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The Impact of Loadshedding on the Mental Health of Small Business Owners in the Alexandra Township

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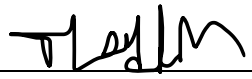
A research paper submitted in partial fulfilment for the degree of Master of Arts in Social and Psychological Research in the Faculty of Humanities, University of the Witwatersrand, April 2024.

Declaration

I, Lesedi Mosenngwe Tladi , know that plagiarism is wrong. I declare that:

- The following research project is my own, unaided work.
- The research project is submitted for the Master of Arts (MA) in Social and Psychological Research by Coursework and research degree at the University of the Witwatersrand.
- The research project has not been submitted before for any other degree or examination at this or any other university.
- I have acknowledged all direct quotations and paraphrased ideas.

Signed:  .

Date: 28 / 04 / 2024 .

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Firstly, I would like to thank the almighty God for guiding me through this tough academic journey. It was not an easy one, but we made it … 'Ke a leboga badimo baka", you have never failed me.

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Chapter 1: Introduction

Introduction

Access to electricity is an important part of individuals' daily routines and everyday lives. Electricity is used for different purposes at home, schools, work, and businesses. Since the end of apartheid, more households have gained access to electricity in South Africa (Pretorius, 2019). According to Pretorius (2019) available figures in 2017, showed that about 13.7 million households had access to electricity in South Africa. In the 21st century, human beings rely more on electricity as it is essential for satisfying basic and essential human needs such as food production, employment, job security, and health (Pretorius, 2019). Therefore, dependable electricity access is indispensable for daily functioning.

South Africa is experiencing an electricity crisis that has increasingly worsened in the past few years (Schoeman & Saunders, 2018). The Electricity Supply Commission (ESKOM) is the main electricity supplier in South Africa and since 2008 it has been struggling to adequately meet the growing demand for electricity in the country (Schoeman & Saunders, 2018). A phenomenon commonly referred to as loadshedding is implemented when the increasing electricity demand outstrips the power supply. Loadshedding is defined as deliberate power interruption to reduce the demand for electricity on the system that generates energy by temporarily switching off power distribution to particular areas (Schoeman & Saunders, 2018). Loadshedding is applied by switching off power distribution block-by-block according to the schedule for two or more hours depending on the power supply. Some areas can experience up to ten to twelve hours per day without electricity (Mabunda et al., 2023). Loadshedding was first implemented in 2008 in South Africa, due to ESKOM's inability to supply sufficient energy to meet the electricity demands of its consumers (Steenkamp & February 2016).

Consequently, the ongoing electricity crisis is disrupting the everyday activities of South African citizens and has negatively impacted the economy and specifically businesses (Nkwinika & Munzhedzi, 2016; Steenkamp & February, 2016). Insufficient supply of electricity has several devastating consequences including economic and psychological consequences (Ann et al., 2015; Mabunda et al., 2023), impacting most segments of society. Arguably it has had a damaging impact on small businesses that do not always have the financial means to shield themselves against the impact of loadshedding. The definition of small business is not universal. It varies from country to country which makes it a challenge to define this term. However, in this study, the following definition of small business will be used, namely, it refers to a business that is owned by one individual or more, falls under any sub-sector or sector of the economy, and can be classified as medium, small, or micro-enterprise depending on its size and number of employees (Zulu, 2019). The total number of employees for medium enterprises is 51 – 250, for small enterprises is 11 -50, and for micro enterprises is 0 – 10 (Zulu, 2019).

Small businesses play an important role in the economy and contribute significantly to the South African economy, particularly in terms of economic growth, job creation, and poverty reduction (Ayandibu & Houghton, 2017; Ibrahim, 2022; Worku, 2013). Small businesses are part of the informal sector which is one of the sectors in South Africa which contributes greatly to the South African economy (Ayandibu & Houghton, 2017). The sector of small businesses contributes approximately more than 60% of the Gross Domestic Product (GDP) in developing countries, while the South African sector of small businesses contributes about 18% of the GDP (Adaeze & Mashinini, 2022). This concurs with Udimal and Biyase (2017) who state how the success of small businesses contributes to the transitions of most economies, often from poor to wealthy, thus the informal sector plays a crucial role in the growth of the economy. Additionally, the growth and development of the

South African national economy are attributed to small businesses, this means that failure in small businesses can have repercussions for the growth and development of the economy at the national level (Worku, 2013). Small businesses have become a means of stimulating the growth of the economy in South Africa.

Small businesses are major sources of employment in South Africa, curbing the high level of unemployment in the country and alleviating poverty. Since 1994, South Africa has been battling with high rates of unemployment and the situation has worsened in recent years (Dhanah, 2016). According to Statistics South Africa (2024) the unemployment rate in South Africa is currently standing at 32.1%, meaning about 7.9 million people are unemployed in South Africa. This challenge concerns South Africa as a whole including government, businesses, and job seekers. Therefore, the employment opportunities that small businesses create for local people in communities are a way of addressing the high unemployment rate in the country and poverty (Adaeze & Mashinini, 2022; Ayandibu & Houghton, 2017). By creating employment for local people in the communities, small business contributes to both local and national economy and development (Ibrahim, 2022). In agreement with this statement, Adaeze and Mashinini (2022) claim that the sector of small businesses in South Africa contributes significantly to the total employment in the country, the small businesses sector comprises more than 1.5 million self-employed individuals. In addition, Chimucheka and Mandipaka (2015) state that small businesses face several challenges including loadshedding, unfriendly business environments, and law issues which hinder their growth and development.

Despite the crucial role played by small businesses in the economic growth and development of the country, small businesses especially in townships receive inadequate to no government support such as funding. A study conducted by Chimucheka and Mandipaka (2015) shows that most small businesses in South Africa do not receive adequate support

from the government, that is if they are lucky enough to get it in the first place. This is in agreement with Worku (2013) who states that although the South African government should assist small businesses that are struggling to grow the economy, most small businesses especially in the townships and rural areas receive minimal support from the government.

Township Economy in South Africa

Township economy can be regarded as the backbone of South Africa, as it supports many people in the country by creating jobs in communities and reducing poverty including socio-economic problems (Eyk et al., 2022). The township economy exhibits a mix of informal and formal businesses in South Africa, and the former plays a significant role in the country's economic growth in many cases (Eyk et al., 2022; Phalatsi, 2016). It is characterised by informal small businesses including hair salons, spaza shops, and street food vendors. Most of these informal small businesses are unregistered entities that by law are not legally existent (Basardien et al., 2014). According to Masuku (2023) most informal small businesses are established out of necessity for survival, they are the main source of livelihood for the business owners in the townships. Informal small businesses are common in many townships, they provide affordable services to local consumers, create employment, and increase local income (Eyk et al., 2022; Masuku, 2023). Small businesses in the townships often operate from different places including a house, decommissioned containers, shacks also known as "*Mkhukhus*", and residential stands.

Background on the Study Area: Alexandra Township

The Alexandra township which is also famously known as '*Alex*' is situated in the north of Johannesburg, next to wealthy suburbs such as Sandton and Sandhurst. It is one of the oldest and most overcrowded and impoverished townships in South Africa, with an estimated population of close to a million living in it (Mafisa, 2019; Nyapokoto, 2014). The initial plan was for the township to accommodate about 30,000 people due to its size,

however, this township is today home to approximately 700,000 people, and it hosts more than its carrying capacity (Mafisa, 2019). Many people in Alexandra live in backyard dwellings, shacks, and hostels, they do not have proper houses, sanitation, or electricity (Masuku, 2023). Many families are squeezed together into small living spaces, with three or more people living in a tiny one-room shack or backroom (Hendricks, 2022). It is the reality of most households in Alexandra, and it is common in many township communities. The township has a high density of shacks and backrooms that have been built over manholes and sewage pipelines which leads to frequent sewage problems in the community (Hendricks, 2022). Moreover, most people use chemical toilets in Alexandra, especially those who stay in shacks. However, most of the shack dwellers do not use the facilities at night due to potential danger or risk of criminal activity, they instead use buckets at night to relieve themselves and dispose of the next day. Additionally, most households do not have access to electricity in Alexandra, particularly shack dwellers (Hendricks, 2022). This leads to people engaging in illegal electricity connections in the community, which overloads the electricity supply and puts the lives of the community members at risk (Bhengu, 2021).

Alexandra is also known for its high crime rate and violence compared to other townships. According to Gauteng crime statistics, Alexandra is one of the top ten dangerous communities in Gauteng, it is even identified as a crime hotspot (Kahla, 2023; Magcaba, 2023). All forms of violent and non-violent criminal activities including robbery, hijacking, assault, selling of drugs, and house break-ins are high in Alexandra (Kahla, 2023). Furthermore, the level of unemployment is very high in Alexandra, the livelihoods of most people who live there are based on menial jobs such as factory and domestic work, and informal trading (Mafisa, 2019; Masuku, 2023). Informal small businesses are one of the main sources of household income in Alexandra township (Masuku, 2023), they employ local

people from the community. There are many different informal small businesses in Alexandra providing a range of services to local people in the community.

Problem Statement

A constant and reliable electricity supply from Eskom is essential to the functioning of businesses in South Africa (Nkwinika & Munzhedzi, 2016). According to Mabunda et al., (2023) most of the activities within some small businesses such as restaurants, hair salons, bakeries, and internet café rely heavily on available electricity. However, the majority of small businesses do not have backup generators or gas appliances and therefore cannot operate during loadshedding which leads to a drop in sales and loss of profit (Oseni & Pollit, 2012). Therefore, the shortage of electricity supply affects the day-to-day activities of individuals, especially small business owners, and their employees.

Rationale

While the occurrence of loadshedding is not exclusive to South Africa, the term used is unique to South Africa. Other developing countries including Nigeria, Pakistan, and Zambia experience rolling blackouts or power cuts, however, the frequency and cause may differ between the countries (Cissokho & Seck, 2013). A study conducted in Pakistan by Zahra (2013) found a relationship between loadshedding and mental health, the former affecting the latter. Frequent loadshedding significantly affects all aspects of an individual's life including work and health (Mabunda et al., 2023; Zahra, 2013). In addition, another research study in Pakistan showed that ongoing blackouts were one of the prevailing causes of some mental health problems (Ann et al., 2015). Despite the significant economic and social problems posed by loadshedding in South Africa, there is limited information regarding its psychological effects (Ann et al., 2015).

The literature on the impact of loadshedding on mental health in South Africa is very limited. The only known exception at the time of writing is the online survey carried out by the South African Depression And Anxiety Group (SADAG) earlier in 2023. The survey which included 1836 responses conducted by SADAG found that many people are psychologically impacted by loadshedding in South Africa (SADAG, 2023). Several people reported experiencing depression, anxiety, panic, and suicide while others reported experiencing psychological challenges such as a feeling of helplessness, and an inability to regulate emotions of anger (SADAG, 2023).

Furthermore, most of the studies address the economic impact of loadshedding on both small and large businesses (Mabunda et al., 2023), however, they tend to neglect the impact of loadshedding on the mental health of the people whose businesses are affected by loadshedding. Therefore, the present study aims to bridge the gap in the literature by investigating the impact of loadshedding on the mental health of small business owners in the Alexandra township. This is important because small businesses in South Africa especially in terms of township economy are crucial to economic sustainability in the country. According to Seinker (2019) informal and formal small businesses in South Africa employ more than 8 million people. Additionally, this sector contributes approximately 40% of turnover to the economy of the country (Seinker, 2019). Concurring with this view, Steenkamp (2016) states that small businesses contribute to the economic growth and development of the country. Mental health is one of the most important aspects of an individual's life, as it impacts every area of their life including the way they think, feel, and behave (Galderisi et al., 2017). A compromised mental health may lead to several psychological problems such as stress, anxiety, and depression (Ann et al., 2015). Therefore, it is important to conduct psychological research to try to understand the impact of loadshedding on the mental health of people, in this case specifically small business owners in the Alexandra township.

The summary of what is discussed in each chapter of this thesis is as follows:

Chapter 1: Introduction

This chapter aims to acquaint readers with the study by offering an overview of the topic that is being explored and the community in which the study took place. Additionally, it endeavors to highlight the need for research that addresses the psychological impact of loadshedding on small business owners.

Chapter 2: Literature Review

This chapter of this study provides a comprehensive overview of existing research related to loadshedding and mental health in South Africa. It further explores the literature concerning this topic and provides Bronfenbrenner's (1975) ecological systems theory as the theoretical framework used in this study to examine the impact of loadshedding on the mental health of small business owners.

Chapter 3: Methodology

This chapter provides a comprehensive overview of how the study was conducted, it outlines the methodological approach and procedures that were followed in the study. This includes research aims, questions, and research design that form the basis for the methods implemented when the study was conducted. Additionally, it outlines steps that were followed to ensure adherence to ethical standards and trustworthiness protocols, as well as issues of reflexivity.

Chapter 4: Findings

This chapter presents the key themes and subthemes that emerged from the analysis of the data gathered for this study, following Braun and Clarke's (2019) thematic analysis. It provides the identified themes and relevant quotes from the interviews with participants about

the economic challenges of loadshedding including operational and financial challenges. Thereafter, findings surrounding the mental health of small business owners are outlined. Additionally, the findings related to the small business owners' experiences in Alexandra are also outlined.

Chapter 5: Discussion

This chapter aims to answer the research questions initially posed in this study by interpreting the findings and comparing them with existing literature that was discussed in Chapter 2 of this study. Thereafter, it discusses the key themes according to Bronfenbrenner's (1975) ecological systems theory. Additionally, the chapter addresses critical questions related to the aims of the study.

Chapter 6: Conclusion

This chapter provides a summary of the relevant findings, explores the limitations of this study, and offers some recommendations for future research endeavours within the field.

Appendices

This section contains documents that were utilised when this study was conducted.

Chapter 2: Literature Review

Introduction

This chapter will provide a comprehensive overview of the literature relevant to the topic under discussion. It will start by providing an overview of loadshedding internationally and in South Africa, followed by an exploration of the different areas of daily life that are impacted by loadshedding. Thereafter, it will highlight the economic situation in South Africa following the COVID-19 pandemic and the economic impact of loadshedding. Further, the chapter will discuss the relationship between loadshedding and mental health with specific reference to small business owners. Finally, the chapter will conclude by outlining the theoretical framework that guided this study.

Loadshedding Internationally and in South Africa

As mentioned in Chapter 1, the issue of loadshedding is not limited to South Africa, many developed and developing countries have experienced loadshedding (Ngoma et al., 2018). Developed countries including the United States of America (USA) have also witnessed electricity interruptions (Umar & Kunda-Wamuwi, 2019). The power systems of the USA are criticised due to the energy provision issues that were experienced in the country such as the electricity crisis experienced in California in 2001 (Umar & Kunda-Wamuwi, 2019). This led to the country investing large amounts of money in electricity generation capacities due to the looming threat of electricity crises in their country (Umar & Kunda-Wamuwi, 2019). Although other parts of the world have also had issues with energy provision, they seem to have addressed these problems, unlike in South Africa.

The extent and rate to which countries experience loadshedding vary. According to Blimpo and Cosgrove-Davies (2019), Nduhuura et al., (2021), and World Bank (2019) most developing countries, particularly in sub-Saharan Africa experience more frequent

loadshedding than any other countries in the world, which is detrimental to the economies of these countries. Approximately 270 million people reside in countries that experience severe loadshedding, this includes Zambia, Nigeria, Ghana, Malawi, Zimbabwe, Pakistan, and Bangladesh, amongst others (Nduhuura et al., 2021; Ngoma et al., 2018).

For example, Zambia is struggling to meet its electricity demands, which is far higher than the supply, the electricity demand is estimated to increase by 3.3% per year (Ngoma et al., 2018). Zambia experiences loadshedding that lasts up to 12 hours per day while Zimbabwe experiences up to 18 hours of loadshedding per day (Staff Writer, 2019). About 45% of power plants in Ghana depend on the country's natural gas and oil supply, therefore, an interruption in the supply leads to power outages in the country (Ngoma et al., 2018). Additionally, about 58% of households that have access to electricity in Ghana reported experiencing frequent loadshedding (Nduhuura et al., 2021).

Similarly, Pakistan, Lebanon, and Bangladesh are among the top 10 countries that experience frequent loadshedding (World Bank, 2019). Pakistan is struggling to meet its electricity demand due to the rapidly increasing population growth in the country (Kazmi et al., 2019). The population was estimated to be 200 million in 2017 and is expected to increase significantly in the near future (Kazmi et al., 2019). This led to some regions in Pakistan experiencing about 16-20 hours of loadshedding per day (Kalil & Hussain, 2014). Moreover, it is reported that loadshedding occurs many hours before the loadshedding schedule is released in some regions in Pakistan (Arslan et al., 2014).

South Africa is no exception when it comes to experiencing power outages. According to the World Bank (2019) South Africa also falls under the top 10 countries with frequent loadshedding, the country was ranked number 94 in the list of 132 countries that experience frequent loadshedding. As mentioned in Chapter 1, loadshedding was first

implemented in 2008 in South Africa in response to insufficient energy supply (Steenkanp & February, 2016). Now sixteen years later, the electricity crisis has not subsided as the country still experiences frequent loadshedding. The electricity crisis reached its peak in 2022 when the loadshedding level and frequency were reportedly the highest, surpassing previous years in terms of the amount of electricity that was shed (Masinga & Madzivandila, 2023). Additionally, loadshedding schedules and power outages were intensified to stage 6 with even the threat of the implementation of stage 8 (Masinga & Madzivandila, 2023). ESKOM forewarned that the frequent loadshedding in the country is expected to continue for at least the next two years (ERERO, 2023).

Different Areas of Daily Life that are Impacted by Loadshedding

The daily lives and routines of South Africans have been deeply impacted since the introduction of loadshedding in 2008. Loadshedding does not only impact the economy and businesses, but it also impacts different areas of daily life including safety and security, household routines, education, health, commuting, and traveling (Masinga & Madzivandila, 2023). Moreover, most people in South Africa have come to consider it normal to endure periods of several hours without electricity (Masinga & Madzivandila, 2023).

Safety and Security

Loadshedding can impact safety and security in various ways, as it is associated with safety concerns for almost everyone affected by power outages. Loadshedding contributes to an increase in criminal activity including robbery, theft, hijacking, assault, and burglary (Nduhuura et al., 2021). There has been a significant rise in public concerns about the heightened risk of house-break-ins, physical assault, and theft during periods of loadshedding (Nduhuura et al., 2021). Reports show that most incidences of criminal activity take place during power outages (Nduhuura et al., 2021). The increased risk of being victims of crime

during loadshedding leads to people being reluctant to leave their houses or go outside at night during power outages due to fear for their safety. Moreover, loadshedding can create opportunities for criminals to take advantage of darkened streets and houses. In a reported incident by Moore (2019), a couple tragically lost their lives to smoke inhalation as they feared leaving their generator unattended outside and losing it to thieves. Reduced visibility also makes it easier for criminals to break into homes and businesses, without being seen, increasing the risk of burglary and theft (Mabunda et al., 2023).

Furthermore, loadshedding interrupts some security systems in homes and businesses (Mabunda et al., 2023). Many security systems such as surveillance cameras, alarms, and electronic gates, rely on electricity to function. Therefore, some of these systems may not operate during loadshedding, exposing properties to criminal activities (Mabunda et al., 2023). Additionally, backup battery systems can offer only temporary support during loadshedding, and prolonged power outages can drain these batteries, leaving homes and businesses vulnerable (Mabunda et al., 2023).

Loadshedding is also reported as one of the primary causes of fire outbreaks (Masinga & Madzivandila, 2023; Nduhuura et al., 2021). Some households, particularly low-income households use unsafe sources of energy such as open fire during loadshedding (Nduhuura et al., 2021). Masinga and Madzivandila (2023) point out that some households use candles as an alternative for lighting during power outages, which puts the lives of the household members at risk for fire hazards especially if left unattended. Similarly, a study conducted in Limpopo found that most people in the villages use firewood and candles as alternative sources of energy during loadshedding (Masinga & Madzivandila, 2023).

Household Routines

Households face challenges in maintaining several daily activities during loadshedding. Frequent loadshedding causes damage to electrical appliances such as refrigerators, stoves, televisions, and geysers in households (Meles, 2020). Power surges when the electricity goes off or when it is restored after loadshedding may cause damage to electrical appliances (Masinga & Madzivandila, 2023). About 38% of South Africans have had to either repair or replace their electrical appliances due to damage caused by loadshedding (Majola, 2022). These electrical damages, therefore, add to the financial burden on households.

Furthermore, loadshedding often leads to the spoilage of perishable food items such as raw meat, and some fruits and vegetables (Masinga & Madzivandila, 2023). Refrigerators do not function during loadshedding and cannot provide cold storage for perishable food which leads to food spoilage (Meles, 2020). Households are then forced to throw away food as consumption of spoiled food poses health risks such as food poisoning (Opperman, 2023; Stadler, 2022). Studies show that the majority of South Africans have had to throw away spoiled food at some point due to loadshedding (Majola, 2022). The food loss due to loadshedding adds to the financial burden of some households. Stadler (2022) points out that most households cannot afford to buy extra groceries to feed their families if they exceed their monthly grocery budget.

Some households are turning to the consumption of unhealthy food due to frequent loadshedding, which is forcing them to rely on fast food more often (Masinga & Madzivandila, 2023) and therefore disrupting their ability to prepare fresh meals at home. South African dieticians point out that home cooking in households is slowly getting replaced by purchasing fast food due to loadshedding as more people opt to buy fast food when loadshedding occurs during meal cooking and preparation times (Coetzee, 2023).

Understandably, some households prefer the convenience of fast food over waiting to cook when the electricity comes back as the loadshedding schedules are not always reliable (Masinga & Madzivandila, 2023). Some working parents already find it difficult to prepare nutritious home-cooked meals for their families because of their busy schedules (Masinga & Madzivandila, 2023). Now, they are facing the additional challenge of dealing with loadshedding just as they return home from work and start to prepare lunch or supper.

Education

Loadshedding contributes to several challenges in education settings, particularly for institutions of higher learning (Phiri et al., 2021). Following the COVID-19 pandemic, the majority of universities have been able to offer blended learning to complement traditional methods of teaching and learning (Malatji & Baloyi, 2023). Students engage in a mix of face-to-face and online learning activities including online lectures, assignments, tests, and exams which are facilitated through digital platforms. However, loadshedding disrupts the facilitation of online learning and teaching in some universities as it interrupts online classes and access to resources, especially at the universities that do not have backup power (Malattji & Baloyi, 2023). Loadshedding can abruptly halt face-to-face lectures, causing students frustration and loss of focus and momentum in their learning (Malatji & Baloyi, 2023). Additionally, loadshedding prevents some students from accessing online study materials and online assessments as power outages often affect internet connectivity (Lindeque, 2020; Malik et al., 2022). This leads to failure to submit assessments on time and missing submissions, therefore hindering students' ability to study effectively (Malik et al., 2022).

Furthermore, loadshedding impacts students' ability to maintain consistent learning routines and academic performance (Malik et al., 2022; Nduhuura et al., 2021). The need to constantly adjust study timetables according to loadshedding schedules can disrupt the learning process and reduce overall productivity (Nduhuura et al., 2021). Consequently,

students may feel demotivated and frustrated, leading to decreased effectiveness in their study routines and habits (Malik et al., 2022). Additionally, the uncertainty of when the electricity will be restored and concerns about meeting submission deadlines can create anxiety among students, making it challenging for them to concentrate on their studies (Malik et al., 2022).

Health

Loadshedding has been shown to have a significant impact on many aspects of health as it disrupts the provision of healthcare services, compromises patient care and safety, and worsens health risks (Gehringer et al., 2018; Ndaguba, 2018). Loadshedding affects the quality of care provided to patients as it can lead to interruptions in medical procedures, surgeries, and treatments (Ismail, 2015). Critical medical equipment such as incubators, ventilators, dialysis machines, and life-saving medicine may also be affected by loadshedding, posing severe health risks to patients (Ndaguba, 2018). Additionally, lack of access to essential medical equipment leads to challenges in delivering treatments on time and effectively, which can result in health-related complications for patients requiring emergency medical attention and intensive care (Ndaguba, 2018). Ismail (2015) reveals an incident where four premature babies lost their lives due to the failure of medical equipment associated with loadshedding in one of the hospitals in Eastern Cape province. This shows how loadshedding may lead to fatal consequences.

Furthermore, loadshedding increases medical emergencies including burn-related injuries, emergencies due to the failure of electrical medical devices at home, carbon monoxide poisoning, and food poisoning (Gehringer et al., 2018; Laher et al., 2019). According to Laher et al., (2019) some of the emergencies result from using alternative sources of energy during loadshedding. Moreover, loadshedding impacts hygiene as water supply systems and sewages are often affected by power outages (Laher et al., 2019).

Commuting and Traveling

Loadshedding has implications for commuting and traveling as it disrupts transportation services and worsens traffic congestion (Arslan et al., 2015). Loadshedding disrupts the operation of public transportation such as taxis, buses, and trains as well as privately owned transportation (Arslan et al., 2015). Moreover, transportation infrastructures including traffic lights, metro systems, and railway signals are usually affected by loadshedding, leading to delays and extended travel time (Mandlate et al., 2023). Loadshedding specifically affects the functioning of traffic lights which leads to traffic jams on roads and highways, especially during peak travel times. This makes it more challenging for commuters and travellers to reach their destinations on time.

Economic Impacts of Loadshedding

South Africa is facing numerous challenges including economic challenges especially following the COVID-19 pandemic (Fubah & Moos, 2022; Khambule, 2022). Like many countries worldwide, South Africa implemented strict lockdown measures to curb the spread of the virus during the COVID-19 pandemic (Fubah & Moos, 2022). While these measures were necessary for public health, they had a profound effect on the South African economy (Khambule, 2022). The lockdown regulations during the pandemic forced businesses to close or operate at reduced capacity which led to a decrease in economic activity, ultimately resulting in a decline in GDP and heightened unemployment (Odeku, 2021). The COVID-19 pandemic exacerbated the already existing economic and employment challenges in South Africa (Khambule, 2022).

Small businesses, in particular, faced several challenges, including temporary and permanent closures, operational challenges, and loss of income (Khambule, 2022). Many small businesses have been unequally affected by COVID-19 due to limited and lack of

financial resources and vulnerability to financial crisis (Odeku, 2021). The United Nations Development Programme (UNDP, 2020) conducted research that shows that small businesses are one of the economic sectors that are mostly impacted by the aftereffects of the COVID-19 pandemic. Additionally, the research shows that COVID-19 resulted in severe job losses in South Africa, which led to the permanent closure of many small businesses (UNDP, 2020). The South African economic situation, particularly for small businesses, remains uncertain and fragile following the COVID-19 pandemic (UNDP, 2020).

Consequently, loadshedding is potentially catastrophic for any business, with different and far-reaching consequences (Ann et al., 2015; Mabunda et al., 2023). Both small and large businesses are affected by loadshedding, however, small businesses are the ones that may be most precarious (Baker & Phillips, 2019; Mabunda et al., 2023). Most small businesses are vulnerable and cannot function without electricity (Ado & Josiah, 2015; Mabunda et al., 2023). Schoeman and Saunders (2018) conducted a study that discovered that approximately 90.7% of small businesses are heavily reliant on electricity for their business operations. This indicates that reliable electricity is essential for the success of the majority of small businesses. Nevertheless, most of the vulnerable small businesses lack financial support and cannot afford other means of generating power such as backup generators (Ado & Josiah, 2015). The survival of most small businesses is hanging by a thread during the loadshedding crisis in South Africa, especially those more informal small businesses that cannot afford generators and gas appliances (Ado & Josiah, 2015; Mabunda et al., 2023).

Furthermore, loadshedding affects the input and output of small businesses negatively (Baker & Phillips, 2019; Inglesi-Lotz & Pouris, 2016; Pouris, 2016). According to Mabunda et al., (2023) the production machines and equipment, financial flows, and business plans of small businesses are often interrupted by loadshedding. Additionally, the electricity crisis has implications for small businesses including operating equipment, service delivery, business

income, and employees. Therefore, the disruption in production processes and financial challenges force most small businesses to cut the working hours of their employees or retrench them due to the inability to afford their salaries (Mabunda et al., 2023).

Alumo Energy (2020) agrees that most small businesses are more vulnerable and often experience some underlying problems that significantly impact their finances and put them at substantial risk of bankruptcy and permanent store closure. In line with this claim, Kumalo and Poll (2018) and Nyoni (2019) argue that loadshedding often contributes to the failure of small businesses including enormous financial losses and complete closure. Some of the concerns that most small businesses encounter due to loadshedding include the inability to trade, spoilt goods, compromised security, and damaged appliances (Alumo Energy, 2020).

Small businesses that are dependent on electricity to operate are forced to close during loadshedding, resulting in a drop in sales (Alumo Energy, 2020). Concurring with this view, results from a study conducted by Schoeman and Saunders (2018) indicate that loadshedding contributes to the loss of customers in small businesses which leads to a decrease in income. Mabunda et al., (2023) conducted a study that found that small businesses experience an estimated loss of approximately 61% of income per day when loadshedding occurs frequently. This highlights the huge financial losses that small businesses experience during loadshedding.

Furthermore, loadshedding can cause food spoilage in businesses that sell food such as restaurants and fast-food outlets, leading to a loss because businesses cannot sell spoiled food (Alumo Energy, 2020; Mabunda et al., 2023). According to Alumo Energy (2020) small businesses may be vulnerable to robberies and shoplifting during loadshedding. As already discussed earlier, Mabunda et al., (2023) have found that crime activity including theft often

increases when it is dark, jeopardizing the security of small businesses. Moreover, the surge of electricity damages electrical equipment and appliances when the electricity is restored which then needs to be replaced (Mabunda et al., 2023).

The abovementioned information shows how small businesses are most vulnerable during periods of loadshedding, especially the ones that cannot afford alternative sources of power such as generators and gas stoves that can be utilised to assist in operating the business during loadshedding hours (Ado & Josiah, 2015; Alumo Energy, 2020; Mabunda et al., 2023).

Definition and Components of Mental Health

According to Thirunavukarasu et al. (2013) it is universally accepted that mental health is crucial to a satisfactory, happy, and meaningful life. The definition of mental health which was proposed by the World Health Organization (WHO) was used in this study. According to WHO (2004) mental health can be defined as: "A state of well-being in which the individual realises his or her abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to his or her community" (p.12). The well-being of an individual comprises emotional, psychological, and social well-being as well as positive feelings such as happiness and satisfaction (Galderisi et al., 2017). However, this does not mean that people with good mental health do not experience emotions such as sadness, anger, or dissatisfaction (Galderisi et al., 2017).

There are different views of what mental health entails. According to Keyes (2014) mental health entails the following three components: emotional, psychological, and social well-being. Mental health affects the thoughts, feelings, and behaviour of an individual (Keyes, 2014). In addition, it also determines the way an individual handles stress and copes with stressful life events. According to Galderisi et al. (2017) the mental health of an

individual can change over time from good to poor or vice versa due to different factors. For example, if an individual experiences financial problems, they may experience poor mental health. However, their experience of poor mental health does not necessarily mean that they are experiencing mental illness (Galderisi et al., 2017). Poor mental health does not equate to mental illness, an individual can experience poor mental health including sadness, worry, and anger and not be diagnosed with any mental illness (Galderisi et al., 2017). Good mental health entails the ability of an individual to think, feel, and behave in positive ways that enable them to cope with the stresses of life while poor mental health on the other hand, entails thinking, feeling, and behaving in ways that make it difficult for an individual to be satisfied in their lives and cope with stresses of life (Keyes, 2014).

Reich (2016) provides a different perspective on mental health which consists of two independent components, namely, positive and negative components. The positive components include happiness, gratitude, purpose in life, and optimism while the negative components include anxiety, depression, and stress (Reich, 2016). The two components seem similar to good and poor mental health, the positive components are similar to what good mental health entails and the negative components are similar to poor mental health. These components of mental health are linked to the way individuals cope with stressful life events (Kent et al., 2014).

Relationship Between Loadshedding and Mental Health

As previously mentioned, loadshedding disrupts the daily routines of South Africans which in turn makes them susceptible to psychological distress (Marchetti-Mercer, 2023). The mental health of most South Africans is already vulnerable due to the aftereffects of the COVID-19 pandemic, therefore loadshedding is worsening the situation (Marchetti-Mercer, 2023). Bantjes and Swartz (2023) point out how loadshedding contributes to psychological

challenges including frustration, uncertainty, feelings of helplessness, and fear of crime which consequently lead to anxiety and depression. Additionally, research shows that loadshedding especially in winter can be detrimental to health and ultimately lead to anxiety and depression (Marchetti-Mercer, 2023). The survey conducted by SADAG found that many people are psychologically impacted by the constant exposure to loadshedding in South Africa (SADAG, 2023). Numerous people reported experiencing heightened symptoms of depression, anxiety, panic, and suicide while others reported experiencing psychological challenges such as a feeling of helplessness, and an inability to regulate emotions of anger (SADAG, 2023).

Loadshedding not only disturbs the everyday routine of people but also affects the operationalisation of businesses especially small businesses that do not have backup power such as generators and gas stoves (Ado & Josiah, 2015). Power cuts mean that small businesses have to temporarily stop operating or close their stores until the electricity comes back (Mabunda et al., 2023). This might affect the finances of small businesses significantly because no electricity means no sales which often leads to a loss of profit (Alumo Energy, 2020). A study conducted by Green (2010) found that job insecurity leads to poor and negative mental health. The constant loss of profit due to loadshedding might lead to job insecurity and permanent store closure which might open a door to the decline in the mental health of small business owners (Green, 2010; Ratanasiripong et al., 2016).

Loadshedding is an economic threat to the small businesses that support the owners and their families. This means that it impacts the livelihoods of small business owners, which can be stressful (Prottas & Thompson, 2006). Some small business owners are breadwinners, their families depend on the income that their businesses generate to pay rent and school fees, buy groceries, and other household expenditures. Therefore, the thought of having no control over the operating times of their businesses and knowing that they might lose their jobs at any

given period due to loadshedding which they do not know when it will end can cause them stress (Prottas & Thompson, 2006). According to Prottas and Thompson (2006) loss of control over one's work is linked to an increased level of stress and poor mental health. Furthermore, small business owners may feel helpless due to loadshedding, which can lead to anxiety and depression (SADAG, 2023).

Permanent store closure due to the impact of loadshedding, results in unemployment of small business owners as well as their employees. This means that small business owners who permanently close their stores no longer have a source of income, therefore they are no longer independent or able to provide for their families which might take a toll on their mental health and those of their families (Galderisi et al.,2017).

Theoretical Framework

This study is guided by Bronfenbrenner's ecological systems theory. Bronfenbrenner's ecology theory was developed with the aim of better understanding human development; however, it has been largely applied in numerous fields including health research (Eriksson et al., 2013). Consequently, Bronfenbrenner's theory has undergone significant changes from the late 1970s until 2005 (Eriksson et al., 2018). The evolution of the theory can be divided into three phases (Rosa & Tudge, 2013) which will be described below. The first phase represents the early version of the theory, the second phase represents the subsequent version, and the third phase represents the final version.

Bronfenbrenner's Ecological Systems Theory

Phase 1 (1973–1979): an ecological approach to human development

Bronfenbrenner called his theory an "ecological model of human development" and defined ecology as a connection or link between an individual and their environment (Bronfenbrenner, 1975). In addition, he proposed that the ecological environment is made up

of the following systems at four different levels: microsystem, mesosystem, exosystem, and macrosystem (Bronfenbrenner, 1975). The microsystem is composed of the relationship and connection between the individual and the close environment that surrounds them such as home, workplace, and school (Bronfenbrenner, 1977). The mesosystem contains interrelations between the immediate environment or major settings that surround the individual, for example, relations between home and workplace or home and school (Bronfenbrenner, 1977). The exosystem contains social structures including the world of work, public agencies, and mass media (Bronfenbrenner, 1977). Lastly, the macrosystem comprises blueprints of society including laws and regulations (Bronfenbrenner, 1977). In order to understand developmental outcomes, one needs to analyse the interactions between the ecological systems and individual factors (Bronfenbrenner, 1977).

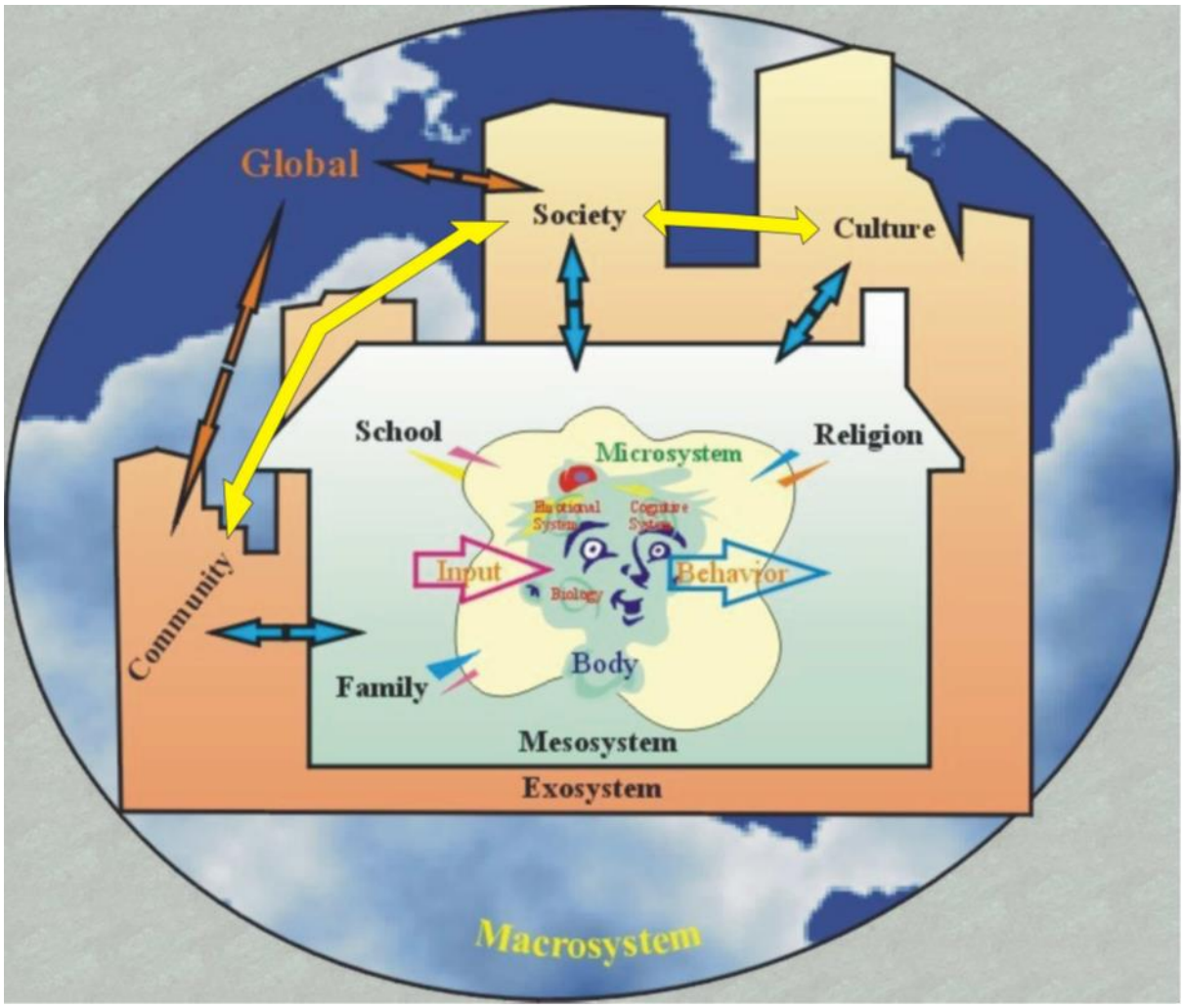
Phase 2 (1980–mid-1990s): adding biology and chronosystem into the ecological framework

Bronfenbrenner emphasised the concept of proximal processes which only developed fully during the third phase. He then added the concept of chronosystems to his ecological model. The chronosystem encompasses changes over time, both within an individual and in the environment in which the individual functions (Bronfenbrenner, 1986).

Phase 3 (mid-1990s–2006): a Process–Person–Context–Time (PPCT) model

The development of the proximal processes which is also called the "engine of development" was finalised during the last phase of Bronfenbrenner's theory (Bronfenbrenner, 1995). The proximal processes involve interaction between a developing human being and the three features of their environment including persons (significant others), objects, and symbols (Bronfenbrenner, 1995). In addition, he also added context to evaluate how different exosystems and macrosystems influence the proximal processes (Bronfenbrenner, 1995).

Figure 1: Concepts of Bronfenbrenner's ecological systems theory (Addison, 1992)



For this research study, the earlier and subsequent versions (Phase 1 and 2) of Bronfenbrenner's ecological theory were used to guide the study. According to Bronfenbrenner (1975) at least two different ecological systems should be included in the analysis to understand human development. The concepts such as microsystem and mesosystem from Phase 1 show ways in which mental health is determined by interactions both within and between the ecological systems (Eriksson et al., 2018).

The relation between small business owners and their workplaces which are the businesses they operate forms the microsystem while interrelations between their workplaces and homes can be considered to be the mesosystem. When small businesses experience a

significant drop in sales and financial problems due to factors such as loadshedding, it may affect their home situation. This is due to some small business owners being breadwinners in their homes and depending on their businesses to support their families, and their staff also being dependent on them for jobs. Therefore, being out of business means they will not be able to provide for their families and their staff will also lose their jobs which can affect the mental health of small business owners. Interactions within and between the microsystem and mesosystem affect the small business owners and their mental health.

Furthermore, the chronosystem from Phase 2 is also one of the key components of ecological systems theory. Chronosystem refers to the dimension of time and how it affects an individual's development and the interactions within their ecological systems over time (Bronfenbrenner, 1986). The role of the chronosystem in this study refers to the political situation in the country which has led to loadshedding. Therefore, loadshedding in South Africa is not just a contemporary issue but a product of historical, economic, technological, and socio-cultural factors that have unfolded over time.

Conclusion

This chapter provided a comprehensive overview of the literature. It began by discussing loadshedding internationally and in South Africa, followed by different areas of daily life that are impacted by loadshedding. Thereafter, it highlighted the economic situation in South Africa post the COVID-19 pandemic and the economic impact of loadshedding. Further, the chapter discussed the relationship between loadshedding and mental health especially as it relates to small business owners. Finally, the chapter concluded by outlining the theoretical framework that guided this study.

Chapter 3: Methodology

Introduction

This chapter will describe the methodology that was used to carry out this study. Firstly, the chosen methodology and research design will be outlined with reference to the chosen theoretical framework discussed in the previous chapter. Then the research aims and questions will be presented. Thereafter, the methods of sampling will be outlined, and a brief description of each participant will be provided. Subsequently, the procedures used in data collection as well as data analysis will be outlined. The steps taken to facilitate qualitative rigour will then be discussed, followed by the ethical considerations of the study. Finally, the chapter will conclude by discussing the researcher's reflexivity.

Qualitative Methodology

A qualitative methodology was used for this study. This approach is distinguished by its emphasis on understanding the depth and complexity of people's behaviours, experiences, and phenomena within their natural settings (Fossey et al., 2002; Morrow & Smith, 2000). This occurs through the researcher's detailed descriptions and subjective interpretations of human behaviours and experiences (Morrow & Smith, 2000). Additionally, the approach focuses on understanding phenomena within their socio-cultural and historical contexts (Morrow & Smith, 2000). It considers how peoples' behaviours and experiences are shaped by social and cultural factors and how these factors influence the interpretation of research findings (Morrow & Smith, 2000). Unlike the quantitative approach which focuses on numerical data and statistics, the qualitative approach focuses on understanding peoples' experiences, perspectives, and meaning (Fossey et al., 2002; Mohajan, 2018).

Moreover, the qualitative approach is characterised by its explorative nature, flexibility, and focus on detailed descriptive data (Bless et al., 2013). Qualitative research is

often exploratory, as it aims to expose new insights instead of testing predetermined hypotheses (Bless et al., 2013). The research involves observation and interaction with participants in their naturalistic settings (Bless et al., 2013). This allows the researcher to gain a deeper understanding of the participants' experiences within their everyday context (Bless et al., 2013). Furthermore, the research methods applied in qualitative research are flexible in a way that enables researchers to refine their approaches and methods according to emerging insights (Bless et al., 2013). The qualitative approach involves the use of different data collection techniques including interviews, focus groups, document analysis, and observations to gather rich and detailed data that generate findings that provide a rich understanding of the complexity of human phenomena (Bless et al., 2013; Fossey et al., 2002; Morrow & Smith, 2000).

Research Design

Research design can be defined as procedures or overall plans for collecting, analysing, interpreting, and reporting data in a research study that assist in answering the research question (Cresswell & Plano-Clark, 2007). There are several forms of research designs in qualitative research such as descriptive, exploratory, and explanatory. However, an exploratory research approach was used in this study.

According to George (2023) this form of research design is appropriate for studies where the researcher is interested in exploring a new phenomenon about which there is insufficient knowledge. The aim of an exploratory approach is to explore the research topic with different levels of depth to help understand the topic and nature of the problem rather than providing final answers to the research questions. Therefore, the approach is concerned with tackling new phenomena in which limited research has been done or no previous research has been done (Brown, 2006). Loadshedding is a relatively understudied

phenomenon in Psychology and limited research has been done on it especially its impact on mental health. Therefore, this research design was deemed suitable for the study.

The aim of an exploratory approach in this study was specifically to understand ways in which loadshedding is impacting the mental health of small business owners in a township setting such as Alexandra.

Research Objectives

The research objectives of the study were to explore the challenges linked to loadshedding especially as they relate to small business owners working in the Alexandra Township in Gauteng and in so doing to understand the impact of loadshedding on the mental health of small businesses business owners.

Research Questions

1. In what ways has loadshedding affected the experiences of small businesses in the Alexandra township?
2. How has loadshedding affected the mental health of small business owners?
3. What is the relationship between loadshedding and mental health?

Sample and Sampling

This study used a purposive sampling method. Purposive sampling involves the selection of individuals to participate in a study based on the judgment of the researcher (Jordan, 2021). The researcher selects participants based on certain criteria and characteristics they need in their sample (Jordan, 2021). The sampling criteria included small business owners operating in Alexandra township whose businesses are likely to be affected by loadshedding, English or Setswana speaking, and over the age of 18. The individuals who did not meet the criteria were excluded from participating.

Furthermore, a snowball sampling method which is sometimes referred to as referral sampling was also used in this study. Snowball is a non-probability sampling method where participants who meet the researcher's specific criteria are requested to recruit other participants who meet the same criteria (Bhat, 2018). Other participants shared my details with other small business owners who may be interested in participating in the study.

In the case of this study, the final sample consisted of eight small business owners who have businesses in Alexandra township and have been operating for more than two years. In addition, it consisted of four males and four females who were over the age of 18 years. Five interviews were conducted in Setswana while three were in English, depending on the preference of the participant. The definition of small business as described in Chapter 1 was used. According to Padilla-Díaz (2015) the sample size should be between three and fifteen participants to allow for in-depth analysis. A level of saturation was reached after eight interviews. Saturation refers to the process of reaching a point at which data collection or analysis is unlikely to yield new information or data (Saunders et al., 2018). Therefore, the chosen sample size was deemed appropriate for this study. The sample included only small business owners from one township, this was specifically small business owners operating in Alexandra township. However, this means that it will not be possible to generalise the findings of this study due to the specific sample population (Robinson, 2014). For example, the experiences of small business owners from rural areas in Limpopo might not be the same as the ones from Alexandra township.

Participants' Background

- **Participant One: Tebogo**

Tebogo has two wives and ten kids. He resides in Alexandra while his family lives in a different province. Tebogo runs a fast-food business, he has been operating his business for

more than ten years at the time of the interview. Tebogo started his business after he was retrenched from a construction company where he was doing manual labour. After struggling to find a job, he decided to start selling food. His business has been doing well whereby he even employed someone to assist in his shop. However, his business has been struggling financially since loadshedding peaked in Alexandra. As a result, he struggles to take care of his family due to the financial problems he is experiencing in his business. This is causing a conflict in his marriage, whereby his wives even think that he is having extra-marital affairs with other women and spend the money on them since he no longer sends enough money home. Tebogo has a gas stove that he uses as an alternative source of energy during loadshedding, however, he complains about how expensive it is to use the gas stove.

- **Participant Two: Khutso**

Khutso is a young woman who has two children and lives with her mother and two siblings in a tiny two-room shack in Alexandra. All the family members are unemployed and financially dependent on Khutso. Khutso started her laundry business with the help of an extended family member who invested in her business. Her business has been doing well in the previous years but is currently struggling financially due to loadshedding. This has led her to downgrade her lifestyle as a way to cope with the challenges. Khutso has no backup power and plans to apply for funding to buy a generator.

- **Participant Three: Musa**

Musa is a young man who has one child who depends on him. He started his laundry business in 2013, which was ten years ago at the time of the interview. His business has been struggling to make a profit to the point that he even had to retrench his one employee. Musa works alone in his business and has a generator an as alternative source of energy during loadshedding.

- **Participant Four: Theo**

Theo is a young man who is renting a one-room shack in an informal settlement in Alexandra. Theo dropped out of school after repeating grade 10 several times. He opened a hair salon after struggling to find a job. When he started his business, he was operating from the back of his rented shack. He then opened a proper salon at a rented shack on a different street when his business began to make enough profit. However, his business no longer makes enough profit like before since loadshedding peaked in South Africa. Theo has no generator; his business solely relies on electricity. Additionally, Theo has a daughter whom he is struggling to support as his business is not doing well.

- **Participant Five: Veronica**

Veronica is a mother to three children who resides in an informal settlement in Alexandra. She owns a laundromat and has been operating for five years. Her business is severely affected by loadshedding as she does not have a generator. Veronica does not use loadshedding schedule as a guide to assist her prepare for loadshedding because she has no idea how the schedule works and cannot afford to buy internet data every day to check the schedule.

- **Participant Six: Stanley**

Stanley has three children and siblings that financially depend on him. He is the breadwinner in his house and mother's house. Stanley pays rent, school fees, and transport for his children, buys groceries, and still has to send money home every month to help out his sisters and their children. Stanley is struggling to take care of two households; however, he feels obliged to take care of his siblings and their children as it is part of his culture to take care of your siblings as an elder sibling. Stanley struggles to afford most of the things that he used to afford in the past years before loadshedding. For example, going on vacations with

his children, and buying take-aways and clothes when needed. His family's lifestyle has changed completely since his business started to make less profit due to loadshedding. Stanley owns a printing business that has nine employees in total. His business used to make a huge profit before the electricity crisis in South Africa, he used to get many orders. However, loadshedding is affecting the finances of his businesses. Stanley has a generator as backup; however, he finds it difficult to maintain the generator due to constant petrol hikes in South Africa.

- **Participant Seven: Refilwe**

Refilwe is a single mother of two children who stays with her children in a backroom in Alexandra. She has a mobile kitchen where she sells a variety of fast food, most of her customers are taxi drivers and construction workers. Refilwe has one employee who assists her in her business. Her business has been doing well but is currently struggling due to loadshedding. Refilwe is struggling to take care of her children as her business is not making enough profit. She is solely responsible for everything in the house including rent, groceries, and school fees and transport.

- **Participant Eight: Rea**

Rea is a young woman with no children and a breadwinner in her family. She stays in Alexandra where she is renting a one-room shack in an informal settlement but is originally from Limpopo. Rea has parents and siblings in Limpopo who depend on the money that she makes in her business. She opened a hair salon after dropping out of college where she was studying electrical engineering due to lack of funding and financial problems. When Rea started her business, she was operating under a tree and did not have proper hair equipment. She then started saving money until she was able to afford to buy proper hair equipment and rent. Rea has two employees and has no generator as her business cannot afford it. Her

business is no longer making a profit as it used to due to loadshedding. This has led her to drown in debt and unable to send money home like she used to.

Data Collection

Instruments

Semi-structured interviews were used to collect data for this study. This type of interview allows the researcher to explore complex topics and understand participants' perspectives in depth (Isaacs, 2014). Researchers can delve into the participants' experiences, beliefs, and behaviours. Additionally, they allow the interviewer to get additional information that is useful for the study through probing and asking follow-up questions. Semi-structured interviews were thus suitable for this study as they allowed me as the researcher to have in-depth conversations and discussions with each of the participants. An interview schedule (see **Appendix B**) which was created with the help of my supervisor was used as a guide to ensure that the interviews covered all the important aspects. The interview schedule comprised eleven questions. Furthermore, the interview schedule was piloted by interviewing one participant first before the main study began. The reason for piloting the interview schedule was to refine the interview questions where necessary for the final interviews. Several questions were refined for the final interviews.

Since COVID-19 restrictions have been lifted in South Africa, face-to-face semi-structured interviews were conducted with the participants. The face-to-face interviews were audio recorded with a cellphone that is password protected. Field notes were also made to record the observations that the researcher made during the interviews. Field notes are important in interviews as they allow the researcher to note non-verbal clues that the audio recording may not capture (Sutton & Austin, 2015). The audio recordings were used to assist in transcribing the interviews. In addition, the audio recordings were then imported to a

password-protected laptop to ensure that no one else besides myself had access to them. The data was then analysed using thematic analysis after the transcription and translation processes had been completed.

Procedures

Firstly, the research proposal was submitted to the Human Research Ethics Committee Non-Medical (HREC Non-Medical) at the University of the Witwatersrand in Johannesburg for ethical clearance and approval to conduct the study. The study only commenced after the committee approved the research proposal.

The sampling procedure that was previously mentioned was followed. I met individually with each participant either at the community library or local park in Alexandra township, depending on the location that was easily accessible to the participants. This was to ensure that the interviews were private, and interruptions were limited. I met with each participant on the time and date that we both agreed on. However, some of the participants sometimes cancelled the appointments at the last minute due to personal reasons. In such an instance, we had to reschedule for another date. The participants were given the research information sheet (see **Appendix A**) and two consent forms to sign before each interview was conducted. Before the participants signed the consent forms, I explained my research to participants and also asked them for permission for the recording of interviews before I began the interviews. The first form provided the participants with information about the study, confidentiality, and anonymity (see **Appendix C**). The second form asked permission from participants to be audio recorded during the interview (see **Appendix D**).

Once the participants had given their consent, the audio recording was switched on then the interview commenced. After the interview, the audio recordings were imported from my cellphone to my password-protected laptop.

The audio recordings of the interviews were then transcribed and those in Setswana language were subsequently translated into English. The recordings were then deleted from my cellphone after translating and transcribing. The process of translation in qualitative research is necessary when analysing data that was collected in a different language from the one in which the study is conducted (Palmary, 2011). Additionally, the researcher must ensure that they maintain the meaning, context, and nuance of the original text when translating into qualitative research (Swartz et al., 2014). The participants were assigned pseudonyms during the transcription process, their real names were not used. After transcribing the interviews, I proceeded to translate them into English. I paid careful attention to details to preserve the participants' accounts of their experiences during both the transcription and translation processes. Translation of data can involve bias which may affect the accuracy of the findings. However, several mechanisms were used to check for accuracy including translation software and reflexive journaling. I used the Google Translate App and a Setswana-English dictionary to assist in the translation process. Additionally, I made some notes on the translation decisions and processes. The data was analysed using reflexive thematic analysis. Lastly, the data will be stored on my Google Drive on my password-protected laptop which I only have access to.

Data Analysis

This study employed Braun and Clarke's (2019) reflexive thematic analysis to analyse the data. Reflexive thematic analysis was ideal for this study due to its accessibility, flexibility, and popularity in qualitative research in analysing qualitative data. Reflexive thematic analysis is the method for identifying patterns of meaning also known as themes across data sets such as transcripts or interviews (Braun & Clarke, 2019). This method allows the researcher to make sense of shared meanings and experiences (Cooper, 2012).

Braun and Clarke (2019) introduced an approach to Thematic analysis that consists of six phases, they had an original one in 2006, and this one from 2019 is a reflexive thematic analysis. The 2019 version of reflexive thematic analysis integrated reflexivity more explicitly into the analysis process. Reflexivity refers to reflecting on the researcher's role, biases, and positionality in shaping the interpretation of data (Braun & Clarke, 2019; Popoveniuc, 2014).

The phases follow each other in a logical order, each phase is built on the previous one.

1. **Familiarisation with the data**

Familiarisation with the data involves reading and re-reading interview transcripts and listening to audio recordings of the interviews (Braun & Clarke, 2019). I read the interview transcripts and listened to the audio recordings numerous times to familiarise myself with the data. Note-making is also an important part of this phase, I made notes by annotating transcripts while going through the transcripts (Braun & Clarke, 2019).

2. **Coding**

Coding involves creating codes or labels that will assist in identifying features of the data that are noteworthy and answer the research question (Braun & Clarke, 2019). Codes are a combination of description and interpretation, they can describe and provide an interpretation of the content of the data (Braun & Clarke, 2019). There are different coding techniques that can be used in thematic analysis such as using file cards, computer software, and coding on hard-copy data (Braun & Clarke, 2019). This study made use of the latter technique, the names of the codes were identified and then the texts that were associated with the code were highlighted.

3. **Searching for themes**

During this phase, the codes that share unifying features were clustered together to identify potential themes or meaningful patterns (Braun & Clarke, 2019). There is no specific number of themes that are deemed enough, it all depends on the data size (Braun & Clarke, 2019). The more data the researcher has, the more likely they are to generate more themes. However, generating too many themes may lead to a loss of coherence in the analysis (Braun & Clark, 2019). I created a table that outlined the potential themes before moving to the next phase.

4. **Reviewing themes**

During this phase, I reviewed the themes against the data to determine whether they were relevant to the research questions (Braun & Clarke, 2019).

5. **Defining and naming themes**

The themes were provided with definitions. It is important to state what makes each theme unique and specific when defining themes (Braun & Clarke, 2019). The selection of extracts from the data to quote and analyse was also a part of this phase. Each extract illustrated the analytic points that I was trying to make. The themes were also provided with names. Naming themes is important in the analysis as it signals the focus of the theme.

6. **Producing the report**

An academic report that provides a convincing story about the data based on the analysis was produced in the form of this thesis (Braun & Clarke, 2019).

Ethical Considerations

Ethics can be defined as a set of rules and morals that should be followed when conducting research especially research that involves human participants (Bhasin, 2020). Ethical principles are relevant and important when conducting research (Bhasin, 2020). As a

researcher, I abided by the following ethics when conducting this study: informed consent, confidentiality and anonymity, voluntary participation, and doing no harm.

Firstly, I provided the participants with an information sheet (see **Appendix A**) that contained all the information regarding the study including the purpose of the study before they signed the consent form (see **Appendix C**). This was to assist participants in making informed decisions. Secondly, the identities of the participants were kept confidential to protect their privacy. Anonymity was not guaranteed, I knew who the participants were, however, confidentiality was guaranteed. In addition, all the information that the participants provided was only accessed by me and my supervisor. The audio recordings and transcripts of the interviews were stored in password-protected cellphone and laptop to ensure safeguarding.

Thirdly, participation in the study was completely voluntary. No individual was coerced, threatened, or manipulated to participate in the study. Participants had a choice to withdraw from the study without any consequences as they have the right to do so. Lastly, all precautionary measures were taken to ensure that the participants were not caused any form of harm including emotional and physical harm. The topic under investigation in this study, along with the questions the researcher will ask during the interviews could potentially cause emotional distress as the participants may be reminded of their feelings of helplessness and loss due to loadshedding, which could further induce emotional pain. Therefore, several measures were put in place in preparation for possible harm during participation in the study. Firstly, the participants were assured that they did not have to answer questions that they did not feel comfortable answering. Secondly, if some of the interview questions elicited some distress in the participants, the researcher was going to give them details of a psychologist at Emthonjeni Centre at the University of the Witwatersrand for counselling. However, no such experiences were encountered during the course of the interviews.

Trustworthiness in Qualitative Research

According to Polit and Beck (2014) trustworthiness in qualitative research is defined as the degree of confidence in the data, interpretation, and methods that are used in the study to ensure the quality of the study. Lincoln and Guba (1985) proposed four criteria for trustworthiness which are mostly accepted in qualitative research. These include the following: credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985).

Credibility

Credibility of the study involves confidence in the truth of the research study; therefore, findings are the most crucial criterion of trustworthiness (Polit & Beck, 2014). The use of standard procedures indicated in the qualitative approach, engaging with participants for a prolonged period, reflective journaling, observation where necessary, and debriefing are some of the techniques that are utilised to establish the credibility criterion. The credibility of this study was established by conducting semi-structured interviews which were guided by an interview schedule. In addition, probing questions were asked where necessary.

Dependability

According to Polit and Beck (2014) dependability is defined as consistency of the data over time and research conditions. Dependability is the same as reliability, however, the stability of conditions is dependent on the nature of the study (Polit & Beck, 2014). Maintaining process logs and peer-debriefings are some of the procedures to ensure dependability (Polit & Beck, 2014). I made some notes about all the activities that occurred during the study.

Confirmability

Confirmability refers to the degree to which the findings of the study could be repeated (Polit & Beck, 2014). Methods used to establish confirmability include maintenance of both methodological memos of log and audit trail of analysis (Polit & Beck, 2014). An audit trail is the research narrative from the beginning of the study until the final which is the findings. I kept notes of all the decisions I made as well as the process of analysis.

Transferability

Transferability refers to the degree to which the findings of the study are useful to people in other settings (Polit & Beck, 2014). However, it is different in that the readers can determine the extent to which the findings are relevant to their situations (Polit & Beck, 2014). The transferability of the study was supported by providing a detailed description of the context and participants, and transparency regarding the analysis (Amankwaa, 2016).

Self-Reflexivity

Self-reflexivity is important in qualitative research as the nature of this type of research and its approaches including data collection and analysis are mostly based on subjectivity (Morrow, 2005). Therefore, it is crucial to remain self-reflexive throughout the research process to limit research bias, assumptions, and preconceptions (Morrow, 2005). Additionally, recognition and acknowledgment of how one's subjective position, experiences, hidden biases, and perspectives may have an influence on research processes is important when conducting qualitative research (Finlay, 2002). According to Popoveniuc (2014) reflexivity entails awareness of oneself and the relationship between oneself and the research context. While I endeavoured to remain self-reflexive when I conducted this study, I might have had an impact on the study as a researcher.

I was aware that I might be subjective when conducting the research because the research topic is something close to my personal experience. I come from Alexandra

township, and I have personally observed the situation of how loadshedding affects the daily living of residents of Alexandra and their businesses. Therefore, I might have had preconceived ideas of how loadshedding affects the mental health of small business owners in Alexandra before having any evidence. However, I managed this by being as open as possible to the experiences shared by my participants trying to ensure that the study was not influenced by my personal viewpoints in any way.

Furthermore, I also needed to be aware of the potential power dynamics and social differences between myself and the participants. I am a young woman who is in her early twenties, and some of the participants were older than me in age. Therefore, they might have not felt comfortable discussing their struggles and problems that are affecting their businesses and livelihoods with someone young like me. For example, some participants might not have been completely honest about how their mental health is affected by loadshedding to avoid being seen as being vulnerable to someone they would consider to be a child. Most cultures believe that older people should not discuss their problems with younger people. However, I treated the participants with the utmost respect, was empathetic, and engaged with them in a mature way during the interviews to break the power dynamics.

I was also aware of other power issues that may arise. I am an educated woman with university qualifications, and some people that I interviewed had no formal education. Therefore, they may have felt uncomfortable discussing their personal issues with me. I first built rapport with the participants to make them comfortable. In addition, I also explained and assured them that participation in the study was completely voluntary, and they were not forced in any way to continue with the interview if they no longer wished to.

Conclusion

This chapter described how a qualitative methodology was used in this study. The chapter begins with an outline of the research methodology and design. It was then followed by the study's research aims and research questions. Thereafter, the methods of sampling were outlined, and a brief description of each participant was provided. Subsequently, the procedures that were used in data collection as well as data analysis were outlined. Furthermore, the steps taken to facilitate qualitative rigour were discussed, followed by the ethical considerations of the study. Finally, the chapter concluded by discussing the researcher's reflexivity.

Chapter 4: Findings

Introduction

The findings that were obtained from the reflexive thematic analysis of the data will be presented in this chapter. The analysis of the data was conducted using Braun and Clarke's (2019) guidelines. The quotes from the participants who were interviewed will be used *verbatim* to support the identified themes and subthemes relevant to the research questions and topic. This will show how the main themes emerged from the interviews, thus increasing the credibility and transparency of the study (Morrison & James, 2009). The following are the main themes that were identified from the data analysis: 1) Operational Challenges as a Result of Loadshedding, 2) The Financial Impact of Loadshedding, 3) The Impact of Loadshedding on Employees, 4) The Strain on Business Owners' Families, 5) The Psychological Impact on Business Owners 6) The Impact of Loadshedding on the Larger Community, and 7) Perceived Government Accountability for Loadshedding. The aforementioned themes and their associated subthemes will be discussed below.

1) Operational Challenges as a Result of Loadshedding

All the participants shared how loadshedding is disrupting their day-to-day business operations. This theme provides insight into the extent to which loadshedding negatively affects the daily operations of the small businesses in Alexandra township according to the participants' experiences. The subthemes associated with the operational challenges theme highlight several specific difficulties faced by small businesses in providing their regular services to customers during loadshedding.

1.1) *Electricity-Dependent Equipment*

Most participants shared that their businesses use equipment that relies heavily on electricity, for example, laundromats, hair salons, and printing businesses. Therefore,

business owners face significant operational challenges during loadshedding. When loadshedding is implemented, it interrupts their machinery leading to disruptions in delivering their regular services to customers. Stanley expressed his operational challenges as follows:

> *Our business is highly dependent on electricity. We have equipment such as tunnels, heat guns, and printing machines that use electricity to operate. We had many instances where loadshedding occurred while the printed t-shirts were still in the tunnel or before we could dry the wet umbrellas that were wet in paint with the heat gun which resulted in faulty prints.*

Rea shared similar challenges related to her hair salon: "*Our hair equipment such as hair dryers use electricity so we cannot use them to work during loadshedding*." Theo who also has a hair salon expressed similar challenges: "*I cannot cut customers hair when there is loadshedding because my hair equipment uses electricity*."

1.2) *Disruptions to Service Delivery*

Loadshedding interferes with the regular workflow of the businesses leading to disruptions in delivering of services to customers. Most participants expressed discontent as to how loadshedding is interfering with their workflow and disrupting their service delivery. Veronica shared how customers complain when she is unable to deliver her services on time due to loadshedding: "*Customers …. expect me to be done at a certain time and if I am not done at that time due to loadshedding, some customers complain and even decide to take their laundry to other laundromats*." Rea voiced similar challenges: "*If the customers want treatment or to wash their hair, we ask them to wait for the electricity to come back …. Most customers never come back to do their hair if they get turned back due to loadshedding*."

Furthermore, some of the small businesses such as salons and fast-food outlets are unable to provide certain services during loadshedding. These businesses are forced to turn away customers who want those particular services during loadshedding, affecting their sales. Some participants expressed how they provide limited services during loadshedding. Rea shared how her business is unable to provide services that require electricity during loadshedding:

> *We plait customers whose hair does not require using hair dryers or hair-cutting machines. For example, if we have customers who want to plait braids, we can plait them because plaiting braids does not require any hair equipment that requires the use of electricity. However, if the customer wants to wash, treat, or style their hair during loadshedding, we have to wait for the electricity to come back.*

Refilwe also shared how she turns away customers who want specific food items that require the use of electricity equipment during loadshedding: *"I cook the food that I can cook with the gas stove and sell them. However, I turn away customers who want to buy fries or Kota."* Theo shared a similar challenge:

> *I turn customers away and tell them to come back when the electricity is back because I cannot cut their hair when there is loadshedding because my hair equipment uses electricity. Some customers don't come back which means I lose profit.*

The inability to deliver services leads to the loss of customers. The majority of the participants mentioned how they lose customers during loadshedding which affects their sales, particularly those who do not have backup power. Khutso reported the loss of customers to competitors during loadshedding: *"I lost a lot of customers due to loadshedding …, they [Customers] decide to go to other laundries where there is electricity which means I lose profit."*

2) The Financial Impact of Loadshedding

This theme provides insight into how participants described how loadshedding influences the financial aspects of their small businesses and how the small businesses endure negative economic consequences due to loadshedding. The majority of participants described the financial strains and economic hardships that their small businesses are experiencing as a result of the ongoing loadshedding.

2.1) *Loss of Profit*

During loadshedding, most of the businesses stop operating, especially the ones that are heavily dependent on electricity. The shutting down of their electronic machinery and equipment leads to a complete stop of production. Most participants shared how this interruption leads to loss of productivity as they cannot continue with their core business. Theo shared how his business stops operating during loadshedding: *"I have to stop working during loadshedding because I don't have a generator. I just sit and do nothing and wait for electricity to come back."* This is closely related to Khutso's experience: *"We don't close the store, we just sit and do nothing."* Musa shared how loadshedding causes everything to be standstill: *"During loadshedding, everything stops, we don't work."*

The loss of productivity leads to financial loss, if businesses are unable to operate it means they are not making money. Most small businesses are experiencing financial setbacks due to loadshedding with their economic performances showing a decline. Six participants shared how their businesses hardly make a profit as a result of loadshedding. Khutso described how customers turn to her competitors with electric backups such as generators which results in loss of income: *"Most customers go back with their laundry when they get to the store and find out that there is loadshedding, they decide to go to other laundries where there is electricity which means I lose profit."* Theo shared a similar experience: *"I turn*

customers away and tell them to come back when electricity is back because I cannot cut their hair when there is loadshedding. Some customers … don't come back, which means I lose profit." Rea associated her loss of customers due to loadshedding with profit loss: *"I lose customers during loadshedding which means that I also lose profit. Our hair equipment such as hair dryers uses electricity so we cannot use them to work during loadshedding."* Refilwe described the income decline in her business due to loadshedding, comparing the profit made in previous years and the current one:

> *I used to make a decent profit in the previous years because loadshedding was better than now, and business was booming. I was able to save money and afford most things that I wanted … But ever since loadshedding peak, my business is not making money like it used to. I think my business will make enough profit as it used to or more if the government can end loadshedding in South Africa.*

This closely relates to Tebogo's experience: *"In the previous years before loadshedding peaked, I used to make a profit of about R 6000 or more … but now I hardly make a profit of R 2000."* Stanley shared similar experiences about the income decline: *"The business used to make a lot of money ten years ago … there was no loadshedding in South Africa … But now the business makes less money because of the loadshedding."*

2.2) *Increased Costs*

Some of the participants did not have backup generators and gas stoves. Although having a generator or gas stove as backup power would help the small businesses continue operating during loadshedding, some of the participants expressed how challenging it is for small businesses to afford backup power like generators. Rea expressed how generator costs are beyond her means: *"We don't have generators. Generators are very expensive, they cost about R100 000. I cannot afford to buy it … because my salon does not make such an amount*

of money." Khutso also shared how purchasing a generator is so costly that she even plans to get funding to buy the generator: *"My plan is to get funding to buy a generator. Buying a generator will cost my business."*

The participants who were able to obtain backup power like generators and gas stoves to keep their businesses running when loadshedding is implemented had different experiences. These participants complained about the costs associated with the maintenance of generators and gas stoves. Stanley expressed how the ongoing fuel price increases have impacted their operational expenses as he needs fuel to keep the generator going:

> *We have a generator, but it is expensive to use a generator because it uses petrol and petrol is expensive. We use the generator to operate some small electrical equipment … other big machines … need a lot of power, so they use a lot of petrol. The petrol price increases almost every day in South Africa, it is very bad.*

Musa shared a similar experience with using a generator as backup power during loadshedding: *"It is expensive to use a generator because you have to buy petrol and the machines use a lot of petrol."* Tebogo on the other hand used a gas stove as a backup but also has faced ongoing rising costs in the price of gas: *"Our backup during loadshedding is a gas stove. If I have half-done chips, I use the gas stove to finish cooking them, but the gas stove is too expensive to use."*

2.3) *Impact on Salaries to be Paid to Employees*

Many participants expressed the challenges that they face with paying employees' salaries, especially fixed salaries. They voiced how challenging it is to cover the employees' salaries when business is slow due to loadshedding. Rea expressed how she is struggling to pay her employees full salaries: *"I am already struggling to pay them now, sometimes they get paid half of their salaries because the business is not doing good since we lose many*

customers due to loadshedding." Veronica described the way loadshedding is costing her business since her employees receive fixed salaries, and they sometimes get remunerated for hours they did not work:

> *We don't work most of the time during loadshedding meaning there is no money coming in during that period. The employees have fixed salaries, they are not paid according to the hours they worked which costs the owner because they have to pay the employees their full salaries irrespective of how bad loadshedding is.*

Musa shared how difficult it was to pay the salary of one employee: *"I used to have one employee, but I had to stop them from working due to loadshedding. I could not afford to pay his salary anymore."* Stanley also expressed the way he is struggling to pay his employees' salaries to the point that he is even considering retrenching some of his employees: *"We might even have to retrench some of our full-time employees if loadshedding continues because where will we get the money to pay them when the business is not making enough money."*

3) The Impact of Loadshedding on Employees

This theme highlights how employees working for small business owners are also affected by loadshedding. This theme highlights the impact on workplace dynamics, financial challenges, and potential job losses faced by employees.

3.1) *Unpredictable Working Hours*

Loadshedding disrupts the operating hours of some of the small businesses in Alexandra leading to unpredictable working hours for employees. A number of participants reported how their employees are required to work overtime which can impact their work-life balance. Rea described how loadshedding disrupts the operating hours in her business: *"We no longer have standard business operating hours. We work whenever we have customers,*

there is no knockoff time. Sometimes we work until 01:00 am in the morning, as long as we make some money." Stanley also shared how his employees are required to work overtime due to loadshedding which tends to be unpredictable: *"The employees work overtime … especially when we are on stage 6 of loadshedding. The employees would work until 22:00 at night."* Khutso shared a similar experience of employees having to work nightshift when loadshedding is at peak: *"We have to work at night to make sure that they [customers] get their clothes ready early in the morning."*

3.2) *Financial Uncertainty*

As already discussed earlier, the loss of income of business owners has a direct impact on the income earned by their employees. Some of the participants expressed their concerns about the financial security of their employees. Khutso described how her employees receive decreased salaries due to fewer hours worked and even provided an example:

> *It [Loadshedding] is affecting their [Employees] incomes because they get paid based on the hours they worked, for example, so if there was loadshedding for four hours, it means they also lost the money for those hours. I have to deduct the money for the hours that we were not working.*

This is similar to the experiences of Refilwe's employees:

> *It [Loadshedding] is affecting their [Employees] incomes because they get paid based on the hours they work. Sometimes I release my employee early if there is loadshedding in the afternoon and that means they will not get their full salary.*

Rea also shared the challenge of fluctuations in employee salaries: *"Sometimes they [Employees] get paid half of their salaries because the business is not doing good since we lose many customers due to loadshedding."*

3.3*) Increased Workload*

The employees at small businesses face increased workloads due to loadshedding. Some participants reported how their employees are often overworked as their small businesses cannot afford to hire more staff due to the financial challenges they are facing because of loadshedding. Stanley shared how his employees are overworked: *"The full-time workers work long hours and are overworked because of loadshedding, we cannot afford to hire casual workers to help with the workload."* Khutso also shared how her employees often work overtime and long hours during loadshedding:

> *We take orders and explain to the customers that there is loadshedding at this time, they can come and fetch their laundry the next day. We have to work at night to make sure that they get their clothes ready early in the morning.*

3.4) *Lack of Job Security*

The financial struggles faced by small businesses due to loadshedding also threaten the job security of the employees. The majority of the participants expressed concerns about the job security of their employees as they may have to retrench staff or in some instances close their business. Rea shared how she might have to retrench her employees if loadshedding continues: *"I will have to retrench my employees and work alone because I won't have money to pay them. I am already struggling to pay them now."* This closely relates to Veronica's intentions if loadshedding continues: *"I will have to let go of my employees because I won't have money to pay them."* Khutso on the other hand expressed how she might have to permanently close her store if loadshedding persists which will result in the loss of jobs for the employees: *"If loadshedding continues then I will have to close my business."* Theo expressed similar concerns: *"I will have to close my business permanently."* This was also echoed by Tebogo: *"I think if loadshedding continues like this, it will leave me*

with no choice. I will have to close my business and go look for a job somewhere else." Retrenchments and permanent store closures will both result in employee job losses.

4) The Strain on Business Owners' Families

The strain on business owners' families theme connects the impact of loadshedding on small businesses to their personal lives. This highlights how loadshedding affects small business owners on a personal level, including their ability to provide for their families and the lifestyle changes they experience. All the participants interviewed expressed how loadshedding affects their personal lives, especially their ability to provide for their families.

4.1*) Adjusted Family Spending*

The impact of loadshedding on small businesses forces adjustments in lifestyles. Participants were forced to reduce their usual family spending and even prioritise essential expenses which led to a change in lifestyle. Stanley shared his family change in lifestyle including how he has to carefully budget for essentials: *"These days I work on budget; I only buy important things. I am no longer able to save money like I used to, our family lifestyle has changed completely because of loadshedding."* Khutso also shared a similar challenge: *"I just buy the basics so that we can have food in the house, and they go to school."* Veronica was also forced to reduce their family spending: *"I had to cut some expenses because the money is just not enough."*

4.2) *Inability to Provide Adequately for One's Family*

Loadshedding imposes financial limitations on the business owners, making it challenging for them to provide for their families. Most participants reported being breadwinners and expressed how loadshedding limits the money they allocate to their family's needs. Rea shared how loadshedding affects the money that she has to send to her family every month as the breadwinner:

I am a breadwinner. Many people at home depend on the money that I make in this salon. I have family in a different province and I have to send money every month because I am the only one with an income. I don't even remember the last time I sent them a decent amount of money; I send them whatever amount I have depending on how the business did during that month.

Stanley expressed how difficult it is for him to provide for his children due to loadshedding:

My children depend on me for everything. With the small profit that I make, I must pay rent, buy groceries, pay for school transport, and everything that the kids want. It is not easy with everything becoming expensive these days due to loadshedding.

Theo expressed similar struggles:

It is my responsibility to take care of my children, however, I am currently failing to provide for my kids because my business is not making enough money due to loadshedding. I am no longer able to afford to pay for my children's school fees and transportation due to loadshedding.

Furthermore, many participants shared their struggle to fulfil their family's expectations as a result of the severe loadshedding. For example, Tebogo struggles to send money home to his two wives who stay in a different province like he used to before loadshedding became severe:

In the previous years before loadshedding peaked, I used to make a profit of about R 6000 or more. Then I would send my family a reasonable amount every month but now I hardly make a profit of R 2000. I am no longer able to send them [Wives] enough money as I used to because of loadshedding.

Stanley and Khutso also shared similar struggles with fulfilling family expectations. Stanley notes: *"I am no longer able to afford most of the things that I used to afford in the past years before loadshedding. For example, going on vacations with my children, buying takeaways and clothes whenever they want."* Similarly, Khutso shared: *"I am no longer able to afford to do some things that I used to for them [Her children]. I used to take them out to restaurants for entertainment."*

4.3) *Changes in Family Dynamics*

Loadshedding has changed the family dynamics of some of the small business owners. Some of the participants reported negative family dynamics including misunderstandings, conflict, and strained relationships due to loadshedding. Tebogo described how his wives are failing to understand the financial challenges that he is faced with due to loadshedding, contributing to a conflict in his marriage:

> *Loadshedding is affecting my family a lot, my family is no longer happy because I am no longer able to provide for them the way used to. I am not able to buy them food and other needs like I used to. They do not understand that things are difficult for me, my wives even think that I am cheating and spending money with other women, but I am not doing any of that.*

Veronica shared a similar challenge of lack of understanding of financial challenges, her children do not understand that due to loadshedding, they cannot afford certain things: *"I had to cut some expenses because the money is just not enough and my children were not happy with that. They are kids, they don't understand what having no money means."* Theo also shared the lack of support from his family and how they see him as a failure: *"Things are no longer good, I look like a failure in my family's eyes as I am failing to provide for my children since my business is not doing well due to loadshedding."*

5) The Psychological Impact on Small Business Owners

This theme highlights the mental health aspects of small business owners from Alexandra township and underlines the psychological burdens that small business owners face. The majority of the participants seem to be experiencing a decline in their mental health due to loadshedding.

The challenges imposed by loadshedding on small businesses cause uncertainty which seemed to induce stress and anxiety in some of the participants. Most of the participants reported several emotional symptoms including feeling overwhelmed and bad about themselves and withdrawing from the people around them. Rea shared how the inability to provide for her family due to loadshedding makes her feel like a failure:

> *I also feel like I am failing my family. I opened my business with the aim of working hard to provide for my family since I come from a poor background, so I feel like a failure now that I can't provide for them like I used to and is all because of loadshedding.*

Stanley also shared how he feels like he is failing his children as a parent when he is unable to provide for his children due to loadshedding: *"I feel bad as a parent, I feel like I have failed my children because it is our duty as parents to provide for our children."* Veronica shared a similar experience: *"I feel bad because I feel like I am failing my children and I blame loadshedding, it is the cause of everything."* Refilwe on the other hand expressed how her stressful situation causes her to neglect her children: *"I am always stressed; I no longer give my children attention like I used to because I stress about whether the business will make enough money the following day."*

Some of the participants shared how they constantly think and worry about the challenges their businesses face due to loadshedding. Rea expressed how she is constantly troubled about the future of her business: *"I am always stressed, wondering if things will ever*

get back to normal. Wondering if my business will ever make profit the way it used to." Refilwe shared a similar experience: *"I am always stressed; I stress about whether the business will make enough money the following day."* Veronica also shared how loadshedding is affecting her mental health: *"It affected it [mental health] badly because I stress a lot about my business losing customers due to loadshedding which is something that I have no control over."*

Furthermore, some participants reported experiencing physical symptoms of stress and anxiety due to loadshedding, for example, sleeping problems, loss of weight, and even anxiety attacks. Tebogo expressed how he struggles to sleep at night and even added how he lost weight because of the challenges his business is facing due to loadshedding:

> *I can't even sleep at night when I think about what loadshedding is doing to my business. Look at me, do you see how skinny I am? This is not my body, I lost a lot of weight because of stress.*

Veronica also shared a similar experience of insomnia: *"I struggle to sleep at night when I start thinking about this [Loadshedding]."* Refilwe shared how loadshedding causes her to panic: *"Whenever I see a notification about loadshedding moving to stage 6, I panic."*

Loadshedding also seemed to contribute to feelings of helplessness for the participants. Some participants felt defeated by loadshedding, and believed they had no power to improve their situations as their businesses depended on electricity. Musa expressed how this is causing him to consider giving up on his business: *"I am losing hope, sometimes I don't see the need to continue operating as I hardly make any profit, but I have a family that is dependent on me."* Tebogo, on the other hand, shared how he feels defeated by loadshedding to the point that he has no idea what to do to improve the state his business is

in: *"I no longer know what to do. I feel bad because things are not going well for me, my business is not doing well."*

There was also a general sense of frustration due to loadshedding. Some participants shared how frustrating it is to have no control over their businesses due to loadshedding. Stanley expressed his frustration with loadshedding and even held the government accountable:

> *The fact that I have no control over the working hours of my business is frustrating, having to work based on the loadshedding schedule is frustrating. I get frustrated Whenever I think about the money that we lose because of loadshedding. Our government needs to do better, we cannot continue like this.*

Refilwe expressed how frustrating it is to turn customers away due to loadshedding:

> *Every cent counts in this economy, loadshedding costs us as small business owners, and it is sabotaging our businesses. I have no control over running my own business due to loadshedding, I have to turn away customers during loadshedding which results in a drop in sales.*

In general, loadshedding seemed to be taking a toll on the psychological well-being of participants. The challenges discussed above related to financial strains, stress, and strained relationships caused by loadshedding seemed to be contributing to the negative personal well-being of participants and impacting their overall quality of life. Tebogo expressed how the impact of loadshedding on his business is affecting his well-being:

> *My business is experiencing financial problems which are also affecting my family as I am unable to provide for them as the breadwinner, my family is unhappy with me and that is affecting my mental health. I feel the pressure to provide for my family.*

Musa also shared how loadshedding is taking a toll on his well-being: *"I don't want to lie, things are extremely difficult for me. I am struggling to cope with everything."*

6) The Impact of Loadshedding on the Larger Community

A number of participants described how loadshedding is negatively affecting their community. This theme highlights how the participants make sense of the consequences of loadshedding on the local economy and the mutual relationship between small businesses within communities.

6.1) *Businesses Losing Income*

Small businesses in Alexandra appear to have been significantly affected by loadshedding. Most of them are experiencing declines in income, which affects the overall economic health of the community. This was described by a number of the participants such as Tebogo who explained how small businesses are experiencing a loss of revenue in Alexandra*: "Small businesses are losing a lot of money, they are making little to no profit due to loadshedding, especially small business owners."* Rea expressed a similar concern: *"Loadshedding is affecting the community of Alexandra a lot, small businesses are losing money."* Veronica shared how small businesses especially those without generators are hit harder by loadshedding: *"It [Loadshedding] is affecting it [Community] badly because businesses that do not have generators lose money."*

6.2) *Increase in Criminal Activities*

Loadshedding contributes to a lack of personal safety as the dark streets at night make it easier for criminals to carry out their activities. The majority of participants expressed how loadshedding is contributing to the increase in crimes in Alexandra. They shared how criminals often commit crimes when it is dark. Theo shared how loadshedding, not only contributes to a high crime rate in Alexandra, but also affects people's sense of safety:

Crime is high during loadshedding in Alexandra, people get a chance to steal power cables and commit robberies during loadshedding because it is dark. We are scared to go out on the street during loadshedding because we fear being mugged.

Musa shared a similar concern: *"The crime is too high during loadshedding, people see opportunities to steal and rob other people when it is dark. So loadshedding increases crime activities in Alexandra."* Rea also expressed how businesses experience robberies during loadshedding: *"Criminals rob the businesses when there is loadshedding because they see the opportunity to steal when it is dark."*

6.3) *Impact on Employment*

Small business owners are trying to curb the high unemployment rate in Alexandra by employing community members. However, the challenges that loadshedding imposes on their businesses make it difficult for them to do so. Loadshedding is negatively affecting local employment, therefore contributing to the high unemployment rate in South Africa. Small businesses in Alexandra are unable to hire new staff, some are even letting go of their employees due to the financial impact of loadshedding on their businesses. Stanley shared how their effort to create employment as small business owners are being sabotaged by loadshedding, he even added how he will have to stop employing community members due to loadshedding:

Unemployment is high in South Africa, it is not easy to get a job even those who have degrees. So people try to create jobs for themselves and the government sabotages their businesses with loadshedding. We will have to stop hiring casual workers because we will not be able to afford to pay extra people.

This closely relates to Rea's experience:

There are no jobs out there, the level of unemployment is very high in South Africa so we try to make a living by opening our own businesses but loadshedding is just making things difficult for us as business owners.

7) Perceived Government Accountability for Loadshedding

This theme highlights how participants perceived the role of government with regard to loadshedding. A number of participants held the government accountable for loadshedding, and they expressed their expectations about possible government support during loadshedding.

7.1) *Expectations of Government Support*

Many participants seemed to place the blame for the ongoing loadshedding on the government. Furthermore, they expected the government to support small businesses that are facing challenges due to loadshedding. Tebogo expressed how he would need the government's assistance to help improve the state of his business:

Small business owners need the government to help us boost our businesses. We need help in terms of funding so that we can buy stock for our business and refill our gas bottles when our businesses are not doing well due to loadshedding.

Refilwe shared how government intervention is needed to revive small businesses in Alexandra: *"Loadshedding is killing small businesses in Alexandra, the government must intervene."* Rea also shared how the government must lend a helping hand: *"Government must stand up for us, things are becoming worse. Actually, they are already worse."* On the other hand, Khutso expressed how the government is failing to support small businesses that are affected by loadshedding: *"I feel like our government is failing us. They are supposed to assist us as small businesses."*

7.2) *Perception of Government Sabotage*

Some of the participants perceived loadshedding as a weapon formed against them by the government. They believe that the government is deliberately trying to ruin their small businesses with loadshedding. Stanley expressed this belief as follows: *"People try to create jobs for themselves and the government sabotages their businesses with loadshedding."* Rea shared a similar perception: *"Government is just making things difficult for us as business owners. Our own government is sabotaging small businesses with loadshedding."* Refilwe also shared how her business will improve if the government can stop loadshedding which sabotages small businesses: *"I think my business will make enough profit as it used to or more if the government can end loadshedding in South Africa since they have the power to end it."*

Conclusion

The main themes that emerged from the analysis of the data collected from interviews with small business owners from Alexandra township were highlighted in this section. These themes offer a comprehensive understanding of the multifaceted impact of loadshedding on small businesses in Alexandra. The findings revealed the experiences of small businesses in Alexandra in relation to loadshedding and how they affect the lives of small business owners from a social, economic, and psychological perspective.

Chapter 5: Discussion

Introduction

The findings of this study provide crucial information to help one answer the research questions that were raised in the initial stage of this study. Although there are some studies on the impact of loadshedding on small businesses, very few studies have explored the mental health impact of loadshedding on small business owners (Ann et al., 2015). The present study aimed to explore the experiences of small business owners working in the Alexandra township in relation to loadshedding impact on their mental health. By so doing it was hoped to bridge a gap in the literature on the psychological impact of loadshedding.

The following research questions below were asked at the initial stage of the project:

1. How has loadshedding affected the mental health of small business owners?
2. In what ways has loadshedding affected the experiences of small businesses in the Alexandra township?
3. What is the relationship between loadshedding and mental health?

To answer the research questions, I will compare the findings of the study with the relevant literature discussed in Chapter 2. In addition, Bronfenbrenner's ecological systems theory will be used as a theoretical backdrop to better conceptualise the findings.

Economic Context

The economic impact of loadshedding on small businesses is one of the significant themes that consistently emerged in the findings. The literature on the economic impact of loadshedding has highlighted the vulnerability of small businesses particularly those without alternative sources of power during the period of loadshedding, emphasizing disruptions to service delivery, operational challenges, loss of revenue, and financial strain (Ado & Josiah, 2015; Alumo Energy, 2020; Mabunda et al., 2023). The findings of this study reflect these

circumstances, highlighting the economic ramifications faced by small business owners in the Alexandra township. The personal experiences of the participants in this study reflect what has already been discussed in the literature, especially the work of Mabunda et al., (2023) who argue that most small businesses without backup power like generators and gas stoves are more vulnerable during loadshedding and more likely to experience severe disruptions in workflow and operational challenges including a halt in operations and loss of productivity and sales. This was reflected in Theo's experience: *"I have to stop working during loadshedding because I don't have a generator. I just sit and do nothing and wait for electricity to come back"*

In addition, the findings reveal how loadshedding affects the sales of small businesses which leads to loss of profit, especially businesses that are highly dependent on electricity. This puts businesses at a potential risk for closure. This concurs with Mabunda et al., (2023) who state that small businesses' inability to operate during loadshedding, particularly those dependent on electricity results in a drop in sales and the risk of permanent store closure. Similarly, Tebogo explains: *"I think if loadshedding continues like this, it will leave me with no choice. I will have to close my business and go look for a job somewhere else."*

The findings correspond with Bronfenbrenner's (1975) theory which described the microsystem which is composed of direct interactions and relationships with family, employees, and the immediate environment such as home, workplace, and school. The disruptions in workflow and economic challenges including loss of profit and financial problems due to loadshedding reflect the immediate and direct impact of loadshedding on small business owners. This can be well understood in relation to the significant role that the microsystem plays in an individual's life (Bronfenbrenner, 1975).

Ado and Josiah (2015) highlight that most of the vulnerable small businesses lack financial support and cannot afford backup power. The findings of this study support this and many participants shared how they struggle to afford generators to use as alternative sources of energy during loadshedding as described by Rea: *"We don't have generators. Generators are very expensive, they cost about R100 000. I cannot afford to buy it … because my salon does not make such amount of money."*

While the existing literature discusses alternative sources of power like generators as solutions to mitigate the impact of loadshedding on small businesses and how small businesses struggle to afford generators (Ado & Josiah, 2015), the findings of this study also highlight that this is not always practically possible for most people, especially in a township context such as Alexandra. The financial burden of maintaining continuous generator usage for prolonged periods underscores the challenges of implementing backup plans in resource-constrained environments like Alexandra township.

The findings of this study further indicate that the employees of small businesses also experience financial challenges because of economic challenges imposed by loadshedding on the small businesses. The experiences of employees as described by the participants, include extended working hours, increased workload, and decreased salaries which concurs with the literature. For example, Mabunda et al., (2023) argue that loadshedding has implications for employees of small businesses as approximately 69% of small businesses are forced to adjust the working hours and cut the salaries of the employees due to the impact of loadshedding on their businesses. This was pointed out by Rea: *"We no longer have standard business operating hours. We work whenever we have customers, there is no knock off time. Sometimes we work until 01:00 am in the morning."*

Additionally, the salaries of the employees are affected by loadshedding, particularly those who get paid based on the hours they work. Some small business owners, such as Rea, have resorted to salary cuts to help keep their businesses afloat: *"Sometimes they [Employees] get paid half of their salaries because the business is not doing good since we lose many customers due to loadshedding."* Loadshedding affects the relationships between small business owners and their staff, also putting staff at risk of losing their jobs due to possible retrenchments. This may result in tensions and challenges within the worksystem which further points to the functioning of the mesosystem, influencing both employees and small business owners. These results resonate with Bronfenbrenner's (1975) views who states that the mesosystem refers to the relationships between the business, family dynamics, and interactions with employees.

Moreover, the findings of this study indicate that the participants experience family financial strain and negative family dynamics due to the economic challenges which stem from loadshedding. Prior research has highlighted how loadshedding impacts the livelihoods of small business owners, especially those who are breadwinners in their families (Prottas & Thompson, 2006*).* This was also reflected in the experiences of this study's participants *"I am a breadwinner. Many people at home depend on the money that I make in this salon. I have to send money every month because I am the only one with an income"* (Rea).

This financial consequence also seemed to lead to conflict and strained relationships between participants and family members as already suggested by Prottas and Thompson (2006). The results highlight Bronfenbrenner's (1975) belief that there is an interconnection between the challenges that small businesses face and the change in family dynamics. The relevance of the mesosystem is illustrated by the impact of disrupted business operations on family dynamics as it involves interaction between the microsystems of the small business owners and that of their families.

Furthermore, the findings of this study highlight how loadshedding has impacted the safety and security of people in the community of Alexandra, further affecting small business owners. This resonates with Mabunda et al., (2023) who showed how small businesses are exposed to different forms of criminal activities such as theft and robberies during periods of loadshedding. This was described by Theo: *"Crime is high during loadshedding in Alexandra, people get a chance to steal and commit robberies during loadshedding because it is dark. We are scared to go out on the street during loadshedding because we fear being mugged."* Furthermore, small business owners fear for their lives and the safety of their businesses during the loadshedding periods.

The findings of this study highlight the important role that small businesses play in the township economy and specifically in this study in creating employment in the Alexandra community. However, the ongoing energy crisis has impacted this as already pointed out by Rohini et al., (2018) who highlight that small businesses play a role in job creation and contribute to local economic development, however, loadshedding affects local employment negatively as employees of such businesses seem to be at risk of decreased salaries as well as possible job losses, as described above.

In addition, the findings point out the overall impact of loadshedding on the economic health of the Alexandra community as a whole. This is in line with the work of Mabunda et al., (2023) and Sitharam and Hoque (2016) who have pointed out that small businesses experience huge financial losses due to loadshedding, with an estimated loss of approximately 61% of income on a day when the small businesses experience loadshedding. The broader impact of loadshedding on the community reflects the role of the exosystem which involves factors that indirectly affect small business owners (Bronfenbrenner, 1975).

The influence of loadshedding on crime and the economic well-being of the Alexandra community as described by the participants, illustrates the ripple effect beyond the immediate microsystem of the participants. Additionally, the impact of loadshedding on the Alexandra community aligns with Bronfenbrenner's (1975) views on the role of the macrosystem. The challenges that small businesses experience within the community of Alexandra resonate with larger societal problems like economic disparities and unemployment. Therefore, the availability or lack of government interventions becomes part of the macrosystem influencing small businesses.

Furthermore, the findings present some new insights which are not present in the available literature. They highlight the personal intensity of the impact of the economic consequences of loadshedding on this study's participants. While the existing literature highlighted general economic challenges that small businesses experience due to loadshedding, the findings in this study suggest that the economic impact of loadshedding on small businesses is particularly severe in township communities such as Alexandra. The participants' experiences highlight the magnitude of the personal struggles they face in order to provide regular services, the financial losses they have suffered, and the risk of permanent business closure due to loadshedding all impacting their personal lives and families. The already difficult socio-economic conditions that are already prevalent in the Alexandra township, particularly in a post-COVID-19 context, may contribute to the heightened economic vulnerability, Therefore, loadshedding has added further vulnerability to the functioning of this important part of this township's economy.

Participants' experiences also bring to the fore a political debate about the government's accountability as well as the perceived lack of government intervention to help address the ongoing energy crisis. Overall, the participants criticised and blamed the government for their struggles as small business owners in Alexandra, holding the

government accountable for challenges that they experienced due to loadshedding and the need for intervention. *"I feel like our government is failing us. They are supposed to assist us as small businesses"* (Khutso). There was a belief amongst participants that it was the government's responsibility to resolve loadshedding and assist them financially as described by Tebogo: *"Small business owners need the government to help us boost our businesses. We need help in terms of funding … when our businesses are not doing well due to loadshedding."* This resonates with Bronfenbrenner (1975) who states that the macrosystem includes economic policies and government regulations. Therefore, the comments of participants on the need for government support to address their economic challenges highlight the role of the macrosystem, representing the broader political and economic context (Bronfenbrenner, 1975). This is all taking place in the context of the current political situation in the country at this time in the history of the country highlighting the importance of including the chronosystem (Bronfenbrenner, 1977) in any understanding of the impact of loadshedding.

Psychological Context

The findings of this study also reveal the multifaceted nature of loadshedding's impact on the personal lives of small business owners and consequently the people around them, including their employees and family members. The findings indicate that the small business owners in Alexandra are experiencing several psychological challenges such as anxiety, stress, feelings of helplessness, as well as ongoing frustration due to the impact of loadshedding on their businesses.

Galderisi et al. (2017) and Green (2010) have suggested that several factors including loadshedding, financial problems, and job insecurity can contribute to poor and declining mental health, ultimately leading to depression. The findings highlight how the loss of

income due to loadshedding is leading to a decline in the mental health of small business owners in Alexandra. This seems to be linked to looming job insecurity associated with the lack of financial security and concomitant losses in their businesses. This was illustrated by Tebogo: *"I can't sleep at night when I think about what loadshedding is doing to my business. Look at me, do you see how skinny I am? This is not my body, I lost a lot of weight because of stress."*

This is further creating ongoing uncertainty and a sense of a loss of control over one's environment which impacts mental health as shown in different psychological symptoms described by participants. Prottas and Thompson (2006) have argued that the loss of control over one's business is linked to an increased level of stress and poor mental health. This loss of control was evident in the experiences of participants such as Veronica who described the impact of this on their mental health: *"It affected it [mental health] badly because I stress a lot about my business losing customers due to loadshedding which is something that I have no control over."* This in turn makes participants more vulnerable and unable to cope with further stress as pointed out by Marchetti-Mercer (2023) and Keyes (2014).

The loss of income can also be seen as a stressful life event. Consequently, the participants shared their experience of negative thoughts and feelings, as a result of the ongoing challenges they face. This was described by participants such as Rea: *"I am always stressed … wondering if things will ever get back to normal. … so I feel like a failure now that I can't provide for them like I used to and is all because of loadshedding."* While stress is a part of life (Bantjes & Swartz, 2023; Galderisi et al., 2017) the participants seem to be particularly vulnerable in dealing with the ongoing stress. This vulnerability may be understood in the context of an already economically and socially under-resourced community that is still reeling from the economic impact of COVID-19.

The findings further highlight the feelings of helplessness and frustration that small business owners experience due to loadshedding. The participants expressed their frustration at not being able to control what was happening to their businesses because of loadshedding. Participants such as Stanley described their frustration with loadshedding as follows: *"The fact that I have no control over the working hours of my business is frustrating, having to work based on the loadshedding schedule is frustrating."* The prolonged and ongoing psychological distress present due to loadshedding may ultimately impact the overall mental health of the participants and even lead to anxiety and depression disorders. This supports the SADAG's (2023) survey findings which suggested that loadshedding may be causing anxiety and depression in many people.

The findings of this study also reveal the changes in family dynamics that the participants have experienced due to their changed financial circumstances as a result of loadshedding. Specific issues related to financial constraints create negative family dynamics such as disagreements and misunderstandings amongst family members that lead to strained relationships. The participants felt that they were not getting sufficient support from their families. Participants were also unable to provide for their families financially in the same way as they used to be able to do. These findings concur with Prottas and Thompson (2006) who suggest that financial challenges can lead to conflict between family members. Similarly, Tebogo explains:

> *Loadshedding is affecting my family a lot, my family is no longer happy because I am no longer able to provide for them the way used to. They do not understand that things are difficult for me, my wives even think that I am cheating and spending money with other women, but I am not doing any of that.*

Furthermore, the findings show how the well-being of other people who are connected to the participants is impacted by loadshedding, especially the employees. The participants described how their employees are often overworked, have unpredictable working hours, and are faced with financial insecurity which can impact the employees' overall well-being. Stressful working conditions and lack of financial and job security can negatively impact the well-being of an individual. Additionally, these factors can impact the work-life balance of employees, which can lead to sadness and dissatisfaction with life. The findings resonate with Galderisi et al., (2017) who claim that the well-being of an individual encompasses various aspects of psychological, emotional, and social health as well as life satisfaction and happiness, and can be impacted by multiple factors including working environment and stressful life events. This precarious situation was described by Rea: *"We no longer have standard business operating hours. We work whenever we have customers, there is no knockoff time. Sometimes we work until 01:00 am in the morning, as long as we make some money."* The mental health challenges experienced by small business owners directly relate to the microsystem, they are immediate and personal experiences within this ecological environment level (Bronfenbrenner, 1986).

Overall Discussion of the Findings

The analysis of the data shows that loadshedding has profound and multifaceted effects on small business owners working in the Alexandra township, ranging from economic consequences to negative family dynamics, and individual psychological effects. The workflow of small businesses in Alexandra is significantly disrupted by loadshedding, which leads to disruption and often even a halt in both operations and production in some small businesses. The income generated by small businesses is therefore negatively affected as a result. The economic impact of loadshedding is apparent in the difficulties faced in providing regular services to customers, the loss of productivity, and the decline in sales. Small

businesses face several workplace challenges due to loadshedding such as irregular working hours, financial strain, and job insecurity which negatively impact the workplace. Most small business owners are breadwinners and have onerous family responsibilities and consequently, they struggle to provide for their families due to the economic challenges loadshedding imposes on their businesses. This leads to families having to change and downgrade their lifestyles to mitigate these new financial circumstances.

Furthermore, the findings revealed the impact of loadshedding on the mental health of small business owners in Alexandra. The participants reported numerous psychological challenges including stress, anxiety, helplessness, and frustration due to loadshedding. The economic challenges that small business owners face due to loadshedding therefore seem to be taking a toll on their mental health, they are constantly worried about their financial struggles and the future of their businesses which contributes to ongoing psychological distress. Moreover, the uncertainty and loss of control over their businesses due to loadshedding increase their stress levels, therefore, negatively impacting their mental health. This subsequently increases the participants' vulnerability and ability to cope with further stress. Moreover, loadshedding impacts the well-being of their employees. The latter also experience financial and job insecurity which is stressful for them and can be expected to impact their life satisfaction negatively.

Furthermore, there seems to be an overall perception that the government is accountable for the ongoing energy crisis and consequently an expectation of government intervention to address the challenges the participants experience due to loadshedding in the community of Alexandra. Overall, the participants perceive loadshedding as a significant problem affecting the Alexandra community as a whole, imposing challenges on small businesses and leading to increased poverty.

Conclusion

Loadshedding seems to affect the mental health of small business owners, the participants experience several psychological challenges due to loadshedding. Furthermore, loadshedding also affects the experiences of small businesses in the Alexandra township. Small businesses experience the economic impact of loadshedding including operational and financial challenges. Additionally, small business owners also experience negative changes in family dynamics due to loadshedding. Therefore, there seems to be a relationship between loadshedding and mental health.

Chapter 6: Conclusion

This study aimed to shed light on the mental health impact of loadshedding on small business owners in Alexandra Township. Overall findings highlight disruptions to workflow, economic challenges, as well as a number of individual psychological effects suggesting a link between loadshedding and mental health. According to the findings, loadshedding extends beyond hampering financial stability and impacts the psychological and personal well-being of small business owners, their families, and employees. By underscoring the economic and mental health implications of loadshedding and the interconnectedness between economic health, workplace dynamics, and personal well-being, this research contributes to a holistic understanding of the impact of loadshedding on the mental health of small business owners in Alexandra Township.

Moreover, this study contributes to the existing knowledge by revealing ways small business owners are affected by loadshedding. The findings offer a comprehensive understanding of the challenges faced by small business owners, therefore providing a foundation for informed decision-making in policy contexts. Policymakers may be able to use these findings to develop targeted interventions that enhance economic resilience and promote sustainable growth within the small business sector.

Limitations

It is crucial to recognise and acknowledge this study's limitations to strengthen the study's quality and integrity and provide guidance for future research endeavours in the field.

The first limitation of this study was the number of participants interviewed. The data was collected from eight participants, limiting the data's breadth and depth. Therefore, the larger number of small business owners in Alexandra who experience similar loadshedding in their businesses was limited. Although saturation was established in this study, an increase in

the number of participants may have provided unique insight that would have improved the understanding of the experiences of small business owners in Alexandra.

Secondly, this study captures a specific time frame; however, the impact of loadshedding may change over time. The participants' experiences could be influenced in the future by external factors such as improvements in the power and energy infrastructure in South Africa and government policies.

Thirdly, mental health assessments are subjective therefore the experiences of the participants may vary. The validity of findings related to mental health could be enhanced by collaborating with mental health professionals who will use standardised mental health assessment tools.

Fourthly, the generalisability of the findings of this study must be exercised with caution. The Alexandra community's unique economic and contextual factors may differ from other locations. Therefore, conducting similar research in different settings will enhance the generalisability of the findings to a broader small business landscape.

Lastly, this study's power imbalance, including interviewer bias, was another limitation. Power imbalance and social differences between myself and the participants may have affected the data gathered negatively. The age gap between myself and the participants may have limited the participants' sense of trust and comfort when the data was collected, limiting the participants’ openness to share their experiences.

Recommendations

Despite the limitations, this study addressed some of the existing gaps in research on the psychological impact of loadshedding. The following are recommendations for future research.

This study was conducted in Alexandra, a township known to be highly impoverished. Therefore, future research studies in this field could explore the experiences of small business owners in different economic contexts and across different regions in the country. Examining how loadshedding impacts small business owners in areas with various levels of economic development or other townships and rural and urban areas could highlight region-specific challenges and offer valuable insight into the experiences of small business owners due to loadshedding.

Furthermore, this study was conducted between September and December in 2023 and stages 5 and 6 of loadshedding were frequently implemented at that time; the experiences are dependent on the loadshedding pattern and frequency at a given period. People's experiences may change if there are improvements in energy supply or prolonged periods of loadshedding. Therefore, researchers should conduct longitudinal studies to provide a comprehensive understanding of the mental health implications and insight into how the experiences of small business owners evolve due to loadshedding.

This study suggests that loadshedding is having a negative impact on the mental health of small business owners. Future studies may investigate the psychological resilience and coping mechanisms that small business owners employ. Exploring how small business owners navigate stress and anxiety during loadshedding can contribute to mental health strategies.

Moreover, future studies could assess the effectiveness of government policies and interventions that are aimed at providing support to small business owners during loadshedding. This will identify gaps which will, in turn, inform the development of support measures that are more beneficial to small business owners.

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Appendices

Appendix A: Research Information Sheet



Title: The impact of loadshedding on the mental health of small business owners in the Alexandra township

Dear participant

My name is Lesedi Tladi, I am currently doing my Master of Arts in Social and Psychological Research at the University of the Witwatersrand (Wits). As part of my degree program, I have to carry out a research project.

I am working on a research project that is exploring the psychological impact of loadshedding on small business owners in Alexandra township. The study requires participants to be small business owners who are over 18 years of age, own a small business in Alexandra, and the business has been in operation for a minimum of 2 years. The interview will be carried out in English or Setswana.

Participation in this study will be in the form of an interview with me at the community library in Alexandra which will last approximately 60 – 90 minutes. The interview will be audio recorded then transcribed and analysed.

Any information you provide during the interview will remain confidential, and your identity and the name of your business will not be revealed. Please note the following; participation in the study is voluntary, you have the option to withdraw at any time from the study if you feel

uncomfortable without any consequences. You will not be paid for being in this research study.

If you need some support or counselling services following the interview, these are available free of charge at Emthonjeni centre at Wits university.

For more information regarding the research study, feel free to contact me or my supervisor (Contact details are provided below)

Lesedi Tladi

Email: mosenngwet@gmail.com

Cell phone No: 076 247 7562

Prof Maria Marchetti-Mercer

Email: maria.marchetti-mercer@wits.ac.za

Appendix B: Interview Schedule



Title: The impact of loadshedding on the mental health of small business owners in the Alexandra township

Interview schedule for small business owners in Alexandra

1. Tell me about yourself.
2. Tell me about your business.
3. How many employees do you have?
4. How long have you been operating?
5. What are some of the challenges that you faced in your business as a result of loadshedding?
6. How have you coped with those challenges?
7. What impact do you think loadshedding will have on your business if it continues?
8. In what ways has loadshedding affected your psychological health/well-being?
9. How has loadshedding impacted your employees (if relevant)?
10. How has loadshedding impacted your family and family life?
11. How do you think loadshedding is impacting your community?

Appendix C: Consent Form



PSYCHOLOGY
THE SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT (SHCD)



Title of the project: The impact of loadshedding on the mental health of small business owners in the Alexandra township

Name of the researcher: Lesedi Tladi

It is necessary to provide your consent in order to participate in this research study.

I, _____, agree to participate in this research project.

I agree to the following:

(Please circle the relevant options below)

The research study was explained to me and I have read and understood what the study is about.

YES NO

All the information that I provide will remain confidential.

YES NO

My identity and the name of my business will not be revealed.

YES NO

The interview may be audio recorded.

YES NO

The interviewer may use the information provided during the interview in an anonymised format.

YES NO

Participation in the study is voluntary, I may withdraw from the study at any time without consequences.

YES NO

I will not be paid for participating in this research study.

YES NO

Name of participant: _____ .

Signature of participant: _____ .

Date: _____ .

Name of researcher: _____.

Signature of researcher: _____.

Date: _____.

Appendix D: Audio Recording Consent Form



This interview will be audio recorded so that it can be typed out the way it was spoken (transcribed). You will need to provide consent for the interview to be audio recorded.

Your identity will be kept confidential, I will not use your real name in the write up.

The recordings will only be accessed by me and my supervisor.

The audio recordings and transcripts of the interview will be kept in a password-protected device for safeguarding.

The researcher may use direct quotes in the research report or other academic publications.

If you do not wish to be audio recorded, this will lead to the withdrawal of your participation.

Participation is completely voluntary. If you decide to withdraw from the study during the interview, your recording will be deleted.

Please sign below to give consent:

Name & Surname: _____ .

Signature: _____ .

Date: _____ .

Appendix E: Ethics Certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT ETHICS COMMITTEE
CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: MASPR/23/09**
PROJECT TITLE:	**The impact of loadshedding on the mental health of small business owners in the Alexandra township.**
INVESTIGATOR	Tladi Lesedi (1659789)
SCHOOL/DEPARTMENT OF INVESTIGATOR	SHCD/Psychology
DATE CONSIDERED	01 June 2023
DECISION OF THE COMMITTEE	Approved unconditionally
RISK LEVEL	Low Risk
EXPIRY DATE	31 December 2025
ISSUE DATE OF CERTIFICATE 05 June 2023	**CHAIRPERSON** **(Dr Aline Ferreira Correia)**

cc: Prof. Maria Marchetti-Mercer (Supervisor)

DECLARATION OF INVESTIGATOR

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

I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure be contemplated from the research procedure as approved, I/we undertake to submit an amendment of the protocol to the Committee.

Tladilm

Signature

Date **10 / July / 2023**