. However, servant leadership is not dominant in the South African democracy, even at the grassroots level where municipal councillors are found. The participant argued that policies are not implemented successfully, and this negatively impacts the welfare of the public. The Reconstruction and Development Programme (RDP) housing policy, for example, while intended to positively impact the welfare of citizens (particularly the most needy and vulnerable groups who are unable to afford decent housing), has failed to provide quality houses, as evidenced by various cases in South Africa.

Participant 2:

According to Participant 2, when policies are implemented successfully, citizens' welfare is positively impacted. Food is described as a social necessity. It is recognised worldwide as one of the most important needs of people, followed by the need for water. The Covid-19 policy for the distribution of food parcels to needy families living on the breadline in South Africa during the 2020 Covid-19 lockdown was successfully implemented according to the Department of Social Development of South Africa. The government announced the Social Relief of Distress policy to be available for citizens who earn a combined household income of R3 600. The Social Relief of Distress policy intended to provide the R350 Covid-19 social

relief grants. The government emphasised that the Social Relief of Distress policy should be available to recipients of SASSA pensioner, disability, child welfare and military veteran grants. The Social Relief of Distress policy received constructive criticisms from the communities. The R350 Covid-19 social relief grants was paid out to some individuals and not being paid out to some individuals. The respondent cited this dilemma as a social injustice prevailing in the South African democracy because other people did not receive the social relief grants.

6.4.3 Theme 3: The challenges of implementing public policy in South Africa since the dawn of democracy.

Participant 1:

According to this participant, South Africa has no problem with the planning or formulation of policies but rather with their implementation. One of the challenges of policy implementation is the government's inability to involve the target beneficiaries in the implementation process. Consequently, the target beneficiaries are inclined to make appropriate demands, especially concerning services rendered to them. Policies imposed by the government without considering whether they meet the needs of the people are deemed to fail. The exclusion of public and civil society actors from the planning, formulation, and implementation of policies undermines participative democracy, as highlighted by this study.

Participant 2:

The participant is of the view that the challenges of implementing public policy in South Africa since the dawn of democracy have been immense. In this participant's view, many citizens do not participate in public policymaking and end up being affected by the policies the government formulates and implements on their behalf without their consent. The failure to follow public policies could lead to confusion, corruption, and misuse of public funds. This causes delays in service delivery because services may not reach the rightful beneficiaries in time or at all. The participant reported that municipal residents do not attend the Integrated Development Plan (IDP) and Imbizo meetings summoned by ward councillors to raise their needs, demands and concerns pertaining to service delivery and to be given clarification on the kinds of services that they should or should not expect from the municipality. This is a challenge to implementing the IDP Policy.

Participant 3:

In the responses from Participant 3, it emerged that poor and improper planning, communication breakdowns, a lack of common interest, and poor management pose challenges to the government in the implementation of policies. “The challenges of policy implementation in South Africa could also link to political instability, and bureaucratic bottleneck, the deliberate imposition of policy, complete alteration to the plan if it is not favourable to the beneficiaries saddled with the responsibility to implement it” (Ajulor, 2018). The participant emphasised that the government may put effort on the planning, formulation, and implementation of policies and the beneficiaries decides to reject such efforts because they do not meet their needs and concerns.

Participant 4:

According to Participant 4, the challenge regarding the implementation of policies is setting unrealistic goals which is an attribute/characteristic of policymaking in developing nations. Policy formulations are always comprehensive and engender expectations among the people which can hardly be matched by the capacities of the system to implement them adequately. The setting of the goal itself is not a problem; the problem lies in how to achieve them. The participant stated that for example, there were eight Millennium Development Goals (MDGs). These were comprehensive, with 18 targets set. Most African countries could not adequately implement the goals because of a lack of human and material capacity.

Participant 5:

Participant 5 is of the view that there are challenges facing policy implementation in South Africa. These challenges include corruption, which contributes to poor policy implementation. The respondent argued that in some cases, corruption happens when public officials implement policies that create an opportunity for them to indulge in corrupt activities. This kind of conduct may result in poor policy implementation or service delivery as the public officials are more interested in promoting their interests than the interests of the citizens, they are meant to provide a service for. The participant stated that the Covid-19 pandemic revealed some public officials’ true colours when councillors were caught distributing food parcels to friends and family and also opening supermarkets. The participant concluded that it is their belief that the main aim of politicians is not to implement policies but to steal from the poor.

6.4.4 Theme 4: Mechanisms that can be used to overcome the challenges in implementing the public policy.**Participant 1:**

In this participant's opinion, the best mechanism that can be used to overcome the challenges in implementing the public policy is to enforce the accountability of public officials. "The people of South Africa require nothing less than full accountability from those who have been elected and appointed to serve them" (Ramaphosa, 2020). Those who have privately benefited from public funds intended to implement policies successfully should be held accountable by paying back the money. For instance, "agencies such as the Socio-Economic Rights Institute of South Africa (SERI) conduct research reports to hold the government accountable. The institution ensures that the government implements what they have promised to citizens" (The Foundation for Human Rights, 2016).

Participant 2:

It emerged from this participant's response that the government should seek advice from different sectors in communities and from knowledgeable people's expertise in policy. The participant also stated that the government should conduct more research on the pros and cons of policies before they are implemented to ensure success. Political decisions alone do not successfully influence the implementation of policies. Even other sectors should inform decision making. The participant stated that it is of paramount importance that scientific decisions or evidenced-based decisions are used to inform policies. It further emerged from the participant that workshops intended to enhance accountability have a great impact on policy implementation. "Such workshops can be attended by participants with expertise including researchers, activists and individuals working in the contexts of policing, law, human rights, forensic medicine, social research and policy, weapons control and accountability systems" (Socio-Economic Rights Institute of South Africa, 2019).

Participant 3:

In this participant's opinion, the government and other sectors of the community should stop being ignorant and recognise that corruption gravely affects democratic political institutions and the country's international image. This is because a country with several cases of corruption makes potential investors reconsider investing in that country. Investors might perhaps ask themselves if it is beneficial to secure investments within such a country. The

participant also argued that the government is failing to find proper remedy to eradicate corruption because there is no cure for greediness and corruption but people who are found looting public funds assigned for implementing policies should be judged by the law. In other words, disciplinary action should be taken against officials accused of improper conduct, and where appropriate, these officials should be reported to law enforcement agencies. This will help to speed up service delivery.

Participant 4:

This participant emphasised that the government should publicise policies before they are implemented. The participant stated that democracy does not support secrecy in government matters which concern the public. The public should know about the intentions of the government concerning their lives. Therefore, transparency should be enhanced. It further emerged from the participant's response that in their view, a lack of transparency was one of the reasons why the implementation of the e-tolls policy failed in South Africa. In this regard, "there is a public view that elements of the e-tolls policy should be reviewed as a matter of urgency, and, to avoid further protracted conflict, the process must be transparent, deliberative, and participatory" (Nicolson, 2019). This will help the government to implement policies after a thorough consultation. The participant concluded that all the policies should follow this process to ensure successful implementation.

Participant 5:

This participant pointed to the fact that public officials are human beings. This means that they may have flaws that may influence their attitudes towards the implementation of policies. The participant emphasised that the public officials' attitude should be monitored so that they can be continuously be reminded about the Batho Pele Principles that is an approach to improving government service which may change their attitudes. "Such changed attitudes will enhance the public officials' performance, increase capacity, and create opportunities for finding creative ways to plan and implement services" (Van der Westhuizen and Swart, 2015:747). Furthermore, the respondent noted "the value of well-planned programmes and projects and stressed the need for leaders with management skills. Joint services with other service providers will lead to success, because of the sharing of resources, knowledge, and skills" (Van der Westhuizen and Swart, 2015:747). This fosters a spirit of cooperation.

7. Result and Discussion

This section of the paper presents the results and a discussion of the findings of the study.

7.1 Major findings on the government ensuring that public policy implementation positively serves as a tool for strengthening democracy.

The researcher found that public functionaries confirmed that unqualified public officials who were politically connected were employed, resulting in the serious decline of successful public policy implementation. The study findings revealed that training and educating unqualified public officials is essential so that public officials can implement policies successfully. It was further indicated by the participants that senior management officers were realistic role models by demonstrating ethical conduct to subordinates. The research findings also revealed that public functionaries and political office bearers at public institutions considered ethics training and ethics education as vital for the effective functioning of the public institution.

Public institutions have a reward system which acknowledges and recognises outstanding performance through the successful implementation of public policies as far as quality service delivery is concerned. Most of the respondents stated that regular workshops were conducted at their workplaces in order to reinforce compliance to ethical values. The research findings also revealed that participation by the members of the public in policy implementation strengthens democracy. By participating in policy implementation, the public will be able to raise their concerns, needs, demands and values and ensure that these are considered. The study findings agree with earlier studies of Muers (2018) that found that “culture and values drive policy outcomes”.

7.2 Major findings on the impact of the public policy implementation on the citizens' welfare

The study confirmed that frustrated residents in South Africa view the impact of the policy implementation of RDP houses negatively. This is because a lack of decent and standardised RDP housing affects people psychologically and emotionally. They do not have peace, and peace is a prerequisite for health. Peace is compromised because of the communities' fear that RDP houses will become hard to live in when heavy rains pour down. This is exacerbated when the houses built began to collapse, and especially when there is a high rate of impoverished and unemployed individuals.

In considering whether the RDP policy is worth implementing, the findings of this study indicated that the RDP housing policy is too good to be true, especially when the allocation of such houses is unjust. This is because there are individuals who bribe public officials to obtain the RDP houses. As a result, the communities are denied the opportunity to exercise their constitutional rights to housing. This automatically suggests that the housing policy is not appropriately implemented to positively impact impoverished and low-income communities. The study also found that social injustice has been exacerbated during the Covid-19 pandemic, where the R350 grant intended to help unemployed people was not paid to all of the individuals who are currently unemployed.

7.3 Major findings on the challenges of implementing public policy in South Africa since the dawn of democracy.

The study findings revealed that most South African citizens are unwilling to participate in public policy-making meetings, especially at the local sphere of government. This could be partly due to unfulfilled promises made by the government and community members' lack of trust in public officials. It becomes difficult for the members of the public to trust public officials because of the allegations of unethical conduct. Long-awaited promises discourage public participation, especially from the youth. "As a result of government attempts to overcome infrastructure- and service delivery backlogs that are sometimes too slow, protest action escalated, especially from 2004 onwards" (Managa, 2012:2). This is because of the bureaucratic system in government and its insufficient capacity which has delayed the achievement of goals and targets, especially those set in the NDP. The findings further revealed that corruption is a challenge in the proper implementation of public policies because goods and services do not meet the rightful beneficiaries.

7.4 Major findings on the mechanisms that can be used to overcome the challenges of implementing public policy

The study found that most of the respondents suggested that public officials that indulge in corrupt practices that compromise successful public policy implementation should be held fully accountable. The findings suggested that severe punishment should be highly recommended to set an example for other public officials who might be planning to become corrupt. The information collected suggested that the democratic principle of openness and transparency

between members of the public and the government should be encouraged. It was suggested that to avoid conflict, the government should first consult members of the public for any public policy that they want to implement. The researcher found that some strategies to overcome the challenges of implementing the public policy included public officials' compliance with the Batho Pele Principles. The Batho Pele Principles is an approach to help public servants to be committed to their work and improve service delivery. These principles help to control the conduct of public officials so that a conducive productive environment is created to ensure that public policy implementation runs without challenges.

8. Recommendations

The study found that there are some public officials who do not have the skills and knowledge to implement policies successfully because their employment was politically connected. The researcher recommends that in line with the principles of democracy, "the government must ensure that a much larger number of people and interests in the state, politics, and civil society have the skills to pose policy questions, evaluate alternatives, and anticipate the likely consequences of preferred initiatives" (Bernstein, 1995). "Often the power of policy implementation lies not in 'solving' problems but in redefining problems within a framework that makes them capable of resolution" (Bernstein, 1995). Ethics education is necessary to enforce integrity and practice self-discipline, for one can be skilled and knowledgeable and still lack good character to execute public policies successfully.

"It should be noted that in a democracy, open policy debate must take place through an honest consultative process" (Bernstein, 1995). "Committed democrats can agree that the best approach to dealing with a country's many challenges is through public participation" (Bernstein, 1995). "Sound policies should be measured by their effect on society and citizens, and not the intentions of the policy-makers" (Bernstein, 1995). The researcher suggests that "consultation meetings can be held in communities (such as informal settlements) that are normally neglected in the public debate, thus providing them with a voice" (Bernstein, 1995).

The researcher further recommends that there should be a dominant involvement of the value systems and cultural beliefs of the South African citizens in policy implementation. "South Africa cannot afford a 'European' level of welfare support when there is clearly an urgent need to address socio-economic ills such as poverty by policy implementation, rather than relying solely on welfare transfers" (Pillay, 2001:16). The government should include traditional

leaders such as chiefs in the implementation of policies. Traditional leaders are well-positioned to understand the needs and cultural preferences of the people to be included in the development projects and could work hand-in-hand with the government to improve the livelihoods of people.

“Poor policy implementation has severely frustrated efforts for South Africans to secure socioeconomic rights in South Africa, particularly in housing” (Ebrahim and Masiangoako, 2019). This is because of the prevailing lack of decent and standardised houses and social injustice in the provision and allocation of RDP houses which has negatively affected the welfare of South Africans. When, for reasons of circumstance or discrimination, part of the population has a reduced likelihood of access to decent quality houses, their welfare system is constrained, influencing their peace. It is clear from the study findings that the RDP housing policy has failed in the attainment of targets relating to improving the livelihoods of impoverished South Africans. The researcher recommends that the government pay more attention to the standard of the houses built, starting from the policy intent to implementation, in order to yield good results.

There was social injustice in the allocation of the R350 Covid-19 grant meant to help the unemployed people because some of the people complained about not receiving the grants. It is justifiable that the recent complete closed economy affected the revenue base of the government to assist the poor and that the R350 Covid-19 grant is a temporal grant because the government do not have enough financial resources. However, the government should take a lesson from this pandemic: that fairness, justice, and equality cannot be overlooked because of a poor economy. Fair distribution of the R350 Covid-19 grant was necessary to sustain the livelihoods of all South Africans.

“A lack of trust in leadership is a factor that contributes to the absence of cooperation and collaboration in the leadership relationship amongst public servants (from up to bottom) and citizens for the purpose of successful implementation of public policies” (Ndalamba, 2018:37). Hence, the researcher recommends that there is a need for the government to build trust in these leadership and citizen relationship by becoming trustworthy and legitimate. This trust can be built by avoiding unethical conduct and meeting the needs of the public without delay. Attention should be given to the bureaucratic system and its insufficient capacity for any realistic policy formulation and implementation. The NDP is an example of this emphasis. The

government should change this approach by ensuring that they do not pursue the arena of policy development as a success but view policy implementation and the delivery of services as the greatest success.

“Corruption distorts policies and priorities, the government should have a resilient system which operates freely from political interference encouraging citizens to speak out against corruption by public officials” (National Planning Commission, 2011). Public officials should subscribe to the notion of democratic governance where citizens believe that they have a share in government and governance. The researcher suggests that to promote the ideals of transparency and accountability in the public institutions needed for the successful implementation of policies, public officials should be held accountable as individuals for their actions in issues involving public resources.

“A democratic policy process assumes that all interests within a society can participate in the public debate to influence government policies” (Bernstein, 1995). This includes the interests of government, business, labour, and civil society to guarantee the successful implementation of the policies. “These groups will help the government to avoid reliving the terrible mistakes of the past in the implementation of policy” (Bernstein, 1995). In a democracy, these groups’ influence on the public policy process are important ingredients in getting results. “Capacity building workshops around adherence to Batho Pele principles must be instilled to all stakeholders, more importantly the foot soldiers (implementers), the do’s and don’ts must also be instilled” (Ngidi and Dorasamy, 2013:49).

9. Conclusion

The study has been able to show the challenges facing the implementation of public policies in South Africa since the dawn of democracy. The study has revealed that South Africa has been unable to implement policies successfully because of challenges such as: the government’s inability to involve the public in policy process, the public’s failure to follow public policies, the exclusion of people’s cultural and value systems, a lack of trust in leadership, insufficient capacity, bureaucratic systems, setting unrealistic goals, and corruption. This means that not much is happening in terms of improving the socioeconomic conditions and lives of ordinary citizens. There is therefore a need to engage seriously in an adequate and appropriate response by enforcing training and education, accountability, transparency, and the Batho-Pele initiatives for successful policy implementation.

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Organisational Stress in the South African Telecommunications Industry

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The current Covid-19 pandemic has had a massive impact on employees' health and has limited employee performance within the workplace. Many industries and their workers have been affected, and most employees are experiencing stress levels unlike any the corporate world has ever experienced. Research shows that work stress in different organisations is that which demands excessive pressures that are not compatible to workers' knowledge and abilities, because there is no opportunity to practice any choice or control, and there is no support from others. Although the government has tried to provide support systems to different industries, some workers have been retrenched, and the remaining staff in most industries are working under extreme pressure and duress as they are expected to work beyond their standard capacity.

The study highlights the factors that cause stress in the South African telecommunications industry and their impact on organisational performance. Using a stress model in a quantitative study of current research, participants were chosen using random sampling. The study findings highlight that employees are experiencing work stress on different levels. As such, the study recognises that a better policy approach to address workers stress levels is needed to enhance organisational productivity.

Keywords: *Organisational stress, telecommunications industry, Covid-19, South Africa.*

1. Introduction

Employee stress is a topic that needs to be studied to boost the performance of organisations. In recent days, employee stress has been growing in a large number of organisations, threatening the productivity of companies. Stress involves life circumstances, which usually occurs when employees lack opportunities, are constrained, or loses something valuable (Lipman, 2019). Symptoms of stress include absenteeism, the deterioration of work, arguing, overreacting, and improper eating

habits, and can lead to serious health illness (Roozeboom, Schelvis, Hootman, Wiezer, and Bongers, 2020).

Ongoing performance management can create an environment where employees are comfortable sharing their experiences, knowing that their organisation can adequately handle and manage sensitive issues. It is no mistake when leaders develop a culture of support. Real-time feedback and coaching can help to improve engagement and attendance. It can also help employees to cope with workplace stress and to deal with their overall health (King and Beehr, 2017). This article explains the mitigating factors affecting organisational stress using the telecommunication industry as a case study.

1.1 Stress

Stress is experienced when an individual reacts to or faces unpredictable or uncontrollable changes or challenges different from the daily experiences. Most often for workers it entails changes that need to be put in to meet up with the work demand. Stress is a “powerful condition where the apparent outcome and the preferred outcome both are equally important and unknown at the same time” (Roozeboom et al., 2020). Researchers have carefully observed stress and have figured out that the condition of stress or the single term 'stress' can either excite pressure or create tension, which might be damaging (Lipmann 2019, King and Beehr, 2017). If the state of stress is unpleasant, it may turn into negativity and have a negative impact on the person; under these circumstances, the person is commonly termed as ‘distressed’. Most often, strategic management in corporate industries set specific targets for repositioning and meeting sales. Statistics have shown that the impact of such changes leads to unhealthy and unreasonable pressures resulting in stress and suffering (Bucuren & Madalina-Adriana, 2011, Miche, 2002). Employees becomes physically and emotionally drained due to intense labour and long working shifts. And consequently, impact the organisational productivity and may lead to financial loss (Mbidioka 2017, Miche, 2002). Stress relating to production or manufacturing, directly affects the output of work, resulting in a low amount of output for the company (Kim and Beehr, 2020). The industry under discussion in this paper is a sales department within a telecommunications organisation.

2. Problem statement

Stress is an ongoing discussion in the global economy due to the Covid-19 pandemic. The coronavirus has shattered many individual livelihoods, businesses, all industries of life and

society (Hamouche, 2020). Many people have lost their jobs, families, homes and income due to the pandemic. This has increased stress levels, especially in the working sector. Aside from the general causes of work stress which have been highlighted in earlier studies, all organisational management have been encouraged to put adequate preventive measures in place within the workplace to prevent the spread of the disease (Sahni, 2020). This additional cost, coupled with the long months of lockdown, has placed most industries at a disadvantage, leading to the retrenchment of staff, demotions of senior-level staff, and reductions in wages and salaries. The adverse effect of these factors has placed most workers at a higher stress level (Goddard, Atwell & Morris, 2020).

In the telecommunications industry, most employees have had to work under intense pressure, even during the lockdown. This is because technology was the only means for communication, collaboration, networking, socialisation, working and shopping during the lockdown. The remaining staff who were not impacted by organisational restructuring and retrenchments had to work additional job shifts to answer to the massive customer services awaiting the industry. This study argues that all corporate management in the telecommunications industry must show exemplary strong leadership and show support to their staff and families during this pandemic to assist in reducing their mental and physical stress.

3. Research Objectives

- To determine the various factors that create employee stress.
- To identify the level of stress that affects the performances of the employees.
- To critically assess the impact that employee stress has on organisational performance and their health.
- To recommend ways for reducing the stress level of employees at the workplace.

4. Research Questions

1. What are the factors that create employee stress?
2. What level of stress affects employee performance?
3. To what extent does the employee's stress have an impact over health and organisational performance?
4. What are the suggestive measures for reducing employee stress?

5. The rationale of the study

The constant daily demands of the contemporary modern work environment have led to unavoidable stress, which limits employees' health and business performance. It has been noted that there is confusion between pressure and stress, and that this has been used to excuse bad management practice (Lipman, 2019; Higgins, Tewksbury and Denney, 2012).

Stress occurs in a wide range of work environments. It is often exacerbated when employees feel that they have no support from senior management and colleagues, which demotivate them and hinders effective production. Work-related stress can be caused by an unstructured organisation, unorganised work design, poor management, unhappy employees, little or no support from colleagues and management, among other factors. If measures are effectively put into place, there are situations where employees can avoid experiencing work-related stress. Control can be exercised over their work and the way they do it if adequate support is received from supervisors and colleagues.

When people feel their contribution to the organisation's success is undervalued, this can result in low productivity, ineffective decision making, poor timekeeping and absenteeism (Lipman, 2019; Higgins, 2012). It is therefore important to identify the factors that create stress among an organisation's employees.

6. Literature Review

6.1 Concept of Stress

Stress is a reality in our everyday life, it is seen as a way human body response to physical and emotional changes (Roozeboom et al., 2020). As mentioned above, stress occurs in most organisation due to workload pressures. Specialists of this field believe that work pressure and stress are often viewed as comparable situations, while in a real sense, the words are distinct (Jahanian, Tabatabaei, and Behdad, 2012).

Stress has several definitions, but what makes these definitions similar is that stress is 'caused by a physical or emotional provocation to which an individual's reactions may vary' (Miche, 2017, Goddard et al, 2020). Individuals adapt themselves to stressful situations in various ways. Simulations are also stress factors, and these stress factors can be of a physical or emotional nature. Naturally, the degree of stress varies from one

individual to another (Roozeboom et al., 2020; Wolever, Bobinet, McCabe, Mackenzie, Fekete, Kusnick, and Baime, 2012). For some, it can be ‘mild stress’ while others have ‘acute stress’. Mild stress occurs as a temporary situation with no complications on the individual. However, acute stress occurs with serious complications such as hypertension, heart attacks, stroke, chronic diseases not to mention a few (Roozeboom et al., 2020).

6.2 Stresses at the workplace

There are different definitions of work-related stress. According to the World Health Organization (2017), work stress emerges from people's responses to the additional demands and pressures presented at work which may not necessarily match their knowledge and abilities and possibly challenge their ability to cope. According to Mbidoaka (2017) and Rasool et al., (2020) workplace stress refers to a situation in which some characteristics of the work situation are thought to cause poor psychological or physical health or to cause risk factors making poor health (Rasool et al., 2020; Mbidoaka, 2017). As mentioned earlier, stress may occur in a wide range of work circumstances and is often made worse when employees feel they have little support from supervisors and colleagues, as well as little control over work processes.

At a workplace, an employee is assigned to specific projects and assignments aligned with specific deadlines which the individual may be unable to meet. This was affirmed by Rahim (2017) feels that workplace-stress (also termed 'occupational stress') is a situation which arises from the demands of the work situation the urgency of the situation or lack of time. High-stress levels often lead to mental pressure that can also harm the individual's performance (Wolever et al., 2012). This can lead to both physical and physiological ill-health.

Numerous variables can cause pressure. Previous works of literature such as Jackson (2016) and Jong (2017) have shown present-day life and modern lifestyles to be a significant cause of stress. According to them, modern life attributes such as ‘constant usage of technology’, ‘too much workload at the same time’, ‘higher price standard of living’, ‘not prioritising enough’, ‘pollution’ amongst many. All these factors contribute to the frequent stress level experienced nowadays. As stated by the World Health Organisation (2017), and supported by Cooper and Marshall (2013), “stress has become

a disease". Researchers have asserted that the stress exhibited by employees is because of the fear of the operational activities of modern-day organisations, financial pressures, workplace demand and hectic schedules which have negative impact on their health. Furthermore, the nature of working conditions implemented within the workplace enable administrators and associations to utilise fear and stress as a key for control or for the increment of the organisational efficiency. Different studies on stress at the workplace have identified various stress-causing stimulants. These include disregard of a person's capabilities, conflicting work duties, biased wages, uncertain job stability, fretfulness and exhaustion, association with partners, subjective condition of machines and workplace safety (Rasool, Wang, Zhang, and Saama, 2020). In addition to this, administrative harassment, innovative changes, undesirable workplaces, heavier workloads, and expanded business travel can increase employees stress level within the organisation. Jahanian et al (2012) cited an example of 20 per cent of U.S. managers and experts working no less than 60 hours per week and nearly all of them are on called 24 hours a day for customers worldwide, resulting to increase in stress level for most American corporate workers. (Jahanian et al. 2012).

Jahanian et al. (2012), further classified workplace stress into four categories, namely, time stress, situational stress, encounter stress, and anticipatory stress. Time stress is experienced by most employees in today's workplaces. This is because most employees feel stress to complete tasks in a proper manner within the given deadlines. Cooper and Marshall (2013) noted that anticipatory stress occurs due to a lack of confidence. Employees often are afraid that their work will not be interesting or praised by their managers. Thus, it can be said that the fear of their work being unsatisfactory creates anticipatory stress in the minds of employees. According to Mcfadden and Altamirano (2020), situational stress arises due to conflicts that arise as a result of changes on working conditions within the workplace. Most often, capacity training and conflict resolution skills are required to manage situational stress within an organisation. For the "encounter stress", this usually occurs when an employee encounters negativity or undesirable behaviour with their colleagues or the employers of labour at the workplace. It takes a matured mind with effective emotional intelligence and empathy to cope with encounter stress within the organisation.

The high numbers of workplace-stress cases are outlined in the literature review. It becomes imperative to become aware of the stresses that employees face as they do their work. If left unchecked, these can lead to severe mental, physical, and emotional stress, which could lead to other problems (Jahanian et al., 2012). Examples of such problems may include legal liability or a loss of motivation amongst employees, which can cause a decrease in the overall efficiency of a firm or organisation (Jahanian et al., 2012). While some stress-causing factors may be within the solving capabilities of the organisation, other factors, such as divorce or the loss of a family member, are beyond the organisation's control. It is important, however, that the company takes care of such individuals, both as a human gesture and for the welfare of the organisation. Organisations tend to perform extraordinary and achieve the best outmost performance if the staff's needs are being addresses leading to a highly motivated team. Having an effective team results in positive productivity leading to good profit and good brand positioning. It can also help the organisation to attract the best possible potential employees due to its good reputation.

6.3 Work Performance

For this study, the term "work performance" refers to a general principle underlying most human behaviour, namely that in all social relationships the co-workers give and expect something, (Higgins, 2012). Job performance refers to what a company expects from its employees in term of quality and quantity (Rasool et al., 2020; Purwanto, Bernarto, Asbari, Wijayanti and Hyun, 2020). Performance is a fundamental criterion related to the outcomes and success of an organisation (Grigoroudis, Orfanoudaki, & Zopounidis, 2012). Although the process of being evaluated and appraised is important for all employees, performance appraisals can also be anxiety-provoking, since individual workers are examined and judged during job-appraisals. Sometimes, the person making performance judgment faces a threat in some cases, as well as interpersonal strains and the responsibility of making decisions which can affect an individual's livelihood (Mbidoaka, 2017; Lipman, 2019).

The effects of stress on employee productivity can be well noticed in an organisation. Employees suffering from high stress levels have a lower level of engagement. They are less productive and have higher absenteeism levels than those not working under

excessive pressure. Unfortunately, managers who attempt to find an optimal stress level for their workgroups frequently find their efforts produce inconsistent or downright harmful results (Roozeboom, 2020; Purwanto et al., 2020). One reason for this may be that stress comes in more than one flavour. Red tape, organisational politics, and bureaucracy are classified as 'hindrance-oriented stressors'. These sources of stress do not usually contribute to the overall mission fulfilment of an organisation but rather serve as distractions to it. 'Challenge-oriented stressors' include things such as heavy workloads, deadlines and time pressure and directly contribute to the purpose of the organisation (Wolkoff, 2020).

6.4 Factors that cause stress

6.4.1 Organisational Climate

The organisational climate, also as known as the 'corporate climate', refers to the 'culture' of an organisation. Organisational climate are the guiding policies in a work environment, perceived directly or indirectly by the employees, and are assumed to be a major force in influencing employee behaviour (Roozeboom et al., 2020; Higgins, 2012). Organisational climate has been measured as a key factor sharpening the employees' attitudes and needs satisfaction for opportunities in the organisation (Al-Kurdi, El-Haddadeh, and Eldabi, 2020). Variables included in the study of organisational climate are organisation design, individual job characteristics, co-worker relationships, direct supervision, culture/work environment, work processes, communication, technology, and customer satisfaction (Rasool et al., 2020; Higgins, 2012). An organisation's organisational climate is important as it plays a large role in how individuals work together and may also significantly impact upon core aspects of employment, such as job satisfaction and work performance. Organisational climate determines employees' inter-relationships, the outcome and quality of end products, time management skills and values, workplace rules and conflict, work delegation/job descriptions, and control within the work environment (Rasool et al., 2020; Goh, Jayaraman, Mostafiz, and Leow, 2020).

6.4.2 Workplace bullying

Workplace bullying involves an emotional or psychological punishment consciously directed to a worker from another colleague. Most often this is personalised and relut in

negativity and unwanted behaviour in the workplace (Arynne, 2009). These negativity and unwanted behaviour reflect an offensive and humiliating attitude showcasing from one worker to another which is more psychological than physical. According to Arynne (2009), these types of workplace bullying can be life threatening and have more consequences if not addressed properly. Einarsen and Hoel (2001), argued that there are two types of bullying: (a) work-related bullying, and (b) person-related bullying. Work-related bullying entails behaviours such as giving an unreasonable deadline or unmanageable workloads from a colleague to colleague or senior to junior worker, while the person-related bullying relates to deliberate self-inflicted words, gossips or teasing at the workplace and making undesirable jokes to afflict or mentally torture another person (Einarsen & Hoel, 2001).

6.5 Theoretical framework

This study explains the factors contributing to the stress of employees within a specific organisation or brand. Therefore, it is highly important to understand the various theories and ideas relating to stress within the workplace. The study engaged with theory on stress management to highlight the adaptability of employees to certain stressful situations and its impact on their behaviour within the organisation. Realising the methods of managing stress can help to deal with future stress issues within the workplace. Additionally, learning about the process by which employment stress occurs can help the management to make amendments to prevent these stress issues within the workplace.

Stress Management is highly effective in providing a descriptive review of the literature. It helps to show an interrelation between various ideologies and thus contributes to the better development of knowledge regarding these factors. Stress levels are highly dependent on the job roles of employees within a brand (Bhui et al., 2012). Assigning employees with the wrong job roles with a disregard for their proficiencies can lead to the brand's low performance as the employees will not be able to provide their best performance to meet the job's demands. Wrong job descriptions can lead to the development of a negative mindset and low job satisfaction. This can increase in stress in the workplace (Cooper, 2018). Additional factors such as low motivation and a lack of respect are also highly interrelated to stress at the workplace.

6.6 Stress Management

According to Cooper (2018), individuals undergo stress when they are under the impression that they cannot manage troublesome occurrences. Troublesome occurrences as mentioned in previous sections can be subjectively interpreted in many phases and affects each individual in multiple ways. A useful stress model considers stimulants such as job features (e.g., large workload, little autonomy, low social welfare), the occurrence of adverse events (e.g., the demise of friends or family, divorce), and other commitments outside of work (e.g., duties towards a reliant relative or spouse) (Bhui et al., 2012). Conceptualising such stimulants of stress explains the impact developed and solutions in mitigating stress and its symptoms (Scott and Howard, 2017).

According to Bhui et al. (2012), stress has additionally been apparent by indications such as anxiety, exasperation, or emotional pain. A different approach is to conjecture that stress is a sign of the poor fit between a person and their condition. Stress is then observed to emerge because of a disparity between the stimulants and how the individual reacts to them in terms of, individual aptitudes to overcome stress, and interventions developed to overcome it.

Value-based models conceptualise stress as something that reveals itself after some time inside a progression of exchanges between the individual and their condition (Leiter, 2017). Stress emerges from and highlights the person's activities, opinions, perceptions, and the attributes of their workplace. Organisational intercessions are those that influence entire populaces or gatherings of individuals and incorporate work environment changes or conflict resolution frameworks in the organisation (Rahim, 2017). It can be said that the environmental conflicts within the workplace create stress in the minds of the employees.

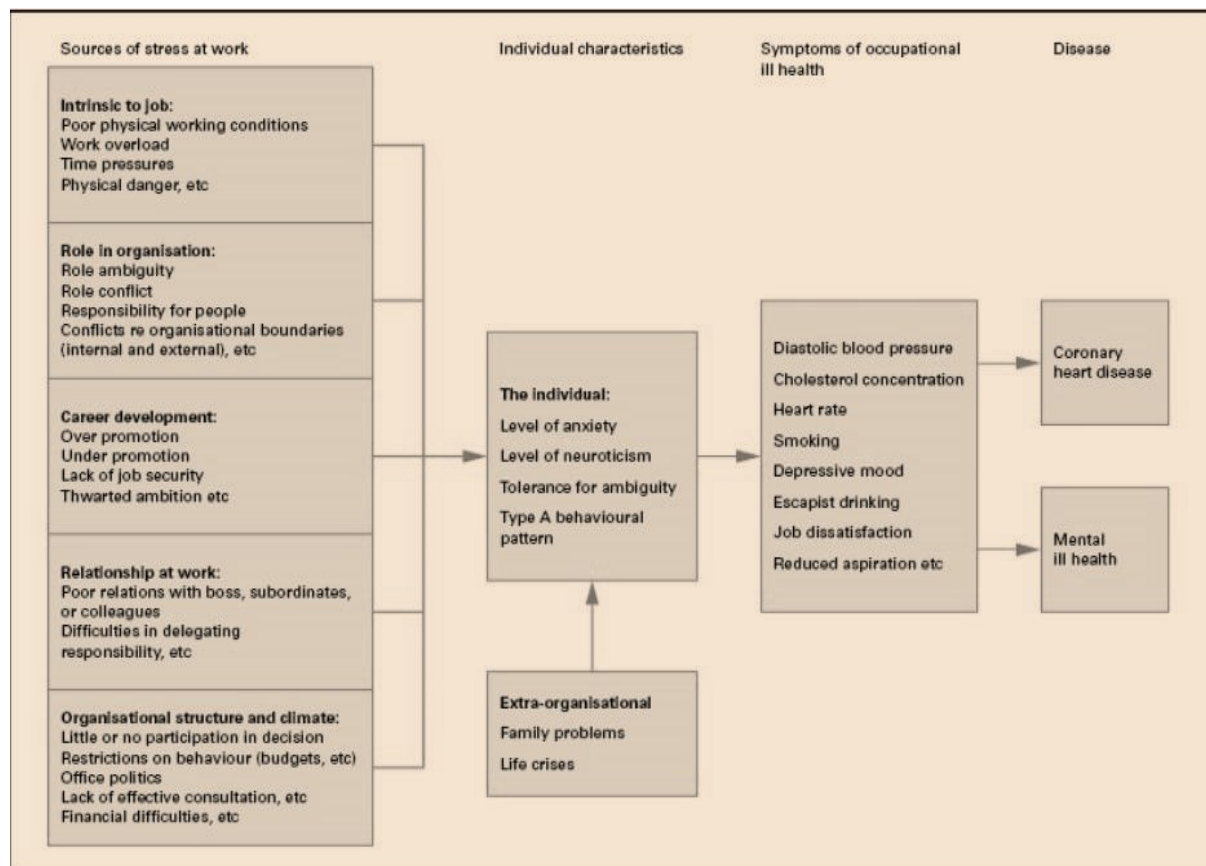
Both the individual and the organisation are targeted in some interventions (such as approaches to secure improved work-life stability and peer-support groups). Primary mediations expect to keep the causal elements of stress; secondary intercessions plan to decrease the seriousness or term of indications; and tertiary or reactive mediations

intend to give restoration and amplify working among those with interminable well-being conditions (Bhui et al., 2012).

The firm needs to consider the efficiency of the employees to produce as much work as possible for the most efficient labour price; they need to remain aware that their greatest asset is their employees. This means that they should also invest in methods that ensure that there is no wastage of resources while spending as much as they can afford to on their employees to keep them motivated and ready for work.

Using the frameworks previously mentioned, it becomes possible to combat stress in the workplace. The first step to each brilliant plan, to each successful endeavour, is planning. As stated by Pignata et al. (2017), stress stands as the most significant issue occurring in the workplace in recent days. Planning is the best step towards reducing the stress of the employees within an organisation. It allows the organisation's employee welfare to conceptualise the various types of stress. This a make for an easier job of understanding the causes of stress on an individual or team and what can be done to alleviate this. Pignata, Boyd, Winefield, and Provis (2017) further add that increasing job security helps in reducing the stress of the employees. A lack of growth opportunities and job insecurity are two causes of increased stress levels among employees. Increased job security increases the flexibility and confidence of employees, thereby combating stress.

An employee with a few less stressful conditions to think about is an employee that can be of very high efficiency. The ways in which individuals react to stress varies from one employee to another. From the figure 1.1, there are different sources of work stress as indicated by Cooper and Marshall (2013), it ranges from intrinsic to job, role of organisation, career development, relationship at work and organisational structure and climate. All these sources affect workers differently as there are different ways of handling job crisis. Even so, the stress model highlighted that the sources have a negative symptom on the workers from anxiety on work crises, family and life crises to ill health and deadly diseases (Cooper and Marshall 2011). This stress model was used as an instrument for data collection in the study as it premised the objectives of study.

Figure 1.1: Stress Model at Workplace: Process of Employment Stress

Source: Cooper and Marshall (2013: 20)

According to Cooper (2018), some significant stressors at the workplace include: role ambiguity, conflict in the role, huge work pressure, discomfort at the workplace, and an immense workload (see figure 1.1). Most often, when an organisation has a tight schedule, employees are required to perform extra work, such as working late at night or working during the weekend. This is a contributor to employee stress as every person is required just to follow suit, and many people will do so, mostly because they need to make a living (Scott, 2017). However, this does not imply that they can be as fast as every other employee, and they may soon start experiencing problems such as not being able to deliver work on time or lacking conversance with their job description, which creates a role ambiguity.

These are many such handicaps in the workplace that trigger various stress factors. Employees may experience bullying by their superiors for a failure to deliver on work, or termination warnings from the organisation's oversight bodies if they do not understand their roles well enough (Cooper, 2018). For a typical person, this would not only trigger stress because of one situation, but it could make the person worry about many other uncertainties, such as job

security and career stagnation, among others. A stressed employee is less profitable to the organisation. Cooper and Marshall (2013) believe that support by means of job feedback can help to reduce the stress levels of employees.

6.6.1 Health Hazards Due to Employment Stress

According to the study by Bhui et al. (2012), the most common health hazards of employment stress are depression and anxiety. Rahim (2017) further stresses that work pressure is often also harmful to the health of employees. Employee who regularly experience stress are prone to health risks. These conditions can be easily traced back to work stress. Anxiety can be caused by work overload and extreme time pressures, as most of the time the employee is always thinking about what they may have or may not have accomplished in their day's work, and such pressures can lead to inadequate responses from demanding clients (Cooper and Marshall, 2013). Workplace bullying can also cause an employee to suffer from anxiety, as they become unsure of their work while trying to please their managers, who they may come to fear. According to Avey, Luthans and Jensen (2009), depression can be caused by a person being uncertain of their worth, especially to the firm. This can be caused by career stagnation and role ambiguity, as well as work-related aspects such as discrimination. Such factors are likely to make an employee question their self-worth and can lead to depression, which has the potential to have serious consequences.

Other imminent health hazards for persons experiencing stress in the workplace include migraines and high blood pressure. People experiencing work-related stress may also exhibit signs of drug and alcohol abuse and may smoke cigarettes, both of which may be as a result of trying to increase their work efficiency or trying to alleviate the stress associated with their jobs (Jahanian *et al.*, 2012).

6.6.2 Work Stress Intervention and Prevention

Several sources have provided simple organisational practices that could be used to help employees work under less stressful conditions. Such methods, according to Nwanzu and Babalola (2019), include the creation of organisational plans that can help in the scheduling of work and in making sure that the employees can work well within their capabilities to offer the best possible outcome and make the organisation the most efficient. Several stress alleviation methods can only be implemented by the organisation, but some must be implemented by the

employees themselves, such as proper time management (Bhui et al. 2012). Once an employee takes upon a work task, it is important that they maintain a sense of discipline with their time.

Wolever et al. (2012) studied the use of mind-body stress alleviation programmes in the workplace. The programmes include activities such as therapeutic yoga and other activities based on connecting one's mind and body. Using a sample of 239 volunteer employees from an insurance company in the United States, it was found that those who participated in this form of intervention had reductions in their stress levels. As such, mindfulness activities such as yoga can be used to reduce stress. In most cases, an organisation may prefer to prevent workplace stress amongst its employees. As opined by Cooper (2018), an efficient strategy towards this would be to ensure that the organisation is aware of the tasks must be performed such that the employees are at no one time working outside their means.

6.6.3 Gap in the Literature

Previous researchers have focused on the performance of employees and how it relates to employee satisfaction in the workplace (Yahaya et al., 2012; Olsen, Bjaalid, & Mikkelsen, 2017). In earlier studies, researchers have defined the concept of stress but have failed to consider the factors responsible for it and the ways of reducing these in the workplace (Bruce and Blackburn, 1992). The current researcher has worked hard to highlight the various organisational stress factors that have a negative impact on the health of employees (Cooper & Marshall, 2018; Rahim, 2017). In addition, this research has shown how the increased stress levels of the employees deteriorate the performance of employees in the workplace. Some of these stress factors include extreme work pressure and extra working periods. The current study has further filled a gap left by earlier researchers by highlighting the importance of organisational planning, job security, and providing growth opportunities at organisations in reducing employee stress.

7. Research Method and Design

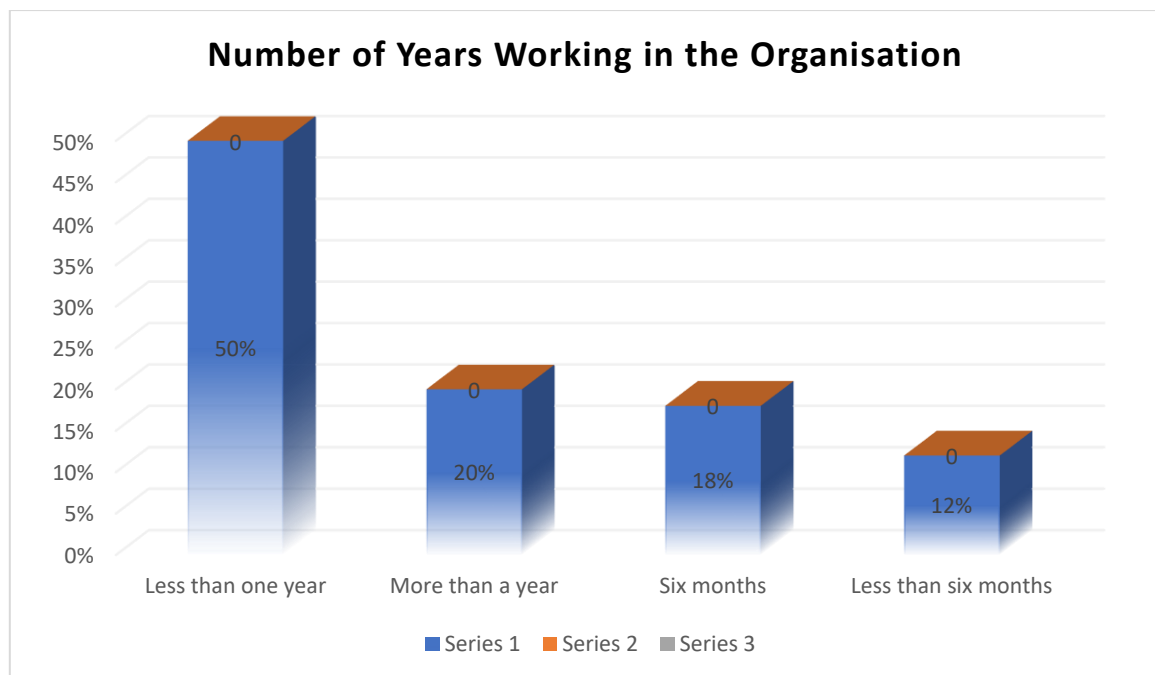
‘Research design’ refers to the approach that is taken to conduct the study and to organise its different aspects in a manner that can answer the research questions. ‘Research methodology’ refers the implementation of the actions taken to collect and analyse the information (Creswell, 2017). This study used a quantitative methodology by conducting a survey to collect data for statistical analysis. According to Brannen (2017), the quantitative methodology has two types

of research designs: a descriptive design and an experimental design. An experimental design establishes causality, while descriptive research is the exploration and description of phenomena in a real-life situation (Pickering and Byrne, 2014). Descriptive studies explain a phenomenon or case study by providing an indepth information to the questions provided. The study used the descriptive design to describe he factors that affect the stress levels of employees since it is a scientific method that measures and observes with no specific influence about study (Brannen 2017). To conduct a descriptive study like this, a sample size of 10% of the total population would suffice (Pickering and Byrne, 2014). Following a positivist philosophy enabled the researcher to make use of logic and ideas. It further aided the researcher in identifying the stress factors. Reason and logic were furthermore used to depict the impact the stress on the health and the performance of the employees.

The researcher used primary sources in the form of surveys which were used to collect information from the participants from the sample population. The data collected was described and analysed in a graphical analysis. The sample population of this study consisted mainly of sales staff from the sales division of a telecommunications organisation (Huawei). This is because they are prone to high levels of stress because of their various deadlines and targets. The size of the sample selected consisted of 40 employees. The questionnaire made used of a Likert scale using Cooper and Marshall's Stress Model design, which was both administered manually and emailed to the respondents (Creswell, 2012). Random sampling was used to select the participants to increase the reliability and accuracy of the research findings. The random sample was chosen to eliminate any bias in terms of human preferences and influences. The analysis was done using statistical graphical representation.

8. Findings and Analysis

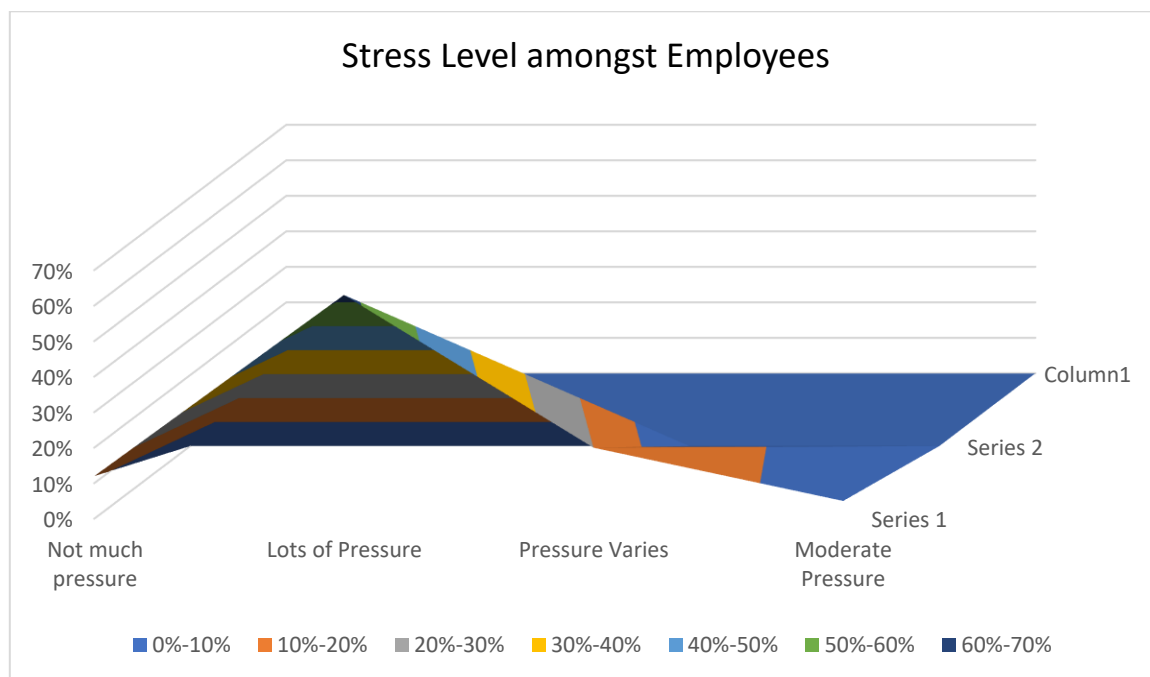
Employee stress is a significant concern for any organisation as it affects the performance of the company. 40 employees of the sales division of the telecommunications organisation (South Africa) were presented with surveys. The following section focuses on the findings derived from these surveys. A quantitative analysis of the results was performed to help the researcher to gain more in-depth insight into the research topic. Question was asked on the number of years the employee has been working to ascertain their experience on the context of study. The figure below presents the findings.

Figure 1.2 Number of years working (n=40)

Source: (Ojo, 2020)

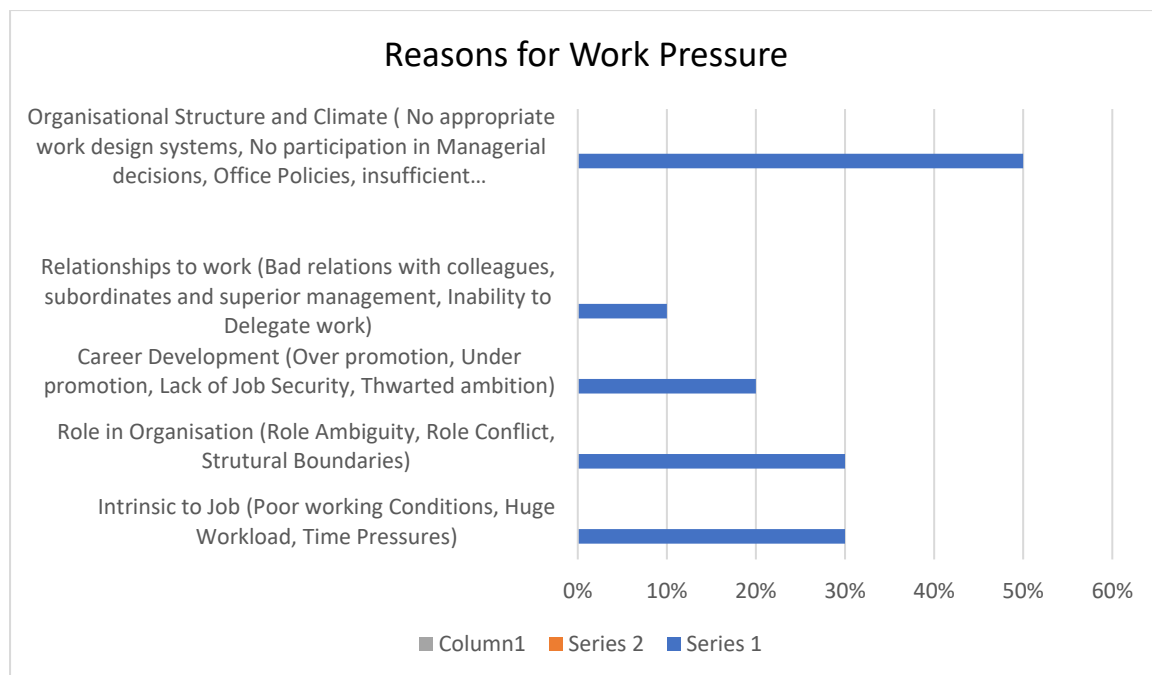
The above bar graph highlights that 50% (n=20) of the respondents have been working in the present telecommunications organisation for less than one year. 20% (n=8) of the employees responded that have been working in the organisation for more than a year. Only 18% (n=7) and 12% (n=5) of employees were found to have worked in the organisation for six months and less than six months, respectively.

The findings on the number of years working reveal that many of the employees (50%, n=20) have been working in the telecommunications industry for less than a year. The findings also show that the last category of the employees (12%) have worked in the present company for less than six months. The findings indicate that there is a good employee turnover in the organisation. Another question asked was on the extent of work pressure the employees are going through within the workplace.

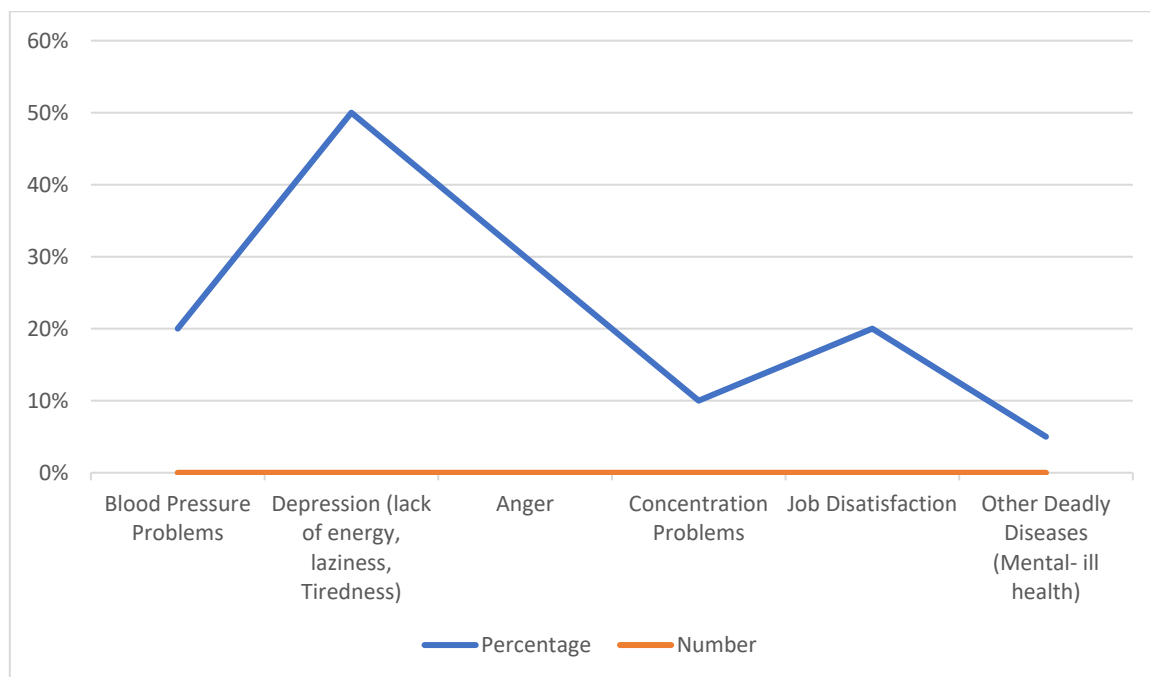
Figure 1.3 Stress Level amongst Employees

Source: Ojo, (2020)

The above graph shows that 12% (n=5) of the respondents are of the opinion that there is not much pressure placed on them in the telecommunications organisation. Most of the respondents (63%; n=25), however, stated that they experience enormous pressure in the company. 20% (n=8) of the respondents stated that the pressure they face in the organisation varies from time to time. 5% (n=2) of the telecommunications organisation's employees opined that there is a moderate level of pressure in the mentioned organisation. It is important to note that many employees working in the telecommunications organisation responded that they experience massive work pressure. This extreme workload creates a stressful situation for employees.

Figure 1.4 Reasons for Work Pressure**Source: Ojo (2020)**

Questions were asked in line with the Cooper and Marshall Stress Model as indicated in the literature. The first stimulant of stress was 'intrinsic to job' in which 30% (n=12) indicate they experience. Another 30% (n=12) also emphasise the second stimulant on 'role of organisation' as a stimulant for stress for them. The third stimulant on 'career development' was attested by 20% (n=8) of the participants as reason for stress. 10% (n=4) indicated that 'relationships to work' is a key factor for stress for them while 50% (n=20) stated that 'organisational climate and structure' are the reasons for work pressure for them, due to lack of properly designed work which makes them to work overtime. The failure to properly manage entire tasks by the manager of the telecommunications organisation is the reason why respondents stated that they experience huge work pressure. Before allocating tasks load, the workers attest that the managers test the skills of the employees and then gives them a target, in which 30% (n=12) as seen in the table above indicates are too hard to reach. Most participants argued that these stress stimulants have both physical and psychological impact on the employees leading to severe consequences as indicated on Cooper and Marshall's Stress model.

Figure 1.4 Health Problems Experienced by Respondents

Source Ojo (2020)

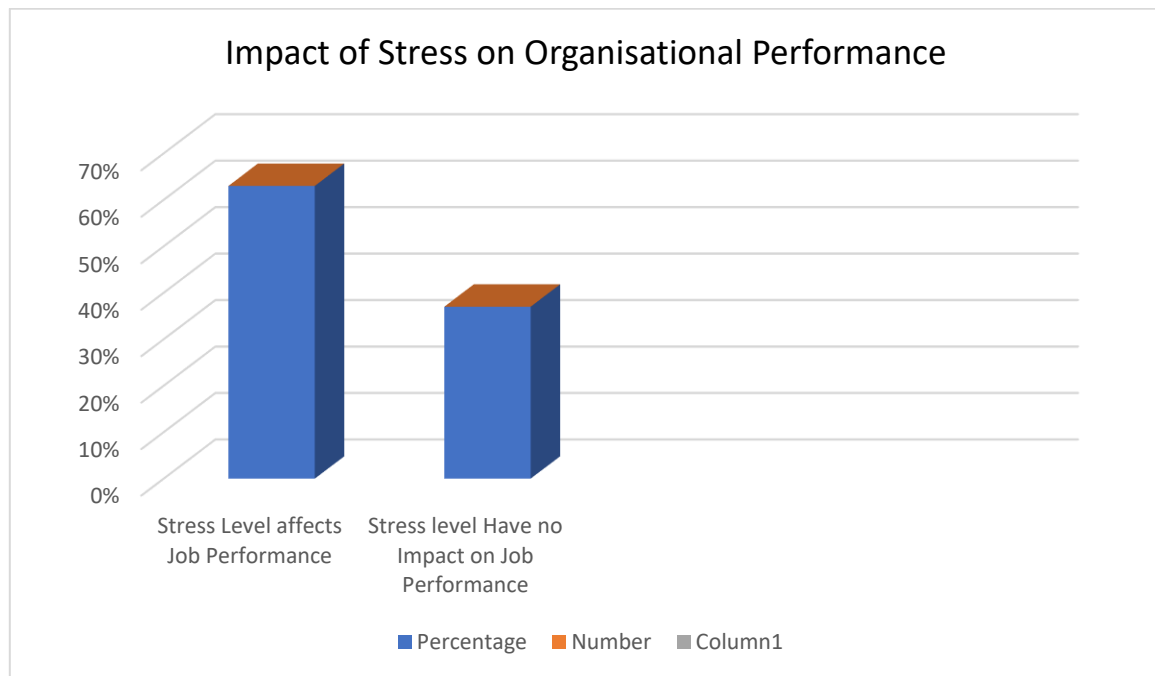
In order to substantiate these findings, questions were further asked on the severe consequences the stress has on the health of the participants.

The pie chart above shows that 20% (n=8) of respondents replied that they are suffering from 'blood pressure problems' due to job-related stress. 50% (n=20) of the employees stated that they have experienced 'depression' due to organisational stress. 30% (n= 12) of the respondents claimed that job stress had boosted their 'anger'. Another 10% (n=4) explained that 'concentration problems' have occurred since they started experiencing stress while 20% (n=8) further attest to 'job dissatisfaction' as a result of stress. The last point raised on implication of stress on health, was 'other deadly diseases' in which 5% (n=2) attest that they have had mental-ill health due to the working and life crisis since they started working.

The findings, therefore, make it clear that many respondents are suffering from health issues. This shows that the stress levels in the telecommunications organisation is affecting the health of its employees negatively. The stress experienced by the employees of the telecommunications organisation has resulted in a short-term psychological impact on their bodies (refer to Figure 1.4). The symptoms of depression that are seen among the employees of the telecommunications organisation include a lack of energy, laziness, tiredness, and difficulties in making decisions (refer to Figure 1.4). It is also important to note that stress can

also have long-term effects on the employees. Uncontrolled or prolonged anger gives rise to headaches and anxiety, thereby highly degrading their physical health (refer to Figure 1.4).

Figure 1.5: Impact of Stress on Organisational Performance



Source: Ojo (2020)

The study inquired on the impact of stress level on the organisational performance and the findings presented indicated that 63% (n= 25) of employees agreed that stress level affects the organisational performance while 37% (n= 15) of respondents answered that employee stress level has no impact on the organisation.

The above findings demonstrate that many the telecommunications organisation's employees have noticed changes in the performance of the organisation due to employee's stress level. This indicate that if the organisation has a low organisational performance due to the employee's stress level then it will affect the organisation's productivity as argued by Grigoroudis, *et al.*, (2012) in the literature.

9. Discussion and Summary of Findings

The findings of this study have helped to evaluate the factors responsible for creating employee stress. Based on the data collected, the fist findings indicate that there is a huge employee stress level in the organisation. The questions asked in line with the Cooper and Marshall stress model indicates that the various factors affecting employees stress level still exists and prominent in

most industries. Furthermore, these factors have had and is still having adverse effects on the employees ranging from depression, anger, job dissatisfaction, chronic or coronary diseases and poor mental-ill health. The study also indicates that there is a connection between employee performance and work stress. The results obtained from the survey have shown that excessive workloads and closely spaced deadlines are two of the primary reasons that the employees of the telecommunications organisation experience an excessive amount of stress. This extreme work pressure also has a negative impact on the quality of their work as the employees do not get enough time to complete the work successfully and has affected the reputation of the company.

The survey further revealed that the employees of the telecommunications organisation experience severe health issues because of the excessive work pressure and stress level they endure. It is almost impossible for the workers to give their best work because, as per the surveys with the employees, it is almost impossible to perform in a stress-inducing workplace. Most of the employees stated that they have suffered from depression due to their work environment. Others reported suffering from high blood pressure and excessive anger.

Recommendations for the employers of labours regarding work-related stress in the organisation in line with the findings, include offering a flexible work environment for the employees, giving incentives and rewards to worthy employees, discouraging multi-tasking, communicating effectively with employees. If these are embedded, the study believes there will be an improvement in work performance which may likely result in better productivity within the organisation.

10. Conclusion

The study helps to understand the effects of excessive work pressure. The study presents the factors affecting employee performance and stimulants of high-stress level for employees within a South African telecommunications organisation. Considering the Covid-19 pandemic, this year as people were forced to stay at home during lockdown and with many experiencing a reduction in their wages and rewards, the stress level of most employees has risen abruptly this year. Many have lost their jobs, and others have been demoted, leading to a reduction in wages. All these factors have witnessed higher statistics of stress in the country than ever seen before (Goddard et al., 2020). From the findings of this research, it can be concluded that

extreme work pressures, incorrect job role allocations, and the low motivation of employees contribute to an overall increase in stress within the workplace.

The study recommends different ways of fostering a stress-free work environment. It is important that the employers motivate and understand their employees and create facilities that enable the employees to relax. A relaxed atmosphere reduces work pressure and promotes better work performance, as do incentives and monetary rewards for good work performance. Organisational management should promote better compensation practices which are sustainable and beneficial to the employees within the workplace. Effective communication is another critical strategy that needs to be intensified in most organisations. Statistics have revealed a communication gap between employers and employees, which has led to bad strategic decisions and a loss of profit within the workplace (Argus & Samson, 2021). A proper structural communication strategy must be put in place for employees to have the ethical sense of freedom and be part of strategic decision making within the workplace (Alyammahi et al., 2020).

Further research is encouraged as the study was limited to 40 employees in the telecommunications industry. Further research might reflect better statistics on the impact of organisational stress on employees within the workplace.

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