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ABSTRACT

Despite multiple calls for interventions in rural businesses, the productivity shocks experienced by rural SMEs from the COVID-19 pandemic remain inconclusive, thus spurring attention from researchers. Although many studies were carried out on the COVID-19 pandemic and SMEs in South Africa, a large portion concentrated on urban areas, but overlooking rural areas. The dire need for empirical studies, particularly in the confines of South African rural SMEs, cannot be overemphasised. Hence, the current study sought to investigate the impact of COVID-19 on SMEs' productivity in Mtubatuba Local Municipality. The study employed a descriptive research design and a quantitative research approach, in which a closed-ended structured questionnaire was utilised to solicit data from a sample of 187 respondents from Mtubatuba Local Municipality. The collected data was analysed using the Statistical Package for the Social Sciences version 29.0 and Microsoft Excel. The findings revealed that the COVID-19 pandemic had a multifaceted impact on SMEs in Mtubatuba Local Municipality, measured using the Relative Importance Index and Relative Severity Index, which categorised the various factors into financial impact, operational disruptions, inventory and supply chain challenges, and workforce issues. In addition, the findings indicated that SMEs in Mtubatuba Local Municipality seized the opportunities presented by the pandemic and adjusted their businesses through selling on-demand products such as airtime, traditional medicines and herbs, headache pills, and adapting to internet and social media marketing. Using the Relative Importance Index and Relative Severity Index, the study demonstrated that high absenteeism rates and financial strains severely affected SMEs. The study recommended that SMEs should formalise their businesses; have insurance; invest in alternative means of productivity such as internet use; adopt remote and hybrid working; set aside emergency funds; and adhere to health and safety guidelines.

Key Words: COVID-19, SMEs, Productivity, Mtubatuba Local Municipality, South Africa

DECLARATION

I hereby declare that this dissertation submitted for the Master's degree in Management Sciences (Business Administration) in the Department of Entrepreneurship and Management is my own original work and has not been previously submitted to any other higher education institution.

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Date: 4/10/2025

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CHAPTER ONE

INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 Introduction

The COVID-19 pandemic had a severe impact on most businesses around the world, including those in South Africa. According to data provided by the World Bank and several other global institutions, the COVID-19 pandemic affected the global supply chain, operations, production and business sales (Apedo-Amah *et al.* 2020:9). This study investigates the influence of COVID-19 on the productivity of small and medium enterprises in Mtubatuba Local Municipality which is in KwaZulu-Natal in South Africa. This chapter discusses the background to the study, statement of the problem, aim, research objectives and research questions. In addition, the chapter provides a preliminary review of the literature and research methodology.

1.2 Background to the study

The COVID-19 pandemic heavily impacted global and national productivity levels (World Bank, 2020) because of a series of government lockdowns which were carried out throughout the world (Brown 2021: 49; Maku 2021: 3). The effect thereof was a disruption of global supply chains, resulting in shortages of raw materials, slowdowns in labour production and poor supply-demand nexus which drove up inflation (Chiloane-Tsoka and Rankhumise 2019: 15). Economies thrive and grow according to their level of productivity (Dall-Schmidt, Jensen and Naz 2018: 388). Small business growth relies on a stable macro environment and productivity to fight inflation and global competition. Without these, small businesses fail, and the associated economies shrink (Chiloane-Tsoka and Rankhumise 2019: 20). The COVID-19 pandemic affected productivity and came along with high inflation rates which had a noticeable effect on small business (Bloom, Bunn, Mizen, Smietanka and Thwaites 2020: 1). The contribution of SMEs to Gross Domestic Product (GDP) is not questionable. According to Kibuuka and Tustin (2019: 35), SMEs contribute over 30% and 17% respectively to the GDPs of the Malaysian and Indian economies. Without productivity, SMEs are unable to fight and meet the challenges of inflation (Chiloane-Tsoka and Rankhumise 2019: 20). Secondly, without productivity, SMEs are unable to fight competition and fend off growing threats from cheap imported goods. Lastly without productivity, SMEs are unable to become part of the global value chain (IFC 2018: 83).

To this day, most companies are still feeling the effects of the COVID-19 pandemic (World Bank 2022). Several studies from both developed and developing countries indicated that the COVID-19 pandemic had the greatest impact on SMEs (Ramphele and Msosa 2022: 94). The lack of financial capital and proper business expertise in dealing with unexpected crises such as the COVID-19 pandemic, dealt a major blow to the survival of a number of SMEs, resulting in a need for direct government support to address these challenges. As an emerging economy, South Africa is one country whose economy and GDP depends heavily on SME contributions (Chiloane-Tsoka and Rankhumise 2021: 9). Small and Medium Enterprises make a substantial contribution to the lifeblood of several provincial economies in the areas of job creation, socio-economic development, and competition (Chimucheka, Dodd and Chinyamurindi 2019: 2; Singh 2020: 36). According to the Treasury Department (2020:1), the province of KwaZulu Natal was the second largest contributor to the country's GDP, due to the number of its SMEs, contributing close to 16% to national production figures.

A report by StatsSA (2022:1) shows that SMEs in South Africa generate over R2 trillion in revenue, contributing significantly to the country's economy. The International Finance Corporation (IFC 2018: 8) reports that South African SMMEs contribute around 34% to the country's GDP, employing about 50 to 60% of the country's population. Being an emerging economy, South Africa relies significantly on SMEs contribution to reduce unemployment, poverty, spur economic growth, distribute wealth and generate taxes (Chiloane-Tsoka and Rankhumise 2019: 7; McLellan and Mzini 2021: 479). The COVID-19 pandemic has significantly impacted on the productivity of small and medium enterprises (SMEs), with research identifying disruptions in supply chains, diminished consumer demand, and liquidity challenges as primary factors affecting business operations (Bartik et al., 2020: 15). Many SMEs experienced considerable financial strain due to extended lockdowns, resulting in revenue losses and, in some instances, business closures (OECD, 2021: 22). Donthu and Gustafsson (2020: 285) underscore that the transition to digitalization was a vital survival strategy; however, numerous SMEs lacked the requisite resources and technological capabilities to adapt effectively. In addition, Fernandes (2020: 26) observed that economic uncertainty led to a decline in investment and innovation among SMEs, further exacerbating productivity declines. Despite these findings, existing literature exhibits certain gaps, particularly in evaluating the long-term resilience strategies adopted by SMEs post-pandemic and how these strategies have influenced productivity across different sectors and regions. Although various studies have

focused on COVID-19 (Kunene 2020: 22; Sloane 2020; Singh 2020; Vukile and Mlungisi 2021), little has been done in relation to productivity of SMEs. In addition, there is very little evidence of any studies conducted on this topic in South Africa, specifically in the Mtubatuba area. Therefore, this study aims to address these gaps. The results of this study should have both theoretical implications, by adding to the academic literature, and practical implications for managers should they experience a similar event in the future.

1.3 Problem statement

In 2020, the world woke up to the scourge of the COVID-19 pandemic, which brought about economic chaos (including poverty and social unrest), the impacts of which are difficult to quantify. Small and Medium Enterprises disintegrated before entrepreneurs' eyes, livelihoods were lost, and productivity went down. With poor demand for non-essential goods and services, companies found themselves holding stock of finished, semi-finished and raw materials (McLellan and Mzini 2021: 484).

A few months into the pandemic, the World Bank reported that small business owners were already closing their businesses in the United States (US). Data provided by the National Small Business Association of the United States (US) found that 43% of SMEs expected to close by December 2020 (Belitski, Guenther, Kritikos and Thurik 2022: 594). In the United Kingdom (UK), over six million SMEs were already feeling the heat within the first 12 months of the pandemic. The decline in their contribution to the national economy was already being felt (Simply Business 2021). A study conducted on European SMEs found that by end of 2020 the majority were recording decreases in sales and customer base (Belitski *et al.* 2022: 594).

The COVID-19 pandemic destroyed both labour and factor productivity (Bloom *et al.* 2020: 2). Small and Medium Enterprises whose survival depended on productivity collapsed as they were unable to service debts or meet their day-to-day obligations (Lewis, Browne and Houdet 2021: 988). The majority of SMEs were not able to keep up with changing marketing conditions, leaving the market to cheap imported products and services (Rashid and Ratten 2021: 359). Given that the majority of small business owners in South African provide non-essential services, government lockdown regulations would not allow them to operate during the Covid-19 pandemic. Therefore, the COVID-19 pandemic significantly disrupted the operations of small and medium-sized enterprises (SMEs), leading to declines in sales, revenue losses, and supply

chain disruptions. While SMEs attempted to adapt through digital transformation and resilience strategies, many lacked the necessary resources and capabilities to sustain these changes. Past studies have shown that in South Africa, SME success depends largely on productivity and location (Lumbwe, Anyadiegwu and Mbohwa 2018: 1208; Mthethwa, 2021:104). For example, a study by Zhou and Gumbo (2021: 22), found that the performance of SMEs in KwaZulu-Natal province had everything to do with location, whether the SME was in urban or rural metros. Against the backdrop of COVID-19 and the associated government regulations in South Africa, it was the SMEs operating in or close to urban metros that were able to adjust to the market conditions of the pandemic. Research suggests that KwaZulu-Natal SMEs in urban metros like eThekweni (Durban) and Msunduzi (Pietermaritzburg) adapted and adjusted their productivity and business models more easily compared to SMEs in other metros such as the Mtubatuba Local Municipality. Hence, this study seeks to examine the effects of COVID-19 on productivity for SMEs from Mtubatuba Municipality in KwaZulu Natal.

1.4 Aim of the study

The key aim of this study is to examine the influence of COVID-19 on the productivity of SMEs in the Mtubatuba Municipality.

1.5 Research objectives

In order to fulfill the aim, this study seeks to achieve the following objectives:

- To examine the impact of the COVID-19 pandemic on the productivity of SMEs in the Mtubatuba Municipality;
- To explore the opportunities exploited by SMEs in the Mtubatuba Municipality during the COVID-19 pandemic;
- To identify the challenges faced by SMEs during the COVID-19 pandemic in Mtubatuba Municipality; and
- To explore government interventions to SMEs in Mtubatuba Municipality during the COVID-19 crisis.

1.6 Research questions

The study seeks to answer the following research questions:

- How did the COVID-19 pandemic impact the productivity of SMEs in Mtubatuba Municipality?
- What opportunities were exploited by SMEs in the Mtubatuba Municipality during the COVID-19 pandemic?
- What were the challenges faced by SMEs during the COVID-19 pandemic in the Mtubatuba Municipality?
- What government interventions were put in place to save SMEs in the Mtubatuba Municipality during the COVID-19 pandemic?

1.7 Scope of the study

The study is confined to SMEs within the Mtubatuba Municipality in the province of KwaZulu-Natal, South Africa. A Category B municipality, the Mtubatuba Local Municipality is located along the Northern KwaZulu-Natal's coastal strip. According to reports, the municipality was home to around 202 176 inhabitants during the pandemic in 2021 (Mtubatuba Municipality, 2022). Mtubatuba is a municipality with a growing number of SMEs especially in the field of tourism, construction, and manufacturing. Due to limited resources the study will only focus on this Municipality which however is one of the best performing municipalities in KwaZulu Natal.

1.8 Significance of the study

This study is significant as it offers critical insights into the long-term impact of COVID-19 on the productivity of SMEs addressing key gaps in the existing literature. SMEs play a vital role in global economies, contributing significantly to employment, innovation, and economic growth (OECD, 2021: 18). therefore, understanding how the pandemic affected their productivity enables policymakers, business leaders, and researchers to develop targeted strategies for resilience and recovery. In addition, the study highlights the effectiveness of digital transformation, financial interventions, and managerial adaptations in sustaining SME operations during crises. Through the examination of these factors, the research provides valuable recommendations for enhancing SME sustainability, ensuring preparedness for future economic disruptions, and fostering an environment conducive to long-term growth and stability. Moreover, the study serves as a foundation for future research on crisis management in SMEs, emphasizing the need for adaptive policies that mitigate risks and enhance productivity in times of uncertainty.

1.9 Literature review

This section presents a synopsis of the literature review on COVID-19, and its impact on SME productivity.

1.9.1 COVID-19 (Coronavirus disease)

In March 2020, the South African government announced a hard lockdown for South African citizens in order to reduce the spread of COVID-19, an infectious disease caused by the SARS-CoV-2 virus (World Health Organisation 2022). The lockdown, which was regularised by the National Health Act 61 of 2003 and the Disaster Management Act 57 of 2002, ensured that only employees and companies providing essential services would continue operating while the remainder were required to stay at home.

1.9.2 Conceptualisation of SME productivity

Productivity is defined as the ratio of output per input in each process (Držajić and Vega 2017: 8). Productivity measures the efficiency and effectiveness of production in organisations. The production per hour produced by each worker is influenced by numerous factors including the health of employees, capital invested and skills, all which can boost productivity. Productivity is a by-product of innovation, technology, and human resources. Productivity is considered to be a success factor for SMEs. According to Chiloane-Tsoka and Rankhumise (2019:20), SMEs are unable to combat and overcome the challenges of inflation without output. In addition, in case of absence of high productivity, SMEs cannot absorb and handle the competitive pressure resulting from imported low priced products (IFC 2018: 83).

1.9.3 COVID-19 pandemic and productivity of SMEs

The Covid-19 pandemic greatly affected SME productivity. According to Bloom *et al.* (2020: 11), SMEs struggled to fund their operations and/or purchase capital goods as a result of the pandemic. Due to SMEs relying heavily on sales to bolster productivity, the COVID-19 pandemic resulted in declines in productivity in many ways. In addition, government lockdowns and standard operation procedures which were meant to contain the virus affected labour and other factors of production (Makau 2021: 3). Furthermore, Covid-19 restrictions created an additional cost burden for smaller businesses due to the costs of sanitising their operating

environments and customers. This led to a reduction in production budgets (Rashid and Ratten 2021: 467). It is reported that most SMEs failed to service their debts, resulting in legal action or the cessation of operations (Belitski 2022: 595). During the pandemic, SMEs had their supply chain affected through shortages and high costs of raw materials (Rashid and Ratten 2021: 469; Agarwal, Tyagi and Garg 2021: 545). The other impact of Covid-19 on SMEs was the forced postponement of production targets which in turn significantly affected local and national economic growth targets (Bloom *et al.* 2020: 11). The flooding of the local markets with low priced goods from countries such as China led to the reduction in production for SMEs (Berardi, Perinelli *et al.* 2020: 431).

For small businesses to succeed, human capital should play an integral role. Human capital adds value and helps to drive productivity for small businesses, acting as a source of competitive advantage (Yasin, Ridjal and Jufri 2019:10; Rashid and Ratten 2021: 470). In addition, employees help SMEs to become competitive and innovative (Chiloane-Tsoka and Rankhumise 2019: 160). This they do through their skills, creativity, sharing their knowledge and innovativeness (Yasin, Ridjal and Jufri 2019: 10). In the midst of the pandemic, businesses faced challenges in terms of paying employees even when not working due to COVID-19 restrictions and also maintaining a safe working environment (Rashid and Ratten 2021: 467). In addition, businesses experienced high employee turnover (Mukwarami, Mukwarami and Tengeh, 2020: 495). In the midst of the COVID-19 crisis, SMEs were relying on a small number of personnel as most employees were following the social distancing guidelines which restricted movement and gathering of people. McLellan and Mzini (2021: 483) concurred that SMEs were not able to maintain staff levels during this period. Productivity became problematic and SMEs found themselves in a difficult position. In addition, the large number of employees who were laid off added to the burden of poverty in various provinces. This eventually led to various incidents of social unrest including the July 2021 looting which took place in parts of KwaZulu-Natal and Gauteng (Vhumbunu 2021: 10).

Due to global supply challenges, consumers were relying on local businesses in some cases (Rashid and Ratten 2021: 459). SMEs used the opportunity to enhance and change their business models to cope the environmental demands. Rashid and Ratten (2021: 467) postulate that SME owners and managers used the nationwide intensive lockdown to enhance their competencies, expertise and adapting their business models to suitable ones. As a result, most

SMEs adopted the use of digital aid through online shops and marketing (Rashid and Ratten 2021: 468; Ramphele and Msosa 2022: 94). Loyal customers became servant for most SMEs. According to Rashid and Ratten (2021: 468), most SMEs had to leverage on customer loyalty to remain operational. The pandemic also gave rise to opportunities including those of collaboration and partnership. COVID-19 was an eye opener, reminding businesses that they needed to be more aware of opportunities that arose in their immediate environments (Rashid and Ratten 2021: 460). A study by McLellan and Mzini (2021: 483) found that 33.3% of SMEs from Gauteng considered focusing on niche products and services. Another study by Sloane (2020: 15) on an institution that promotes entrepreneurship in South Africa found that 46% of SMEs were already thinking about diversifying.

1.9.4 Government interventions in SMEs during COVID-19 and the role of municipalities in business development

On the 27th March 2021, the South African government announced a hard lockdown, creating a negative impact to the economy (Kunene 2020: 3). In addition to health regulations, poor and slow government interventions designed to save businesses exposed challenges for SMEs which researchers had been highlighting for many years (Vukile and Mlungisi 2021: 472; IFC 2018: 9). A study by McLellan and Mzini (2021: 485) found that the government had done little to support small businesses compared to those in other countries. Measures put into in place in South Africa included wage assistance, income/corporate tax easing, social and pension fund assistance amongst others (Department of National Treasury 2020; Organisation for Economic Co-operation and Development (OECD 2020). In terms of direct lending, the South African government announced a R100 million soft loan or credit line facility to rescue small businesses in South Africa. However, reports by May 2021 indicated that only R18 million had been approved by banks for SMEs. The remainder were either rejected because of their credit status or financial structures, while others were caught up in the backlog (Banking Association of South Africa 2021). An indicator of economic development at municipal levels in South Africa would be number of businesses in that municipality (Kruger 2014: 61). Another indicator of local economic development is the change in the value of commercial property. This indicator is a sign of how well the municipality is performing economically. The availability of commercial properties for sale to businesses also indicates how well a municipality is doing. All this is supported by the number of new businesses opening. More new businesses indicate that the municipality will make money from issuing and renewing business licenses.

1.10 Research methodology and design

This section summarises the research design and methodology that was employed to answer the research questions. In addition, the choice of a suitable method to conduct one's research is imperative to accomplish objectives.

1.10.1 Research Design

Sekaran and Bougie (2016: 53) state that there are three different approaches to research design, namely exploratory, descriptive, and explanatory research design. Descriptive research design was used in this study. Descriptive study design, according to Antwi and Hamza (2015: 220), refers to data that describes the characteristics of people, things or circumstances. Descriptive research design, according to Sekaran and Bougie (2016: 71), helps to define the purpose for conducting research. Descriptive study design, according to du Plooy-Cilliers, Davis and Bezuidenhout (2021: 86), assist in providing answers on what, where, when, and how, as well as understanding personal experiences in research. Since descriptive research design can answer research questions about the relationship between COVID-19 pandemic and productivity of SMEs, it was adopted in this study.

1.10.2 Research Approach

There are three research approaches to research: namely quantitative, qualitative, and mixed methods (Sekaran and Bougie 2016: 2). This study used a quantitative research approach. Comparatively, quantitative methods concentrate on statistics, which involve a population-wide generalisation of data. Quantitative research relies on collecting information through experiments, surveys, and content analysis (du Plooy-Cilliers, Davis and Bezuidenhout 2021: 167). This method allowed for the testing and checking of data collected in a way that leaves the discussion less open to argument.

1.10.3 Target Population

Sekaran and Bougie (2016: 85) define a population as the sum of subjects, individuals, events, or items under study. The target population for this study were the owners and/or managers of the SMEs in the Mtubatuba Municipality. The target population was made up of 350 participants who were registered in the Mtubatuba Municipality database. The researcher came up with this figure after a crosscheck with the municipality database.

1.10.4 Sampling and sample size

Sampling is the method of selecting a representative sample from a larger population that the researcher is interested in (Sekaran and Bougie 2016: 85). Probability sampling and non-probability sampling are the two main sampling techniques that one might select from (du Plooy-Cilliers, Davis and Bezuidenhout 2021: 152). The probability sampling method was used in this study. Through probability sampling, simple random sampling technique was employed to randomly select the participants to be included in the study. Using the Yamane method of calculating the sample size, a sample size of 187 was arrived at, from the target population of 350.

1.10.5 Research instrument

A closed-ended questionnaire was the research instrument that was utilised to gather data. Questionnaires are beneficial because they make descriptive research easier and are consistently reliable (Sekaran and Bougie 2016:85). The questionnaire that was distributed to respondents had a cover letter. A Likert scale was employed in the questionnaire, where the respondent was able to select from various levels of agreement or disagreement in response to each question.

1.10.6 Pilot study

A pilot study is described by du Plooy-Cilliers, Davis and Bezuidenhout (2021: 294) as an initial 'mini' research study that is carried out to aid in designing a larger study. Sekaran and Bougie (2016: 136) adds that a pilot study is a small study that is initially conducted to assist with the design of a larger study by experimenting with research methodologies that might be beneficial for development. Before commencing with the full collection of data, quantitative researchers

use a pilot study (Sarantakos 2015: 254; Antwi and Hamza 2015: 218). For the pilot study, ten randomly selected participants from Mtubatuba were recruited to experiment and address errors before the main research kicks off. Information from the pilot study was used to correct errors and refine the research instrument.

1.10.7 Data collection method

There are two main methods of collecting data which are personal method and online method (du Plooy-Cilliers, Davis and Bezuidenhout 2021: 170). A personal method of data collection was used as it allowed any questions that required clarification from the respondents to be answered immediately (Sekaran and Bougie 2016: 147). According to Li, Higgins and Deeks (2019: 130), the selection of a procedure for collecting data in the field is determined by proximity between the investigator and the population.

1.10.8 Validity and Reliability

Reliability, also referred to as consistency, describes how trustworthy a study is and the data collection instrument, and its findings are if they are used by other researchers as outlined by Sekaran and Bougie (2016: 137). Validity is explained as the closeness of a research instrument in measuring the characteristics it is meant to evaluate (Sekaran and Bougie 2016: 137). Validity deals with the issue of cause-and-effect relationship between the variables and the external environment. Validity and reliability work together to confirm the accuracy and dependability of the study. Factor analysis was used to measure the construct validity test, while Cronbach's Alpha was used to measure the internal consistency for reliability. According to du Plooy-Cilliers, Davis and Bezuidenhout (2021: 172), a data collection instrument must measure the variables that it is designed to test, to be considered valid. The researcher ensured that a sufficient and representative sample of items was employed to ensure the validity and reliability of the study.

1.10.9 Data analysis

Data analysis, according to de Vos *et al.* (2015: 333), is a procedure for providing the primary data collected during research, organisation, structure and significance. Sarantakos (2015: 60), defines data analysis as the statistical investigation of primary data of research to determine if

the generated hypotheses have been confirmed. The study used the Statistical Package for Social Sciences Statistics version 29, Excel and Smart partial least squares (PLS) software to analyse the data. To analyse the data, descriptive and inferential statistics were used. In terms of descriptive statistics, data graphs, pie charts, and bar graphs were used to display the information gathered from respondents. On the other hand, inferential statistics such as Relative Severity Index, Spearman`s correlation and PLS structural equation modelling were utilised to determine the relationship between the variables.

1.10.10 Ethical considerations

Ethical consideration is an important aspect of the study which deals with the values and principles that guide researchers in conducting their studies (Sarantakos 2015: 254). The researcher ensured that the participants were fully informed about the details of the study, and they signed the consent form to that effect. In addition, participants were guaranteed anonymity through a research instrument that did not require their personal identification details. Confidentiality was ensured through the safeguarding of the data, ensuring that it was only accessed by authorised personnel only. In addition, the participants were respected throughout the whole research process, as per the letter of information and consent. Data was stored in a password protected Google Drive account and will be destroyed in five years.

1.10.11 Structure of the thesis

This thesis is structured as follows:

Chapter One – Provides the introduction and overview of the study through outlining the background of the study, problem statement, objectives, questions, a brief summary of the literature review and research methodology.

Chapter Two – This chapter presented the literature by analysing and reviewing various secondary data sources. The impact of COVID-19 on SMEs and productivity was discussed. In addition, productivity and its measures were discussed. The chapter also outlined the theoretical framework.

Chapter Three – This chapter outlined the research methodology and design that was used. The chapter discussed research philosophy, design, approach, research instrument, sampling, data collection methods and ethical considerations.

Chapter Four – This chapter presented the analysis and interpretation of the results. Descriptive statistics and inferential statistics were presented and supported with relevant literature in this chapter.

Chapter Five – This chapter presented a summary of the findings in chapter Four. These findings are discussed in relation to those obtained from previous research. Conclusions are then drawn from the literature and empirical analysis of the data collected. In addition, the chapter provides recommendations based on the results of the study and ends with guidelines for future research.

1.11 Conclusion

COVID-19 brought challenges for people and businesses in all spectrums of life and SMEs were not excluded. COVID-19 forced many businesses to close, reduced capacity utilisation, disrupted supply chains, diminished product demands, reduced spending and decreased sales volumes which had a great ramification for SMEs. This chapter provided an overview of the study through discussing the background of the study, problem statement, questions, and objectives. In addition, the chapter also discussed the research methodology that was to be used. The next chapter presents the literature review of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The COVID-19 pandemic disrupted businesses significantly on a global scale and the SMEs have been among the worst affected. SMEs are the strong foundational pillars of economic development for developing nations as they contribute through employment creation, product development, GDP, taxes, and poverty reduction (Rashid and Ratten, 2021: 467). SME are small and this makes them more susceptible to the events that disrupt normal economic performance such as the case of COVID-19 pandemic. The pandemic has had an unparalleled effect on trades, with numerous SMEs facing substantial challenges, including reduced demand for their products and services, supply chain disruptions and monetary restrictions (Kibuuka and Tustin, 2019: 35). Due to these challenges, productivity has been affected negatively. Hence, it is important to examine the effect of Covid-19 on their productivity. This chapter reviews literature on the effects of Covid-19 on the productivity of SMEs. The chapter explored the opportunities exploited and the trials met by SMEs as well as the government interventions to SMEs in Mtubatuba Municipality during COVID-19 crisis. In addition, the chapter provides a comprehensive review of both theoretical and empirical studies that have been conducted which is related to this study and explore the various aspects that have supported the decline in SMEs' productivity during the pandemic.

2.2 The issue of COVID-19

COVID-19 is an extremely infectious respiratory disease triggered by the novel coronavirus SARS-CoV-2. The disease was initially known in Wuhan, China, in December 2019, and has since rapidly spread across the world, leading to a global pandemic (WHO 2020: 1). On 30 January 2020, The World Health Organisation (WHO) labelled COVID-19 a public health emergency of global concern. The disease quickly spread on March 11, 2020. The diseases spread quickly across the nations, infecting more than four million and claiming more than hundred thousand lives as of May 2020. The signs of COVID-19 include fatigue, cough, fever, and respiratory distress all ranging from mild to severe. The disease is mainly spread through droplets from infected people and can also be transmitted through contact with contaminated surfaces (WHO 2020: 1).

COVID-19 caused extreme sickness and death rates throughout the globe and presented a wave of challenges in the international economy and public health that were never seen before (Bai, Wang, and Wang 2022: 9658). Two years after the WHO officially acknowledged COVID-19 as a global pandemic in March 2020, most nations were battling and having extreme difficulties with the spread of the disease. The rise of numerous new SARS-CoV-2 variants increased the vagueness to the development of the disease (Guan, Wu, Wang, Zhou and Tong, 2020: 1199). Available data indicates that by March 2022, COVID-19 cases exceeding 470 million and 6 million died with the disease were reported in 225 countries and territories (Bai and Wang, 2022: 1982). In the first months into the pandemic, most nations across the world were not adequately prepared to handle and contain diseases that spread rapidly and with high number of casualties such as COVID-19. In addition, the situation was intensified by the absence of widespread testing, lack of COVID-19 vaccines, and inaccessibility of effective treatment modes (Bai *et al.* 2022: 9659).

In response to the global health crisis, WHO (2021: 1) developed and implemented essential public health mitigation methods which involved, personal and ecological hygienic practices, segregation, and confinement of the confirmed cases, contact tracing, social distancing, shutting down of non-crucial companies and service industries, and accommodation guidelines. The mitigation measures and guidelines introduced by WHO were effective in reducing the transmission and the spread of the virus in the societies. De Villars *et al.* (2020: 13) state that the first COVID-19 vaccine was approved and rolled out in December 2020 in United States of America. However, the procurement and roll-out of COVID-19 vaccines was mirrored with supply linked encounters, trends of vaccine patriotism, and related unfair vaccine access both inside and across nations are causing increased alarms (Cooper, Rooyen and Wiysonge, 2021: 921). Severe recession and massive uncertainty for the economy throughout the world also resulted from the spread of COVID-19 (Bai *et al.* 2022: 9659). The pandemic has brought unexpected challenges on all fronts of lifespan on a global scale economy, affecting businesses of all sizes across all sectors (Belitski, Guenther, Kritikos and Thurik 2022: 594). The effects of the pandemic on African countries were predicted to be disastrous as it affected the health economic and social sectors drastically (The Lancet Global Health 2020: 612).

2.2.1 COVID-19 in South Africa

The first COVID-19 confirmed case in South Africa was documented on March 5, 2020, involving an individual who had recently visited Italy. Subsequently, the nation experienced a gradual rise in infections (Naidu 2020: 559). The COVID-19 outbreak was unexpected, and the reactions to this crisis were intricate, multidimensional, and shaped by various internal, external, and personal factors (De Villiers, Cerbone and Van Zijl 2020: 4). South Africa's government established the South African Network for Genomics Surveillance of COVID, a collaboration of government labs and public universities, to conduct thorough investigation of the epidemic within the country and initial genomic studies of the initial SARS-CoV-2 cases in KwaZulu-Natal. Compared to states like Mexico, Brazil, and the United States, South Africa had a relatively swift response to the COVID-19 health emergency (Ryan 2020: 24). Following WHO guidelines on curbing virus transmission, the South African government enacted a lockdown 23 days after the first contagion. Many have interpreted the government's lockdown implementation as an exceptional demonstration of effective governance and decisive action, a rarity in South Africa's recent history (Cerbone *et al.* 2020: 4). In addition, the government rolled out the program for community-based screening, testing, and vaccinating across the whole country. According to the data published by WHO (2023: 1), in South Africa from 3 January 2020 to 2 November 2023, there have been 4, 072, 533 confirmed cases of COVID-19 with 102 595 death that were reported to WHO. In addition, 41, 798,812 vaccine doses have been given in South Africa. To curb the transmission of the disease and defend public health, the South African government implemented a series of lockdown phases as shown in Table 2.1 beneath.

Table 2.1: Lockdown stages in South Africa

Date	Level	Description
27 March 2020	5	The implementation of this lockdown came with strict measures which were put in place, including the closing of schools and non-crucial businesses, limitations on movement, and a ban on public gatherings. This stage aimed to slow down the spread of the virus and avert overwhelming the healthcare organisation.
1 May 2020	4	After assessing the situation and the impact of Level 5, the government gradually eased the restrictions in a phased approach allowing some industries and sectors to resume operations under specific conditions. However, several restrictions, such as the

		prohibition of social gatherings, remained in place to minimize the risk of transmission.
1 June 2020	3	Under this stage, further relaxations were introduced, including the reopening of most businesses, limited domestic air travel, and the lifting of some restrictions on movement. However, certain high-risk activities and venues, such as large gatherings and nightclubs, remained prohibited.
17 August 2020	2	Additional easing of restrictions was introduced which permitted inter-provincial travel, and the sale of alcohol was allowed again, though with limitations. The success in controlling the spread of the disease during this phase resulted further relaxations.
20 September 2020	1	Most economic and social activities have resumed, subject to compliance with health protocols such as mask-wearing and physical distancing. International travel has also resumed under specific conditions, with some countries still subject to travel restrictions.

Source: De Villiers, Cerbone and Van Zijl (2020: 4)

2.2.2 Modeling epidemiological scenarios in an economic model

On a global scale, the COVID-19 pandemic had a severe effect on public health and economy and it is essential to use economic models to comprehend the possible effect of different epidemiological scenarios on the economy. The economic models can be used to approximate the cost of various public health interventions such as lockdowns and their impact on the economy (Rose, Walmsley and Wei 2021: 169). The modeling epidemiologic scenarios in an economic model requires the model to include a representation on how the COVID-19 virus spreads across the population, considerations on the impact of government policies such as mandatory lock down and closure of non-essential businesses, and the economic impact of the various facets need to be included in the model (Aguilar *et al.* 2019: 2). The Computable General Equilibrium Model (CGE) and Economic Consequence Analysis (ECA) Framework are the most common models used to depict the scenarios of the pandemics in an economy.

2.2.2.1 Computable General Equilibrium model

There are various models that have been utilized to model the COVID-19 economic effect but the Computable General Equilibrium (CGE) model which analyses the pandemic's effect on economic activity and employment is widely used (Chen, Rose, Prager and Chatterjee, 2017: 207). A CGE is a large-scale economic outline which captures relations amongst businesses and customers in an economy. The CGE model provides the production structure of industries which includes supply chains, labour productivity, produced outs, sales of produced outputs (Dixon and Rimmer 2011: 602). The model permits the individuals to conduct scenarios and to have a comparison on the state of the economy with or without a shock such as the COVID-19 pandemic, war or natural disasters allowing the economy to depict the consequences of the assumed disturbances.

Figure 2.1: Covid-19 epidemiological scenarios in CGE model



Source: Botzen, Deschenes and Sanders (2020: 68)

As displayed in Figure 2.1 above, the direct impact of the epidemic on the economy and business environment is the sickness and death which reduced the supply of labour and increased costs for the businesses. Rose *et al.* (2021: 169) state that the reduced workforce lead to a reduction in manufacture of goods and amenities and some reduction in households' income. Government policies, such as lockdowns, isolation measures, and the closure of non-

crucial industries, have significantly impacted workforce interactions. These measures have reduced contact between employees and customers, thereby decreasing the risk of disease transmission. In addition, the limited social interaction has resulted a decline in customer expenditure outside the home, as fewer individuals are willing to venture out. Furthermore, the labor force has been directly affected by infections among workers, contributing to an overall reduction in economic activity. Both the direct effects and policy induced effects of COVID-19 lead to reduced (Botzen, Deschenes and Sanders 2020: 68).

2.2.2.2 Economic Consequence Analysis (ECA) Framework

The economic consequence analysis approach is one of the disaster economic approaches which has been useful to many real and man-made disasters (Rose 2017: 60). The framework is based on advanced predictable economic effect study that has been functional for eras to more usual disasters, crisis, and circumstances. In its analysis, the framework commences with the description of direct economic effects of the disaster or pandemic and then characteristically applies a modern widely acceptable economic model such as a computable general equilibrium (CGE) model, to provide an estimate total economic impact (Botzen *et al.* 2028: 68).

The key distinction of an economic significance investigation is its involvement of resilience and behaviour response to the disaster (Santos 2020: 249). Resilience in ECA relates to several activities undertaken by manufacturers, customers, and governments to recuperate from the shock, pandemic and silent the adverse effects on economic activity by using remaining resources proficiently. As far as COVID-19 is concerned, resilience was through the adoption of teleworking, remote working, stimulus packages and the quick scientific work on vaccines. In addition, the ECA outline also incorporates behavioural answers, which are characteristically inspired by anxiety, often far yonder the location of the catastrophe, and aggravate the losses. ECA Framework aids in differentiating several diverse groups of aspects influencing the disaster consequences (Rose 2017: 60). In the context of COVID-19, the features influencing behavioural response include lockdowns, social distancing, re-openings and declining consumption and workforce due to avoidance.

2.2.3 The impact of COVID-19 on the SME business environment

The COVID-19 pandemic has had far-reaching socio-economic impacts across the world (Lumbwe, Anyadiegwu and Mbohwa 2018: 1208). In addition to the direct health impacts of the disease, such as illness and mortality, the pandemic has led to widespread economic disruption, social dislocation, and political instability (Rashid and Ratten 2021: 359).

2.2.3.1 Disruption of supply chains

According to Belitski (2022: 595), COVID-19 led to the restriction of mobility and shutting of non-essential businesses in almost every affected nation globally which has negative impact on various business supply chains. This had a negative impact on the SMEs through bottlenecks as result of disruptions in the supply chain (Rashid and Ratten 2021: 469; and Agarwal, Tyagi and Garg 2021: 545). Bloom *et al.* (2020: 2) concur that the pandemic had a serious impact on the supply chains which affected the trade flow. In addition, the unforeseen impact of the pandemic was the decline of product demand, and shutdown of national borders resulting in the disruption of global trade. The interruption has led resulted in declining business activities, loss of jobs, and a decline in economic growth (Zhou and Gumbo 2021: 210). As a result, SMEs were enforced to reschedule their production timelines which in turn significantly affected economic growth goals on all facets (Bloom et al. 2020: 11). In addition, the increase of low-priced imported products from countries like China had a huge negative impact on local SMEs supply chain (Berardi *et al.* 2020: 119).

2.2.3.2 Impact on business processes

The disruptions of global supply chains consumers were relying on local businesses in some cases (Rashid and Ratten 2021: 459). Businesses had to also focus on enhancing and altering their business models. Rashid and Ratten (2021: 467) outline that those SME owners and managers sharpened and enhanced their competencies and knowledge during the hard lockdowns to adopt their businesses to the changing environment. In addition, digitalisation in businesses was improved through online marketing and selling during the pandemic as well as valuing of loyal customers as a survival strategy (Ramphela and Msosa 2022: 94). According to Rashid and Ratten (2021:4 68), SMEs had to device ways of encouraging loyalty and

negotiating new terms of their contracts in adjustments to the pandemic. In reaction to the impact of the pandemic, the need for collaboration and partnering resources amongst SMEs was determined as a sustainable way to deal with the pandemic. In addition, the pandemic also opened the innovativeness of the SMEs to determine the opportunities and avenues that came due to the effects of the pandemic (Rashid and Ratten 2021: 460). In support, a study conducted by McLellan and Mzini (2021:483), shows that during the pandemic 33% of the SMEs operating in Gauteng developed new avenues through providing products and services in the niche markets. Moreso, a study by Sloane (2020: 15) on an institution that promotes entrepreneurship in South Africa found that 46% of SMEs diversified their business offering during the pandemic.

Rashid and Ratten (2021: 467) state that businesses faced financial challenges which an effect on the payroll resulting in failure to pay wages on time, buying protective clothing and disinfecting the workplace during the pandemic. Mukwarami, Mukwarami and Tengeh (2020: 495) state that human resources management was a challenge dealing with short staff, managing remote workers, turnover and death. Therefore, studies found that SMEs were relying on limited personnel to conduct their daily business (McLellan and Mzini 2021: 483). This had an impact on the productivity of the SMEs leading to retrenchment, frustration of employees and resulting in social unrest in communities as indicated the July 2021 looting which took place in parts of KwaZulu-Natal and Gauteng (Vhumbunu 2021: 10).

2.2.3.3 Reduced economic activity

COVID-19 had an unprecedented toll on the global economy which led some national economies into recession. The pandemic provided a fair share of negative effects on all facets of the economy with SMEs being heavily overwhelmed due to their size, and limited capacity to deal with economic disasters of such magnitude (Rashid and Ratten 2021: 359). The demand for goods and services dwindles in the pandemic due to reduced disposable income. Businesses had their supply chains cut short, contracts being cancelled, and negative cashflows. Lumbwe, Anyadiegwu and Mbohwa (2018: 1208) acknowledge that economic impact of the pandemic was more severe in third world developing nations. The economic impact in developing nations was exacerbated by the financial challenges, in adequate

supportive institutions and poor performing economies as stated by Mthethwa (2021: 104). COVID-19 induced economic decline resulted in increases retrenchments across industries, poverty and widens social inequality gap. The pandemic made visible the already existing vulnerabilities and disparities in societies and increased them. The economic effects of COVID-19 have been excessively felt by the most susceptible populace in the community, such as SMEs, low-income earners, and women (Rashid and Ratten 2021: 359).

2.3 The concept of productivity

Linna (2019: 302) states that productivity is a standalone concept which is overlapped with performance in most cases leading to confusion. Productivity is an element in which performance may be assessed and defined. The concept of productivity is not new in the field of business management as it has become multidimensional in nature and being utilised in all fronts of operations such as the workforce, teams, technology, and the organisation at large (Ehsan and Ali 2019: 32). Productivity is a key concept in the field of business and economics, playing a crucial role in defining the success and growth of organizations, particularly small and medium-sized enterprises (SMEs) (Dixit, Pandey, Mandal and Bansal 2017: 741).

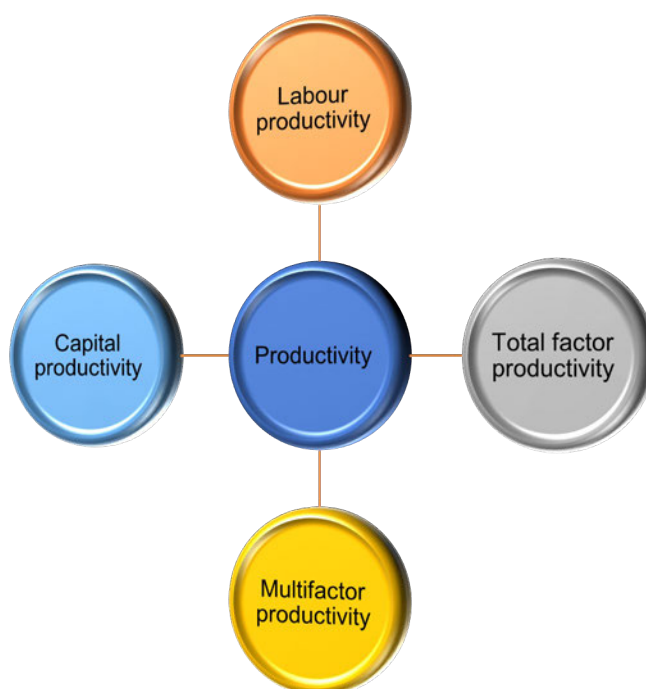
Therefore, productivity is considered as the total output such as goods and services that can be produced with given inputs which can be labour, capital and resources; and it's a cornerstone of economic growth, social prosperity, and betterment of living standards (Owalla, Gherhes and Vorley 2022: 1290). Productivity can be described as the procedure of changing the inputs such as human resources, money, time into products and services known as outputs. In another words, productivity can be defined as a ratio between the output volume and the volume of inputs (Mayer *et al.* 2017: 137). Productivity is regarded as the measure of efficiency in converting inputs into outputs which reflects how effectively resources are utilised to create valuable goods or services. Productivity can be defined in three categories which are techno-economic approach, a combination approach, and an inclusive approach (Alaghbari, Al-Sakkaf and Sultan 2019: 79). In relation to the techno-economic approach, productivity is an efficiency measure, a combination approach considers productivity as an integration of efficiency and efficiency, and an inclusive approach considers productivity as a broader approach that includes everything that makes an organisation operational (Karhunen and Huovari 2015: 805).

Therefore, in the context of this study an inclusive approach was used to define productivity. Productivity is a significant concept in the context of SMEs due to their valuable influence in economic development through employment creation, tax contributions, innovation, provision of products and services (Linna 2019: 301).

2.3.1 Dimensions and measures of productivity

Productivity measures how efficiently production inputs, such as labour and capital, are being used by employees, organisation, or an economy to create a desired level of output (Ehsan and Ali 2019: 32). Productivity can be measured in various ways, including labor productivity, capital productivity, total factor productivity (TFP), and multifactor productivity (MFP). Figure 2.1 below shows the dimensions and measures of productivity.

Figure 2.2: Dimensions and measures of productivity



Source: Alaghbari, Al-Sakkaf and Sultan (2019:80)

2.3.1.1 Labour productivity

Labour productivity measures the output generated per unit of labour input (Alaghbari, Al-Sakkaf and Sultan 2019: 80). Labour productivity is regarded and assessed as the volume of output per hour worked (Figure 2.1). Labour productivity can be calculated through dividing the total output by the number of hours worked or number of employees. According to Tam, Toan, Hai and Quy (2021: 1), labour productivity is very crucial in organisations as it determine and assess how efficiently their workforce is using time and resources. In addition, labour productivity allows the organisations to monitor and compare the value of output per employee over time leading to identification of ways of improving productivity, set performance standards and strategies to enhance efficiency (Tam *et al.* 2021: 1). However, Naoum (2016: 402) states that labour productivity does not consider the influence of other factors of production which makes it a partial measure. Therefore, the interpretation of labour productivity needs to be done with caution as its changes might reflect other factors that are outside of workers' influence such improved economic growth and improved capital input.

In addition, other measures of labour productivity used at national and international level include the value of output (GDP) per employee or per capita. GDP per capita represents the total goods and services produced within the country divided by the population of that nation (Hai and Van-Tam 2019: 353). The GDP per employee per capita provides an indication of the average economic output per person in the country over a given period. High GDP per employee shows that the country's workforce is generating more economic value which entails high labour productivity. However, GDP per employee or capita does not provide a comprehensive image of labour productivity in the country as other factors such as resources distribution, employment quality, and income distribution might influence labour productivity (Tam *et al.* 2021: 1).

2.3.1.2 Capital productivity

Capital productivity measures output per unit of capital invested. Capital productivity measurement assists organisations to determine the efficiency of investments in capital goods such as machinery, equipment, and technological investments (Hwang, Zhu and Ming 2017: 1). The focus of capital productivity is to evaluate the efficiency and effectiveness of an

organisation`s capital investments. Therefore, this measurement enables organisations to make comparisons on the output being generated against the capital invested to make more informed decisions about capital prioritisation, allocation, and the areas that improvement. Alaghbari *et al.* (2019: 80) posit that the goal of determining the capital productivity in an organisation is to ensure that the capital invested is generating a good return and contributes to its overall growth and profitability.

2.3.1.3 Total Factor Productivity (TFP)

Total factor productivity represents the overall efficiency of all factors of production (Momade and Hainin 2019: 3945). Total factor productivity is regarded as the true measure of productivity as it incorporates all the aspects of productivity in the equation. Berk (2017: 1) states that total factor productivity measure is very broader, and it considers labour, capital and other factors that influence productivity. Total factor productivity measures how efficiently all the inputs are combined to produce an output. Van Tam, Huong and Ngoc (2018: 127). Total factor productivity indicates the technological advancement, innovation, and the overall production process efficiency. The positive changes in total factor productivity measurement indicates improvement in productivity that are not solely based on labour or capital inputs.

2.3.1.4 Multifactor productivity

Linna (2019: 302) states that multifactor productivity considers the combined contribution of labour, capital, and other inputs to output. Owalla, Gherhes and Vorley (2022: 1290) state that multifactor productivity provides a more comprehensive view of productivity through considering the integrated effect of various factors which enables organisations to determine the inputs that are contributing to overall productivity, allowing targeted interventions and improvements. Multifactor productivity measure considers materials, labour, capital, and energy as well as other resources. These measures are used to evaluate how an organisation uses its resources to produce revenue and measure its performance over time (Karhunen and Huovari, 2015: 805).

2.3.2 Challenges that hinder productivity

Productivity is very crucial for economic growth and organisational competitiveness, but many factors can hinder productivity (Wibawa, Hamidah and Wibowo 2022: 355). There are several challenges within and outside the organisation that can affect the productivity of business which include technology and innovation, human capital management, political stability, economic growth, and other external variables such as pandemics like COVID-19 (Van-Tam *et al.* 2018: 127).

2.3.2.1 Limited access to technology and innovation

Azman, Hon, Skitmore, Lee and Xia (2019: 72) state that technology can enhance productivity by streamlining processes, reducing waste, and improving the quality of output. However, businesses may face significant challenges in accessing technology, particularly in developing countries, where there are limited resources to invest in research and development. Hasan, Baroudi, Elmualim and Rameezdeen (2018: 916) emphasise that the limited access to technology may result in the continuous use of outdated processes, equipment which led to reduced efficiency and competitiveness, which may impact productivity in the long run. Studies conducted on productivity confirm that the usage of technologies have a solid effect in enhancing productivity levels in various businesses in different sectors (Azman *et al.* 2019: 73). Hasan *et al.* (2018: 67) postulate that the fourth industrial revolution which has intensified the use of artificial intelligent, digitalisation, automation, cloud computing and big data analytics has facilitated the notion of regarding technology as a basic factor affecting productivity in business.

2.3.2.2 Lack of skilled and educated personnel

Human capital management is a crucial concept which can have catastrophic impact at national and business level if not managed properly. The productivity of any depending or organisation largely depends on the skills and knowledge of the human resources personnel (Ohueri *et al.* 2018: 71). Inadequate investment in education and training programs can lead to a lack of skilled labour, a mismatch between skills and job requirements, and low productivity. Therefore, labour skills and human capital development are major challenge affecting productivity of many businesses, in particular SMEs. Numerous studies have found that employees in business need

to participate in regular skills, knowledge, and experience enhancement development programs (Alaghbari *et al.* 2019: 79; Enshassi *et al.* 2007: 245; Mahamid 2013: 194; Ohueri *et al.* 2018: 71). Therefore, inadequate training and development have a negative effect on the productivity of any entity (Mahamid 2013: 194).

2.3.2.3 Leadership and management

Giardili, Ramdas and Williams (2023: 1500) state that leadership and management are regarded as significant determining factors of organizational outcomes, including productivity, profits, stock returns and its survival. Brimhall (2019: 33) asserts that the lack of effective management and leadership can hinder productivity. Leadership without vision and strategic decision-making skills can impact on the productivity of a business. Etekpe (2022: 132) posits that leaders need to stir their business towards growth and productivity through enhancing high level of productivity. The leaders in organizations are responsible for harnessing resources and coordination of all the departments to ensure that desired level of productivity. Ineffective management can lead to poor work conditions, low employee motivation, and inadequate supervision, resulting in low productivity levels (Giardili *et al.* 2023: 1500).

2.3.2.4 Lack of capital and equipment

The lack of capital and equipment have a significant impact on productivity especially in developing countries such as South Africa. Lack of capital can affect the productivity of a business in several ways. Businesses without access to capital can find it very challenging to acquire equipment and means that improve productivity such as computers, resources and other tools required to enhance productivity (Van Tam *et al.* 2018: 127). In addition, businesses without access to capital and equipment find it difficult to expand and invest in technologies, tap into potential markets, and expand. In the same context, limited capital resources can limit the business capacity invest in research and development thereby hampering the ability to innovate, develop new products and improve the existing ones (Azman *et al.* 2019: 72). In addition, businesses without capital can fail to attract and retain skilled employees as they might fail to pay competitive salaries, benefits and offer growth as well as promotional opportunities. The shortage of equipment leads to businesses failing to meet demand and scaling operations. Therefore, businesses can be restricted to expanding operations, productivity and meeting

increasing customer demands. Furthermore, outdated, lack of modern equipment and machinery can slow down the production processes, leading to inefficiency and lower productivity (Van Tam *et al.*, 2018: 127).

2.3.2.5 External challenges that affect productivity

In addition to these challenges, political instability, corruption, regulatory barriers and uncertainties such as the COVID-19 pandemic can also hinder productivity. These obstacles lead to uncertainties in markets, create unnecessary bureaucratic red tape, increase corruption, and discourage foreign investment, hindering productivity (Van Tam *et al.* 2018: 127). The economic conditions such as inflation rates, interest rates and unemployment rate can affect productivity of the employees. A strong growing and well performing economy creates a business environment that is very conducive for higher level of productivity as consumer demand for products is high (Hiyassat *et al.* 2016: 138). Government can make statutory policies and regulations in forms of minimum wages, taxation and safety regulations that affects the productivity of the employees (Jarkas *et al.* 2015: 94). In addition, the demographic changes of the population such as having either a young or an aging population have a huge impact on the productivity level of an organisation or country (Van Tam *et al.* 2018: 129).

2.4 Small and medium-sized enterprises (SMEs)

The conceptualisation of SMEs differs according to the context, region and country. Amah *et al.* (2020: 9) concur that there is no worldwide agreed definition of SMEs as it varies from nation to nation, and it includes numerous limitations contingent on the purpose of requirement. The definition of SMEs differs according to international institutions, international law, and industry (Divikara 2018: 19). Generally, SMEs are defined based on their size, which can be measured by a variety of indicators, including number of employees, turnover, and assets. However, there is no universal agreement on what constitutes a small or medium-sized enterprise, with different countries and organizations using different criteria to define SMEs (Amah *et al.* 2020: 9). Defining SMEs is a very challenging task due to the lack of a universally accepted definition and consistency in the standards used to measure size. SMEs can be defined in both qualitative and quantitative terms.

Table 2.2: Qualitative definition of SMEs

Category	SMEs
Management	The owners of the organization are the managers who make strategic decisions of the business venture.
Personnel	The workforce is made up of individuals with all rounds up knowledge and fewer university graduates.
Organization	Highly personalized contacts
Sales	Comparative positions not defined or certain.
Buyer`s relationship	Uncertain
Production	Labour intensive
Research and development	Following the intuitive market approach
Finance	Role of family funds and self-financing

Source: Berisha and Shiroka (2015: 18)

As indicated in Figure 2.2 above, Berisha and Shiroka (2015: 18) state that in qualitative definition of SMEs is more universal and similar array of SMEs features across sectors and countries is distinguished. In the same context, Divikara (2018: 19) states that SMEs are defined based on qualitative characteristics of the business such as ownership, management, how it is financed and sales. The quantitative definition of SMEs is the most accepted and widely used which is based on the size of the workforce, revenue, capital base, and degree of formalization (Berisha and Shiroka 2015: 18). Table 2.3 below indicates how SMEs are quantitatively defined in Japan, Europe, United States of America and by the United Nations Industry development organization (UNIDO).

Table 2.3: Quantitative definition of SMEs

Institution	Criterion	Medium	Small
Japan ministry of economics,	Capital investments. Number of employees	Less than 300Yen Less than 300	

trade, and industry			
European commission	Number of employees	Less than 250	Less than 50
	Annual turnover	Less than Euro 50million	Less Euro10 million
United States of America	Number of employees	100-499	10-99
United Nations Industry development organization (UNIDO)	Number of employees	Less than 300	
	Total assets/ turnover	Between \$15-35 million	

Source: Divikara (2018:20)

The quantitative definition of SMEs is most used in research work as it has a direct approach, but there are many parameters involved and no universally agreed commonality (Bushe 2019: 210). However, the challenge in defining SMEs using the quantitative approach is the lack of consistency in the criteria used to measure size as the quantity of the workforce is a common criterion used to define SMEs, but the number of employees required to be considered a small or medium-sized enterprise can vary significantly between countries and industries (Divikara 2018: 120). As indicated in Table 2.3 above, Japan ministry of economics, trade, and industry defines SMEs as organisations with a workforce of less than 300 employees, European commission consider SMEs as organisations with less than 250 employees, in United States of America SMEs have less than 499 employees and United Nations considers SMEs as entities with less 300 employees. Therefore, the criteria and parameters used to define SMEs can vary significantly between regions and industries, making it difficult to compare SMEs across different contexts (Bushe 2019: 210).

2.4.1 SMEs in the context of South Africa

Definitions of SMEs in South Africa are based on a set of features that distinguish them from larger organisations (StatsSA 2022: 4). These characteristics include the size of the workforce, turnover, assets and ownership structure. The National Small Business Act of 1996 defines SMEs as firms that employ less than 200 people and have an annual turnover of less than R50 million (South African Government 1996). In addition, the Small Business Act of 1996 describes SMEs as any separate and distinct business entity, including cooperative enterprises and non-governmental organisation managed by one owner or more which including its branches or

subsidiaries, if any, is predominantly carried on in any sector or sub sector of the economy. However, other definitions have been proposed by various scholars and other institutions. The Small Enterprise Development Agency (SEDA) defines SMEs based on the number of employees, as follows:

- Micro-enterprises: 0-5 employees
- Very small enterprises: 6-20 employees
- Small enterprises: 21-50 employees
- Medium enterprises: 51-200 employees (SEDA, n.d.)

Another definition was proposed by the National Treasury in 2018, which defines SMEs based on the turnover, as follows:

- Micro-enterprises: less than R1 million turnover per year
- Small enterprises: between R1 million and R10 million turnover per year
- Medium enterprises: between R10 million and R50 million turnover per year (National Treasury 2018)

The number of SMEs in South Africa ranges between 2.4 and 3.5 million and an estimate of ninety one percent (91%) of formal business entities are SMEs (Bushe 2019:210). These entities contribute between fifty two percent (52%) and fifty-seven percent (57%) to gross domestic product (GDP) and provide employment between 50 and 60 percent of the country's work force across all sectors and are accountable for a quarter of job growth in the private sector (Berisha and Shiroka 2015: 18). According to OECD (2022: 2), out of the total number of SMEs in South Africa 54% are microenterprises and 15% are in the rural areas. In terms of running the business, two out of three SMEs owners run their enterprise and do not employ employees. In addition, 32% of SMEs provide between one to ten jobs (OECD 2022: 1). The South African Department of Small Business (2019: 1) classify SMEs according to industries, number of full-time employees, and annual turnover as shown in Table 2.4 below

Table 2.4: Classification of SMEs in South Africa

Industry	Category	Annual turnover in millions (South African rand)	Number of employees (maximum limit)
Agriculture	Micro	7	0-10
	Small	17	11-50
	Medium	35	51-250
Construction	Micro	10	0-10
	Small	75	11-50
	Medium	170	51-250
Catering and Accommodation	Micro	5	0-10
	Small	15	11-50
	Medium	40	51-250
Manufacturing	Micro	10	0-10
	Small	50	11-50
	Medium	170	51-250
Wholesale	Micro	20	0-10
	Small	80	11-50
	Medium	220	51-250
Retail and Motor trade and repair services	Micro	7,5	0-10
	Small	25	11-50
	Medium	80	51-250
Electricity, Gas and Water	Micro	10	0-10
	Small	60	11-50
	Medium	180	51-250
Mining and quarry	Micro	15	0-10
	Small	50	11-50
	Medium	210	51-250
Community, social and personal services	Micro	5	0-10
	Small	22	11-50
	Medium	70	51-200
Finance and business services	Micro	7,5	0-10
	Small	35	11-50
	Medium	85	51-200
Transport, storage, and communications	Micro	7,5	0-10
	Small	45	11-50
	Medium	140	51-200

Source: Department of Small, Business Development (2019:1)

2.4.2 Overview of SMEs in Mtubatuba District Municipal

Mtubatuba Municipality falls under one of the five Category B Municipalities within the Umkhanyakude District. Mtubatuba is a town which is located 55km north of Richards Bay and 200km north of Durban along the N2 route in KwaZulu-Natal district in South Africa. The town was developed from the railway side into a robust sub-regional commercial, service, transport, and administration center for the northeastern Zululand. According to Stats SA (2019:1), Mtubatuba municipality stretches 2122 square km of the district's geographical area. In addition, the population of Mtubatuba has an approximate population of 215 869 people and 35421 households (Municipalities of SA 2024:1). Umkhanyakude District, Mtubatuba town and ST Lucia are the most urbanised towns in the district, and it have 19 wards of which 15 falls under the Mpukunyoni Traditional Council area (IDP 2015: 32).

The anchor of Mtubatuba municipality's economy is controlled by community services (26%), followed by the agriculture (15%) and wholesale and retail (13%) sectors (Mtubatuba 2024:1). Undetermined sector contributors' account for approximately (14%) of the municipal economy (Mtubatuba Municipality IDP, 2020:1). In Mtubatuba, an estimated 32% of the population is employed and 10% is not employed. Most SMEs in Mtubatuba are found along major transport routes (N2 and R618), in the central business district, intersections and taxi ranks as well as in townships (Gumede 2019: 50). Khumalo (2015: 103) state that SMEs inform of informal trading in Mtubatuba contribute enormously to economic development, employment creation and poverty reduction in the municipality.

2.4.3 Importance of SMES on achieving SDGs, AU and SADC goals

SMEs across the world are crucial and their contribution to economic growth, employment creation and poverty reduction is highly necessary. As recognised by the UNDESA (2022: 5), SMEs assist through employment creation for the marginalised communities which automatically help to reduce hunger, poverty, providing better education and health for the

employees which are some of the Sustainable Development Goals (SDGs). Jurkowska (2021: 1) concurs that the crucial contribution of SMEs to the broader social economic spectrum goals such as employment creation makes them a key priority area for achieving SDGs. SDGs are a holistic and future oriented plan seeking action from all nations to improve the lives of their people through ending poverty, reducing inequality, and dealing with environmental protection and climate change. Therefore, Jurkowska (2021: 1) elucidates that employment creation by SMEs have a direct positive impact on the poor, vulnerable and marginalised communities thereby increasing income, reducing poverty, enabling them to invest in education and health. In the same context, UNDESA (2022: 5) states that SMEs have a strong positive impact on SDGs globally in particular SDG1 (poverty eradication), SDG2 (zero hunger), SDG3 (good health and wellbeing), SDG8 (promote inclusion, sustainable growth, employment, and decent work), and improve innovation and industrialization).

On the African continent, SMEs are regarded as an engine of economic growth and development with an approximate account for over 80% of the total employment and 30% of exports (African Union 2023: 1). In addition, the African Union (2023: 1) recognises that SMEs plays a crucial role in steering the socio-economic development and growth in the African continent. SMEs are important as they enhance innovation, new ideas, products and tapping into new markets within the continent and across the globe. Having recognised the role and importance of SMEs in the African continent, the African Union Development Agency-NEPAD launched a campaign in 2019 to create 100 000 SMEs by 2021 to create more jobs and reducing poverty. SMEs plays a crucial role in achieving the socio-economic goals of the Southern African Development Community (SADC). SMEs account for most businesses in region and are responsibility for a significant portion of employment and economic activity. SMEs make up an overwhelming share of the formal business in the SADC region and are responsible for most business activities in the formal private sector. SMEs enable the SADC region to grow economically, create employment, significantly contribute to GDP of the region, and assist in poverty reduction (Abisuga-Oyekunle et al. 2019: 1; Matambalya 2001: 17).

2.4.3.1 The importance of SMEs in South Africa

SMEs are recognised as one of the most important drivers of economic growth and development, playing a crucial role in employment creation, innovation, and poverty reduction (Akinyemi and Adejumo 2017: 624). In South Africa, Fatoki (2018: 2) highlights that SMEs are documented as the cornerstone of economic development as they contribute to about half of the gross domestic product (GDP) of this country each year. In the same vein, Parsons (2018: 40) acknowledges that SMEs created 60% jobs and adds about 40% to South Africa's GDP in 2017. SMEs are significant factor in enhancing economic growth. Despite their relatively small size, SMEs have been recognized as an essential component of the national economy highlighting their contribution to job creation, innovation, and economic development (Bieńkowska and Vanhaverbeke 2018: 1241). A powerful and positive economy is highly powered and influenced by the generation, success, and sustainability of SMEs and in South Africa, all stakeholders concur on the significance of promoting the establishment of SMEs, as well as facilitating their growth (Bushe 2019: 210).

Furthermore, Akinyemi and Adejumo (2017: 625) posit that SMEs are crucial in community integration and empowerment in South Africa considering the apartheid history of the nation. In support, Herrington et al. (2016: 412) explain that SMEs are in societies are crucial in forging relationships with surrounding communities, empowering individuals, and reducing poverty in communities. SMEs are also recognised for their contribution to innovation, with many SMEs playing a crucial role in the development and commercialisation of new products and services. SMEs are often more innovative than larger companies, due in part to their flexibility and agility, allowing them to respond quickly to market opportunities and consumer demands (Lewis, Browne and Houdet 2021: 988). SMEs are also recognised for their contribution to innovation, with many SMEs playing a crucial role in the development and commercialisation of new products and services. SMEs are often more innovative than larger companies, due in part to their flexibility and agility, allowing them to respond quickly to market opportunities and consumer demands (Lewis, Browne and Houdet 2021: 988). Despite the undoubted significant of SMEs to South Africa as a country, they linger to experience huge failure rate and operational glitches which affect their productivity, performance, and success (Augustine and Asiedu 2017: 8; Herrington et al. 2016: 1).

2.4.4 The opportunities that COVID-19 created for SMEs

Despite the challenges of the pandemic and amid the disruption, some opportunities have emerged that SMEs can leverage to survive and thrive. COVID-19 influenced most SMEs to rethink their business models and adapt to new realities (Agarwal, Tyagi and Garg 2021: 538). One of the opportunities that the pandemic has created for SMEs is the chance to adopt innovative business models that can help them survive and thrive in the COVID-19 free world (Apedo-Amah *et al.* 2022: 1). In particular, the pandemic has emphasised the need for SMEs to embrace e-commerce and other digital channels to reach customers. In a study conducted by Zheng *et al.* (2021: 58), the researchers examined the impact of COVID-19 on SMEs in China and found that the pandemic had spurred the adoption of innovative business models. The study found that SMEs that had already adopted e-commerce and digital technologies were better positioned to weather the pandemic's impact. The study concluded that SMEs that invest in digital technologies and e-commerce are more likely to survive and thrive in the post-pandemic world. Similarly, a study conducted by OECD (2022: 4) found that the pandemic has created opportunities for SMEs to embrace new business models, such as online marketplaces, teleworking, and digital collaboration. The study suggested that SMEs that are willing to embrace new business models and digital technologies are more likely to succeed in the post-pandemic world.

The COVID-19 pandemic has also created opportunities for SMEs to tap into new markets (Bolosha, Sinyolo and Ramoroka 2022: 5). The pandemic has disrupted global supply chains and created new demand patterns, which SMEs can leverage to diversify their customer base and expand into new markets. In a study conducted by Ayyagari *et al.* (2021: 151), the researchers examined the impact of COVID-19 on SMEs in India and found that the pandemic has created opportunities for SMEs to tap into new markets. The study found that SMEs that were able to adapt their business models and products to meet the new demand patterns were more likely to succeed in the post-pandemic world. The study concluded that SMEs that are willing to explore new markets and adapt to changing demand patterns are more likely to succeed in the post-pandemic world.

The Covid-19 pandemic presented new opportunities for SMEs in South Africa to adapt their business models and innovate to remain competitive (Singh 2018: 36). COVID-19 accelerated the adoption of digital technologies in various industries, providing SMEs with an opportunity to

shift their operations online. SMEs in the retail, hospitality, and education sectors, among others, embraced e-commerce, online payment systems, and digital marketing to reach customers and keep their businesses running. A study by the Small Business Institute (SBI 2022: 1) found that 49% of SMEs in South Africa have increased their online presence since the onset of Covid-19 (SBI 2020). Moreover, the pandemic created new demand for specific products and services such as SMEs in the healthcare industry has experienced increased demand for personal protective equipment (PPE), sanitizers, and other medical supplies. The food and beverage industry also saw a rise in demand for home delivery services and food delivery platforms. A study by the University of Johannesburg found that 68% of SMEs in the healthcare sector reported an increase in business activity during the pandemic (Van Biljon and Nkosi 2021: 1).

Furthermore, the informal sector in South Africa was severely affected by COVID-19. However, some SMEs in the informal sector have identified new opportunities to meet the needs of customers during the pandemic (Odeku 2021: 1). For instance, some spaza shops have diversified their product offerings to include essential items such as PPE and household cleaning products (Naidoo, 2020: 34). Moreover, the South African government and various organizations have provided funding opportunities for SMEs affected by the pandemic. For instance, the Department of Small Business Development launched the Debt Relief Fund and the Business Growth Resilience Facility to provide financial assistance to SMEs affected by the pandemic (DSBD 2020). The Industrial Development Corporation (IDC) has also provided funding to support SMEs in specific sectors such as tourism and agriculture (IDC 2021).

2.4.5 COVID-19 and the productivity of SMES

The Covid-19 pandemic greatly affected SMEs productivity in South Africa. According to Bloom *et al.* (2020: 11), due to the pandemic SMEs were unable to fund their operations and purchase capital goods. As SMEs heavily rely on sales to measure their productivity, the productivity was negatively hit hard by the COVID-19 pandemic in many ways. In addition, government lockdowns and standard operation procedures which were meant to contain the virus affected labour and other factors of production (Makau 2021: 3). They also added a cost burden on

smaller businesses which were then forced to consider sanitation of environments and people. This led to cutting back of production budgets (Rashid and Ratten 2021: 467).

It is reported that most SMEs defaulted on servicing their debts and were either sued or forced to cease operations (Belitski 2022: 595). The supply chains of the SMEs were mired mobility challenges, unavailability, and high cost of raw materials (Rashid and Ratten 2021: 469; Agarwal, Tyagi and Garg 2021: 545). The other impact of Covid-19 on SMEs was the forced postponing of production targets which in turn significantly affected production at both local and national level (Bloom *et al.* 2020: 11). Competition from low priced imported goods had a massive impact on the productivity, competitiveness, and sustainability of SMEs (Berardi *et al.* 2020:119).

To succeed in small businesses, human capital should play an integral role. Human capital adds value and helps drive productivity for small businesses and can act as a source of competitive advantage (Yasin, Ridjal and Jufri 2019: 10; Rashid and Ratten 2021: 470). In addition, employees help SMEs to become competitive and innovative (Chiloane-Tsoka and Rankhumise 2019: 160). This they do through their skills, creativity, sharing their knowledge and innovativeness (Yasin, Ridjal and Jufri 2019: 10). In addition, Rashid and Ratten (2021: 467) acknowledges that SMEs struggled to stay afloat during the pandemic.

Managing employees in SMEs has always been a challenge because of high labour turnover (Mukwarami, Mukwarami and Tengeh, 2020: 495). During the pandemic studies found that SMEs were relying on fewer employees to carry the day as most employees were either dissatisfied with the working conditions or were not happy with the look of things. SMEs also could not keep up with certain staff levels (McLellan and Mzini 2021: 483). With this element of productivity gone, most SMEs found themselves sitting between a rock and a hard place.

For small businesses to succeed, human capital should play an integral role. Human capital adds value and helps to drive productivity for small businesses, acting as a source of competitive advantage (Yasin, Ridjal and Jufri 2019:10; Rashid and Ratten 2021: 470). In addition, employees help SMEs to become competitive and innovative (Chiloane-Tsoka and Rankhumise 2019: 160). This they do through their skills, creativity, sharing their knowledge and innovativeness (Yasin, Ridjal and Jufri 2019: 10). In the midst of the pandemic, businesses faced challenges in terms of paying employees even when not working due to COVID-19

restrictions and also maintaining a safe working environment (Rashid and Ratten 2021: 467). In addition, businesses experienced high employee turnover (Mukwarami, Mukwarami and Tengeh 2020: 495). In the midst of the COVID-19 crisis, SMEs were relying on a small number of personnel as most employees were following the social distancing guidelines which restricted movement and gathering of people. McLellan and Mzini (2021: 483) concurred that SMEs were not able to maintain staff levels during this period. Productivity became problematic and SMEs found themselves in a difficult position. In addition, the large number of employees who were laid off added to the burden of poverty in various provinces. This eventually led to various incidents of social unrest including the July 2021 looting which took place in parts of KwaZulu-Natal and Gauteng (Vhumbunu 2021: 10).

2.4.6 Government interventions for SMEs during COVID-19 and the role of municipalities in business development

The South African government on 27 March 2021 announced a hard lockdown, and the impact on the economy was negative (Kunene 2020: 3). In addition to healthy regulations, poor and slow government interventions to save businesses exposed challenges of SMEs which researchers have from time immemorial have been pointing out (Vukile and Mlungisi 2021:472; IFC 2018: 9). A study by McLellan and Mzini (2021: 485) found that government did little to support small businesses compared to other countries. Measure put in place included wage assistance, income/corporate tax easing, social and pension fund assistance among others (Department of National Treasury 2020; Organisation for Economic Co-operation and Development 2020).

In terms of direct lending, the South African government announced a R100 million soft loan or credit line facility to rescue small businesses in South Africa, reports by May 2021 indicated that only R18 million had been approved by banks to give to SMEs the rest was suffering from backlog and rejection because of their credit status or financial structures (Banking Association of South Africa 2021). An indicator of economic development at municipal level in South Africa is the number of businesses a municipality has (Kruger 2014: 61). The other indicator of local economic development is the change in the value of commercial property. This indicator shows how the municipality is performing economically. Availability of commercial properties for sale

to businesses also indicates how a municipality is doing. All this is supported by the number of new businesses opening. More businesses indicate that the municipality will make money from issuing and renewing business licenses.

2.5 Theoretical framework for the study

The measures taken to contain the spread of the virus, such as lockdowns and travel restrictions, have led to a decline in economic activity hence affects SMEs' productivity. This research aims to examine the effects of Covid-19 on the productivity of SMEs. To achieve this goal, a theoretical framework is needed to guide the study. Therefore, this study will be underpinned by the Resource Based Theory, Institutional theory, and Resilience theory.

2.5.1 Resource Based Theory

The Resource Based Theory (RBT) was a result of the work of Barney's article on firm resources and sustained competitive advantage in 1991 and the theory is based on determining the organisation's strategic resources that can be exploited to attain a competitive edge (Collins 2021: 331). The RBT suggests that an organisation's resources and capabilities are critical determinants of its performance. In the same context, Zica, Goncalves, Martins and Goncalves (2016: 434) posit that an organisation's performance and productivity can be enhanced by the manner in how its remarkable resources are managed. In addition, the theory proposed that organisations are different, and they possess different resources which entails that organisations can use different strategies because of diverse resource combinations (Rashid and Ratten 2021: 457). Organisations need to distinguish strategic resources which are rare, valuable, inimitable, and no substitutable from other general resources (Zica et al. 2016: 434).

Utilising the RBT perspective to analyse SMEs' productivity during the COVID-19 pandemic highlights the importance of accessing and effectively using crucial strategic assets. These include financial resources, workforce, technological capabilities, and connections with vendors and clients to sustain productivity levels (Barney, Ketchen and Wright 2021: 1936). Moreover, applying RBT in the SME context reveals how these businesses modify or realign their resources to sustain or improve productivity while facing COVID-19-related obstacles. This

study employs RBT due to its ability to offer a useful framework for comprehending how SMEs can exploit their resources to boost productivity during crisis periods like the COVID-19 pandemic. The application of RBT theory in SMEs enables them to identify and effectively utilise key resources, to adapt, innovate, and differentiate themselves from competitors. However, Rashid and Ratten (2021: 457) state that the RBT theory can be challenging to use especially in defining and measuring resources and capabilities of an organisation accurately. In addition, this theory may oversimplify complex organisational realities and neglect the importance of external environmental factors (Collins 2021: 332).

2.5.2 Institutional Theory

The Institutional theory emphasises the influence of social norms, rules, and regulations on organizational behaviour (Loi, Lei and Lourenco 2021: 755). The institutional theory suggests that organizations' behaviors and actions are shaped by social and cultural norms, values, and expectations (Mishra 2021:176). In addition, Klymenko and Halse (2022: 1335) state that this theory posits that organizations conform to institutional norms and expectations to gain legitimacy and ensure survival. In the context of SME productivity during COVID-19 pandemic, institutional theory would examine how SMEs respond and adapt to institutional pressures, such as government imposed national lockdowns, WHO's social distances measures and mitigations to reduce spread of the virus. The theory emphasises the need for organisations to conform to the rules and regulations prevailing in the environment they are operating in (Loi *et al.* 2021: 755). Therefore, this theory is relevant to this study as it explores how different institutional contexts affect SMEs' productivity and what strategies SMEs adopt to conform or diverge from these institutional pressures.

Institutional theory allows researchers to analyse how SMEs respond to and conform with institutional pressures during the COVID-19 crisis. Understanding the institutional context can help SMEs adapt their practices to align with societal expectations, comply with government regulations, and navigate industry standards, ultimately influencing their productivity. However, institutional theory may overlook the agency and strategic decision-making of individual firms and limiting the exploration of alternative strategies and innovative approaches that could positively impact SMEs productivity during the pandemic (Schmidt 2020: 1177).

2.5.3 Resilience Theory

The theory is a conceptual framework for understanding how some individuals and organisations rejuvenate after experiencing setbacks and adverse situations (Reams and Irving 2019: 235). The adverse situations and disasters are inevitable, hence the requirement of resilience which is the capacity of a dynamic process to adapt successfully to disturbances that threatens individual and organisation` functions as well as development. According to Li, Zhong, Zhang and Hua (2021: 44), resilience theory focuses on the capacity of organizations to adapt, recover, and thrive in the face of adversities. Therefore, the resilience theory perspective is to explore how SMEs build resilience to mitigate the negative effects of COVID-19 and enhance productivity. Many SMEs prove their resilience during COVID-19 through organisational flexibility, agility, leadership capabilities, and learning orientation (Rajesh 2021:903). Shashi, Centobelli, Cerchione and Ertz (2020: 1215) concur that resilience has become a significant concept in strategic management as it requires organisations to come up with resilience business models to deal with management and environmental disruptions of individual organisations and supply chains.

Resilience Theory examines how organizations adapt, recover, and thrive in the face of adversity. This theory is particularly relevant during the COVID-19 pandemic as it acknowledges the challenges SMEs face and highlights their capacity to overcome them (Rajesh 2021: 903). Resilience theory emphasises organizational flexibility, agility, learning, and collaboration, providing valuable insights into how SMEs can maintain or even enhance productivity during crises. However, one potential limitation of resilience theory is the lack of clear boundaries and measures around resilience (Reams and Irving 2019: 235). In addition, the theory can be challenging to define and measure organizational resilience accurately, making it difficult to apply consistently across different contexts.

2.5.4 Technology Adoption Model

The Technology Adoption/Acceptance Model (TAM) was developed by Fred Davis in 1980 and it is based on providing an understanding and prediction on how individuals, communities and

organisations accept and adopt new innovations and technologies (Lai 2017: 22). TAM theory has been widely used to examine users' intentions and behaviors towards various technologies and it is based on the perceived usefulness, perceived ease of use, behavioral intention to use and actual use of technology (Oliviera and Martins 2019: 122). Perceived usefulness refers to an individual's belief about the degree to which a particular technology can enhance the performance and effectiveness of a job or organisation. Lai (2017: 22) states that the positive perception of a technology being useful, the more likely is accepted and used. In addition, perceived ease of use refers to an individual's belief about the degree of effort required to understand and use a specific technology. The easier the technology is to use and apply, the more likely it is adopted. Behavioral intention to use is the extent to which an individual intends to use a technology which is regarded as a strong predictor of actual technology adoption and usage as individuals with a positive intention to use a technology are more likely to adopt it (Granic 2022: 9725). Lastly, the actual use refers to the extent to which individuals engage in behaviors that involve utilizing a specific technology. This can be measured by observing and analyzing real-world usage patterns (Oliviera and Martins 2019: 122).

This theory examines the process by which new technologies are adopted and spread within organizations. In the context of SME productivity and COVID-19, most SMEs used technology to overcome challenges posed by the pandemic. To adhere to the social distancing and national lockdowns, some SMEs adopt digital tools, remote working technologies, e-commerce platforms, and other technological innovations to keep on operating and being productive during the pandemic (Rashid and Ratten 2021: 460). The merits of the TAM include its simplicity in concepts and application. In addition, the TAM theory focuses on users' perceptions of usefulness and ease of use, which are critical factors in determining technology acceptance. Camilleri and Kozak (2022: 97) posit that through understanding these perceptions, organisations can tailor their strategies and interventions to promote adoption and usage. However, the theory does not explicitly consider the influence of external factors, such as organizational context, task characteristics, or technological environment, which can impact technology adoption.

2.6 Empirical review

Several studies were conducted on the impacts of COVID-19 on business, whether big or small. Kala`lembang (2021: 101) found that COVID-19 pandemic global upheaval which resulted in the stunted economic growth had a negative impact on sustainability of SMEs. However, Kala`lembang (2021: 1) found that COVID-19 was a catalyst that enabled SMEs to adopt and use digital technologies to communicate with customers, saving costs, streamlining business processes, and improving relationship with business partners. However, Nyanga and Zirima (2020: 22) conducted a study on the implications on productivity as result of COVID-19 and found that SMEs were severely affected by the lockdowns that were imposed as a measure to reduce the spread of the virus which coerced most SMEs to shut down and halt their production. In support, Aftab, Naveed and Hanif (2021: 74) found that during COVID-19 period most SMEs were experiencing shortage of materials, having logistical challenges to deliver products and declining demand of goods and services which had a negative impact on their overall productivity. Ozcan (2020: 207) further adds that some SMEs` production and productivity was severely affected to the extent of shutting down.

In the South African context, Rajagopal, Magwentshu and Kalidas (2020: 1) state that the COVID-19 mounted pressure on SMEs which were already carrying a heavy burden of slow economic growth. Nizo, *et al.* (2022: 206) conducted a study on the impact of COVID-19 on the productivity of SMEs within the construction and consulting engineering in South Africa and found that the pandemic significantly affected the productivity just like it did to the rest of the world. Ikwegbue (2021: 271) concurs that measures that were introduced globally and locally to curb the spread of the virus had a negative toll on small business and informal traders as they were forced to shut down leading to a sharp decline in the labour and capital productivity. Several studies conducted in South Africa concur that COVID-19 had a negative impact on the productivity of both larger corporations and SMEs (Bloom *et al.* 2020: 11; Nizo *et al.* 2022: 206; Rashid and Ratten 2021: 467; Nizo *et al.* 2022: 206). However, SMEs which had adopted digital technologies and incorporated technology in the delivery of their services were able to maintain the level of productivity they had owing to remote working and teleworking (Ramphela and Msosa 2022: 94).

2.7 Conclusion

This chapter reviewed the secondary sources of data to build literature on the impact of Covid-19 on SMEs productivity. The chapter discussed COVID-19 pandemic, its arrival in South Africa, lockdown stages in South Africa and the impact of the pandemic on the business environment. In addition, the chapter conceptualised productivity, discussed the types of productivity measurement and factors that hinder productivity. The theoretical framework of the study is underpinned by the Resilience Theory, Technology Adoption Theory, Institutional Theory, and the Resource Based Theory. Therefore, the next chapter discusses the research methodology that was used to gather data for the study.

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.1 Introduction

Research methodology is the grand strategy, a blueprint of conducting a research study, and it contains all the necessary steps from the beginning to the end of the study (du Plooy-Cilliers, Davis and Bezuidenhout 2021: 167). The contents of the research methodology need to be clearly defined and include information about the research design, methods, data analysis methods, and ethical considerations of the study as well as other elements that might be included (Sekaran and Bougie 2016: 80). The aim of this study was to examine the influence of COVID-19 on the productivity of SMEs in Mtubatuba Municipality. A descriptive research design and a quantitative research approach was used for the purpose of gathering the primary data of the study. Therefore, this chapter outlines and discusses the research methodology that was used in this study.

3.2 Research philosophy

A research philosophy is defined as a set of beliefs that guide researchers in their approach to data collection, analysis, and interpretation (Al-Ababneh 2020: 79). In the same context,

Sekaran and Bougie (2016: 80) define research philosophies as the framework that guides the researchers' worldviews and influences the choices they make regarding research methods, data and analysis. Research philosophy is an important aspect of research which is used to determine the research design to be utilised and the motive for using such a design (Al-Ababneh 2020: 79). According to Saunders, Lewis and Thornhill (2009:43), there are four key types of research philosophies which are realistic, pragmatic, interpretivist and positivist. Realism is a research philosophy that acknowledges the existence of an external reality that is independent of human perception (Kivunja and Kuyini 2017: 26). Realism philosophy argues that reality can be known through a combination of empirical observation and theoretical understanding, while pragmatism is a research philosophy that emphasises the practical application of research findings. According to Maarouf (2019: 2), a pragmatism research philosophy is based on the notion that research should be conducted based on the needs of the research question, rather than adherence to a particular research paradigm. In addition, the pragmatism philosophy argues that there is no one universally accepted philosophy and therefore researchers can use many philosophies for a project (Kaushik and Walsh 2019:255).

According to Zyphur and Pierides (2019: 2), interpretivism is a research philosophy that focuses on understanding human behaviour through the interpretation of subjective experiences and meanings. In addition, the philosophy states that reality is multi-dimensional, subjective and cannot be measured through objective methods (Ryan 2018: 41). Interpretivism research philosophy is more likely to be applied to interpret the data collected through qualitative research methods such as interviews, focus groups, and observation. Bryman (2016:112) states that the interpretivism research philosophy develops knowledge by concentrating on a subjective and descriptive method to deal with complicated situations rather than an objective and statistical method (Al-Ababneh 2020: 80). On the other hand, positivism research philosophy is based on objectivity, empiricism, and the use of a scientific method as the basis for knowledge generation (Hwang 2019: 128). Positivism is a philosophy that argues that reality is objective and can be measured by means of scientific methods. As a research philosophy, positivism typically uses research methodologies that employ quantitative data with the aim of objectivity, generalisability, and replicability of findings (Ryan 2018: 41). Positivism aligns with the study's goal of assessing the impact of COVID-19 on SME productivity using statistical techniques, enabling the identification of patterns and relationships between variables

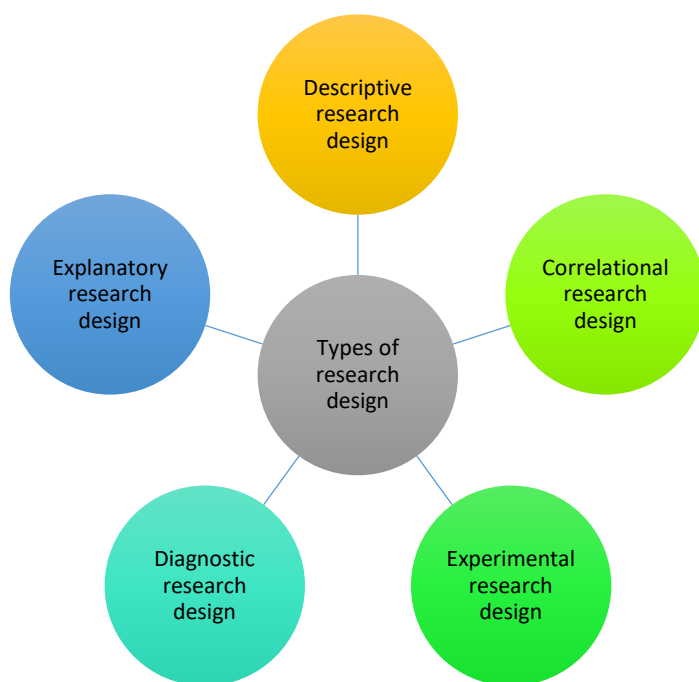
(Saunders et al., 2019: 130). This approach ensures that conclusions are based on observable evidence rather than subjective interpretations, enhancing the study's credibility. Furthermore, positivism facilitates the use of structured methodologies, such as surveys and econometric models, to derive conclusions that can inform policies and strategic decision-making for SMEs in the post-pandemic era.

Therefore, this study adopted and employed a positivism research philosophy using quantitative research methods.

3.3 Research design

Patel and Patel (2019:49) define a research design as the overall strategy that combines the various elements of the study in a rational and logical way to ensure that the researcher addresses the research problem effectively. According to Zyphur and Pierides (2019: 8), a research design is the research masterplan for the collection, measurement, and analysis of data. A research design comprises of the objectives of the study, scope, coverage, timeline, limitations, methods of data collection, tools of analysis and data analysis and presentation. According to Thakur (2021: 57), there are five main types of research designs, namely the descriptive research design, correlational research design, experimental research design, diagnostic research design and explanatory research design.

Figure 3.1: Types of research designs



Source: Thakur (2021: 56)

Figure 3.1 shows various types of research designs that are at the disposal of researchers when conducting studies. A correlational research design permits the researcher to determine the relationship between variables (Thakur 2021: 56). Correlational research designs cannot prove causation as they only show the relationship between variables. An experimental research design is a type of research design in which the researcher manipulates an independent variable and measures the effect of that manipulation on the dependent variable. According to Bloomfield and Fisher (2019: 28), the main aim of an experimental research design is to make conclusions about cause and effect. In addition, experimental research designs contribute to solving a particular problem by manipulating the independent variables to observe the change they have on the dependent variables (Sileyew 2019: 3). Diagnostic research is one of the research designs types that intend to examine the fundamental cause of a certain situation, problem or phenomenon. Diagnostic research is used to find out more about the factors that lead to specific issues or challenges that a society or organisation is facing. A diagnostic research design involves three research phases namely, problem commencement, problem diagnosis and the possible solutions to the problem (Bloomfield and Fisher 2019: 28). According to Asenahabi (2019: 77), an explanatory research design is one that focuses on understanding the reasons for challenges and problems. In addition, explanatory research

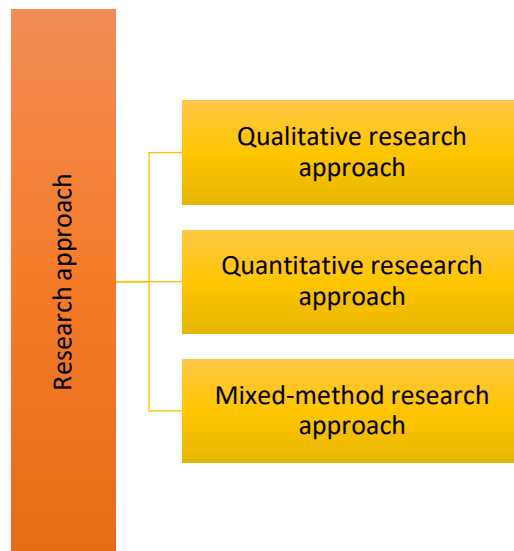
design is used to further increase, discover and elucidate the researcher's ideas and theories. Explanatory research design is best utilised in studies which elaborate on the un investigated elements of a particular topic and attempts to provide an explanation of the missing pieces. Descriptive research design is a research design that is used to describe and summarise a particular phenomenon. In the same vein, Thakur (2021: 57) elucidates that a descriptive research design is theory-based, with the researcher mainly concerned in describing the topic that is the subject of the research. It is mostly used in case studies, observations and surveys. In addition, a descriptive research design commences with identifying a clear research problem, followed by collection of the primary data from the population, analysis, and presentation of the data (Siedlecki 2020: 8). This study adapted and employed a descriptive research design to describe the the influence of COVID-19 on the productivity of SMEs in the Mtubatuba Municipality.

Descriptive research design is appropriate for this study as it enables a systematic analysis of the impact of COVID-19 on SME productivity by providing a clear snapshot of trends, challenges, and adaptations. This design allows for the collection of quantifiable data through surveys or secondary sources, facilitating statistical analysis and objective conclusions (Creswell, 2018: 147). In addition, descriptive research design helps in identifying patterns and correlations between variables, ensuring a comprehensive understanding of how SMEs navigated the crisis and adapted to sustain productivity.

3.4 Research approach

A research approach is the systematic and logical method of conducting research to obtain and analyse relevant data, draw conclusions and address research questions and objectives (Al-Ababneh 2020: 80). A research approach is the procedure selected by the investigator to collect, analyse and interpret research data. According to Patel and Patel (2019: 49), there are three main research approaches, namely qualitative, quantitative and mixed research approaches (Figure 3.2). Thakur (2021: 55) emphasises that the researchers should select an appropriate research approach for their studies based on the research questions, objectives, feasibility and nature of the data to be collected and the strength and limitations of each approach.

Figure 3.2: Research approaches



Source: Patel and Patel (2019:49)

3.4.1 Qualitative research approach

Qualitative research approaches are based on the gathering, analysis and interpretation of inclusive description and graphical data to acquire an understanding into a particular subject of interest (Hamilton and Finley 2020: 283). Qualitative research approach is centred on gathering non-numerical data in form of audios, narratives and observations. Lewis (2015: 474) states that qualitative research approach aims to comprehend phenomena in-depth, exploring meanings, experiences, and subjective interpretations. The qualitative research approach uses methods such as interviews, focus groups, or ethnographic observations are commonly used. In addition, qualitative research approach uses deductive reasoning (Hamilton and Finley 2020: 283).

3.4.2 Quantitative research approach

A quantitative research approach is based on the collecting, analysis, and interpretation of numerical data to describe, elucidate, and control the phenomenon of interest (Mayer and

Alexander 2017: 444). In addition, Creswell, and Poth (2017: 223) concur that quantitative research approach focuses on collecting and analysing numerical data to examine relationships, patterns, and statistical correlations. Melnikovas (2018: 32) states that quantitative research approach uses surveys, experiments, or existing datasets to gather data, relying on statistical analysis to draw conclusions. In line with the positivism research philosophy and descriptive research design, the quantitative research approach which is based on collecting and analysing quantitative data was used in this study. The quantitative research approach is justified in this study as it enables the collection of numerical data that can be statistically analyzed to measure the impact of COVID-19 on SME productivity. This approach ensures objectivity, reliability, and generalizability of findings, making it suitable for identifying patterns, correlations, and causal relationships (Creswell, 2018: 102). In addition, quantitative methods allow for large-scale data collection, providing empirical evidence to support decision-making and policy recommendations for SME resilience and productivity enhancement.

3.4.3 Mixed research approach

This approach combines elements of both quantitative and qualitative research approaches. In mixed methods research approach, Creswell and Poth (2017: 224) state that both numerical and non-numerical data is collected and analysis techniques to gain a deeper understanding of complex research questions. The integration of both approaches can strengthen the overall research findings.

3.5 Target population

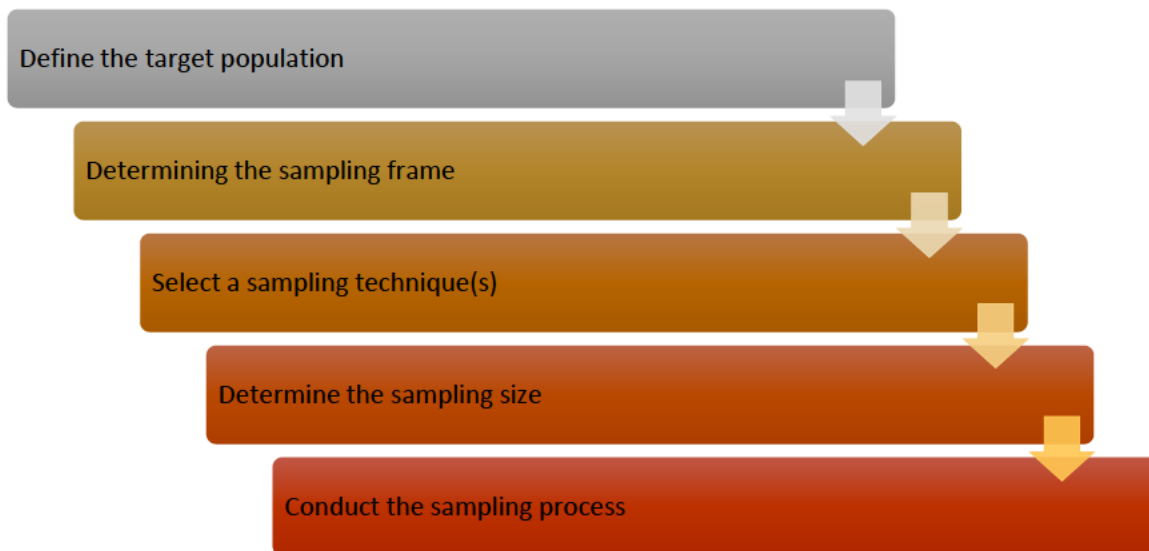
The target population is the group of people, units, and elements that the researcher is interested in studying and making conclusions about a specific topic (Stratton 2021: 373). Target population is referred to as the subset of the individuals or elements for whom the research is designed, that the researcher recruits and gathers information about the research topic. In addition, the target population of a study must be clearly defined for the researcher to select a representative sample that truly reflects the characteristics of the target population (Stratton 2021: 373). Therefore, the target population for this study is 350 registered SMEs from

Mtubatuba Municipality. Mtubatuba Municipality is in the North-East of the KwaZulu-Natal province in Umkhanyakude District in South Africa.

3.6 Sampling and sample size

Sampling is the method of choosing subset of individuals or elements from the entire population to study by collecting information, analysing data, and making conclusions on topics that are representative of the entire population (Bhardwaj 2019: 157). In the same context, Stratton (2021: 374) explains that sampling is the process of selecting a group of individuals or elements in a population that the study data will be collected from.

Figure 3.3: Steps used in the sampling process



Source: Malhotra (2010:1)

As shown in Figure 3.3, the sampling process begins with having a clearly defined target population that the researcher intends to collect the data about a topic from. The second step is to determine the sampling frame which is the source or list from which the sample is drawn from. After that, the researcher selects a suitable sampling technique for the study and calculates the sample size using a credible method. A comprehensive list of SMEs operating in the Mtubatuba Municipal district was obtained through various sources such as business directories, industry associations, and local government records. This list served as the sampling frame of the study. The last step is the conducting of the whole process by the researcher. There are various sampling techniques which are at the disposal of the researchers

and are subdivided into two categories which are probability and non-probability sampling methods (Bhardwaj 2019: 157).

3.6.1 Non-probability sampling

Elfil and Negida (2017: 52) state that a non-probability sampling method selects the sample from the population based on subjective judgment rather than random sampling. As a result, members of the population do not have an equal probability of being selected to participate in the study (Bhardwaj 2019: 158). Types of non-probability sampling techniques include:

- **Convenience Sampling:** This sampling method encompasses choosing individuals who are readily available or easily accessible and is often used when time, cost or resources are limited (Jager, Putnick and Bornstein 2017: 14).
- **Purposive Sampling:** This sampling technique involves handpicking individuals based on specific criteria or characteristics that align with the research objectives (Elfil and Negida 2017:52). This technique permits researchers to select participants who are deemed to be knowledgeable or have relevant experiences.
- **Snowball Sampling:** Snowball sampling involves the selection of a particular set of participants, and then through their referrals, additional participants are recruited (Sharma 2017: 751). This method is useful when researching hidden populations or hard-to-reach individuals.
- **Quota Sampling:** Quota sampling includes selecting participants to meet prearranged quotas based on specific characteristics or demographics.

3.6.2 Probability sampling

According to Jager, Putnick and Bornstein (2017:14), probability sampling is a sampling method in which every element or individual in the target population has an equal probability of being selected and included in the sample. A probability sampling method uses some form of random selection, and the methods guarantee the population representativeness of the sample (du Plooy-Cilliers *et al.* 2021: 152). There are four probability sampling techniques which are:

- **Simple Random Sampling:** This technique is based on entire random selection of elements or individuals from the population (du Plooy-Cilliers *et al.* 2021: 154).
- **Systematic Sampling:** In systematic sampling, researchers select every *n*th individual from the population to form the sample. The first individual is chosen randomly, and subsequent selections are made at regular intervals (Sharma 2017: 750).
- **Stratified Sampling:** Stratified sampling includes the division of the study elements into different subgroups, or strata, based on certain characteristics such as age, gender and geographical location (Tyrrer and Heyman 2016: 59). Researchers then randomly sample individuals from each stratum in proportion to their representation in the population. Stratified sampling ensures representation from all subgroups and allows for comparisons between groups
- **Cluster Sampling:** Researcher using cluster sampling divide the study elements into clusters or groups, such as households, schools, or geographic areas. Sharma (2017: 752) elucidates that researchers randomly select a few clusters from the population and include all individuals within those clusters as the sample. Cluster sampling is useful when the population is geographically dispersed or when it is costly or impractical to access individual elements.

Simple random sampling technique was used to select the respondents in this study. Through simple random sampling, the potential respondents were assigned with a number and the numbers were selected randomly using the computer to pick 187 respondents. Simple random sampling is unbiased as every member of the population has an equal chance of being selected which facilitates generalizability and increases the validity of the research (du Plooy-Cilliers *et al.* 2021: 152). In addition, simple random sampling was adopted because of its simplicity and easiness in implementation (Sharma 2017: 750).

3.6.3 Determining the sample size

du Plooy-Cilliers *et al.* (2021:150) define a sample as a subset of the population from which the research study will get information that adequately represents the entire population. Sample elements or sample units are people or objects that form the basis of the selected sample.

Yamane (1967:1) established a very simple and recommended method of calculating the sample size at a 95% confidence level and 5% degree of variability as stated by Negera and Abdisa (2022: 5). Therefore, a 5% level of precision was used to obtain a sample size that accurately reflects the population.

$$n = N / (1 + N(e^2))$$

Where:

n = sample size

N = population size

e = desired level of precision (expressed as a decimal)

In this case, the population size (N) is given as 350 and a desired level of precision (e) of 0.05. Therefore:

$$n = 350 / (1 + 350(0.05^2))$$

$$n = 350 / (1 + 350(0.0025))$$

$$n = 350 / (1 + 0.875)$$

$$n = 350 / 1.875$$

$$n \approx 186.67$$

Therefore, the sample size using the Yamane method for a population of 350 elements with a desired level of precision of 0.05 was approximately 187.

3.7 Research instrument

Melnikovas (2018: 34) elucidates that a questionnaire is a research data collection instrument that uses a series of written or printed questions designed to gather raw primary information about a particular topic from individuals in a specified target population. Sekaran and Bougie (2016: 146) assert that questionnaire-based primary data collection is reliable. A questionnaire is a popular method used in various fields of research due to its convenience, efficiency, and ability to collect large amounts of data from a diverse sample. A structured closed-ended questionnaire was used in this study as it coexists with a quantitative research design. The

questionnaire that was distributed to respondents came with a cover letter which provided the respondents with all the information about the study and a consent form which respondents signed to indicate that they were furnished with all the relevant information about the study. The questionnaire made use of a Likert scale where respondents were requested to rate statements according to how strongly they agreed or disagreed with each one of them. The questionnaire had four sections which sought the perceptions of the respondents as follows:

Section A: Biographical data section

Section B: Impact of COVID-19 on productivity in SMEs

Section C: Challenges faced by managers of SMEs

Section D: Opportunities explored by SMEs during COVID-19

3.8 Data collection method

Data collection is the process of systematically gathering, documenting and measuring information about a particular topic (Setia 2016: 262). The researcher used both primary and secondary data in this study.

3.8.1 Primary data

Primary data is raw data that is collected from respondents for the purpose of analysing and drawing inferences about a particular topic (Sharma 2017: 750). There are various methods that can be used to collect primary data which includes interviews, focus groups, observation, surveys, and questionnaires. According to Li, Higgins and Deeks (2019: 130), the research instrument, distance and costs associated determine the method that the researcher can use to collect primary data. The primary data of this study was collected from SMEs in Mtubatuba Municipality using a questionnaire that was distributed using a personal method of data collection. Through this method, the researcher physically distributed the questionnaires to the respondents who were given 14 days to complete the questionnaire. A personal method has the advantage that it allows any questions that require clarification from the respondents to be answered immediately (Sekaran and Bougie 2016: 147).

3.8.2 Secondary data

Secondary data is the data that has been already collected and analysed by other scholars (Li et al., 2019:130). Secondary data is very important, and it is very critical to evaluate its source and quality before using it in research. The secondary data was used to clarify and conceptualise the main variables of the study. In addition, the secondary data was used to build the literature and the theoretical framework of the study. Various secondary data sources such as research articles, theses and journals were reviewed and analysed in the building of the relevant literature of the study. Credible and reliable sources such as Google Scholar, Academia, Science Direct and published textbooks were used.

3.9 Pilot study

A pilot study is described by du Plooy-Cilliers, Davis and Bezuidenhout (2021: 294) as a small initial study that is conducted with the aim of making improvements to the methods, techniques and processes before the actual study. Sekaran and Bougie (2016: 136) mention that a pilot study is the initial investigation done to help with the design of a larger study by experimenting with research methodologies beneficial for development. Before beginning the actual data collecting, quantitative researchers, according to Sarantakos (2015: 254), should use a pilot study. Moreover, Antwi and Hamza (2015: 218) concur that quantitative researchers use a pilot study before starting the actual data collection. For the pilot study, ten randomly selected individuals who did not form part of the final sample were recruited to experiment and address errors before the main research was conducted. The feedback from the pilot study was used to correct the wording and grammatical errors on the questionnaire.

3.10 Validity and reliability

Validity and reliability are essential concepts in research, particularly in quantitative research, where the goal is to measure and test hypotheses with numerical data (Saunders *et al.* 2019). Therefore, Sekaran and Bougie (2016: 137) emphasises that it is crucial for researchers to observe the concepts of validity and reliability in their studies.

3.10.1 Validity

Validity is defined as how closely a research instrument measures the characteristics it is meant to evaluate (Sekaran and Bougie 2016: 137). Validity refers to the extent to which a research study measures what it intends to measure. The validity deals with the issue of cause-and-effect relationship between the variables and the external environment (Sucuru and Maslacki 2020: 2695). There are several types of validity and reliability in research, namely:

- **Content Validity:** This type of validity ensures that the measurement instrument adequately covers the full range of the construct being measured. To ensure content validity in this study, the researcher carefully selected the content that was representative of the constructs of the study and used the expertise of the supervisors and research peers to ensure that the research items were appropriate and relevant.
- **Construct Validity:** It assesses whether the operationalisation of a concept accurately represents the theoretical meaning of the concept. To ensure that construct validity was attained in this study, KMO and Bartlett's Test was applied to ensure that the study measure was tapping into the construct that was intended to be measured.
- **Criterion-related Validity:** This type of validity assesses the extent to which a measure is related to an external criterion or outcome. To ensure that criterion validity was obtained, the researcher correlates the measures of the study with other established measures of the same construct.

3.10.2 Reliability

Reliability, also referred to as consistency, describes how trustworthy a study is, as well as how trustworthy a research tool and its findings are if they are used by other researchers (Sekaran and Bougie 2016: 137). Reliability is the consistency and dependability of the data collection process and ability to obtain the same results if the process is repeated multiple times (Sucuru and Maslacki 2020: 2695). The three most common types of reliability are:

- **Test-Retest Reliability:** This type of reliability assesses the stability of a measure over time by administering the same test to the same group of people at two different points in time. A pilot study was conducted before the actual study and the research instrument was fine tuned.

- **Inter-Rater Reliability:** It measures the degree of agreement between different raters or observers who are evaluating the same phenomenon.
- **Internal Consistency Reliability:** It evaluates the extent to which items in a measure are correlated with one another. To determine this reliability type, a Cronbach-Alpha test was used to determine the correlation of research items.

3.11 Data analysis

Data analysis, according to De Vos *et al.* (2015: 333), is a procedure for giving the primary data obtained during research organisation, structure, and significance. Sarantakos (2015: 60) defines data analysis as the statistical examination of data gathered during research to determine whether the generated hypotheses have been supported. Once the completed questionnaires were collected by the researcher, the spoilt and incomplete questionnaires were removed. The data from the completed questionnaire was captured in an Excel sheet to form a dataset which was sent to a statistician for analysis using the Statistical Package for Social Sciences Statistics (SPSS) version 29 and Excel. The data analysis process was twofold with both descriptive and inferential statistics which are two major types of statistical analysis used in research data analysis. Descriptive statistics are used to summarise and describe the features of a dataset through calculating measures of central tendency, such as mean, median, mode and measures of variability, such as standard deviation and range (Creswell and Poth 2017: 227). Descriptive statistics assist the researchers to comprehend the distribution and characteristics of the data as well as providing a summary of the data's key features. In terms of descriptive statistics, data graphs, pie charts and bar graphs were used to display the information gathered from respondents. On the other hand, inferential statistics were used to make inferences or conclusions about a population based on a sample of data (De Lisle 2011: 88). Inferential statistics such as Relative Importance Index, Spearman's Correlation, Relative Severity Index analysis, and Structural equation modelling were performed to make conclusions about the variables of the study.

3.12 Ethical considerations

Research ethics refers to the set of principles and guidelines that govern the conduct of research involving human subjects (Drolet *et al.* 2023: 270). In addition, research ethics ensure that researchers treat participants ethically, with respect for their rights, safety and well-being.

Ethical considerations are the principles that guide the design, methods, and practices of the study. Ethical considerations are essential in research as they protect the rights and welfare of participants, maintain integrity in research practices, and promote trust in the scientific community (Cascio and Racine 2021:23). The following key ethical considerations were observed in this study:

- **Informed Consent**

Researchers must obtain informed consent from participants before their involvement in the study (Drolet *et al.* 2023: 270). The researcher provided informed consent of this study through an information letter which articulated clear information about the purpose, objectives, procedures, potential risks, and benefits of the research, and allowing participants to make a voluntary and informed decision to participate. To confirm the provision of informed consent, the respondents signed the informed consent forms that were attached to each questionnaire.

- **Protection of Participants**

Researchers have a responsibility to ensure the safety and well-being of participants. The researcher undertook all the necessary precautions to minimise physical, psychological, or social harm that could have caused by the study.

- **Voluntary participation**

The respondents were requested to voluntarily take part in this study and to withdraw at any stage of the study should they felt uncomfortable without any fear.

- **Anonymity and Confidentiality**

Researchers should ensure the privacy and confidentiality of participants' personal information (Creswell and Poth 2017: 237). Data collected should be anonymized or treated with strict confidentiality, and participant identities should be protected unless explicit permission has been granted. The questionnaire that was used did not request any personal identification data from the respondents and the data was used solely for the purposes of this study. In addition, the primary data was only accessed by authorised persons only.

- **Institutional Review Board (IRB) Approval**

The Durban University of Technology research committees approved the study, and it was conducted following the guidelines and ethical requirements of the institution.

- **Storage of data**

Data is stored in a password protected Google Drive account and the questionnaires are stored in locked storage facility. The data will be permanently deleted, and questionnaire shredded after a period of 5 years after the publication of the thesis.

3.13 Limitations and delimitation

Limitations and delimitations in research define the boundaries and scope of a study. In addition, Akalne and Ademuson (2020:107) state that limitations and delimitations of the study assist to establish the constraints and focus of the research, as well as identify its potential shortcomings or areas where the findings might be limited. Limitations are constraints or weaknesses that may impact the research process or the interpretation of its outcomes. As a limitation, the sample size of 187 SMEs was small, it may limit the generalizability or external validity of the findings, and the study was conducted within a limited timeframe. On the other hand, delimitations define the boundaries or scope of the research by explicitly stating what aspects are included or excluded from the study (Coker 2022:17). The study focused on SMEs in Mtubatuba Municipality only and focused on managers and owners of the SMEs only.

3.14 Conclusion

This chapter discussed the research methodology that was used to gather the primary data of the study. The study adopted and employed a positivist research philosophy, a descriptive research design and a quantitative research approach. In addition, simple random sampling, which is a method of probability sampling, was used to select 187 respondents from Mtubatuba Municipality. A closed-ended structured questionnaire was distributed using a personal method of data collection. Furthermore, the chapter discussed how validity and reliability was attained, and the ethical considerations that were observed during the study. The next chapter presents the analysis, interpretation and discussion of the results and findings of the study.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF THE FINDINGS

4.1 Introduction

The research methodology chapters present the processes and procedures that were used to collect the primary data of the study. This chapter presents the analysis and findings with regards to the investigation into the impact of COVID-19 on SME productivity, challenges confronted by SMEs during the pandemic, opportunities explored, and government interventions aimed at assisting SMEs during the COVID-19 pandemic. The research employed the IBM SPSS Statistic version 29 in conjunction with MS Excel to establish the extent to which COVID-19 pandemic has impacted on productivity of SMEs in Mtubatuba Municipality. The chapter then presents results on opportunities exploited by SMEs in the Mtubatuba Municipality during the COVID-19 pandemic. Findings on the challenges faced by SMEs in Mtubatuba Municipality during the COVID-19 pandemic were also presented. This section is followed by an exploration into the government interventions for SMEs in Mtubatuba Municipality during the COVID-19 crisis. The chapter culminates with a section on discussion of study findings where findings were reconciled with empirical literature.

4.2 Response rate

A total of 187 questionnaires were administered through the collective administration method. The returned completed questionnaires were assessed to determine whether they were fully completed and consistent. Therefore, out of 179 that were collected, a total of 171 questionnaires were completed and consistent, hence deemed usable for analysis. Therefore, the calculated response rate of 91.4% was sufficient to achieve the research objectives.

4.3 Reliability and validity analysis

To determine the reliability of the research instrument that was used, Cronbach's alpha test was performed. As indicated in Table 4.1 below, the averaged results of the Cronbach's alpha test averaged to 0.8 to reflect the scale.

Table 4.1: Reliability analysis results

Variable	Cronbach's Alpha	N of items
Impact of COVID-19 on productivity of SMEs	0.875	10
Opportunities explored by SMEs during COVID-19 pandemic	0.780	8
Challenges confronting SMEs	0.840	15
Government interventions	0.840	8
Overall reliability	0.834	41

An overall Cronbach's alpha coefficient of 0.834 is indicative of a high level of internal consistency amongst the items in the scale or test. Such a degree of internal consistency reflects a higher level of reliability, meaning the questionnaire did not require further amendments and improvement, and the study results tend to be reliable and valid. The validity of the construct was assessed using KMO and Bartlett's Test. The results of the validity test are shown in Table 4.2 below.

Table 4.2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.776
Bartlett's Test of Sphericity	Approx. Chi-Square	3090.118
	Df	820
	Sig.	<.001

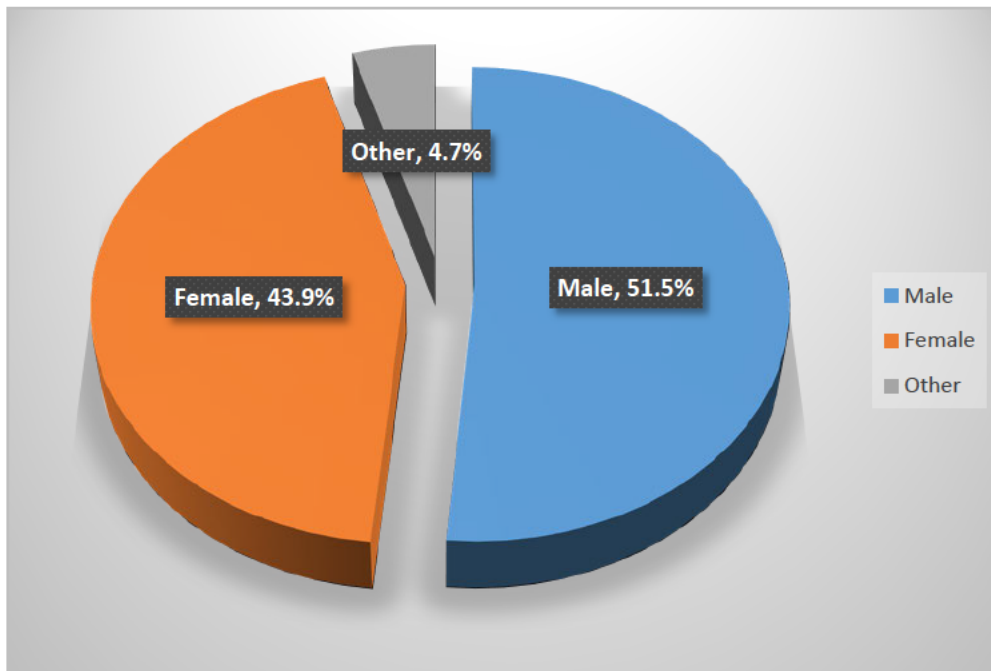
The Keiser-Meyer-Olkin of 0.776 were obtained from the data analyzed and was identified to be significant at 5% level (p-value < 0.001). This means that the research instrument (questionnaire) was reliable and valid.

4.4 Demographic characteristics of respondents

The demographic information considered in this study included gender, status, length of service working for or owning a small business and educational qualifications of the respondents.

4.4.1 Gender distribution of the respondents

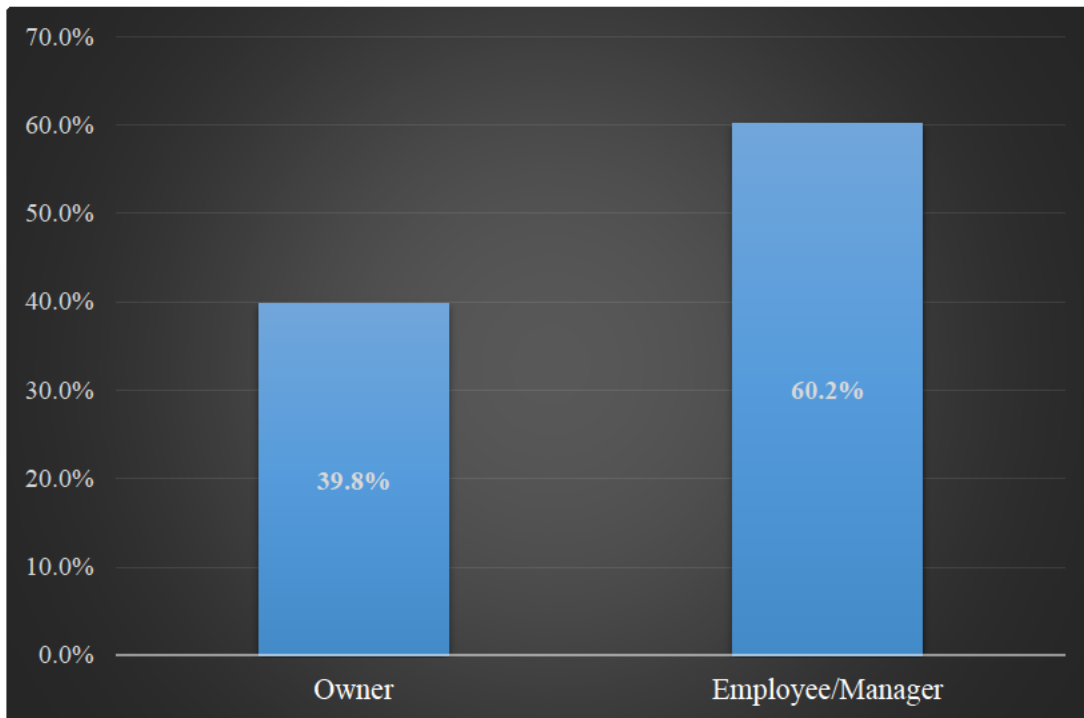
Figure 4.1: Distribution of respondents by gender.



Study findings in Figure 4.1 indicates that 51.5% of the respondents are male, making them the largest group in the study. Female respondents on the other hand, make up 43.9% of the total sample, the second-largest group. Respondents who identify as 'Other' constitute 4.7% of the total sample, representing the minority group. The demographic data shows that the study sample is somewhat balanced between male and female respondents, with males slightly outnumbering females. The 'Other' category, although small, is included to ensure inclusivity. These demographics provide a foundational understanding of the respondent base for the study, ensuring that any findings on the impact of COVID-19 on SME productivity in Mtubatuba can be analyzed with consideration of the gender distribution of the participants. The nearly equal representation of males and females, along with the inclusion of non-binary respondents, supports a comprehensive and inclusive analysis of the data.

4.4.2 Distribution by status

Figure 4.2: Distribution of respondents by status



The bar chart in Figure 4.2 above provides insights into the status of respondents participating in the study on the influence of COVID-19 on the productivity of small and medium enterprises (SMEs) in the Mtubatuba Municipal District. The chart categorizes respondents into two groups: owners of the businesses and employees/managers working within these SMEs. From the data, it is evident that a majority of the respondents, 60.2%, are employees or managers, amounting to 103 individuals. This higher representation of employees/managers is significant as it provides a broader perspective on the operational and managerial challenges faced during the pandemic. Employees and managers are likely to offer detailed insights into day-to-day business operations, workforce issues, and the practical implications of supply chain disruptions and financial strains. Their perspective is crucial for understanding the operational disruptions and workforce challenges, as they are directly involved in managing these aspects. On the other hand, business owners constitute 39.8% of the respondents, with 68 individuals indicating their status as owners. The insights from business owners are equally critical, as they provide a top-level view of the financial impact, strategic decisions, and overall business performance during the pandemic. Owners are typically responsible for financial planning, navigating debt obligations, and ensuring the business's survival during crises. Their responses help illuminate the broader financial challenges, and the strategic adjustments made to mitigate the impact of the pandemic.

The nearly 40-60 split between owners and employees/managers offers a balanced view of the impact of COVID-19 on SMEs from both managerial and ownership perspectives. This distribution ensures that the study captures a wide range of experiences and responses to the pandemic, reflecting the multifaceted nature of its impact on business productivity. Owners bring in a strategic viewpoint, often highlighting the financial and long-term sustainability issues, while employees/managers focus on operational, workforce, and day-to-day business challenges. This balanced respondent base allows for a comprehensive analysis, ensuring that the study's findings are robust, and representative of the diverse challenges faced by SMEs during the pandemic. It highlights the importance of considering both strategic and operational dimensions when assessing the impact of external shocks like COVID-19 on business productivity. The inclusion of both groups provides a holistic understanding, enabling stakeholders to develop more effective support mechanisms and policies to aid SMEs in recovery and resilience-building efforts.

4.4.3 Length of service

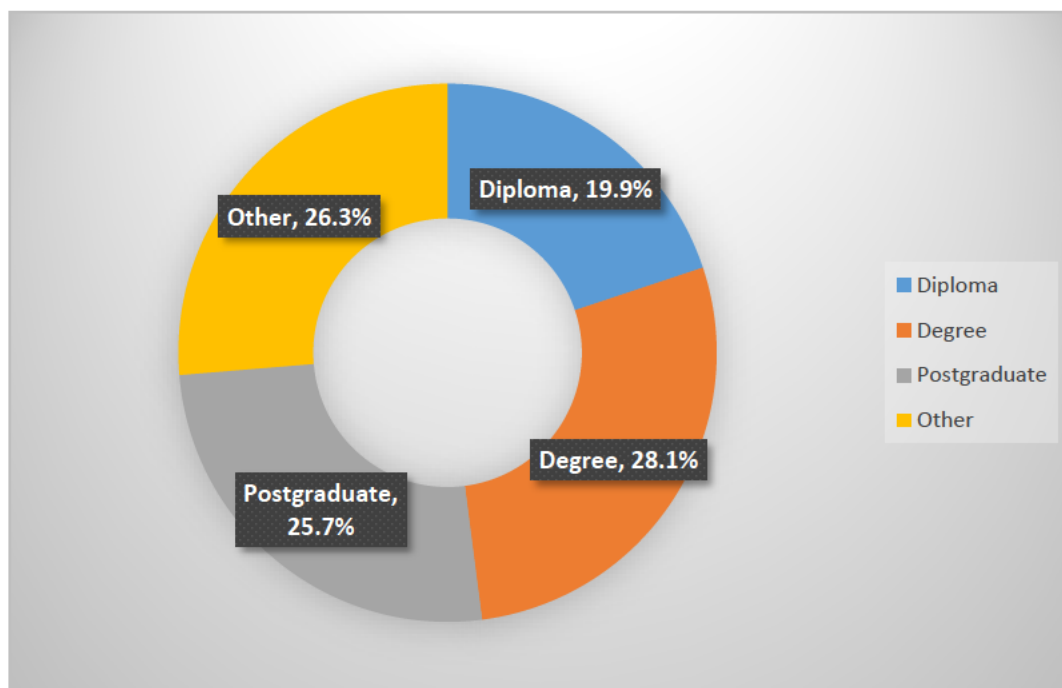
Table 4.3: Length of service working for or owning a small business

Tenure	Frequency	Percent (%)	Valid %
Less than 2 years	30	17.5	17.5
2-4 years	48	28.1	28.1
5-10 years	57	33.3	33.3
More than 10 years	36	21.1	21.1
Total	171	100.0	100.0

Findings shown in Table 4.3 above reveal that the majority of respondents, 33.3%, had 5-10 years of working/owning a small business, which is a considerable level of experience. This is followed by 28.1% in the 2-4-year range, 21.1% having more than 10 years and the minority 17.5% having less than 2 years of experience in the SME sector. Having respondents with considerable levels of experience enables the researcher to get more comprehensive insights into the matter under investigation.

4.4.4 Educational background

Figure 4.3: Educational background of respondents



Figure, 4.3 above indicate that 19.9% of respondents hold diplomas, indicating a notable presence of vocational and technical training within the SME sector. Degree holders constitute the largest group, representing 28.1% of respondents. Postgraduate degree holders make up 25.7% of the respondents, indicating a strong presence of highly educated individuals within the SME sector. The category of 'Other' qualifications, encompassing 26.3% of respondents, includes a diverse range of educational backgrounds such as certificates, short courses, informal training, and possibly self-taught skills. The distribution of educational qualifications among respondents in the Mtubatuba Municipal District underscores the importance of a well-educated and diverse workforce with the mix of practical, theoretical, and specialised skills within the workforce suggests that these businesses are well-equipped to navigate the challenges and uncertainties brought about by the pandemic.

4.5 Primary Objective: Impact of COVID-19 pandemic on the productivity of SMEs

The primary objective underpinning the study was to examine the impact of the COVID-19 pandemic on the productivity of SMEs in Mtubatuba Municipality. Respondents were required to indicate the extent to which they agree with each of the 10 statements on the impact of the

pandemic on the productivity of SMEs. To comprehensively understand the impact of the COVID-19 pandemic on the productivity of SMEs in Mtubatuba Municipality, the study grouped the factors into broader categories and discuss each in detail. These categories include Financial Impact, Operational Disruptions, Inventory and Supply Chain Challenges, and Workforce Issues. The study then employed the Relative Importance Index (RII) method to provide a systematic way to quantify and rank the impact of various factors on SME productivity during the COVID-19 pandemic. This method allows researchers and decision-makers to identify which areas were most affected and prioritize interventions accordingly.

The study computed the Relative Importance Index (RII) as outlined in the study by Fagbenle, Adeyemi and Adesanya (2004):

$$\text{Relative Importance Index} = \frac{1}{N(n)} \sum_{i=1}^5 P_i U_i$$

Where,

RII = Relative Importance Index,

P_i = respondent's rating on the COVID-19 related impact on productivity of the SME

U_i = frequency of respondents placing identical rating on the same impact statement

N = sample size, which in this case is 171.

n = the highest attainable score on statement explaining the impact, which in this case is 5.

i = 1,2,3,4, 5.

The COVID-19 pandemic had a multifaceted impact on SMEs in Mtubatuba Municipality, which can be understood by categorizing the various factors into Financial Impact, Operational Disruptions, Inventory and Supply Chain Challenges, and Workforce Issues. The results of the rankings of each of these factors is shown in Table 4.4 below.

Table 4.4: RII for COVID-19 related impact on productivity (N=171)

COVID-19-related impact	RII	Rank
Our number of products/service output dwindled during Covid-19	0.7287	
Operational Disruptions	0.7287	4
Our stock/inventory turnover was affected by COVID-19	0.7637	
Some stock/inventory went obsolete because of poor customer turnout	0.7813	
Supply was cut because of non-payment/late payment	0.7766	
Inventory and Supply Chain Challenges	0.7739	3
Profits were eroded	0.7614	
Sales were eroded	0.7696	
We failed to meet debt obligations/loans	0.7836	
We failed to pay rentals on time	0.7977	
Costs of doing business went up	0.8035	
Financial Impact	0.7832	2
Production was affected by the high absenteeism of employees	0.8140	
Workforce Issues	0.8140	1

Table 4.4 above presents an analysis of the impact of the COVID-19 pandemic on the productivity of SMEs in Mtubatuba Municipality, categorized into four main areas: Operational Disruptions, Inventory and Supply Chain Challenges, Financial Impact, and Workforce Issues. Each category is associated with an average Relative Importance Index (RII) and a rank indicating its overall impact.

4.5.1 Workforce Issues

The category with the highest impact, as indicated by the highest RII of 0.8140, is Workforce Issues. The specific factor contributing to this category is the high absenteeism of employees during the pandemic. High absenteeism rates were likely caused by illness, quarantine

requirements, or caregiving responsibilities, which directly disrupted production schedules and overall business operations. This significant disruption in workforce availability made it the most critical issue affecting SME productivity during the pandemic.

4.5.2 Financial Impact

Ranked second, with an RII of 0.7832, is the Financial Impact category. This category includes factors such as the erosion of profits and sales, difficulties in meeting debt obligations and paying rentals on time, and the increased costs of doing business. The high RII indicates that financial challenges were a substantial concern for SMEs, severely affecting their ability to maintain operations, invest in recovery, and sustain long-term viability. The increased operational costs, combined with decreased revenue streams, placed significant financial pressure on these businesses. Findings show that the costs of doing business went up during the COVID-19 pandemic (RII = 0.8035). This factor within the Financial Impact category had the highest RII, indicating significant financial pressure on productivity of SMEs in Mtubatuba Municipality. Failure to pay rentals on time had an RII score of 0.7977. Ranked the second highest in terms of impact, this factor underscores the liquidity challenges faced by SMEs during the pandemic. Other financial factors that impacted SMEs included erosion of sales (RII = 0.7696), erosion of profits (RII = 0.7614) and failure by SMEs to meet their debt obligations/loans (RII = 0.7836).

4.5.3 Inventory and Supply Chain Challenges

With an RII of 0.7739, the Inventory and Supply Chain Challenges category is ranked third. Factors within this category include the impact on stock turnover, obsolescence of inventory due to poor customer turnout, and disruptions in supply due to non-payment or late payment. These challenges reflect the difficulties SMEs faced in managing their inventory efficiently and maintaining reliable supply chains during the pandemic (RII = 0.7766). The disruption in supply chains and inventory management issues further compounded financial losses and operational inefficiencies. Findings revealed that some stock/inventory went obsolete (RII = 0.7813) thereby reflecting the difficulties confronted in managing unsold inventory. The majority of SMEs also revealed that their stock/inventory turnover was affected significantly (RII = 0.7637), highlighting the slow movement of inventory due to reduced demand.

4.5.4 Operational Disruptions

Finally, the Operational Disruptions category has an RII of 0.7287 and is ranked fourth. This category includes the overall reduction in product and service output during the pandemic. The decline in output was likely due to restrictions on business operations, reduced working hours, and other pandemic-related constraints that hindered the ability of SMEs to maintain their usual levels of productivity. Although significant, operational disruptions were somewhat less impactful than the other categories, indicating that while production declines were severe, they were part of a broader set of challenges affecting SME productivity in Mtubatuba Municipality.

In conclusion, the analysis indicates that Workforce Issues, particularly high absenteeism, had the most significant impact on SME productivity during the pandemic. Financial challenges were also crucial, severely affecting the stability and sustainability of businesses. Inventory and supply chain disruptions further exacerbated the situation, while operational disruptions, though impactful, were somewhat less critical compared to the other factors. This comprehensive analysis highlights the multifaceted nature of the pandemic's impact on SMEs, emphasizing the need for targeted interventions to address these specific areas to enhance resilience and recovery.

4.5.5 Structural Equation Modelling

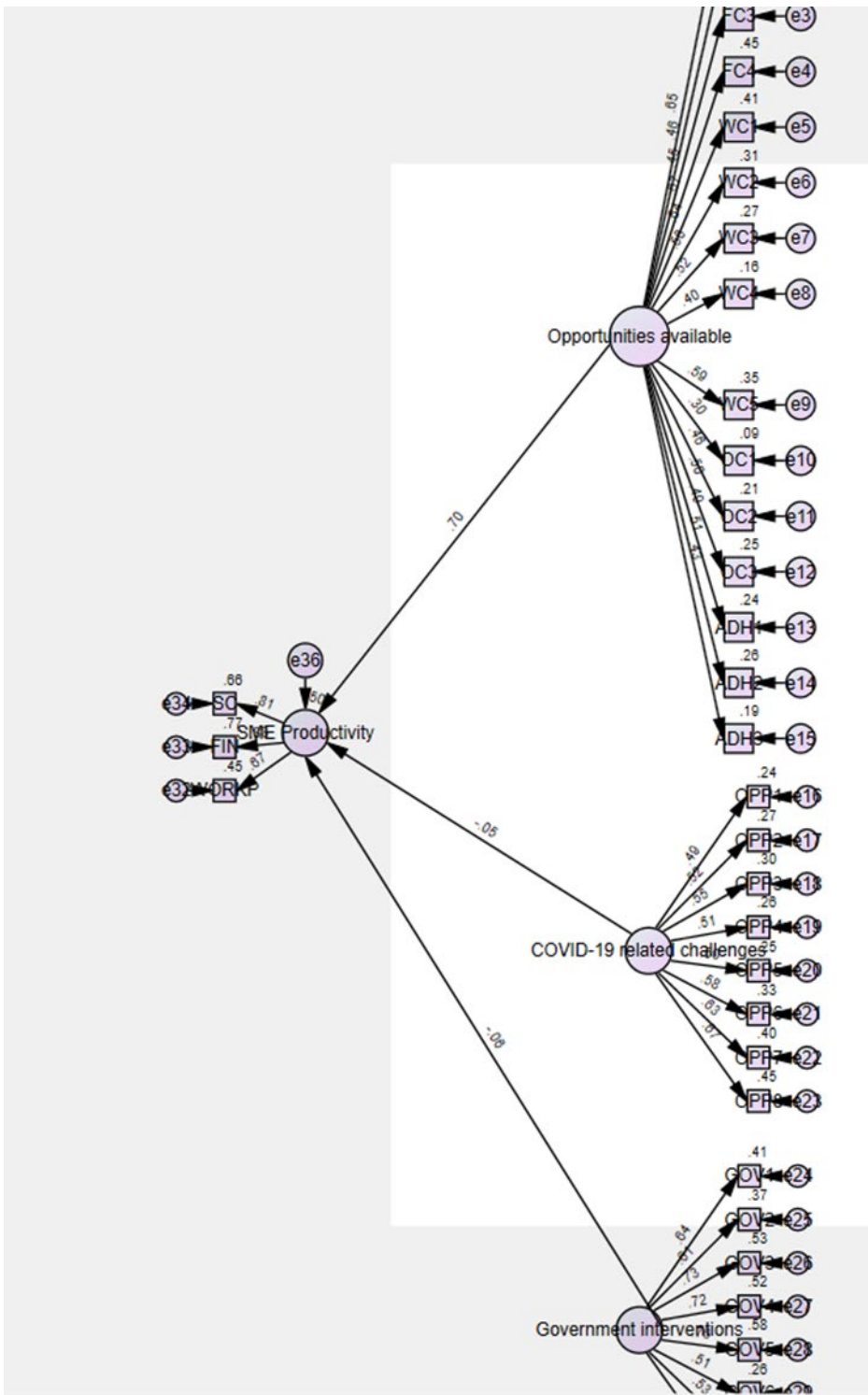
To comprehensively examine the impact of the COVID-19 pandemic on the productivity of SMEs in the Mtubatuba Municipality, this study employs Structural Equation Modeling (SEM). SEM is a powerful statistical technique that allows for the simultaneous analysis of multiple relationships between observed and latent variables. In this context, SEM is used to explore the interrelationships between key constructs identified as critical to understanding the pandemic's impact: COVID-19 related challenges, opportunities explored, and government interventions. The primary focus is to determine how these constructs influence the dependent variable, SME productivity. By utilizing Structural Equation Modeling, the study can effectively model the complex interactions between these constructs and assess their direct and indirect effects on SME productivity. This approach provides a nuanced understanding of the multifaceted impact of COVID-19, helping to identify the most significant factors affecting SME performance and guiding targeted policy and managerial interventions to support the resilience

and growth of SMEs in the face of such unprecedented challenges. The results of the Structural Equation Modeling (SEM) are shown in Table 4.5 and Figure 4.4 below:

Table 4.5: MLE for the Structural Equation

Estimates (Group number 1-Default model)				
Scalar Estimates (Group number 1-Default model)				
Maximum Likelihood Estimates				
Regression Weight: (Group number 1-Default model)				
	Estimate	S.E.	C.R.	PLabel
Productivity < ---Opportunities_Explored	.640	.105	6.075	***
Productivity< ---COVID_19_Challenges	-.058	.083	-.703	.482
Productivity < ---Government	-.055	.064	-.862	.389

Figure 4.4: Standardised Estimates for Structural Equation Modelling



The structural equation modeling (SEM) results for SMEs in Mtubatuba during the COVID-19 pandemic indicate several key insights regarding productivity:

Positive Correlation with Productivity: The opportunities explored by SMEs have a strong positive correlation (0.7) with their productivity. This suggests that the more SMEs engaged in these new opportunities, the higher their productivity tended to be.

Standardised Maximum Likelihood Estimate (MLE): The standardised MLE for the opportunities explored is 0.640, which is statistically significant. This indicates that the influence of exploring new opportunities on productivity is both strong and reliable. The significant opportunities include selling masks, traditional medicines and herbs, headache pills, and internet data, as well as leveraging regular customers and using internet and social media marketing.

COVID-19-related Challenges: The challenges brought by COVID-19 were found to have an insignificant negative effect on productivity, with a beta value of -0.058. This means that while challenges related to the pandemic negatively impacted productivity, this effect was minimal and not statistically significant in rural businesses.

Government Interventions: The impact of government interventions on productivity was also found to be insignificant, with a beta value of -0.055. This suggests that the interventions put in place did not have a meaningful effect on the productivity of these SMEs during the pandemic. The SEM results highlight that the proactive strategies adopted by SMEs in Mtubatuba such as diversifying their products and adapting their marketing approaches had a significant and positive impact on their productivity during the pandemic. In contrast, the negative impacts of COVID-19-related challenges and government interventions on productivity were minimal and statistically insignificant.

4.6 Objective 1: Exploring the opportunities exploited by SMEs

The first secondary objective of the study was concerned with exploring into the opportunities exploited by SMEs in the Mtubatuba Municipality during the COVID-19 pandemic. To achieve this secondary objective, the researcher gathered the perceptions of respondents regarding the key opportunities exploited by SMEs in their business operations amid the pandemic. The COVID-19 pandemic posed unprecedented challenges to Small and Medium Enterprises (SMEs) worldwide, including those in the Mtubatuba Municipality. However, amidst the adversity, these enterprises demonstrated remarkable resilience and adaptability by identifying and exploiting various opportunities to sustain their operations. The objective of this analysis is to explore how SMEs leveraged these opportunities to navigate the tumultuous business

landscape during the pandemic. Respondents were required to indicate the extent to which they agreed with 8 statements highlighting potential opportunities available for SMEs to exploit during the COVID-19 pandemic. The range for possible responses was 5 = Strongly Disagree; 4 = Disagree, 3 = Neutral, 2 = Agree and 1 = Strongly Agree. Mean scores were used to evaluate the respondents' overall level of agreeableness towards a given position/view. A high mean suggests that, on average, respondents tend to agree with the given position. In this case, any statement with a mean score ranging from 1 to 2.5 highlights disagreement by respondents with the given position. A higher mean indicates that respondents, on average, tend to agree with the given position. In this study, a mean score of 3.5 to 5 highlights notable agreement with the stated position. Those in a neutral position are shown by mean scores of between 2.5 and 3.4 on a continuous Likert scale.

The standard deviation is a measure of data dispersion around the mean. A higher standard deviation indicates greater response variability. To ensure survey results are reliable and valid, the standard deviation should be low, typically below 0.9. When the standard deviation is low, it suggests that responses are tightly grouped around the mean, indicating consistent agreement or disagreement among participants. Conversely, a high standard deviation implies that responses are widely scattered from the mean, suggesting diverse opinions or significant disagreement among respondents. A standard deviation exceeding 0.9 signifies substantial differences in how respondents perceive the variable's impact, while a value below 0.9 indicates shared views on the measured variable. A comprehensive assessment of agreeableness towards a given position can be achieved by combining mean and standard deviation analysis with qualitative insights, allowing for informed interpretations of overall sentiment within the surveyed group. The computation of means and standard deviations is performed, and Table 4.6 displays the mean scores and their corresponding ranks in order of importance.

Table 4.6: Opportunities explored by SMEs in the Mtubatuba Municipality (N=171)

Descriptive Statistics							
Opportunities explored	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
We adjusted our business model to sell masks	171	3.58	1.301	-0.621	0.186	-0.876	0.369
We adjusted our business model to sell traditional medicines/herbs	171	3.09	1.415	-0.142	0.186	-1.429	0.369
We adjusted our business model to sell headache pills	171	3.20	1.462	-0.248	0.186	-1.400	0.369
We relied on regular customers to make sales	171	3.70	1.212	-0.752	0.186	-0.497	0.369
We delivered products and services to regular customers	171	3.42	1.278	-0.339	0.186	-1.141	0.369
We adapted to internet and social media marketing to gain customers	171	3.92	1.153	-0.968	0.186	-0.077	0.369
We adjusted our business model to sell internet data as most people were using data	171	3.73	1.259	-0.748	0.186	-0.665	0.369
There was a dramatic increase in the sale of airtime	171	4.00	1.117	-1.026	0.186	0.034	0.369
Valid N (listwise)	171						

The findings from the SMEs in Mtubatuba Municipality reveal various strategic adjustments and opportunities exploited during the COVID-19 pandemic. Each strategy is characterized by specific statistical measures, including mean, standard deviation, skewness, and kurtosis, providing insights into the central tendencies and distributions of the responses. Firstly, the adjustment of the business model to sell masks, with a mean of 3.58 and a standard deviation of 1.301, suggests a moderate level of agreement among respondents. The negative skewness of -0.62, with a standard error of 0.186, indicates a slight tendency towards higher agreement

scores, implying that a significant portion of respondents found this adjustment beneficial. The kurtosis score of -0.62, with a standard error of -0.876, suggests a flatter distribution than the normal curve, indicating variability in responses but with a central concentration around the mean. The adjustment to sell traditional medicines and herbs has a lower mean of 3.09 and a higher standard deviation of 1.415, reflecting more varied opinions on this strategy. The near-zero skewness of -0.14 (standard error 0.186) and the similarly low kurtosis of -0.14 (standard error -1.429) imply a symmetrical and flat distribution, indicating a wide range of responses with no extreme deviations.

Similarly, the adjustment to sell headache pills has a mean of 3.2 and a standard deviation of 1.462, showing moderate agreement with some variability. The skewness of -0.25 and kurtosis of -0.25, with standard errors of 0.186 and -1.4 respectively, suggest a slightly left-skewed distribution with responses dispersed more evenly. The reliance on regular customers to make sales exhibits a higher mean of 3.7 and a lower standard deviation of 1.212, indicating strong agreement among respondents. The skewness of -0.75 (standard error 0.186) indicates a more pronounced left skew, showing a stronger tendency towards higher agreement scores. The kurtosis of -0.75 (standard error -0.497) reflects a flatter distribution, suggesting diverse but centralized responses.

Delivering products and services to regular customers, with a mean of 3.42 and a standard deviation of 1.278, shows moderate agreement. The skewness of -0.34 and kurtosis of -0.34, with standard errors of 0.186 and -1.141 respectively, suggest a slightly left-skewed and flatter distribution, indicating some variability but a central tendency around moderate agreement. Adapting to internet and social media marketing, with a mean of 3.92 and a standard deviation of 1.153, indicates a high level of agreement. The skewness of -0.97 (standard error 0.186) and kurtosis of -0.97 (standard error -0.077) suggest a strong left skew, indicating a significant lean towards higher agreement, and a relatively flat distribution, indicating diverse responses.

The adjustment to sell internet data, with a mean of 3.73 and a standard deviation of 1.259, also reflects high agreement. The skewness of -0.75 (standard error 0.186) and kurtosis of -0.75 (standard error -0.665) suggest a pronounced left skew and a flatter distribution, indicating centrality with some variability in responses. Finally, the dramatic increase in the sale of airtime, with the highest mean of 4 and a standard deviation of 1.117, shows strong agreement among

respondents. The skewness of -1.03 (standard error 0.186) and kurtosis of -1.03 (standard error 0.034) indicate a very pronounced left skew and a flat distribution, reflecting a strong consensus towards higher agreement scores but with a wide range of responses. These findings illustrate the diverse strategies SMEs in Mtubatuba Municipality adopted in response to the pandemic, with varying degrees of agreement and response distributions. The statistical measures provide a comprehensive view of how these businesses adjusted their models and operations to exploit new opportunities and sustain themselves during the COVID-19 pandemic.

4.7 Objective 2: Challenges faced by SMEs during the COVID-19 pandemic

The second secondary objective of the study was concerned with identifying the main challenges confronted by SMEs in Mtubatuba Municipality during the COVID-19 pandemic. To achieve this secondary objective, the researcher gathered the perceptions of respondents regarding the key challenges they encountered in their business operations amid the pandemic. To structure the investigation, the study relied on insights from previous research to pinpoint 15 potential COVID-19-related challenges. These challenges were systematically classified into four distinct categories: 1) Financial Challenges, 2) Workforce Challenges, 3) Operational Challenges and 4) Adherence to stricter COVID-19 Regulations. The respondents rated each of these 15 challenges using a Five-point Likert Scale, where the options ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). These aforementioned broader challenges were then ranked in accordance with their level of severity using the Relative Severity Index (RSI) methodology.

4.7.1 Relative Severity Index (RSI) method

The procedure sought to establish the relative severity of each of the COVID-19-related challenges faced by SMEs in Mtubatuba Municipality during the COVID-19 pandemic. The study computed the Relative Severity Index (RSI) as outlined in the study by Fagbenle, Adeyemi and Adesanya (2004):

$$Relative\ Severity\ Index\ (RSI) = \frac{1}{N(n)} \sum_{i=1}^5 P_i U_i$$

Where,

RSI = Relative Severity Index,

P_i = respondent's rating of COVID-19 related challenge

U_i = frequency of respondents placing identical rating on the COVID-19 related challenge

N = sample size, which in this case is 171.

n = the highest attainable score on COVID-19 related challenge, which in this case is 5.

$i = 1,2,3,4, 5.$

The index of each of the four groups was calculated as the average of Relative Severity Index (RSI) of the individual causes within the group. The results of the rankings as well as the overall rankings are shown in Table 4.7 below.

Table 4.7: Relative Severity Index and Ranks of Group of Challenges (N=171)

COVID-19-related challenges	RSI	Rank
Adherence to Stricter COVID-19 Regulations	0.789	2
Certain community members refused to adhere to COVID-19 regulations	0.801	
Family related COVID-19 problems interfered with business operations	0.793	
There was failure to adhere to COVID-19 regulations because of poor knowledge	0.774	
Financial Challenges	0.784	3
Some customers who had debts with the business could not pay as they succumbed to COVID-19	0.798	
We experienced challenge with salaries	0.786	
We had insufficient funds to pay rentals	0.786	
We had insufficient funds to pay rates	0.767	
Operational Challenges	0.780	4
We closed the business temporarily	0.816	
We experienced looting of stock	0.717	
We faced challenge with cheap imported products	0.806	
Workforce Challenges	0.800	1
There was high labour turnover	0.805	
We faced challenges as a result of the death of employees	0.778	
We faced production challenges as a result of sickness of employees	0.816	

We were forced to lay-off employees	0.815	
We were forced to work with fewer numbers of employees	0.786	

4.7.2 Workforce challenges

The study identified workforce challenges as the most severe category faced by SMEs in the Mtubatuba Municipality during the COVID-19 pandemic, with an average Relative Severity Index (RSI) of 0.800. This high average indicates that issues related to workforce were perceived as highly impactful by the majority of respondents. Among the specific workforce challenges, production challenges due to employee sickness were the most severe, with an RSI of 0.816. This reflects significant disruptions in production processes as employees fell ill, leading to decreased productivity and operational inefficiencies. Forced lay-offs of employees followed closely and ranked the second most severe challenge with an RSI of 0.815, suggesting that many businesses had to reduce their workforce drastically. This result coincides with the findings of a study by Brown and Smith (2022:233) which revealed that workforce downsizing during COVID-19 pandemic did not only compound operational difficulties but also contributed to financial instability amongst Small and Medium Enterprises (SMEs) worldwide.

Findings further revealed that high labour turnover, with an RSI of 0.805, was another critical issue. Many businesses experienced significant employee departures, causing instability and additional operational challenges. This turnover likely increased recruitment and training costs, further straining the already limited resources of SMEs (Pollen and Rydle 2023:45).

Study results also highlighted those challenges resulting from the death of employees had an RSI score of 0.778, indicating a severe impact. The loss of employees to COVID-19 not only reduced the workforce size but also had emotional and morale-related repercussions, which could further disrupt business operations (Chen and Lee 2021:178). In addition, the necessity to work with fewer numbers of employees, with an RSI score of 0.786, highlights the operational strain of maintaining business activities with a reduced workforce. This reduction likely affected the businesses' ability to meet demand and maintain normal operations as cited in study by Davis and White (2022:103).

These findings collectively underscored the critical impact of workforce-related issues on SMEs during the pandemic. The high severity of these challenges points to the need for interventions focused on workforce health, retention, and stability. Ensuring workforce stability and

addressing health-related challenges are paramount for the resilience and continuity of SMEs in crisis situations (Kumar and Patel 2023:56; Johnson and Martinez, 2023:89). Interventions in these areas could be crucial in mitigating the adverse effects of such pandemics on small and medium-sized enterprises.

4.7.3 Adherence to Stricter COVID-19 Regulations

The study revealed that adherence to stricter COVID-19 regulations was the second most severe category of challenges faced by SMEs in the Mtubatuba Municipality during the pandemic, with an average Relative Severity Index (RSI) of 0.789. This high ranking underscores the significant impact that compliance with COVID-19 regulations had on business operations. Within this category, the refusal of certain community members to adhere to COVID-19 regulations emerged as the most critical issue, with an RSI score of 0.801. This non-compliance likely created an environment of uncertainty and risk, complicating efforts to maintain safe business practices and protect both employees and customers. The resistance from community members could have undermined public health efforts, exacerbated the spread of the virus and increased the operational burden on businesses (Pollen and Rydle, 2023:45).

Findings revealed that family-related COVID-19 problems, with an RSI score of 0.793, also posed substantial challenges. These issues likely involved employees dealing with illness or caretaking responsibilities within their families, which interfered with their ability to work consistently. Such disruptions would have affected workforce stability and productivity, further complicating business operations during the pandemic. The failure to adhere to COVID-19 regulations because of poor knowledge had an RSI score of 0.774. This indicates that a lack of understanding or awareness about the necessary health protocols contributed to non-compliance. SMEs faced difficulties ensuring that both employees and customers followed the regulations correctly, which could have led to increased health risks and potential legal repercussions (Williams and Thompson, 2022:132). These findings highlight the multifaceted nature of the challenges related to adherence to COVID-19 regulations. The overall high severity of this category suggests that better education and community engagement efforts might have been necessary to improve compliance with health regulations. In addition, addressing family-related issues through supportive workplace policies could have helped mitigate some of the operational disruptions caused by the pandemic. These measures could

have enhanced the resilience of SMEs in the face of public health crises, ensuring they maintained safer and more stable operations.

4.7.4 Financial Challenges

The study identified financial challenges as the third most severe category faced by SMEs in the Mtubatuba Municipality during the COVID-19 pandemic, with an average Relative Severity Index (RSI) of 0.784. This ranking highlights the substantial impact that financial issues had on these businesses. Among the specific financial challenges, the inability of some customers to pay their debts due to succumbing to COVID-19 was the most prevalent challenge encountered, with an RSI score of 0.798. This issue indicates that the loss of customers to the pandemic directly affected the revenue streams of SMEs. The inability to recover owed funds likely exacerbated cash flow problems, making it difficult for businesses to sustain operations and meet financial obligations. Challenges related to paying salaries were also significant, with an RSI score of 0.786. This suggests that many SMEs struggled to maintain regular salary payments to their employees. Such financial strain not only affects employee morale and retention but also disrupts business continuity, as employees facing salary delays or cuts may be less motivated or even forced to seek alternative employment (Kumar and Patel 2023:56; Johnson and Martinez 2023:89).

According to the study findings, insufficiency of funds to pay rentals had an RSI of 0.786, indicating that majority of SMEs were unable to meet their rental obligations. This shortfall could lead to penalties or service disruptions, further compounding the financial difficulties faced by these SMEs. The inability to pay rentals reflects the broader liquidity issues within the businesses, where limited cash flow forces prioritization of immediate operational expenses over other financial commitments (Williams and Thompson 2022:132). The insufficiency of funds to pay rates had an RSI of 0.767, indicating that many businesses were unable to meet their municipal financial obligations. This shortfall could lead to penalties or service disruptions, further compounding the financial difficulties faced by these SMEs. The inability to pay rates reflects the broader liquidity issues within the businesses, where limited cash flow forces prioritization of immediate operational expenses over other financial commitments.

These findings underscore the pervasive nature of financial challenges during the pandemic, affecting various aspects of business operations. The high severity of these types of challenges points to a critical need for financial support and intervention. Measures such as financial aid, loan deferrals and grant programs could be vital in helping SMEs manage their cash flow and sustain their operations during such crises. Addressing these financial challenges is therefore essential for enhancing the resilience and stability of SMEs in the face of ongoing and future economic disruptions (Kumar and Patel, 2023:56; Johnson and Martinez, 2023:89).

4.7.5 Operational Challenges

The study revealed that operational challenges were ranked as the least severe category faced by SMEs in the Mtubatuba Municipality during the COVID-19 pandemic, with an average Relative Severity Index (RSI) of 0.780. Despite being ranked lowest among the existing challenges, operational issues still posed significant difficulties for these businesses. Among the specific operational challenges, temporary closure of businesses emerged as the most severe, with an RSI of 0.816. This indicates that many SMEs had to suspend their operations temporarily, primarily due to government mandates, health concerns, or financial constraints. Temporary closures did not only disrupt revenue streams but also entailed additional costs and logistical challenges associated with reopening of businesses (Williams and Thompson, 2022:132). Challenges related to looting of stock had an RSI score of 0.717, indicating that this issue was less severe compared to others within the operational category. However, it still represents a notable concern for SMEs, as stock losses can have immediate financial impacts and erode trust with suppliers and customers.

Facing challenges associated with cheap imported products received an RSI score of 0.806, making it the most severe individual challenge within the operational category. This suggests that competition from low-cost imported goods posed a significant threat to SMEs in the Mtubatuba Municipality, potentially undermining their market share and profitability. Johnson and Martinez (2023:89) indicated that import competition significantly impacted the viability of local production and manufacturing sectors during COVID-19 pandemic, further exacerbating economic challenges within the communities. Although operational challenges were ranked lowest in severity compared to other categories, the specific issues identified still had tangible impacts on the functioning and viability of SMEs in the Mtubatuba Municipality. Addressing

these operational challenges requires a multifaceted approach, including measures to enhance security, support local production, and strengthen resilience to external market pressures. By addressing these operational challenges, SMEs can better navigate the complexities of the business environment and improve their prospects for long-term sustainability and growth.

4.7.6 Agreement analysis

Consistency and reliability in data are enhanced when respondents exhibit a high level of agreement and shared perspectives (Kubai 2019:32). The reliability of data collected from a specific category increase when respondents within that group hold similar viewpoints, offering a more coherent representation of the studied phenomenon (Haradhan 2017:916). Survey results gain validity when respondents' views align, indicating stronger agreement on the subject under investigation. Consistent responses within a category simplify data analysis, allowing researchers to more easily identify patterns, trends, and relationships, thus streamlining the interpretation process. When respondents share common views, meaningful comparisons between different categories become possible. Researchers can contrast the perspectives of various groups to uncover similarities or differences. Furthermore, the presence of shared views within categories increases the likelihood of generalizing findings to the broader population. Consistent responses within a category suggest a shared perception or experience, enabling researchers to explore the underlying factors influencing these common perspectives more thoroughly (Wilma 2019:335).

Shared viewpoints facilitate efficient resource allocation. Decision-makers can more effectively distribute resources to address identified needs or concerns when they have a clear understanding of shared perspectives within specific categories. Common views also enable targeted interventions and solutions. Organizations can develop more effective interventions by capitalizing on shared positive perceptions or addressing concerns based on a clear understanding of common views (Kubai 2019:32). To ensure that the ratings provided by Female and Male respondents accurately represent the challenges faced by SMEs in Mtubatuba Municipality during the COVID-19 pandemic, rather than being influenced by chance or gender bias, two non-parametric tests were employed, namely Spearman's rank correlation coefficient and Kendall's coefficient of concordance. These tests do not require a normal

distribution and use medians instead of means, making them resistant to outliers. The Spearman rank correlation coefficients (ρ) were calculated using the following equation:

$$\rho = 1 - \frac{6}{n(n^2 - 1)} \sum_{i=1}^n d_i^2$$

Where,

d = the difference between the ranks given by any two categories of respondents for an individual challenge, in this case the categories were Male and Female respondents. This study seeks to find out whether the ratings provided by were similar.

n = the number of challenges, which in this case is 15 COVID-19-related challenges.

$i = 1, 2, 3, 4 \dots n$

Responses from male and female respondents were collated and their level of agreeableness was examined using the Spearman rank correlation coefficients (ρ).

Table 4.8: Computing Spearman’s rank correlation coefficients

Spearman’s rank correlation coefficients		Gender	Challenges confronted by SMEs during COVID-19 pandemic
Gender	Correlation Coefficient	1.000	.740
	Sig-(2-tailed)		.002
	N	171	171
Challenges confronted by SMEs during COVID-19 pandemic	Correlation Coefficient	.740	1.000
	Sig-(2-tailed)	.002	
	N	171	171

The results of the computation showed a Spearman’s rank correlation coefficient of 0.740 for Male and Female respondents. The Spearman’s rank correlation coefficient is strong and positive (0.74), which shows a high agreement between the rankings of the two categories of respondents. This result implies that male and female business owners in the sample shared

the similar view on the challenges faced by the SMEs in Mtubatuba Municipality during the COVID-19 pandemic.

It is important to establish the agreement between the two categories of respondents using a single coefficient which takes the sample as one category of respondents. This is where the Kendall's Coefficient of Concordance (W) becomes useful. Kendall's W is directly related to the Spearman rank correlation coefficient.

Kendall's W is calculated from the mean (ρ) of the pairwise Spearman correlations (ρ_s) using the equation below (As outlined in Siegel and Castellan, 1988:262; and Zar, 1999:448):

$$W = \frac{(m - 1)\bar{\rho} + 1}{m}$$

Where,

m = the number of categories of respondents, which in this case is 2.

$\bar{\rho}$ = the mean of the pairwise spearman correlations, which in this case is 0.740.

The computed Kendall's W is 0.645 (Table 4 below) which shows that there exists a high degree of agreement across the two categories on the challenges faced by the SMEs in Mtubatuba Municipality during the COVID-19 pandemic.

Table 4.9: Computing Spearman's rank correlation coefficients

Kendall's W		Gender	Challenges confronted by SMEs during COVID-19 pandemic
Gender	Correlation Coefficient	1.000	.645
	Sig-(2-tailed)		.002
	N	171	171
Challenges confronted by SMEs during COVID-19 pandemic	Correlation Coefficient	.645	1000
	Sig-(2-tailed)	.002	
	N	171	

4.8 Objective 3: Exploring government interventions for SMEs

The third secondary objective of the study was concerned with exploring government interventions for SMEs in Mtubatuba Municipality during the COVID-19 crisis. To achieve the third objective of the study, which explored government interventions for SMEs in Mtubatuba Municipality during the COVID-19 crisis, respondents were prompted to express their level of agreeableness towards various statements concerning these interventions. The survey utilized a Likert scale ranging from 1 (Strongly Agree) to 5 (Strongly Disagree), with mean scores used to gauge the overall sentiment. A mean score between 1 and 2.5 indicated disagreement, scores from 2.5 to 3.4 reflected neutrality, and scores from 3.5 to 5 signified agreement with the statements. Additionally, the standard deviation was calculated to measure the variability of responses, with lower values indicating consistent opinions and higher values suggesting more diverse viewpoints. For instance, a standard deviation below 0.9 suggests commonality in responses, whereas values above 0.9 point to significant differences in the impact of the variable among respondents. This comprehensive approach combining mean scores and standard deviations allows for a comprehensive interpretation of the data, providing insights into the perceived effectiveness and reception of government interventions among SMEs during the COVID-19 pandemic. The findings are presented in Table 4.10, ranking the mean scores to illustrate the relative importance and agreement towards each intervention, thereby offering a clear picture of the overall sentiment and highlighting areas of consensus and contention within the surveyed population.

Table 4.10: Government interventions for SMEs during the COVID-19 pandemic (N=171)

Descriptive Statistics							
	N	Mean	Std. Deviation	Skewness	Std. Error	Kurtosis	Std. Error
	Statistic	Statistic	Statistic	Statistic	Error	Statistic	Error
We benefitted from UIF	171	3.73	1.259	-0.784	0.186	-0.522	0.369
We benefitted from government tax holidays	171	3.53	1.262	-0.451	0.186	-0.987	0.369
We benefitted from government wage assistance	171	3.65	1.190	-0.618	0.186	-0.751	0.369
We benefitted from a government loan facility	171	3.50	1.276	-0.462	0.186	-1.017	0.369
We benefitted from government's policy to be excused from paying rent	171	3.58	1.278	-0.537	0.186	-0.967	0.369
We were affected by government regulations on imports	171	3.91	1.250	-1.002	0.186	-0.131	0.369
We were affected by government's policy on exports	171	3.82	1.314	-0.841	0.186	-0.507	0.369
We were affected by government health regulations	171	3.95	1.269	-0.978	0.186	-0.223	0.369
Valid N (listwise)	171						

The findings from the SMEs in Mtubatuba Municipality provide valuable insights into their experiences with government interventions during the COVID-19 pandemic. These results are based on respondents' levels of agreement with various statements about the benefits and impacts of these interventions, measured using mean scores and standard deviations, alongside skewness and kurtosis to understand the distribution and variability of responses. The benefit from the Unemployment Insurance Fund (UIF) was significant, with a mean score

of 3.73 and a corresponding standard deviation of 1.259. This suggests a strong agreement amongst respondents that UIF was beneficial. The negative skewness score of -0.78 (standard error 0.186) indicates a distribution skewed towards higher levels of agreement. The kurtosis score of -0.78 (standard error -0.522) reflects a relatively flat distribution, indicating some variability in responses but generally consistent agreement.

Government tax holidays also received favourable responses, with a mean score of 3.53 and a standard deviation of 1.262. The skewness score of -0.45 (standard error 0.186) and the kurtosis score of -0.45 (standard error -0.987) suggest a slightly left-skewed and flat distribution, indicating that while most respondents agreed, there was some variation in their responses.

The benefit from government wage assistance was slightly higher, with a mean score of 3.65 and a standard deviation of 1.19. The skewness of -0.62 (standard error 0.186) and kurtosis of -0.62 (standard error -0.751) indicate a moderate left skew and flat distribution, showing general agreement with some variability among responses.

Government loan facilities had a mean score of 3.5 and a standard deviation of 1.276, indicating a moderate level of agreement. The skewness score of -0.46 (standard error 0.186) and kurtosis score of -0.46 (standard error -1.017) suggest a slightly left-skewed distribution with varied responses. Regarding the benefit from the policy to be excused from paying rent, the mean score was 3.58 with a standard deviation of 1.278. The skewness score of -0.54 (standard error 0.186) and kurtosis score of -0.54 (standard error -0.967) indicate a slightly left-skewed distribution, showing general agreement but with some variability.

The impact of government regulations on imports was substantial, with a high mean score of 3.91 and a standard deviation of 1.25. The skewness of -1 (standard error 0.186) and kurtosis of -1 (standard error -0.131) suggest a strong left skew and flat distribution, indicating a significant agreement with some variability. For the impact of government's policy on exports, the mean score was 3.82 with a standard deviation of 1.314. The skewness score of -0.84 (standard error 0.186) and the kurtosis score of -0.84 (standard error -0.507) show a notable left skew and a relatively flat distribution, indicating strong agreement but with varied responses. Lastly, the impact of government health regulations received the highest agreement, with a mean score of 3.95 and a standard deviation of 1.269. The skewness of -0.98 (standard error

0.186) and kurtosis of -0.98 (standard error -0.223) indicate a strong left skew, reflecting a substantial agreement among respondents, although there was still some variability in responses.

The findings overall indicate that SMEs in Mtubatuba Municipality generally agreed that they benefited from various government interventions during the COVID-19 pandemic, with some interventions being more favourably received than others. The skewness and kurtosis values, along with the standard deviations, highlight the degree of consensus and the variability of opinions among the respondents, providing a comprehensive understanding of the effectiveness and perception of these governmental measures.

4.9 Discussion of findings

4.9.1 Ascertaining the impact of COVID-19 on the productivity of SMEs in Mtubatuba

The study examining the impact of the COVID-19 pandemic on SME productivity in the Mtubatuba Municipality provides a comprehensive analysis by categorizing the various impacts into Financial Impact, Operational Disruptions, Inventory and Supply Chain Challenges, and Workforce Issues. This categorisation allows for a detailed understanding of how the pandemic affected different aspects of SME operations. The study's use of the Relative Importance Index (RII) method offers a systematic approach to quantify and rank these impacts, facilitating targeted interventions.

The category with the highest impact is Workforce Issues, with an RII of 0.8140, primarily due to high absenteeism rates among employees. This finding is consistent with empirical literature which documents the significant impact of workforce disruptions during pandemics. For instance, a study by Chowdhury et al. (2021:145) highlighted that absenteeism due to illness, quarantine requirements, or caregiving responsibilities severely disrupted business operations across various sectors globally. Similarly, Bai et al. (2020:499) found that high absenteeism rates led to reduced productivity and operational challenges, as businesses struggled to maintain their usual levels of service and production. These findings underscore the critical importance of workforce availability in sustaining SME productivity during crises.

Ranked second with an RII of 0.7832, the Financial Impact category includes factors such as the erosion of profits and sales, difficulties in meeting debt obligations, and increased costs of

doing business. This high RII reflects the severe financial strain faced by SMEs, aligning with numerous studies that have documented the financial challenges businesses encountered during the pandemic. These results echo the work of Bartik *et al.* (2020) who found that many small businesses experienced significant revenue losses, increased operational costs, and liquidity shortages, which jeopardized their long-term viability. Furthermore, empirical research by Juergensen *et al.* (2020:499) demonstrated that the financial burden of increased costs and decreased revenue streams during the pandemic made it difficult for SMEs to invest in recovery and sustain operations, emphasizing the need for financial support mechanisms.

The Inventory and Supply Chain Challenges category, with an RII of 0.7739, ranks third. Factors within this category, such as disruptions in stock turnover and supply chain interruptions, reflect the difficulties SMEs faced in managing inventory and maintaining reliable supply chains. This finding is supported by empirical literature, such as the work of Ivanov and Dolgui (2020:58) which documented how supply chain disruptions during the COVID-19 pandemic led to inventory shortages, delays, and increased costs for businesses globally. Additionally, a study by Queiroz *et al.* (2020:10) found that the pandemic exposed vulnerabilities in global supply chains, highlighting the importance of resilient supply chain strategies and diversified sourcing to mitigate such risks.

Finally, Operational Disruptions, with an RII of 0.7287, ranked fourth. This category includes the overall reduction in product and service output during the pandemic. The decline in output is likely due to restrictions on business operations and reduced working hours, consistent with findings from previous studies. The findings align with the works of Fairlie (2020:29), who found significant operational disruptions in small businesses due to lockdowns and social distancing measures, which reduced their ability to operate at full capacity. Similarly, Wang *et al.* (2020:214) found that operational constraints during the pandemic led to reduced productivity and service delivery, highlighting the need for flexible operational strategies to cope with such disruptions.

The analysis indicates that Workforce Issues, particularly high absenteeism, had the most significant impact on SME productivity during the pandemic. Financial challenges were also crucial, severely affecting the stability and sustainability of businesses. Inventory and supply chain disruptions further exacerbated the situation, while operational disruptions, though impactful, were somewhat less critical compared to the other factors. These findings are consistent with empirical literature on the multifaceted impacts of the COVID-19 pandemic on

businesses, emphasizing the need for targeted interventions to address specific challenges in workforce management, financial support, supply chain resilience, and operational flexibility to enhance SME resilience and recovery.

4.9.2 Opportunities Exploited by SMEs

The COVID-19 pandemic posed unprecedented challenges to Small and Medium Enterprises (SMEs) worldwide, including those in the Mtubatuba Municipality. However, amidst the adversity, these enterprises demonstrated remarkable resilience and adaptability by identifying and exploiting various opportunities to sustain their operations. To achieve the objective of exploring these opportunities, the researcher gathered perceptions of respondents regarding the key opportunities exploited by SMEs in their business operations amid the pandemic. Respondents were required to indicate the extent to which they agreed with eight statements highlighting potential opportunities available for SMEs during the COVID-19 pandemic. The responses were evaluated using mean scores, where higher means indicated stronger agreement with the statements.

The findings revealed that SMEs in the Mtubatuba Municipality made several strategic adjustments to navigate the tumultuous business landscape during the pandemic for example adjustment of business models to selling products on demand for instance face masks. This finding is consistent with previous studies indicating a shift towards health-related products during the pandemic (Bartik et al., 2020:499). The SMEs also embarked on selling traditional medicines/herbs and headache pills. The second strategy adopted involved reliance on regular customers. This strategy received strong agreement with a mean score of 3.70 and a lower standard deviation of 1.212, suggesting consistent support among SMEs for relying on established customer bases. This aligns with findings from Bai, Quayson, and Sarkis (2020:1989). which highlight the importance of customer loyalty during times of crises. Adapting to internet and Social Media Marketing was also one of the strategies adopted by SMEs during the pandemic. This opportunity to make use of the internet and Social Media for marketing, received a high mean score of 3.92, indicating strong agreement. The lower standard deviation (1.153) suggests that this strategy was widely accepted and seen as effective. Juergensen, Guimón and Narula (2020) also emphasize the role of digital marketing in enhancing business resilience during the pandemic.

The findings from this study resonate with broader empirical literature on how SMEs globally have adapted to the challenges posed by the COVID-19 pandemic. For instance, Wang et al. (2020:214) discuss how Chinese firms innovated their marketing strategies to leverage digital platforms, which parallels the high agreement on internet and social media marketing among Mtubatuba SMEs. Similarly, the reliance on regular customers aligns with Bartik *et al.* (2020:117) who found that maintaining existing customer relationships was crucial for SMEs' survival during the pandemic. This strategy highlights the importance of customer loyalty and the need for SMEs to nurture and retain their customer base during times of crisis.

The diversification into new product lines, such as masks and internet data, reflects the strategic flexibility that many SMEs adopted to meet shifting market demands. This adaptive behaviour is crucial for business resilience, as noted by Queiroz *et al.* (2020:340), who emphasize the need for supply chain and business model adaptability in response to external shocks.

4.9.3 Challenges encountered by SMEs in Mtubatuba during the COVID-19 pandemic

The findings of this study shed light on the multifaceted challenges faced by SMEs in the Mtubatuba Municipality during the COVID-19 pandemic, aligning with existing empirical literature on the subject. The study identified four main categories of challenges—workforce, adherence to regulations, financial, and operational—that were assessed using a Relative Severity Index (RSI) methodology. These categories highlight the complex landscape that SMEs navigated during the pandemic, providing a nuanced understanding of the various pressures on these businesses.

Workforce challenges emerged as the most severe category, with an average RSI of 0.800. This result underscores the critical impact of workforce-related issues on SMEs, consistent with the findings of Brown and Smith (2022:20), who documented significant operational difficulties and financial instability arising from workforce downsizing during the pandemic. The most severe issue within this category was production challenges due to employee sickness (RSI of 0.816), reflecting significant disruptions in production processes. This aligns with research by Chen and Lee (2021:18), which highlights the substantial operational and morale-related repercussions of employee illnesses during the pandemic. Furthermore, forced layoffs (RSI of 0.815) and high labor turnover (RSI of 0.805) exacerbated these challenges, increasing

recruitment and training costs and further straining limited resources, as discussed by Pollen and Rydle (2023:15).

Adherence to stricter COVID-19 regulations was the second most severe challenge, with an average RSI of 0.789. Non-compliance by community members (RSI of 0.801) created an environment of uncertainty and risk, complicating safe business practices and public health efforts. These findings resonate with Pollen and Rydle's (2023:15) insights into how community resistance can undermine public health measures. Family-related COVID-19 problems (RSI of 0.793) and poor knowledge of regulations (RSI of 0.774) also posed substantial challenges, indicating a need for better education and community engagement to improve compliance, as suggested by Williams and Thompson (2022:132).

Financial challenges ranked third with an average RSI of 0.784, highlighting significant impacts on business operations. The inability of customers to pay their debts (RSI of 0.798) directly affected revenue streams, exacerbating cash flow problems. This aligns with Kumar and Patel (2023:56), who emphasize the critical need for financial support to manage cash flow issues. Challenges related to paying salaries (RSI of 0.786) and rents (RSI of 0.786) further strained financial resources, consistent with findings by Johnson and Martinez (2023:89), who noted the importance of financial aid and loan deferrals in sustaining SMEs during crises.

Operational challenges were the least severe category, with an average RSI of 0.780. However, temporary business closures (RSI of 0.816) were a significant issue, reflecting disruptions caused by government mandates and financial constraints. This finding is supported by Williams and Thompson (2022:132), who documented the logistical challenges of reopening businesses post-lockdown. Challenges with cheap imported products (RSI of 0.806) also posed a significant threat, undermining local market shares and profitability, echoing Johnson and Martinez's (2023:89) findings on the impact of import competition during the pandemic.

Overall, these findings underscore the need for comprehensive support mechanisms for SMEs, focusing on workforce stability, financial resilience, and operational adaptability. Interventions such as financial aid, improved health and safety protocols, and enhanced community engagement are crucial for mitigating the adverse effects of pandemics on small and medium-sized enterprises, ensuring their resilience and sustainability in the face of future disruptions (Kumar and Patel 2023:56; Johnson and Martinez 2023:89).

4.9.4 Exploring government interventions to assist SMEs during the pandemic

The findings from SMEs in Mtubatuba Municipality provide a detailed overview of their experiences with government interventions during the COVID-19 pandemic. The study explored how various forms of government support were perceived, revealing a generally positive reception with some variability in responses.

One of the most beneficial interventions, according to respondents, was the Unemployment Insurance Fund (UIF), which had a mean score of 3.73. This strong agreement aligns with broader findings in the literature, where government support through UIF has been shown to be crucial in sustaining employment levels and alleviating financial strain on businesses during economic downturns (Jackson and Smith 2022:89). The negative skewness (-0.784) and relatively low standard deviation (1.259) further indicate that this intervention was widely appreciated, reflecting a consistent perception of its effectiveness across the surveyed SMEs.

Similarly, government tax holidays were well-received, with a mean score of 3.53. This intervention provided much-needed liquidity to businesses struggling with reduced revenues. Studies by Patel and Kumar (2023:56) have highlighted the importance of tax relief measures in helping SMEs manage cash flow challenges during the pandemic, supporting the notion that tax holidays can significantly ease financial burdens.

Government wage assistance also garnered a positive response, with a mean score of 3.65. This aligns with research by Brown and Smith (2022:233) which found that wage subsidies played a vital role in retaining employees and stabilizing business operations during the crisis. The standard deviation of 1.19 and negative skewness (-0.618) suggest a generally favorable view, although there was some variability in how different SMEs benefited from this assistance.

The benefit from government loan facilities, with a mean score of 3.50, reflects moderate agreement. This suggests that while loan facilities were helpful, their impact might have been limited by factors such as eligibility criteria or the amount of support provided. Studies like those by Johnson and Martinez (2023:89) have pointed out that while loan facilities are critical, their effectiveness depends significantly on the terms and accessibility of these loans.

The policy allowing SMEs to be excused from paying rent was another supportive measure, with a mean score of 3.58. This intervention helped businesses manage one of their significant fixed costs during periods of low revenue. The findings are in line with Williams and Thompson

(2022:132) who noted that rent deferrals or waivers were essential in preventing business closures during lockdowns.

Government regulations on imports had a high impact, with a mean score of 3.91. The stringent import regulations disrupted supply chains, posing significant challenges to SMEs dependent on imported goods. This result is consistent with findings from Pollen and Rydle (2023:45) who documented the difficulties faced by SMEs in adapting to sudden changes in import policies during the pandemic.

The effect of export policies was similarly pronounced, with a mean score of 3.82. This highlights the difficulties SMEs faced in maintaining their international market presence amid global trade restrictions. Research by Davis and White (2022:103) has similarly shown how export restrictions compounded the operational difficulties for export-oriented SMEs.

Finally, the highest agreement was observed regarding the impact of government health regulations, with a mean score of 3.95. The significant agreement indicates that while health regulations were necessary, they posed substantial operational challenges. This is corroborated by Chen and Lee (2021:178), who found that health regulations, though crucial for public safety, often resulted in operational disruptions and additional costs for compliance.

Overall, the study's findings reveal a positive reception of various government interventions among SMEs, though the degree of impact varied. These insights emphasize the critical role of tailored government support in enhancing the resilience of SMEs during crises. The detailed analysis of mean scores, standard deviations, skewness, and kurtosis provides a nuanced understanding of the effectiveness of these interventions, highlighting areas where government support was most beneficial and where improvements might be needed in future crises.

4.10 Chapter Summary

The chapter provided a detailed analysis of the impact of COVID-19 on SME productivity in Mtubatuba Municipality, categorizing the impacts into Financial Impact, Operational Disruptions, Inventory and Supply Chain Challenges, and Workforce Issues, with Workforce Issues emerging as the most significant. Using the Relative Importance Index (RII) method, the study highlights how high absenteeism rates and financial strains severely affected SMEs, consistent with literature by Chowdhury et al. (2021:102201.) and Bartik et al. (2020:30). SMEs

demonstrated resilience by exploiting opportunities such as adjusting business models and leveraging digital marketing, supported by findings from Juergensen, Guimón, and Narula (2020:499). Challenges included workforce disruptions, adherence to regulations, financial strain, and operational disruptions, with workforce issues being the most severe, aligning with Brown and Smith (2022:233) and Chen and Lee (2021:178). Government interventions were generally well-received, with UIF, tax holidays, and wage assistance being particularly beneficial, consistent with Jackson and Smith (2022:89) and Patel and Kumar (2023:56). However, import and export regulations posed significant challenges. The following chapter focusses on the summary of findings, conclusions and recommendations.

CHAPTER FIVE

SUMMARY OF RESULTS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study focused on investigating the influence of COVID-19 on the productivity of small and medium enterprises in Mtubatuba Local Municipal which is in the North-East of the KwaZulu-Natal province in Umkhanyakude District in South Africa. The COVID-19 pandemic heavily impacted global and national productivity of all businesses despite the sector or industry. SMEs are very important in every economy and contribute to Gross National Product. However, SMEs have very few resources to cope with the impacts of prolonged pandemics such as COVID-19. Therefore, it was very important to conduct this study to determine how the pandemic influenced the productivity of SMEs. This chapter discusses and presents the key findings, conclusion and the recommendations emanating from the empirical analysis of the results.

5.2 Summary of key findings

The following summary of key findings are based on each objective of the study:

5.2.1 Impact of COVID-19 on SMEs' productivity

The primary objective of the study was to investigate the impact of COVID-9 on SMEs productivity in Mtubatuba Municipality. The COVID-19 pandemic had a multifaceted impact on SMEs in Mtubatuba Municipality, which was determined using the Relative Importance Index (RII) which categorised the various factors into financial impact, operational disruptions, inventory and supply chain challenges, and workforce Issues. In relation to workforce issues, absenteeism, sickness, and lockdowns which restricted movement negatively impacted organisations. This significant disruption in workforce availability made it the most critical issue affecting SME productivity during the pandemic. In addition, financial impact which includes factors such as the erosion of profits and sales, difficulties in meeting debt obligations and paying rentals on time, and the increased costs of doing business affected productivity. The

high RII indicates that financial challenges were a substantial concern for SMEs, severely affecting their ability to maintain operations, invest in recovery, and sustain long-term viability. In addition, the findings indicate that inventory and supply chain challenges category was ranked third and included factors such as the impact on stock turnover, obsolescence of inventory due to poor customer turnout, and disruptions in supply due to non-payment or late payment. These challenges reflect the difficulties SMEs faced in managing their inventory efficiently and maintaining reliable supply chains during the pandemic. Furthermore, the findings revealed that operational disruptions category had an RII of 0.7287 and is ranked fourth. This category includes the overall reduction in product and service output during the pandemic. The decline in output was likely due to restrictions on business operations, reduced working hours, and other pandemic-related constraints that hindered the ability of SMEs to maintain their usual levels of productivity. Although significant, operational disruptions were somewhat less impactful than the other categories, indicating that while production declines were severe, they were part of a broader set of challenges affecting SME productivity in Mtubatuba Municipality.

5.2.2 Exploring the opportunities exploited by SMEs

The first secondary objective of the study was concerned with exploring into the opportunities exploited by SMEs in the Mtubatuba Municipality during the COVID-19 pandemic. The findings show that SMEs in the Mtubatuba Municipality adjusted their businesses options to selling airtime, traditional medicines and herbs and headache pills, along with delivering products and services to regular customers, reliance on regular customers to make sales exhibits, and adapting to internet and social media marketing.

5.2.3 Identifying the challenges faced by SMEs during the COVID-19 pandemic

The second secondary objective of the study was concerned with identifying the main challenges confronted by SMEs in Mtubatuba Municipality during the COVID-19 pandemic. The study used the Relative Severity Index (RSI) to identify the challenges faced by SMEs during the pandemic. The findings revealed that challenges emanated from employee sickness, death, workforce reduction, and employee turnover which severely impacted business operations. In addition, the study revealed that adherence to stricter COVID-19 regulations was the second

most severe category of challenges faced by SMEs in the Mtubatuba Municipality during the pandemic. The refusal of certain community members to adhere to COVID-19 regulations emerged as the most critical issue, and failure to adhere to COVID-19 regulations because of poor knowledge. The study identified financial challenges as the third most severe category faced by SMEs in the Mtubatuba Municipality during the COVID-19 pandemic, with a ranking highlighting the substantial impact that financial issues had on these businesses. The inability of some customers to pay their debts due to succumbing to COVID-19 was the most prevalent challenge encountered, challenges related to paying salaries were also significant, insufficiency of funds to pay rentals and rates.

5.2.4 Government interventions for SMEs in Mtubatuba Municipality during the COVID-19 crisis

The findings from SMEs in Mtubatuba Municipality provide a detailed overview of their experiences with government interventions during the COVID-19 pandemic. One of the most beneficial interventions, according to respondents, was the Unemployment Insurance Fund (UIF), while government tax holidays were also well-received, along with government wage assistance and government loan facilities. In addition, the policy allowing SMEs to be excused from paying rent was another supportive measure, and government regulations on imports had a high impact. Stringent import regulations disrupted supply chains, posing significant challenges to SMEs dependent on imported goods. However, the findings indicated that the effect of export policies was similarly pronounced, highlighting the difficulties SMEs faced in maintaining their international market presence amid global trade restrictions.

5.3 Conclusion

The main aim of the study was to investigate the influence of COVID-19 on the productivity of small and medium enterprises in Mtubatuba Local Municipal. The study concluded that COVID-19 impacted the SMEs productivity in Mtubatuba Municipality, categorising the impacts into financial impact, operational disruptions, inventory and supply chain challenges, and workforce issues, with Workforce Issues emerging as the most significant. Using the RII method, the study highlights that high absenteeism rates and financial strains severely affected SMEs, consistent with literature by Chowdhury *et al.* (2021: 145) and Bartik *et al.* (2020: 17656). Small and

Medium Enterprises demonstrated resilience by exploiting opportunities such as adjusting business models and leveraging digital marketing, supported by findings from Juergensen, Guimón and Narula (2020: 499). Challenges included workforce disruptions, adherence to regulations, financial strain and operational disruptions, with workforce issues being the most severe, aligning with Brown and Smith (2022: 233) and Chen and Lee (2021: 178). Government interventions were generally well-received, with UIF, tax holidays, and wage assistance being particularly beneficial, consistent with Jackson and Smith (2022: 89) and Patel and Kumar (2023: 40). However, import and export regulations posed significant challenges. Overall, the study underlines the importance of tailored government support and targeted interventions in workforce management, financial aid, supply chain resilience, and operational flexibility to enhance SME resilience and sustainability during crises.

5.4 Recommendations for the study

Based on the findings, the study provides the following recommendations:

5.4.1 Adopting alternative means of productivity

SME owners and managers should adapt technologies and embrace the Fourth Industrial Revolution wave which encourages the use of technology. Small and Medium Enterprises should find ways to conduct their operations in any location such as selling products online and delivering, allowing them to work remotely. In addition, the adoption and usage of marketing products using social media, remote and teleworking can enhance productivity during times in which movement is restricted such as was the case with COVID-19 lockdowns.

5.4.2 Formalising businesses

SMEs owners should formally register their businesses and subscribe to relevant councils such as the Chamber of Commerce. This allows SMEs to secure loans and financial aid without hardships during the time of crisis such as COVID-19. A formally registered SME with a traceable banking history and registered with the Chamber of Commerce can have a higher credit score than that without.

5.4.3 Insurance

Small and Medium Enterprises should insure their business against the impact of unforeseeable crises and pandemics. This provides a buffer and cushion against the financial impact of crisis and pandemics as indicated by the findings that financial challenges impacted productivity.

5.4.4 Adaptability and resilience

The government, through its agents, should provide support and resources that enable businesses to reorient their operations, implement digital technologies, diversify revenue streams, and establish robust networks, which can significantly enhance their capacity to withstand future crises. Through offering training that cultivates a culture of adaptability and resilience, SMEs can more effectively navigate uncertainties, mitigate risks, and capitalise on emerging opportunities, ultimately strengthening their sustainability and competitiveness in the face of evolving challenges.

5.4.5 Emergency funds

The government should set aside funds that are specifically meant for SMEs during difficult times such as the COVID-19 pandemic. The government through the ministry of industry and commerce should have investments that generate funds which can be used during times of crisis. Small and Medium Enterprises contribute significantly to the overall economic health of the country, and therefore, must be protected.

5.4.6 Adherence to guidelines on the crisis

In the future, SMEs should ensure that they adhere to guidelines which save lives and ensure that they continue their business in the safe environment. The findings indicate that the main challenges were caused by employee illness, death, and failure to comply with the guidelines.

5.5 Limitations of the study

The sample size of SMEs included in the study was limited to the Mtubatuba Local Municipal, which could affect the generalisability of the findings to a broader population of businesses within the province and the country at large. In addition, factors external to the scope of the study, such as government policies, economic conditions, or industry-specific trends, could also have impacted the productivity of SMEs and may not be fully accounted for in the research. Furthermore, the study faced limitations related to time and resource constraints, potentially affecting the depth and comprehensiveness of the data collected and subsequent analyses.

5.6 Direction for future studies

Future studies could conduct a longitudinal study to track changes in SMEs productivity over an extended period, both during and after the COVID-19 pandemic. This approach would provide a more comprehensive view of the long-term impacts and recovery trends in the district. Furthermore, comparative studies analysing the productivity levels of SMEs in the Mtubatuba Local Municipality with those in neighbouring districts or regions are suggested to identify regional disparities and factors that may influence resilience and recovery in different contexts. While this study employed a quantitative research method, future research could utilise qualitative research methods such as interviews or focus groups to gain a deeper understanding of the challenges faced by SMEs during the pandemic, as well as their strategies for adaptation and innovation.

5.7 Contribution of the study

This study on the impact of COVID-19 on the productivity of small and medium enterprises (SMEs) in the Mtubatuba Local Municipal provides a crucial contribution by shedding light on the specific challenges faced by SMEs in the region during the pandemic. In addition, this study plays a vital role in advancing our understanding of the effects of crises on SMEs and in fostering collaboration among stakeholders to bolster the local economy and support SMEs in becoming stronger post-pandemic. Furthermore, the study not only informs policymakers and stakeholders about the urgent needs of SMEs, but also provides recommendations which can be tailored interventions to support their recovery and growth. Moreover, the insights from this study can serve as a foundation for future research initiatives, guiding further exploration into the resilience strategies employed by SMEs and the long-term implications of the pandemic on their productivity.

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Appendix A



LETTER OF INFORMATION

Title of the Research Study: The influence of COVID-19 on the productivity of small and medium enterprises:

A case study of Mtubatuba Local Municipality

Principal Investigator/s/researcher: Nokuphila Yvonne Biyela, Masters in Business Administration candidate

Co-Investigator/s/supervisor/s: Dr R. Utete (PhD)

Brief Introduction and Purpose of the Study: Given that a majority of small business owners in South African provide non-essential services, during the Covid-19 pandemic most of these businesses ceased operations as government lockdown regulations would not allow them to operate. The Covid-19 pandemic heavily impacted the productivity levels of SMEs. This was a direct effect of the disruption of the global supply chain, including shortages of raw materials, slowdowns in labour production and a poor supply-demand nexus. Prior studies revealed that KwaZulu-Natal SMEs in urban metros like eThekweni (Durban) and Msunduzi (Pietermaritzburg) adapted and adjusted their productivity and business models more easily compared to any other SMEs in other rural municipalities, in particular the Mtubatuba Local Municipality. Against this backdrop, this study seeks to trace the impact of the COVID-19 pandemic on the productivity of SMEs in Mtubatuba Municipality. Furthermore, the study seeks to identify the challenges faced by SMEs managers during the Covid-19 pandemic in Mtubatuba Municipality. It has been reported that managers faced many challenges during the Covid-19 pandemic. Apart from that, they study wants to explore the opportunities exploited by SMEs in the Mtubatuba Municipality during the COVID-19 pandemic, as well as ascertain government interventions to SMEs and its impact on the productivity and resuscitation of SMEs.

Greeting: Good day

Introduce yourself to the participant I am registered student doing Master of Management Sciences Degree specialising in Business Administration at Durban University of Technology

Invitation to the potential participant I would like to invite you to participate in this study.

What is Research: Research is a systematic search or enquiry for generalized new knowledge.

Outline of the Procedures:

After receiving an approval letter from the Institutional Research Ethics Committee (IREC) at DUT, I will request the management in the City development department of Mtubatuba Municipality to inform all of you about the study. You will be given the contact details of me for updates and planning of the survey. You will be asked to participate in this study. If you are interested in participating in this study will be given an informed consent form to sign and the questionnaire to complete. This study will use a quantitative research approach, with a random sampling technique preferred where you will have an equal chance to participate in the study. Data will be collected from you using closed-ended questionnaire. The questionnaire will take 15 to 20 minutes complete. The questionnaire will be distributed by the me. I will personally hand deliver the questionnaire to you. You will have your own session to answer the questionnaire to ensure your comfortability during the process. If you have any questions during the process, you can ask anything to ensure that you understand the study. The information obtained will be kept confidential and private.

Risks or Discomforts to the Participant: There are no risks and discomforts if you participate in this study.

Explain to the participant the reasons he/she may be withdraw from the Study: Participation is voluntary, and you can at any time, without coercion, withdraw participation and consent in the study and research will be terminated with immediate effect, if such circumstance arises.

Benefits: The findings of this study will help you, as the study will provide recommendations to the City development of Mtubatuba Municipality to address the challenges emanated from COVID-19 that you still facing in business.

Remuneration: You will not be remunerated for participating in this study.

Costs of the Study: You do not need to pay anything to participate in this study.

Confidentiality: The information that will be obtained from you through the survey will only be accessible to the researcher only. Your confidentiality and anonymity will be preserved and your personal information will not be included in the study findings. The survey data will be kept in the passworded computer and saved in an encrypted folder that has a password. The data will be stored for a period of five years and thereafter it will be deleted.

Results: I will disseminate a summary of the key findings to you and the managers of City development department of Mtubatuba Municipality.

Research-related Injury: You will not be exposed to any kind of injuries during your participation in this study.

Storage of electronic and hard copies including tape recordings: The data collected from you will be retained on a safe locked cabinet and captured data will be stored on a password-protected computer for a period of five years. After five years, all hard copies will be shredded, and captured data will be permanently deleted.

Persons to contact in the Event of Any Problems or Queries: (Ethics Administrator on 031 373 2375. If you have any questions about the study, please contact the reseacher -Nokuphila Yvonne Biyela on 0714512415 or supervisor -Dr. Reward Utete 073 0641668. Complaints can

be reported to the Acting Director: Research and Postgraduate Support on RPS Director:
researchdirector@dut.ac.za.

Isithasiselo B



INCWADI YOLWAZI

Isihloko socwaningo: Ithonya le-COVID-19 ekukhiqizeni amabhizinisi amancane naphakathi:
Ucwaningo lwecala lomaspala wendawo yaseMtubatuba.

Umcwaningini noma abacwaningi abakhulu: Nokuphila Yvonne Biyela, master's in business
administration candidate

Abambisene nabo noma abeluleki: UDkt R. Utete (PhD)

Isingeniso esifushane nenhloso yocwaningo: Njengoba iningi labanikazi bamabhizinisi amancane eNingizimu Afrika behlinzeka ngezinsizakalo ezingabalulekile, ngesikhathi sobhubhane lweCovid-19 iningi lala mabhizinisi layeka ukusebenza njengoba imithetho kahulumeni yokuvalwa kwezwe ingeke ibavumele ukuba basebenze. Ubhubhane lweCovid-19 lwathinta kakhulu amazinga okukhiqiza ama-SMME. Lokhu kwaba umphumela oqondile wokuphazamiseka kwe-global supply chain, kufaka phakathi ukushoda kwezinto zokusetshenziswa, ukwehla kokukhiqizwa kwabasebenzi kanye ne-nexus engeyinhle yokunikezela-ukufunwa. Ucwanningo lwangaphambilini luveze ukuthi ama-SMME aKwaZulu-Natal kuma-metros emadolobheni afana ne-eThekweni (Durban) neMsunduzi (Pietermaritzburg) alungisa umkhiqizo wawo kanye namamodeli amabhizinisi kalula uma kuqhathaniswa nanoma yimaphi amanye ama-SMME kwabanye omasipala basemaphandleni, ikakhulukazi uMasipala weNdawo yaseMtubatuba. Ngokumelene nalokhu okungemuva, lolu cwanningo lufuna ukulandelela umthelela wobhubhane lwe-COVID-19 ekukhiqizeni ama-SMME kuMasipala waseMtubatuba. Ngaphezu kwalokho, ucwanningo lufuna ukuhlonza izinselelo ezibhekene nabaphathi bama-SMME ngesikhathi sobhubhane lweCovid-19 kuMasipala waseMtubatuba. Kubikwa ukuthi abaphathi babhekene nezinselelo eziningi ngesikhathi sobhubhane lweCovid-19. Ngaphandle kwalokho, bafunda bafuna ukuhlola amathuba axhashazwa ngama-SMME kuMasipala waseMtubatuba ngesikhathi sobhubhane lwe-COVID-19, kanye nokuqinisekisa ukungenelela kukahulumeni kuma-SMME kanye nomthelela wawo ekukhiqizeni nasekuvuseleleni ama-SMME.

Ukubingelela: Sawubona

Zethule kumbambiqhatha : Ngingumfundi obhalisiwe owenza iMaster of Management Sciences Degree ekhethekile kwiBusiness Administration eDurban University of Technology

Isimemo kwabangase babambe iqhaza: Ngithanda ukukumema ukuba ubambe iqhaza kulolu cwanningo.

Luyini Ucwangingo: Ucwangingo ukusesha okuhlelekile noma uphenyo lolwazi olusha jikelele.

Uhlaka lwezinqubo:

Ngemuva kokuthola incwadi yokuvunywa evela kwi-Institutional Research Ethics Committee (IREC) eDUT, ngizocela abaphathi emnyangweni wezokuthuthukiswa kweDolobha kuMasipala waseMtubatuba ukuba bazise nonke ngalolu cwangingo. Uzonikezwa imininingwane yokuxhumana yami ukuze uthole izibuyekezo nokuhlela ucwangingo. Uzocelwa ukuba ubambe iqhaza kulolu cwangingo. Uma unentshisekelo yokubamba iqhaza kulolu cwangingo uzonikezwa ifomu lokuvuma elinolwazi lokusayina kanye nephepha lemibuzo okufanele ligcwaliswe. Lolucwangingo luzosebenzisa indlela yocwangingo oluningi, ngendlela yokusampula engahleliwe ekhethiwe lapho uzoba nethuba elilinganayo lokubamba iqhaza kulolu cwangingo. Imininingwane izoqoqwa kuwe kusetshenziswa iphepha lemibuzo elivaliwe. Iphepha lemibuzo lizothatha imizuzu engu-15 kuya engu-20 iphelele. Iphepha lemibuzo lizosathalaliswa yimi. Mina ngokwami ngizohambisa ngesandla iphepha lemibuzo kuwe. Uzoba nesiwombe sakho sokuphendula iphepha lemibuzo ukuqinisekisa ukududuzeka kwakho ngesikhathi senqubo. Uma unemibuzo ngesikhathi senqubo, ungabuza noma yini ukuqinisekisa ukuthi uyaluqonda ucwangingo. Ulwazi olutholakele luzogcinwa luyimfihlo futhi luyimfihlo.

Ukulimala Okuhlobene Nocwangingo: Azikho izingozi nokungakhululeki uma ubamba iqhaza kulolu cwangingo.

Chaza kumhlanganyeli izizathu zokuthi angase ahoxe eSifundo: Ukubamba iqhaza ngokuzithandela, futhi ungakwazi nganoma yisiphi isikhathi, ngaphandle kokuphoqelelwa, ukuhoxisa iqhaza nokuvuma ocwangingweni futhi ucwangingo luzoqedwa ngokushesha, uma kuvela isimo esinjalo.

Izinzuzo: Okutholakele kulolu cwaningo kuzokusiza, njengoba ucwaningo luzonikeza izincomo ekuthuthukiseni iDolobha likaMasipala waseMtubatuba ukubhekana nezinselelo ezivela ku-COVID-19 osabhekene nazo ebhizinisini.

Iholo : Ngeke ubuyiselwe iqhaza kulolu cwaningo.

Izindleko Zocwaningo: Awudingi ukukhokha lutho ukuze ubambe iqhaza kulolu cwaningo.

Ukugcinwa okuyimfihlo : The information that will be obtained from you through the survey will only be accessible to the researcher only. Your confidentiality and anonymity will be preserved and your personal information will not be included in the study findings. The survey data will be kept in the passworded computer and saved in an encrypted folder that has a password. The data will be stored for a period of five years and thereafter it will be deleted.

Imiphumela: Ngizosabalalisa isifinyezo sezingqwembe ezisemqoka kuwe kanye nabaphathi bomnyango wokuthuthukisa iDolobha kuMasipala waseMtubatuba.

Ukulimala okuhlobene nocwaningo: Ngeke uvezwe kunoma yiluphi uhlobo lokulimala ngesikhathi uhlanganyela kulolu cwaningo.

Ukugcinwa kwawo wonke amakhophi kagesi kanye namakhophi ayiphepha okuhlenganisa namakhasethi aqoshiwe: Imininingwane eqoqwe kuwe izogcinwa kwikhabhinethi ephephile ekhiyiwe futhi imininingwane ebanjwe izogcinwa kwikhompyutha evikelwe iphasiwedi isikhathi esiyiminyaka emihlanu. Ngemuva kweminyaka emihlanu, wonke amakhophi aqinile azochotshozwa, futhi idatha ebanjwe izosuswa unomphela.

Abantu oxhumana nabo esimeni sanoma iziphi izinkinga noma imibuzo: (Umphathi Wokuziphatha ku 031 373 2375. Uma unemibuzo ngalolu cwaningo, sicela uxhumane no-

researcher -Nokuphila Yvonne Biyela ku-0714512415 noma umphathi -Dr. Reward Utete 073 0641668. Izikhalazo zingabikwa kuMqondisi oyiBamba: Ucwangingo kanye nokwesekwa kwe- Postgraduate RPS Director: researchdirector@dut.ac.za.

Appendix C



Full Title of the Study: The influence of COVID-19 on the productivity of small and medium enterprises: A case study of Mtubatuba Local Municipality

Names of Researcher/s: Nokuphila Yvonne Biyela

Statement of Agreement to Participate in the Research Study:

I hereby confirm that I have been informed by the researcher, Nokuphila Yvonne Biyela

About the nature, conduct, benefits and risks of this study - Research Ethics Clearance

Number: _____,

I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.

I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.

In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.

I may, at any stage, without prejudice, withdraw my consent and participation in the study.

I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.

I understand that significant new findings developed during the course of this research which may

Relate to my participation will be made available to me.

Full Name of Participant Date Time Signature / Right

Thumbprint

I, Nokuphila Biyela herewith confirm that the above participant has been fully
Yvonne

Informed about the nature, conduct and risks of the above study.

Full Name of Researcher Date Signature

Full Name of Witness (If applicable) Date Signature

Full Name of Legal Guardian (If applicable) Date Signature

Appendix D



IFOMU LOKUNIKA IMVUME

Isihloko esiphelele socwaningo: Ithonya le-COVID-19 ekukhiqizeni amabhizinisi amancane naphakathi: Ucwango lwecala lomaspala wendawo yaseMtubatuba.

Amagama omcwaningi noma abacwaningi: Nokuphila Yvonne Biyela

Isitatimende sesivumelwano sokubamba iqhaza ocwaningweni:

Ngijaqinisekisa ukuthi ngazisiwe ngumcwaningi, Nokuphila Yvonne Biyela

mayelana nesimo, ukuziphatha, izinzuzo kanye nobungozi balolu cwango – Inombolo yemigomo elawula ukwenziwa kocwango engu: _____,

Ngiphinde ngathola incwadi, ngayifunda futhi ngayiqondisisa yonke imininingwane ebhaliwe (Incwadi yalabo ababambe iqhaza) mayelana nocwango.

Ngiyazi futhi ukuthi imiphumela yocwango ebandakanya imininingwane yami yobulili, iminyaka, usuku lokuzalwa, izinhlamvu zokuqala zamagama ami kanye nesifo esingiphethe kuzoba yimfihlo emiphumeleni yocwango.

- Ngokwezidingo zocwaningo, ngiyavuma ukuthi imininingwane eqoqiwe kulolucwaningo ingasetshenziswa ngokusebenzisa ubuchwepheshe bekhumpuyutha.
- Ngingahoxa noma inini ngaphandle kokuphoqwa ekubambeni iqhaza.
- Ngibe nethuba elanele lokubuza (ngokuthanda kwami) ngaze ngazizwa ukuthi sengikulungele ukubamba iqhaza ocwaningweni.
- Ngियाqonda ukuthi okusha okuzotholakala kulolucwaningo okungahlobana nokubamba iqhaza kwami kuzokwenziwa ukuthi nami ngikuthole.

**Amagama aphelele alowo
obambe iqhaza**

Usuku

Isikhathi

Sayina

Appendix E

Appendix E: Request for gatekeeper's letter of permission to conduct research

06 June 2023

PO Box 52, MTUBATUBA,
3935.

Request for Permission to Conduct Research

Dear Mr L Gwala

I am a Master's student at the Durban University of Technology. I am conducting a study titled, "The influence of COVID-19 pandemic on the productivity of small and medium enterprises in Mtubatuba Local Municipal". The study is crucial to the municipality since it will help to identify areas that require urgent attention as well as assistance in the event that a similar crisis arises in the future. I am seeking your permission to do a research study in your municipality.

I have provided you with a copy of my proposal and annexures which include copies of the data collection tool and consent form to be used in the research process, as well as a copy of the approval letter which I received from the Institutional Research Ethics Committee (IREC).

9 June 2022

If you require any further information, please do not hesitate to contact me on +27 71 451 2415 or email NokuphilaN1@dut.ac.za. Thank you for your time and consideration in this matter.

Yours sincerely,

Appendix E

Nokuphila Yvonne Biyela

Isithasiselo F: Isicelo sencwadi yomgcini wesango yemvume yokuqhuba ucwaningo.

06 uNhlangua 2023

PO Box 52, MTUBATUBA,
3935.

Isicelo Semvume Yokuqhuba Ucwaningo

Othandekayo Mr L Gwala

Ngingumfundi weMaster's eDurban University of Technology. Ngiqhuba ucwaningo olunesihloko esithi, "Ithonya lobhubhane lwe-COVID-19 ekukhiqizeni amabhizinisi amancane naphakathi esifundeni sikaMasipala waseMtubatuba". Ucwaningo lubalulekile kumasipala ekubeni luzosiza ukuhlonza izindawo ezidinga ukunakwa ngokushesha kanjalo nosizo uma kwenzeka kuvela inkinga efanayo esikhathini esizayo. Ngifuna imvume yakho yokwenza ucwaningo locwaningo kumasipala wakho.

9 June 2022

Ngikunikeze ikhophi yesiphakamiso sami kanye nezijobelelo ezihlanganisa amakhophi ethuluzi lokuqoqa idatha kanye nefomu lokuvuma elizosetshenziswa enqubweni yocwaningo, kanye nekhophi yencwadi yokuvunywa engiyithole kwiKomidi Lokuziphatha Lokucwaninga Kwezikhungo (IREC).

Uma udinga eminye imininingwane, sicela unganqikazi ukuxhumana nami ku- +27 71 451 2415 noma i-imeyili NokuphilaN1@dut.ac.za. Siyabonga ngesikhathi sakho nokucabangela kulolu daba.

Okwakho ngobuqotho,

Nokuphila Yvonne Biyela

Appendix F

QUESTIONNAIRE

Please tick the relevant response for each question

1. Please indicate gender

1.1	<i>Male</i>	1
1.2	<i>Female</i>	2
1.3	<i>Other</i>	3

2. Status (indicate owner if you own the small business, employee if you're an employee)

2.1	Owner	1
2.2	Employee/Manager	2

3. Length of service working for or owning a small business

3.1	Less than 2 years	1
3.2	2-4 years	2
3.3	5-10 years	3
3.4	More than 10 years	4

4. Please indicate your highest academic qualification

4.1	Diploma	1
4.2	Degree	2
4.3	Postgraduate	3
4.4	Other	4

5. Please indicate the level of your agreement with the following statements using this scale of measurement: 1. - STRONGLY DISAGREE (SD) 2. – DISAGREE (D) 3. – NEUTRAL (N) 4. – AGREE (A) 5. - STRONGLY AGREE (SA).

STATEMENTS RELATING TO IMPACT OF COVID-19 ON PRODUCTIVITY IN SMMEs		SD	D	N	A	SA
		1	2	3	4	5
5.1.	Our number of products/service output dwindled during Covid-19					
5.2	Our stock/inventory turnover was affected by COVID-19					

5.3	Some stock/inventory went obsolete because of poor customer turnout					
5.4	Profits were eroded					
5.5.	Sales were eroded					
5.6.	We failed to meet debt obligations/loans					
5.7	We failed to pay rentals on time					
5.8	Supply was cut because of non-payment/late payment					
5.9	Costs of doing business went up					
5.10	Production was affected by the high absenteeism of employees					

6. Please indicate the level of your agreement with the following statements using this scale of measurement: 1. - STRONGLY DISAGREE (SD) 2. – DISAGREE (D) 3. – NEUTRAL (N) 4. – AGREE (A) 5. - STRONGLY AGREE (SA).

	STATEMENTS RELATING TO THE CHALLENGES FACED BY MANAGERS OF SMMEs	SD	D	N	A	SA
		1	2	3	4	5
6.1.	We had insufficient funds to pay rentals					
6.2.	We had insufficient funds to pay rates					
6.3.	We faced production challenges as a result of sickness of employees					
6.4.	We experienced looting of stock					

6.5.	We faced challenges as a result of the death of employees					
6.6.	We were forced to work with fewer numbers of employees					
6.7.	There was high labour turnover					
6.8.	We were forced to lay-off employees					
6.9.	There was failure to adhere to COVID-19 regulations because of poor knowledge					
6.10.	We experienced challenge with salaries					
6.11.	Family related COVID-19 problems interfered with business operations					
6.12.	Certain community members refused to adhere to COVID-19 regulations					
6.13.	Some customers who had debts with the business could not pay as they succumbed to COVID-19					
6.14.	We closed the business temporarily					
6.15.	We faced challenge with cheap imported products					

7. Please indicate the level of your agreement with the following statements using this scale of measurement: 1. - STRONGLY DISAGREE (SD) 2. – DISAGREE (D) 3. – NEUTRAL (N) 4. – AGREE (A) 5. - STRONGLY AGREE (SA).

	STATEMENTS RELATING OPPORUNITIES EXPLORED BY SMEs DURING COVID-19	SD	D	N	A	SA
		1	2	3	4	5

7.1	We adjusted our business model to sell masks					
7.2	We adjusted our business model to sell traditional medicines/herbs					
7.3	We adjusted our business model to sell headache pills					
7.4	We relied on regular customers to make sales					
7.5	We delivered products and services to regular customers					
7.6	We adapted to internet and social media marketing to gain customers					
7.7	We adjusted our business model to sell internet data as most people were using data					
7.8	There was a dramatic increase in the sale of airtime					

8. Please indicate the level of your agreement with the following statements using this scale of measurement: 1. - STRONGLY DISAGREE (SD) 2. – DISAGREE (D) 3. – NEUTRAL (N) 4. – AGREE (A) 5. - STRONGLY AGREE (SA).

	STATEMENTS RELATING OPPORUNITIES EXPLORED BY SMEs DURING COVID-19	SD	D	N	A	SA
		1	2	3	4	5
8.1	We benefitted from UIF					
8.2	We benefited from government tax holidays					
8.3	We benefited from government wage assistance					

8.4	We benefited from a government loan facility					
8.5	We benefited from government's policy to be excused from paying rent					
8.6	We were affected by government regulations on imports					
8.7	We were affected by government's policy on exports					
8.8	We were affected by government health regulations					

Thank you for completing my questionnaire

Isithasiselo G

IPHEPHA LEMIBUZO

Sicela uphawule impendulo efanele yombuzo ngamunye

9 June 2022

9. Sicela ukhombise ubulili

1.1	<i>owesilisa</i>	1
1.2	<i>owesifazane</i>	2
1.3	<i>obunye</i>	3

10. Isimo (bonisa umnikazi uma ungumnikazi webhizinisi elincane, isisebenzi uma uyisisebenzi)

2.1	Umnikazi	1
2.2	Isisebenzi/Umphathi	2

11. Ubude benkonzo usebenzela noma ukuba nebhizinisi elincane

3.1	Ngaphansi kweminyaka engu-2	1
3.2	iminyaka 2-4	2
3.3	iminyaka 5-10	3
3.4	Iminyaka engaphezu kwengu-10	4

12. Sicela ukhombise iziqu zakho eziphezulu zezemfundo

4.1	i-Diploma	1
4.2	Degree	2

4.3	Iziqu zeziq	3
4.4	Okunye	4

13. Sicela ukhombise izinga lesivumelwano sakho nezitatimende ezilandelayo usebenzisa lesi silinganiso sokulinganisa: 1. - UKUNGAVUMELANI KAKHULU (UK) 2. – UKUNGAVUMELANI (D) 3. – UKUNGATHATHI HLANGOTHI (UH) 4. – VUMELANA (V) 5. - VUMELANA KAKHULU (VK).

	IZITATIMENDE EZIPHATHELENE NOMTHELELA WE-COVID-19 EKUKHIQIZENI E SMMEs	UK	U	UH	V	VK
		1	2	3	4	5
5.1.	Inani lethu lemikhiqizo / ukukhishwa kwensizakalo kwancipha ngesikhathi seCovid-19					
5.2	Inzuzo yethu yesitoko / yokusungula yathinteka yi-COVID-19					
5.3	Ezinye zesitoko / i-inventri zapheliswa yisikhathi ngenxa yokuvota okungalungile kwamakhasimende.					
5.4	Inzuzo yabhujiswa					
5.5.	Ukuthengisa kwabhujiswa					
5.6.	Sehlulekile ukuhlangabezana nezibopho zezikweletu / imali mboleko					
5.7	Sehlulekile ukukhokha ukuqasha ngesikhathi					
5.8	Ukuhlinzekwa kwancishiswa ngenxa yokungakhokhi / ukukhokha sekwedlule isikhathi					
5.9	Izindleko zokwenza ibhizinisi zakhuphuka					

5.10	Ukukhiqizwa kwathinteka ngokungabi khona okuphezulu kwabasebenzi					
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14. Sicela ukhombise izinga lesivumelwano sakho nezitatimende ezilandelayo usebenzisa lesi silinganiso sokulinganisa: 1. - UKUNGAVUMELANI KAKHULU (UK) 2. – UKUNGAVUMELANI (D) 3. – UKUNGATHATHI HLANGOTHI (UH) 4. – VUMELANA (V) 5. - VUMELANA KAKHULU (VK).

	IZITATIMENDE EZIPHATHELENE NEZINSELELO EZIBHEKENE NABAPHATHI BE- SMMEs	UK	U	UH	V	VK
		1	2	3	4	5
6.1.	Sasinemali enganele yokukhokha imali yokuqasha					
6.2.	Sasinemali enganele yokukhokha Ama-rates					
6.3.	Sabhekana nezinselelo zokukhiqiza ngenxa yokugula kwabasebenzi					
6.4.	Sihlangabezane nokuphangwa kwesitoko					
6.5.	Sibhekane nezinselelo ngenxa yokushona kwabasebenzi					
6.6.	Saphoqeleka ukuba sisebenze nezibalo ezimbalwa zabasebenzi					
6.7.	Kwakukhona ukuguqulwa okuphezulu kwabasebenzi					
6.8.	Siphoqelege ukuthi sixoshe abasebenzi					
6.9.	Kwaba nokwehluleka ukunamathela emithethweni ye-COVID-19 ngenxa yolwazi olubi					
6.10.	Sihlangabezane nenselelo ngamaholo					

6.11.	Izinkinga ze-COVID-19 ezihlobene nomndeni ziphazamise ukusebenza kwebhizinisi					
6.12.	Amalungu omphakathi athile enqaba ukunamathela emithethweni ye-COVID-19					
6.13.	Amanye amakhasimende ayenezikweletu ayengakwazi ukukhokha njengoba ebulawa yi-COVID-19					
6.14.	Sivale ibhizinisi okwesikhashana					
6.15.	Sibhekene nenselelo ngemikhiqizo eshibhile engenisiwe					

15. Sicela ukhombise izinga lesivumelwano sakho nezitatimende ezilandelayo usebenzisa lesi silinganiso sokulinganisa: 1. - UKUNGAVUMELANI KAKHULU (UK) 2. – UKUNGAVUMELANI (D) 3. – UKUNGATHATHI HLANGOTHI (UH) 4. – VUMELANA (V) 5. - VUMELANA KAKHULU (VK).

	IZITATIMENDE NAMATHUBA EZIHLOLWE NGESIKHATHI SE-COVID-19	EZIPHATHELENE NGAMA-SMME	UK	U	UH	V	VK	
			1	2	3	4	5	
7.1	Silungise imodeli yethu yebhizinisi ukuthengisa i-Mask							
7.2	Silungise imodeli yethu yebhizinisi ukuthengisa imithi / amakhambi wendabuko							
7.3	Silungise imodeli yethu yebhizinisi ukuthengisa amaphilisi ekhanda							

7.4	Sathembela kumakhasimende ajwayelekile ukuthengisa						
7.5	Silethe imikhiqizo nezinsizakalo kumakhasimende ajwayelekile						
7.6	Sazivumelanisa ne-intanethi kanye nokumaketha kwezokuxhumana ukuze sithole amakhasimende						
7.7	Silungise imodeli yethu yebhizinisi ukuthengisa idatha ye-intanethi njengoba abantu abaningi babesebenzisa idatha						
7.8	Kwaba nokwanda okumangalisayo kokudayiswa kwe-airtime						

16. Sicela ukhombise izinga lesivumelwano sakho nezitatimende ezilandelayo usebenzisa lesi silinganiso sokulinganisa: 1. - UKUNGAVUMELANI KAKHULU (SD) 2. – UKUNGAVUMELANI (D) 3. – UKUNGATHATHI HLANGOTHI (N) 4. – VUMELANA (A) 5. - VUMELANA KAKHULU (SA).

	IZITATIMENDE EZIPHATHELENE NAMATHUBA EZIHLOLWE NGAMA-SMME NGESIKHATHI SE-COVID-19	UK	U	UH	V	VK
		1	2	3	4	5
8.1	Sazuza ku-UIF					
8.2	Sahlomula ngamaholidi entela kahulumeni					
8.3	Sihlomule ngosizo lwamaholo kahulumeni					

8.4	Sihlomule ngendawo yokubolekwa kwemali kahulumeni					
8.5	Sahlomula ngenqubomgomo kahulumeni yokuxolelwa ekukhokheleni irenti					
8.6	Sathinteka ngemithetho kahulumeni mayelana nokungeniswa kwempahla ivela kwamanye amazwe					
8.7	Sithintekile ngenqubomgomo kahulumeni mayelana nokuthunyelwa kwamanye amazwe					
8.8	Sathinteka ngemithetho yezempilo kahulumeni					

Ngiyabonga ngokuqedela iphepha lami lemibuzo

Appendix H



TRREE

Zertifikat Certificat

Certificado Certificate

Promouvoir les plus hauts standards éthiques dans la protection des participants à la recherche biomédicale
Promoting the highest ethical standards in the protection of biomedical research participants

Certificat de formation - Training Certificate

Ce document atteste que - this document certifies that



Clinical Trials Centre
The University of Hong Kong

nokuphila Biyela

a complété avec succès - has successfully completed

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of the TRREE training programme in research ethics evaluation

Release Date: 2022/08/19
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[REV : 20220217]

Appendix I

EDITING LETTER

696 Clare Road
Clare Estate
Durban
4091
20 November 2024

To: Whom it may concern

Editing of Dissertation: Nokuphila Yvonne Biyela

**THE INFLUENCE OF COVID-19 ON THE PRODUCTIVITY OF SMALL AND
MEDIUM ENTERPRISES: A CASE STUDY OF MTUBATUBA LOCAL
MUNICIPALITY**


This letter serves as confirmation that the aforementioned dissertation has been language edited. The requisite grammatical conventions have been met/recommended. Suggestions have been made to the candidate where necessary.

Any queries may be directed to the author of this letter.

Regards

MP MATHEWS
Lecturer and Language Editor
Mercimathews4@gmail.com
083 676 4778

Appendix J

<h1>MTUBATUBA</h1> 		
UMASIPALA • MUNICIPALITY • MUNISIPALITEIT		
9 52 MTUBATUBA 3935	☎ (035) 550 0069 / 550 0050	📠 (035) 550 0060
<hr/>		
Date: 05 October 2022	Enquiries: Municipal Manager	
Ms. Nokuphila Yvonne Biyela Masters Business Administration Durban University of Technology		
Re: Permission to Conduct Research in Mtubatuba Municipality		
Dear Ms. Biyela,		
I trust this letter finds you in the best of health and spirits.		
Upon reviewing your request and the accompanying IREC letter from Durban University of Technology, I am pleased to grant you the permission to conduct your research study titled, "The Influence of COVID-19 on the Productivity of Small and Medium Enterprises: A Case Study of Mtubatuba Local Municipality " within the jurisdiction of Mtubatuba Municipality.		
Your commitment to scholarly pursuits and your choice to focus on a subject of such contemporary significance speaks highly of your dedication. We believe that the insights garnered from your research will be invaluable not just for the academic community, but also for our municipality, local businesses, and the community at large.		
Please adhere to the following conditions while conducting your study:		
Confidentiality: Respect the privacy and confidentiality of all participants. Any personal data must be anonymized and used strictly for academic purposes.		
Regular Updates: Kindly provide the municipality with periodic updates on the progress of your study, as well as a copy of the final report upon completion.		
For any assistance related to the logistics within the municipality, or if you encounter any challenges during the course of your research, feel free to reach out to our office.		
For any further queries, you may contact our office directly or refer to the details mentioned in this letter.		
Thank you for considering Mtubatuba Municipality for your research. We are looking forward to the valuable insights your study will offer.		
Warm regards,		
Municipal Manager		
Mr TV Xulu		
<hr/>		
Tel: 035 550 0069	Fax: 035 550 0060	Email: mm@mtubatuba.org.za
Cell: 072 918 5895		

APPENDIX K

Document			
ORIGINALITY REPORT			
20%	12%	13%	10%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS
PRIMARY SOURCES			
1	Submitted to Midlands State University Student Paper	3%	
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