E-Journal of Humanities, Arts and Social Sciences (EHASS)
ISSN – Online 2720-7722 | Print 2821-8949
Volume 7 Issue 2 2026 pp 536 - 554
Available online at: https://noyam.org/journals/ehass/
DOI: https://doi.org/10.38159/ehass.2026729

The effect of Load Shedding on the performance of Small-scale restaurants in Mthatha, South Africa – An assessment

Lelethu Mantangayi[1], Obert Matarirano[1] & Cuthbert Muza[1]
1 Department of Management Sciences, Faculty of Management and Public Administration Sciences, Walter Sisulu University, South Africa.

ABSTRACT
Small enterprises in South Africa play a critical role in job creation, driving economic growth and addressing the historical economic injustices. However, the scheduled power outages implemented in South Africa due to electricity supply constraints have placed a significant operational burden on these enterprises, particularly within the restaurant sector, which is highly dependent on consistent electricity supply. The study examined the impact of load shedding on the operational and financial performance of small-scale restaurants in Mthatha, South Africa. A quantitative, explanatory research design was used. Data were collected through a survey, using a self-administered questionnaire distributed to 53 small-scale restaurants. Fifty-one valid responses were received and analysed with descriptive and inferential statistics using Microsoft Excel and SmartPLS4 statistical software. The results revealed that load shedding has a negative impact on both the profitability and productivity of small-scale restaurants. However, these effects were found to be statistically insignificant. Given that South Africa's electricity challenge does not seem to have a near-future solution, it is crucial to understand its impact on small enterprises. Although the effects were not statistically significant, the negative effects warrant the need for long-term, sustainable energy alternatives, tailored to the needs of small enterprises in electricity-dependent sectors, such as hospitality. State the contribution of this study to scholarship.

Keywords: Load Shedding, Performance, Productivity, Profitability, Small-Scale Restaurants

INTRODUCTION
Electricity is the basis for meeting basic human needs,[1] and it is one of the most important gifts that science has given to humankind.[2] It has become a part of modern life, and it is impossible to imagine a world without it. It has many uses in people's daily lives, as well as in enterprises.[3] Despite the significance of electricity, it has not always been in adequate supply to most developing countries,

[1] Chian-Woei Shyu, "Ensuring Access to Electricity and Minimum Basic Electricity Needs as a Goal for the Post-MDG Development Agenda after 2015," *Energy for Sustainable Development* 19 (2014): 29–38.
[2] Karan Uppal, "Creation of Smart Energy," *Business Connects* 1, no. 2 (2018).
[3] Benedict B Ateba, Johannes J Prinsloo, and Remigiusz Gawlik, "The Significance of Electricity Supply Sustainability to Industrial Growth in South Africa," *Energy Reports* 5 (2019): 1324–38.

CORRESPONDENCE – Lelethu Mantangayi Email: mantangayilelethu@gmail.com/ lmantangayi@wsu.ac.za
PUBLICATION HISTORY - Received : 6th September, 2025 | Accepted: 17th November, 2025 | Published: 31st March, 2026.
TO CITE THIS ARTICLE – Mantangayi, Lelethu, Obert Matarirano, and Cuthbert Muza. "The effect of Load Shedding on the performance of Small-scale restaurants in Mthatha, South Africa – An assessment." *E-Journal of Humanities, Arts and Social Sciences* 7, no.2 (2026): 536 - 554. https://doi.org/10.38159/ehass.2026729

leading to a myriad of challenges.[4] South Africa is one of the countries that experiences a shortage of electricity supply, leading to load shedding that affects the operations of many enterprises. In South Africa, electricity is supplied by Eskom, a state-owned company.[5] The electricity shortage in South Africa was the result of a drastic increase in electricity consumption, which increased by 50% between 1998 and 2007. Much of this increase in consumption was due to the Free Basic Electricity Policy (FBE), implemented in 2001.[6] Since then, the country has been experiencing electricity crisis, which is attributed to a delay by the government in deciding to build a new power plant to meet increased demand.[7]

The electricity crisis is negatively affecting enterprises and the economy, as alluded to by South Africa's Minister of Small Enterprises Development, Stella Ndabeni-Abrahams, who claims that small enterprises in her department were failing due to load shedding.[8] This is despite the immense contribution of the sector to economic growth worldwide. Small and medium companies (SMEs) contribute significantly to the growth of the global economy and the creation of employment opportunities.[9]In emerging economies, SMEs can account for up to 40% of the GDP. [10]

Makgopa and Mpetsheni pointed out that load shedding affects mostly SMEs compared to larger enterprises.[11] The burden is heavier on smaller enterprises because they lack the resources to provide alternative power sources.[12] Within the small business sector, those in the restaurant industry are hit the hardest as they primarily depend on Eskom-generated electricity for most of their enterprise operations.[13] This is despite the restaurant industry experiencing significant annual growth and being a major source of job creation compared to other industries, some of which see several closures.[14] However, electricity threatens to derail these gains, as the industry is largely dependent on electricity for operations. Mupani claims that load shedding has been one of the biggest challenges facing the restaurant industry ever since load shedding was introduced in 2007.[15]

The loss of load affects the growth and success as it increases the cost of operations, leading to a decrease in profitability.[16] When there is load shedding, small-scale restaurants are forced to use backup alternatives or stop the operations that require electricity, such as food processors, heaters, and coolers, during the load shedding period.[17] Alternatives to Eskom electricity are expensive to small enterprises. Generators, as an alternative, are expensive to buy and use fuel, which is extremely

---

[4] Moussa P. Blimpo and Malcolm Cosgrove-Davies, " Electricity Access in Sub-Saharan Africa: Uptake, Reliability, and Complementary Factors for Economic Impact," *World Bank Publications*, 2019.

[5] Faeeza Ballim, "Eskom and the Electricity Act 42 of 1922," *South African Historical Journal* 74, no. 4 (2022): 680–82.

[6] Ilze Pretorius, "Impacts and Control of Coal-Fired Power Station Emissions in South Africa" (North-West University (South Africa), Potchefstroom Campus, 2015).

[7] Anusha Rathi, "Why South Africa Is in the Dark, Again, Foreign Policy," Ghana Web, June 17, 2022, https://foreignpolicy.com/2022/07/08/south-africa-energy-crisis-eskom-power-cut/.

[8] A. Ndabeni-Abrahams, "Power Cuts Killing Small Businesses," South Africa Web, June 19, 2022, https://www.enca.com/news/ndabeni.

[9] Christopher Arnold, "The Foundation for Economies Worldwide Is Small Business," South Africa, Web, November 11, 2019, https://www.ifac.org/knowledge-gateway.

[10] World Bank, "Small and Medium Enterprises (SMEs). Improving SMEs' Access to Finance and Finding Innovative Solutions to Unlock Sources of Capital," 2020, https://www.worldbank.org/en/topic/smefinance.

[11] S Makgopa and Z Mpetsheni, "Exploring the Impact of Load-Shedding on SMME's in Nelson Mandela Bay Municipality," *Academy of Entrepreneurship Journal* 28, no. 03 (2022): 1–10.

[12] Thea Schoeman and Michael Saunders, "The Impact of Power Outages on Small Businesses in the City of Johannesburg," in *10th International Conference on Education, Business, Humanities and Social Sciences Studies*, vol. 19, 2018.

[13] Olayide F Olajuyin and Stephen Mago, "Effects of Load-Shedding on the Performance of Small, Medium and Micro Enterprises in Gqeberha, South Africa," *Management and Economics Research Journal* 8, no. 4 (2022): 1–8.

[14] Faith N Zwane, Lindie Du Plessis, and Elmarie Slabbert, "Analysing Employers' Expectations of Employee Skills in the South African Tourism Industry," *SA Journal of Human Resource Management* 12, no. 1 (2014): 1–9.

[15] Honest Mupani, "Environmental Factors, Employee-Resourcing Strategies And Performance Of Small Restaurant Businesses In South Africa: A Structural Equation Modelling Approach" (Central University of Technology, 2019).

[16] Corbett A Grainger and Fan Zhang, "Electricity Shortages and Manufacturing Productivity in Pakistan," *Energy Policy* 132 (2019): 1000–1008.

[17] Hunt Allcott, Allan Collard-Wexler, and Stephen D O'Connell, "How Do Electricity Shortages Affect Industry? Evidence from India," *American Economic Review* 106, no. 3 (2016): 587–624.

expensive in South Africa, making this alternative expensive for small-scale restaurants and Tshangana claims that restaurants in Mthatha are closing due to load shedding.[18]

Lubasi observes that prior to the implementation of load shedding, small enterprises experienced relatively stable operations, with a success rate of over 50%, largely attributed to the steady supply of energy.[19] SMEs were able to operate efficiently and were able to meet the customers' needs throughout regular business hours before load shedding implementation.[20] However, recent reports indicate that operational capacity has decreased to approximately 40% due to load shedding.[21] The load shedding is estimated to cost South Africa more than R4 billion per day, with most restaurant enterprises suffering considerably as a result.[22] Several studies found that load shedding has a negative influence on performance of enterprises.[23] However, the studies used a variety of proxies for enterprise performance, and most studies did not consider the small enterprises within the hospitality industrynor did they use inferential statistics. This study covers this gap by statistically estimating the effects of load shedding in small-scale restaurants.

The study aims to establish the effects of load shedding on the performance of small-scale restaurants operating in Mthatha. The primary objective is to investigate the extent to which load shedding affects the performance of small-scale restaurants based on the perceptions of owners and managers. To support this primary objective, the study attempts to establish the effect of load shedding on the productivity and profitability of the small-scale restaurants.

LITERATURE REVIEW

Load shedding and SME performance

Using data from the 2013 World Bank Enterprise Survey, examined the effects of load shedding on firm performance in Ghana, with profitability as a proxy.[24] They found that the frequency and duration of loadshedding have a significant negative effect on enterprise profitability.

Similarly, Ajibola et al. , who studied the impact of electricity supply on the performance of small enterprises in Nigeria, found a similar finding to Frederick and Josephine.[25] They discovered that the performance of SMEs was negatively affected by electricity supply, primarily because they were unable to use electric devices such as cellphones and computers for online orders, affecting business efficiency. They stated that when the electricity supply improves, the performance of SMEs also improves, implying a positive link between electricity availability and SME performance. Additionally, their results showed a significant difference between the performance of SMEs and alternative sources of power. As a result, power significantly influences on enterprise performance.

In Kenya, Njiraini looked at the effects of power outages on the performance of manufacturing firms.[26] The study used a broader view of performance, including financial performance, customer satisfaction, operations efficiency, employee productivity, green performance, and social responsibility. Once again, statistical analysis supported the claim that load shedding negatively affected enterprise

[18] Thomas Habanabakize and Zandri Dickason-Koekemoer, "Assessing the Significance of Electricity Supply, Inflation and Fuel Price on Food and Beverage Production and Sales in the Manufacturing Sector," *African Journal of Business and Economic Research* 16, no. 4 (2021): 137; Venny Tshangana, " Eskom Has Become a Big Factor as Well as Power Outages," South Africa Web, March 12, 2022, https://scontent.fcpt2-1.fna.fbcdn.net/v/t39.3080.

[19] Nelson Lubasi, "Impact of Energy Distribution on Small and Medium Enterprise (A Case Study of Chongwe District)" (2020).

[20] Lubasi, "Impact of Energy Distribution on Small and Medium Enterprise (A Case Study of Chongwe District)."

[21] Vusi Adonis, "Load Shedding: Permanent Stage 2 or Not, Small Businesses Are Dying," *South Africa, Web*, 2023.

[22] eKomani Blog, "The Impact of Loadshedding on Restaurants and Negative Customer Reviews: A Case Review of Ons Huisie," January 15, 2022, https://blog.ekomi.com/archive/the-impact-of-loadshedding-on-restaurants-and-negative-customer-reviews-a-case-review-of-ons-huisie/.

[23] Ali Fakih, Pascal Ghazalian, and Nancy Ghazzawi, "The Effects of Power Outages on the Performance of Manufacturing Firms in the MENA Region," *Review of Middle East Economics and Finance* 16, no. 3 (2020): 20200011.

[24] Frederick Nyanzu and Josephine Adarkwah, "Effect of Power Supply on the Performance of Small and Medium Size Enterprises: A Comparative Analysis between SMEs in Tema and the Northern Part of Ghana," 2016.

[25] Akinyemi Alao Ajibola et al., "Impact of Electricity Supply on the Performance of Small and Medium-Scale Enterprises (SMEs) in Nigeria: A Case Study.," *Economic Insights-Trends & Challenges*, no. 4 (2021); Nyanzu and Adarkwah, "Effect of Power Supply on the Performance of Small and Medium Size Enterprises: A Comparative Analysis between SMEs in Tema and the Northern Part of Ghana."

[26] Winfred Njiraini, "Effects of Electric Power Outage Dynamics on the Performance of Manufacturing Firms in Kenya" (University of Nairobi, 2021).

performance. An electric power outage had a significant negative influence on the performance of manufacturing enterprises in Kenya.

However, this study focused on all sizes of businesses, including small enterprises. Keeletse and Gan assessed the effects of loadshedding on the performance of SMEs in South Africa.[27] Their study used a mixed methods approach, and their inferential statistics expressed a statistically significant negative impact of loadshedding on the performance of SMEs. They found load shedding disturbs financial performance, service delivery and sales turnover, which some SMEs are experiencing lower profitability and increased operational challenges. Against this background, the following hypothesis was established:

H_1: Load shedding has a statistically significant effect on the overall performance of small-scale restaurants in Mthatha.

Load shedding and SME productivity

Several studies, such as Fjose et al., Rud, and Ef Ii, have showed that enterprises with a stable electricity supply are more productive than enterprises with an unstable electricity supply.[28] Most of small-scale restaurants are not productive during load shedding, as most of them do not have backup power to keep going.[29] When there is load shedding, small-scale restaurants have no choice but to shut down their operations, especially those that need electricity to function.[30] Temperature controls are required for perishable commodities such as meat, dairy products, and fresh fruit to preserve quality and safety.[31] Extended load shedding periods, such as those frequenting Mthatha, can result in food waste, and possibly health risks if expired food is served to customers.[32]

The study by Mutambo et al. examined the impact of power load shedding on the operations of small and medium-sized firms (SMEs).[33] The research revealed how recurring power outages severely disrupt enterprise operations, stifle economic growth, and hinder SMEs' progress. A study by Khan and Mumlikat on the social impact of the energy crisis on small-scale industrial workers in Pakistan found that power outages reduced working hours, resulting in a decrease in industrial production to the point where the industrial workforce was reduced to its minimum. [34]The findings of Olajuyin and Mago revealed that load shedding has affected enterprises in many ways, as it affects the service capacity and forces restaurants to compromise customer service and reduce the quality of products that restaurants offer, which can lead to a decrease in the performance of an enterprise.[35]

Phiri said that as load shedding reduces operating hours, the restaurant can experience frequent absenteeism and high turnover rates, and its productivity suffers.[36] Business working hours are mostly affected by load shedding, as enterprises that operate during the day operate fewer hours, and they stop all operations once the electricity goes off.[37] In their study, Abeberese found that the strategies that firms

---

[27] Keeletse Katlego and Gan Yin, "The Effects of Loadshedding on Small and Medium South African Enterprises Using Statistical Analysis," *International Journal for Research in Applied Science and Engineering Technology* 12, no. 10 (2024): 238–51.

[28] Sveinung Fjose, Leo A Grünfeld, and Chris Green SQW, "Identifying SME Roles and Obstacles to SME Growth," *MENON-Publication No* 14 (2010); Juan Pablo Rud, "Electricity Provision and Industrial Development: Evidence from India," *Journal of Development Economics* 97, no. 2 (2012): 352–67; Pami-Pami Ef Ii, "The Impact of Electricity Insecurity on the Performance of Small and Medium Size Enterprises-The Case of Cameroon," 2021.

[29] Schoeman and Saunders, "The Impact of Power Outages on Small Businesses in the City of Johannesburg."

[30] D. M. Kadam and R. K. Shah, " An Overview of Refrigeration and Its Importance in Food Preservation," *Journal of Food Science and Technology* 55, no. 2 (2018): 387–95.

[31] Charlotte Kohler, " How Load-Shedding Destroys Small Businesses," Africa Web, November 15, 2022, https://www.nichemarket.co.za/blog/nichemarket-advice/load-shedding-kills-smesouth-africa.

[32] Kohler, " How Load-Shedding Destroys Small Businesses."

[33] Humphrey Mutambo et al., "Impact of Electricity Load Shedding on Operations of Small-Scale Enterprises in Selected Developing Countries: A Review of Literature," 2023.

[34] Shahid Khan and Mumlikat Begum, "Social Impact of Energy Crisis on Small Scale Industrial Workers in District Swat," *Pakistan Journal of Society, Education and Language (PJSEL)* 6, no. 1 (2020): 81–93.

[35] Olajuyin and Mago, "Effects of Load-Shedding on the Performance of Small, Medium and Micro Enterprises in Gqeberha, South Africa."

[36] James Phiri, *Electricity Demand and Load Shedding: Impact on Zambian Business: A Case Study of Selected Solwezi Based Businesses* (LAP LAMBERT Academic Publishing, 2018).

[37] Lubinda Ngenda, "Project Report Title: The Impact of Load Shedding on Manufacturing Industries in LUSAKA, Zambia" (2020).

adopted to cope with load shedding do not help to reduce the negative impact on the productivity of firms.[38] These findings culminated in the following hypothesis:
H_2: Load shedding has a statistically significant effect on the productivity of small-scale restaurants in Mthatha.

Load shedding and the profitability of SMEs

Load shedding also affects the profitability of SMEs. Banda et al. used primary data to investigate the effect of load shedding on small entrepreneurs in Zambia.[39] They established that the number of customers declined due to load shedding, reducing revenues and, eventually, profitability. This finding was corroborated by Schoeman and Saunders, who also found a reduction in customers during load shedding.[40] Banderker claims that, during load shedding, ATMs stop working, which reduces sales. Mabuza and Maphosa in their study revealed that most manufacturing SMEs are still severely losing production, sales, and returns due to the irregular power supply.[41]

The study conducted by Makhdoom et al. conducted showed that load shedding affects the financial viability of businesses, as they claim that damaged products, increased cost, and decreased cost were the main factors that affect business due to load shedding.[42] The costs of generators, alternative sources of power and the increase in employee overtime, as well as damaged machines that need to be fixed, lead to a decrease in profitability.[43] According to Njiraini, an alternative electricity source costs three to ten times as much as the public grid.[44] Alternative electricity sources such as generators, gas and solar are expensive to purchase and replenish the fuel and gas required to operate them. This leads to the following hypothesis.
H_3: Load shedding has a statistically significant effect on the profitability of small-scale restaurants in Mthatha.

Productivity and profitability of SMEs

Increased productivity has a strong positive impact on enterprise profitability. Aliahmadi investigated the relationship between worker productivity and financial success, revealing a positive and substantial association.[45] The study indicated that increased labor productivity leads to gains in financial indicators such as return on assets (ROA), highlighting the importance of productivity in financial success. Damnjanovic et al. investigated the link between employee productivity and company failure in 468 Serbian SMEs that closed in 2021.[46] The research emphasizes productivity as a critical internal aspect that has a substantial impact on a company's financial performance and overall survival. Using regression analysis and performance data spanning five years, the authors discovered that low staff productivity was closely associated with unfavorable financial results, such as decreased revenue, increasing operating expenses, and worse profitability.
H_4: Productivity has a statistically significant positive influence on the profitability of small-scale restaurants.

---

[38] Ama Baafra Abeberese, Charles Godfred Ackah, and Patrick Opoku Asuming, "Productivity Losses and Firm Responses to Electricity Shortages: Evidence from Ghana," *The World Bank Economic Review* 35, no. 1 (2021): 1–18.
[39] Gerald Banda, Garry Simukoko, and Tailoka Frank Patson, "Effect of Load Shedding on Small Scale Entrepreneurs: A Case of Kitwe District of Zambia," *Economy* 7, no. 2 (2020): 104–9.
[40] Schoeman and Saunders, "The Impact of Power Outages on Small Businesses in the City of Johannesburg."
[41] Banderker, "The Perceived Psychosocial and Economic Impact of Load-Shedding on Employees in Selected Small Micro Medium Enterprises"; Semanga Mabuza and M Maphosa, "R. The Impact of Load Shedding on the Performance of Manufacturing SMES in South Africa," in *Proceedings of the 10th Biennial Academy of World Business, Marketing and Management Development Conference, Perth, Australia*, 2023, 25–28.
[42] Tayyaba Rafique Makhdoom, Muhammad Nawaz, and Nabi Bakhsh Narejo, "Effects of Loadshedding on Retail Business: A Glimpse From Hyderabad, Pakistan," *Grassroots* 51, no. 1 (2017).
[43] Habanabakize and Dickason-Koekemoer, "Assessing the Significance of Electricity Supply, Inflation and Fuel Price on Food and Beverage Production and Sales in the Manufacturing Sector."
[44] Njiraini, "Effects of Electric Power Outage Dynamics on the Performance of Manufacturing Firms in Kenya."
[45] Saeid Aliahmadi, "Does CEO Power Moderate the Link between Labor Productivity and Financial Performance: Agency Theory or Stewardship Theory," *Asian Journal of Accounting Research* 9, no. 1 (2024): 47–56.
[46] Aleksandar M Damnjanovic et al., "Risk Influence of Employee Productivity on Business Failure: Evidence Found in Serbian SMEs," *Sustainability* 15, no. 6 (2023): 4705.

THEORETICAL FRAMEWORK

The study used the resource-based theory (RBT) as its basis. The resource-based theory (RBT) was postulated by Penrosein 1959 and improved by Jay Barney in 1991.[47] According to Barney, the RBT is a strategic management concept that focuses on the importance of a firm's unique resources and capabilities in developing and maintaining competitive advantage.[48] It implies that a firm's performance is driven not only by the industry in which it works but also by the specific resources it possesses and how well it can usethem. The RBT has 4 key constructions that include firm resources, sustainable competitive advantage, market attractiveness (or potential), and financial performance.[49] This study used the firm resources construct of the theory.

According to Barney, the electricity provided by the national grid is the main resource for SMEs in South Africa.[50] Restaurants rely on electricity for a range of operations, such as cooking, lighting, and refrigeration. [51] Load shedding can interrupt these operational activities, resulting in decreased production, lower customer satisfaction, and financial losses.[52] According to RBT, restaurants with scarce, non-substitutable resources and inimitable resources will be less vulnerable to the impacts of load shedding.[53]

Load shedding may be viewed as a resource limitation that limits a company's capacity to function efficiently, as most SMEs in South Africa use electricity as the resource that makes them stay competitive in the market.[54] Load shedding might make it difficult for restaurants to keep their food warm, prepare it properly, or operate their equipment.[55] This can result in a decrease in food quality, which can lead to a drop in customer satisfaction.[56] Employee morale, productivity, and turnover can all suffer as a result of load shedding. Employee morale will suffer due to a lack of power, working fewer hours, earning fewer tips, or working with inadequate lighting, leading to a increase in productivity and service quality, and eventually profitability.

In a market where load shedding is common, having backup power can give small enterprises a significant competitive advantage.[57] This is because it allows the enterprise to continue operating even when the power is out. According to Fiawoo, enterprises lose customers when there is no electricity, as customers are more likely to choose an enterprise that they know will be able to operate during load shedding.[58] A restaurant that has alternative electricity backup is less likely to experience a decline in production or reduced customer satisfaction as a result of load shedding.[59] It will preserve its competitive edge and earn profits in the future. In addition to maintaining its customer base, a restaurant with backup power can also attract more customers, improving the financial performance of the enterprise.

On the other hand, small-scale restaurants without backup electricity are exposed to the impacts of load shedding. Power failures will force the restaurant to close, resulting in reduced production, poor

---

[47] Yasemin Y Kor and Joseph T Mahoney, "Edith Penrose's (1959) Contributions to the Resource-based View of Strategic Management," *Journal of Management Studies* 41, no. 1 (2004): 183–91.

[48] Jay Barney, "Firm Resources and Sustained Competitive Advantage," *Journal of Management* 17, no. 1 (1991): 99–120.

[49] David A. Holdford, "Resource-Based Theory of Competitive Advantage – a Framework for Pharmacy Practice Innovation Research," *Pharmacy Practice* 16, no. 3 (September 30, 2018): 1351, https://doi.org/10.18549/PharmPract.2018.03.1351.

[50] Barney, "Firm Resources and Sustained Competitive Advantage."

[51] Mupani, "Environmental Factors, Employee-Resourcing Strategies And Performance Of Small Restaurant Businesses In South Africa: A Structural Equation Modelling Approach"; I. Kibirige and Benon Basheka, " Effects of Load Shedding on Business Operations in Kampala, Uganda," *International Journal of Management and Commerce Innovations* 5, no. 1 (2017).

[52] Olajuyin and Mago, "Effects of Load-Shedding on the Performance of Small, Medium and Micro Enterprises in Gqeberha, South Africa."

[53] Jay B Barney and Delwyn N Clark, *Resource-Based Theory* (Oxford: Oxford University Press, 2007), https://doi.org/10.1093/oso/9780199277681.001.0001.

[54] Mkateko Vivian Mabunda, Ricky Munyaradzi Mukonza, and Lufuno Robert Mudzanani, "The Effects of Loadshedding on Small and Medium Enterprises in the Collins Chabane Local Municipality," *Journal of Innovation and Entrepreneurship* 12, no. 1 (2023): 57.

[55] Olajuyin and Mago, "Effects of Load-Shedding on the Performance of Small, Medium and Micro Enterprises in Gqeberha, South Africa."

[56] I. Mahomed and M. Taute, "Load Shedding's Impact on Restaurants in South Africa," *African Journal of Hospitality, Tourism and Leisure* 8, no. 1 (2019): 1–9.

[57] Mabunda, Mukonza, and Mudzanani, "The Effects of Loadshedding on Small and Medium Enterprises in the Collins Chabane Local Municipality."

[58] Evitta Ersinam Fiawoo, "Assessing the Effects of Load Shedding (Dumsor) on SMEs and the Coping Strategies Used to Survive Load Shedding in Madina, Accra" (2016).

[59] Makgopa and Mpetsheni, "Exploring the Impact of Load-Shedding on SMME's in Nelson Mandela Bay Municipality."

customer satisfaction, and financial losses, and as a result, the restaurant is less likely to preserve its competitive edge and continue to thrive.[60]

METHODOLOGY

Study design

The study followed a quantitative research method. Quantitative research examines relationships between variables, which are measured numerically and analyzed using a range of statistical and graphical techniques.[61] It involves using statistical methods to test hypotheses and establish cause-and-effect relationships.[62] Because the study measured relationships and culminated in hypothesis testing, it was appropriate to use a quantitative research method. The deductive research approach was adopted because it aligns with quantitative research methods, where the goal is to test hypotheses and establish cause-and-effect relationships.[63]

Explanatory research design guided the study. The explanatory research design was considered ideal as it attempts to identify the relationship between variables connected to the research phenomenon. The study aimed to establish the extent to which the performance of small-scale restaurants is affected by load shedding, requiring the establishment of relationships.

Population and sampling

The study population was all small-scale restaurants operating in Mthatha, with the sample frame being obtained from the Mthatha SMMEs Office and the Mthatha Business License. The sample frame shows that 53 small-scale restaurants are registered and operate in Mthatha.[64] Taking into account such a small target population, the study did not employ sampling techniques; instead, the entire population was considered the data for analysis.

Data collection

Data was collected from all restaurants to achieve meaningful statistical analysis. According to Delice, if the study adopts a relational survey design, the sample size should not be less than 30 respondents.[65] Because that there were only 53 restaurants in Mthatha, the study used the entire population as a source of data. The study used a survey to collect data from restaurant owners or managers using a self-administered questionnaire administered using Google Forms. The questionnaire was distributed by WhatsApp and email. Before distributing the questionnaire, the contact details of restaurants that did not provide their details online were physically gathered from those restaurants. The self-administered questionnaire was preferred to other methods because they are cheap, easy and quick to administer.

Measurement of variables

The major variables for the study include load shedding and performance. Performance is a function of productivity and profitability.

Table 1: Measurement of variables

Variable	Measurement
Load shedding	
Productivity	Working hours; use of equipment requiring electricity, ie card machines
Profitability	Sales; expenses
Performance	Productivity and profitability

[60] Schoeman and Saunders, "The Impact of Power Outages on Small Businesses in the City of Johannesburg."
[61] Oberiri Destiny Apuke, "Quantitative Research Methods a Synopsis Approach," *Arabian Journal of Business and Management Review (Kuwait Chapter)* 6, no. 11 (2017): 40–47.
[62] John W Creswell and Vicki L Plano Clark, *Designing and Conducting Mixed Methods Research* (Sage publications, 2017).
[63] Lusanda Mlobothi, "The Impact of Direct Marketing on Consumer Buying Decisions in Mthatha's Cosmetic Industry" (Walter Sisulu University, 2022).
[64] Mlobothi, "The Impact of Direct Marketing on Consumer Buying Decisions in Mthatha's Cosmetic Industry."
[65] Ali Delice, "The Sampling Issues in Quantitative Research.," *Educational Sciences: Theory and Practice* 10, no. 4 (2010): 2001–18.

Data analysis

The data gathered through Google Forms was downloaded to MS Excel. The data was cleaned for errors and missing values and then coded. The descriptive analysis was achieved using MS Excel. The cleaned data were exported to the SmartPLS statistical analysis software for hypothesis testing using regression analysis. Regression analysis is a reliable method to identify variables that have an impact on a topic of interest.[66] SmartPLS is a regression-based technique derived from route analysis,[67] and can handle sophisticated prediction models with small to medium data sizes,[68] making it the most appropriate software considering the small number of responses for this study. The bootstrapping resampling method of SmartPLS was used to establish the relationships between identified variables.

Regression analysis

The study used two models to establish the effects of load shedding on the performance of small-scale restaurants. The first model (Equation 1) considered the effects of load shedding on the overall performance of small-scale restaurants, whilst the second model (Equation 2) considered the effects of load shedding on productivity and profitability.

$Per = \alpha + \beta 1X_{load\ shed} + e$ (Equation 1)

$Per = \alpha + \beta 1X_{prod} + \beta 2X_{prof} + e$ (Equation 2)

Where:

$X_{load\ shed}$ = Load shedding

Per = Performance of restaurants

X_{prod} = productivity

X_{prof} = profitability

α= constant

e = error function

Ethical considerations

An ethics clearance certificate, Protocol number: HN/9918/2021, was obtained from the Research Ethics Committee of Walter Sisulu University. The ethics clearance was necessary as a human element was involved in the study. Respondents were informed about the purpose and objectives of the study and consent was requested before they participated in the survey.

PRESENTATION OF FINDINGS

Response rate

Of the 53 respondents who requested to participate in the survey, 51 responded to the call, leading to a very high response rate of 96%. This high response rate was achieved by the researcher who visited the Mthatha business licensing authority to request the number of restaurants registered in Mthatha. The researcher visited the restaurants that do not have their contact details online to request their emails or WhatsApp business contacts to send the questionnaire. When the researcher visited the restaurants, the managers or owners were asked to answer the questions while the researcher waited. This helped to increase the response rate. 51 restaurants a possible 53 responded to the questionnaire, which translates to a response rate of 96.23%.

Goodness of measurement instrument

Reliability of the measurement instrument was established by Crobach's Alpha and composite reliability, whilst validity was established using Average Variance Extracted (AVE) and factor loadings.

---

[66] A. Venon Chimaihe, Miston. Mapuranga, and Rirchard Chinomona, "The Influence of Training and Development Dimensions on Employees' Performance at an Institution of Higher Learning in South Africa," *Business & Social Science Journal (BSSJ)* 6, no. 2 (2021): 21–44.

[67] Thomas Ledermann and David A Kenny, "Analyzing Dyadic Data with Multilevel Modeling versus Structural Equation Modeling: A Tale of Two Methods.," *Journal of Family Psychology* 31, no. 4 (2017): 442.

[68] Cheng-Hsien Li, "Confirmatory Factor Analysis with Ordinal Data: Comparing Robust Maximum Likelihood and Diagonally Weighted Least Squares," *Behavior Research Methods* 48, no. 3 (2016): 936–49.

As a rule of thumb, a Cronbach's Alpha value of 0.6 and above,[69] whilst a composite reliability and AVE of 0.7 and 0.5 respectively, and factor loadings of 0.4 imply a dependable and legitimate model.[70] Table 2 shows the Cronbach's Alpha values, composite reliability, and average variance extracted (AVE).

Reliability

Table 2:Reliability and validity

	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
Performance	0,591	0,786	0,553
Productivity	0,868	0,903	0,618
Profitability	0,768	0,846	0,529

The Cronbach Alpha coefficient is used to measure the internal consistency of the measurement scale. The productivity and profitability values of Cronbach's Alpha exceeded the recommended threshold as indicated by coefficients of 0,868 and 0,768, respectively. However, performance did not meet the recommended threshold, with a value of 0,591. However, this figure is very close to the threshold. Although below the threshold, the composite reliability for performance is above the threshold of 0.7 suggested by Ringle et al. The composite reliability for productivity and profitability is also over the 0,7 threshold, confirming the reliability of the measurement scale, which confirms that the items used to measure productivity and profitability were reliable.

Validity

The study considered Average Variance Extracted and factor loadings to measure validity. The average Variance Extracted, as in Table 2, shows that all variables exceeded the threshold of 0,5 as suggested by Ringle et al. Rahn suggested that a factor loading above 0.4 confirms validity.[71] Table 3 shows the factor loadings for the items that represent the variables. Three of the five items for the performance variable had factor loadings above 0.4, six of the seven items for productivity had above threshold factor loadings, whilst five of the seven items on profitability had factor loadings above 0.4. The items with factor loadings less than 0.4 were not used for analysis. These results confirm the validity of the measurement instrument.

Table 3: Factor loadings

Construct	Performance	Productivity	Profitability	Load shedding
MBP				1,000
Pef3	0,712			
Pef4	0,683			
Pef5	0,828			
Prd1		0,870		
Prd2		0,856		
Prd3		0,915		
Prd5		0,467		
Prd6		0,647		
Prd7		0,861		
Prf1			0,647	
Prf2			0,524	
Prf4			0,789	

[69] Samiaji Sarosa, "The Role of Brand Reputation and Perceived Enjoyment in Accepting Compulsory Device's Usage: Extending UTAUT," *Procedia Computer Science* 161 (2019): 115–22.

[70] Christian M Ringle, Sven Wende, and Jan-Michael Becker, "SmartPLS 3. SmartPLS GmbH, Boenningstedt," *Journal of Service Science and Management* 10, no. 3 (2015): 32–49.

[71] Maike Rahn, " Factor Analysis: A Short Introduction, Part 5–Dropping Unimportant Variables from Your Analysis," South Africa Web, April 9, 2021.

Prf5			0,784	
Prf6			0,845	

NB: Pef= Performance, Prd= Productivity, Prf= Profitability

Overall, the results of the reliability and validity tests show that the measurement instrument, with the adjustments made, was fit for use, confirming its reliability and validity.

Restaurants' performance

Respondents were asked to select to what extent they agreed or disagreed with statements about how the restaurant's performance is affected by load shedding. The responses are presented in Figure 1.

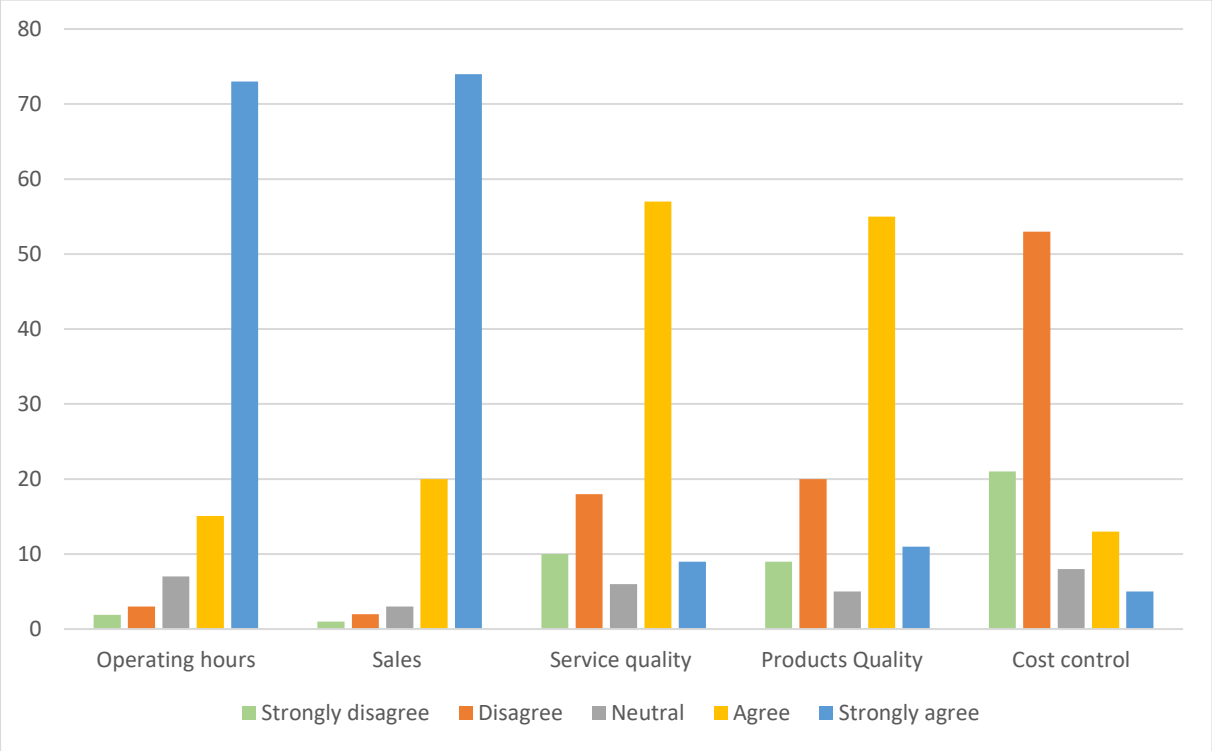

Figure 1: Restaurant performance

Looking at the response rate, the respondents agreed that the quality of product and quality of service (53% and 57%) are affected by load shedding, as most of the restaurants commonly selected "agree" in both statements. Lastly, most respondents selected "disagree" on the statement about the cost control, and some selected "agree." The results show that cost control was not really affected by load shedding, as most of the restaurants did not use cost control as their performance measure (53 % of respondents disagreed). Looking at the responses regarding operating hours, sales, quality of product and service quality, all are affected by load shedding. The results are in line with the findings of Makhdoom et al., as their results showed that sales decreased from 50 percent to 25 percent due to load shedding effects.[72] The results by Phiri showed that load shedding leads to a reduction in service and product quality.[73]

Hypotheses testing

SmartPLS was used to test the proposed hypotheses using regression analysis. In interpreting the results, p-values and t-statistics are used to identify statistically significant relationships between dependent and

[72] Makhdoom, Nawaz, and Narejo, "Effects of Loadshedding on Retail Business: A Glimpse From Hyderabad, Pakistan."
[73] Phiri, *Electricity Demand and Load Shedding: Impact on Zambian Business: A Case Study of Selected Solwezi Based Businesses*.

independent variables.[74] P-values greater than 0,05 or t-statistics below 1,69 would mean that the independent variable has no significant effect on the dependent variable.[75] The correlation coefficient is used to check whether the effect of the independent variable is positive or negative. The results of the regression analysis are presented in Table 4.

Table 4: Regression results

	T statistics (|O/STDEV|)	P values	Path coefficients
Productivity -> Performance	0,697	0,486	0,404
Productivity -> Profitability	64,117	0,000	0,958
Profitability -> Performance	0,109	0,913	0,065
load shedding -> Productivity	0,976	0,329	-0,139
load shedding -> Profitability	0,924	0,355	0,047

Loadshedding and SME Performance

The first hypothesis postulates that load shedding has a statistically significant negative effect on the performance of small-scale restaurants. The findings showed that there is no significant relationship between load shedding and the performance of small-scale restaurants, shown by p-value greater than 0,05 (p-value = 0,329) and a t-statistic below 1,69 (0,976) for productivity. For profitability, the p-value is greater than 0,05 (p-value = 0,355) whilst the t-statistic is below 1,69 (0,924). Therefore, the first hypothesis is rejected.

Load Shedding and Productivity

Based on the literature, the second hypothesis claims that load shedding has a statistically significant negative effect on the productivity of small-scale restaurants. The regression analysis resulted in a p-value of 0,329, which is above the 0,05 threshold, indicating an insignificant influence of load shedding on productivity. Although insignificant, the relationship shows a widely believed negative relationship. Then it can be claimed that load shedding has a negative influence on the productivity of small-scale restaurants; however, this influence is statistically insignificant. Therefore, the result means that the hypothesis that there is a statistically significant positive relationship between load shedding and productivity of small-scale restaurants in Mthatha, South Africa, is rejected.

Load Shedding and Profitability

Hypothesis 3 postulates that load shedding has a statistically significant negative effect on profitability. Contrary to the literature, the results of Banda et al.; Bhagwan and Narsee; Makhdoom et al. results show that profitability and load shedding have a positive relationship, as shown by the positive correlation coefficient (0.047).[76] The relationship between the two variables was, however, statistically insignificant because the p-value is greater than 0,05 (p-value = 0,189) whilst the t-statistic is below 1,69 (1,315). This means that load shedding does not have a statistically significant impact on restaurant profitability, leading to rejection of the hypothesis.

Productivity and Profitability

Hypothesis 4 asserts that productivity significantly influences profitability. The findings indicate a positive association between productivity and profitability, shown by a high correlation coefficient of 0.958. The relationship is statistically significant, as shown by a p-value of less than 0,05 (p-value =

[74] Fakhrurrazi Fakhrurrazi and Muhammad Isa Indrawan, "The Influence of Work Motivation and Work Discipline on Employee Performance Mediated by Organizational Commitment at Teungku Fakinah General Hospital Banda Aceh City," *International Journal of Social Science, Education, Communication and Economics* 2, no. 2 (2023): 943–58.

[75] Ringle, Wende, and Becker, "SmartPLS 3. SmartPLS GmbH, Boenningstedt."

[76] Banda, Simukoko, and Patson, "Effect of Load Shedding on Small Scale Entrepreneurs: A Case of Kitwe District of Zambia"; J. Bhagwan and H. Narsee, " Investigating the Impact of Load Shedding on Small Businesses in South Africa: An Exploratory Study," *Journal of Economics* 8 (2017): 43–53; Makhdoom, Nawaz, and Narejo, "Effects of Loadshedding on Retail Business: A Glimpse From Hyderabad, Pakistan."

0,00) and a t-statistic of greater than 1,69 (64,117). This implies that productivity significantly affects restaurant profitability.

DISCUSSION OF FINDINGS

The study examined the relationship between load shedding and the performance of small-scale restaurants, focusing on productivity and profitability as key indicators. However, the results indicated a statistically insignificant relationship between load shedding and restaurant performance, as measured by productivity and profitability proxies. The null hypotheses for both productivity and profitability were not rejected based on the p-values and t-statistics, suggesting that load shedding did not have a significant influence on the performance of small-scale restaurants in Mthatha. This contradicts most previous studies, including Nyanzu and Adarkwah; Ajibola et al.; Njiraini; Keeletse and Gan which found load shedding to have a significant negative influence on performance. [77]

Load shedding and productivity

Numerous studies, Fjose et al.; Rud; and Ef Ii find a positive correlation between stable electricity supply and enterprise productivity.[78] Studies like that of Schoeman and Saunders; Kadam and Shah; Kohler highlight the negative effects of load shedding on restaurants due to reduced productivity because of equipment and service disruptions, food spoilage as there is a lack of refrigeration, compromised customer service and reduced product quality, decreased sales and profit caused by load shedding.[79] The current study found a negative correlation between load shedding and restaurant productivity, but the relationship was statistically insignificant. This contradicts some existing literature that suggests a negative impact.

The current study findings are consistent with some previous research, such as Mabunda et al., which also found a negative impact of load shedding on SME productivity.[80] However, variations in methodologies and contextual factors should be considered when comparing results across studies.

The findings of the study contradict those of several prior studies, such as Makgopa and Mpetsheni; Olajuyin and Mago; Mabunda et al.[81] However, most of the studies are qualitative and those that were quantitative focused mostly on descriptive statistics. The study by Mabunda et al. revealed results comparable to the current study, as they found that load shedding had a negative impact on the productivity of SMEs.

Load shedding and profitability

The findings of the study indicate a statistically insignificant relationship between load shedding and restaurant profitability, despite a positive correlation coefficient. The hypothesis that there is no significant relationship between load shedding and restaurant profitability could not be rejected on the statistical analysis. These results contradict the consensus in the literature, suggesting that the impact of load shedding on profitability may not be as significant as previously thought.

Studies such as Banda et al.; Bhagwan and Narsee; Makhdoom et al. highlighted the negative effects of load shedding on profitability, as load shedding causes food spoilage due to refrigerators and

---

[77] Nyanzu and Adarkwah, "Effect of Power Supply on the Performance of Small and Medium Size Enterprises: A Comparative Analysis between SMEs in Tema and the Northern Part of Ghana"; Ajibola et al., "Impact of Electricity Supply on the Performance of Small and Medium-Scale Enterprises (SMEs) in Nigeria: A Case Study."; Keeletse Katlego Kepadisa and Gan Yin, "The Effects of Loadshedding on Small and Medium South African Enterprises Using Statistical Analysis," *International Journal for Research in Applied Science and Engineering Technology* 12, no. 10 (October 31, 2024): 238–51, https://doi.org/10.22214/ijraset.2024.64493.

[78] Fjose, Grünfeld, and SQW, "Identifying SME Roles and Obstacles to SME Growth"; Rud, "Electricity Provision and Industrial Development: Evidence from India"; Ef Ii, "The Impact of Electricity Insecurity on the Performance of Small and Medium Size Enterprises-The Case of Cameroon."

[79] Schoeman and Saunders, "The Impact of Power Outages on Small Businesses in the City of Johannesburg"; Kadam and Shah, " An Overview of Refrigeration and Its Importance in Food Preservation"; Kohler, " How Load-Shedding Destroys Small Businesses."

[80] Mabunda, Mukonza, and Mudzanani, "The Effects of Loadshedding on Small and Medium Enterprises in the Collins Chabane Local Municipality."

[81] Makgopa and Mpetsheni, "Exploring the Impact of Load-Shedding on SMME's in Nelson Mandela Bay Municipality"; Olajuyin and Mago, "Effects of Load-Shedding on the Performance of Small, Medium and Micro Enterprises in Gqeberha, South Africa"; Mabunda, Mukonza, and Mudzanani, "The Effects of Loadshedding on Small and Medium Enterprises in the Collins Chabane Local Municipality."

freezers that do not operate.[82] They also revealed that the increased costs from backup power (generators, etc.) and repairs have a negative effect on loadshedding, as they also decreased revenue due to lost sales and customer inconvenience. The study's findings diverge from some previous research, such as that of Mabunda et al., which reported a significant negative impact of load shedding on SME profitability.[83] Differences in methodologies and contextual factors may contribute to these disparities. However, the study's results align with findings from other studies, such as Anaman and Bernard and Robert and Karen, which also found statistically insignificant relationships between load shedding and enterprise profitability.[84]

The hypothesis that there is no significant relationship between load shedding and productivity of small-scale restaurants in Mthatha, South Africa, cannot be rejected. This finding contradicts previous studies in the literature that argued that load shedding influences the profitability of the enterprise. The study by Mabunda et al. revealed different results from the current study, as they found that load shedding had a negative impact on the profitability of SMEs. They found that when there is load shedding, the enterprise loses 61% of its income in one day. The difference may be caused by the different methodology, as they used mixed methods, and the current study used a quantitative method. There was no hypothesis testing for their study, and the current study tested the hypothesis.

The study is in line with the findings of Anaman and Bernard, who did not reject the null hypothesis that load shedding affects the profitability of listed firms in Ghana. They found that load shedding has a positive relationship and a statistically insignificant impact on enterprise profitability, with a P-value of 0.934. It is consistent with the findings of Robert and Karen, where the study found that load shedding does not have a significant impact on the profitability of SMEs. Load shedding can have an impact on SMEs' profitability and other variables although it is usually insignificant, and it is possible that there are other factors that have a more significant impact on the profitability.

Implication for theory

The studies on literature have claimed that load shedding has a negative impact towards the performance of most of the enterprises in South Africa, which is also supported by the resource-based theory. The resource-based theory (RBT) is a strategic management theory that emphasizes the significance of a company's unique resources and skills in building and retaining a competitive edge. It suggests that a firm's success is influenced not just by the industry in which it operates, but also by the unique resources it possesses and its ability to employ them effectively. The findings of the study do not strongly support the resource-based theory, nor do the literature presented. The findings revealed that load shedding has a negative effect on productivity and a positive effect on profitability. The effects are, however, statistically insignificant. What it means, therefore, is that small-scale restaurants must not claim to fail due to load shedding, as the effect is considered statistically insignificant.

RECOMMENDATIONS

Longterm (policy/structural) strategies

The study uncovered some intriguing findings, as they are mostly different from the literature, but the researcher believes that additional research is needed to see whether replication is feasible in other locations, such as different populations and places. The results indicate that load shedding does not have a statistically significant influence on the profitability and productivity of small-scale restaurants. However, it is essential to examine additional considerations before making a selection. A crucial consideration is future unpredictability. Load-shedding plans and frequency can change, affecting

[82] Banda, Simukoko, and Patson, "Effect of Load Shedding on Small Scale Entrepreneurs: A Case of Kitwe District of Zambia"; Bhagwan and Narsee, " Investigating the Impact of Load Shedding on Small Businesses in South Africa: An Exploratory Study"; Makhdoom, Nawaz, and Narejo, "Effects of Loadshedding on Retail Business: A Glimpse From Hyderabad, Pakistan."

[83] Mabunda, Mukonza, and Mudzanani, "The Effects of Loadshedding on Small and Medium Enterprises in the Collins Chabane Local Municipality."

[84] Bawuah Bernard and Dinah Koranteng Anaman, "Power Outages in Ghana: Did They Have an Effect on the Financial Performance of Listed Firms?," *International Journal of Management Excellence (ISSN: 2292-1648)* 10, no. 3 (2018): 1434–39; S. Robert and S. Karen, "The Impact of Load Shedding on SMEs' Profitability: A Study of South African SMEs," *Journal of Small Business Management* 58, no. 3 (2020): 773–99.

companies more heavily. Furthermore, investing in alternative energy sources can provide a stable and constant power supply, decreasing the reliance on the national grid. Furthermore, renewable energy sources may reduce carbon emissions and contribute to a more sustainable future, which may be a significant factor for organizations aiming to lessen their environmental impact.

Short-term (operational) strategies

Restaurants should employ gas-powered equipment, such as gas burners and refrigerators, to be more productive. Restaurants must implement flexible payment options, such as mobile wallets or cash, to accommodate customers during power outages and prioritize activities that require electricity during periods of stable power supply. Given that SMEs are not paid for their losses during load shedding, the electricity provider should cut power tariff prices for small enterprises to make them more affordable. Furthermore, alternative energy sources, such as solar power, can result in long-term savings in electric costs. This may be a substantial advantage, particularly for small-scale restaurants with limited profit margins.

CONCLUSION

The study aims to establish the effects of load shedding on the performance of small-scale restaurants operating in Mthatha. The primary objective is to investigate the extent to which load shedding affects the performance of small-scale restaurants based on the perceptions of owners and managers. To support this primary objective, the study attempts to establish the effect of load shedding on the productivity and profitability of the small-scale restaurants.

The purpose of to what study was to establish the extent load shedding affects the performance of small-scale restaurants in Mthatha, South Africa. The hypotheses were tested using SmartPLS4, and the findings revealed that productivity and profitability are not significantly affected by load shedding. The findings also revealed that load shedding does not have a significant impact on the performance of small-scale restaurants. In other words, despite common beliefs and personal knowledge, the economic and operational problems caused by power outages did not lead to measurable drops in key performance measures for the organizations being studied. The shortage of notable statistical effects does not imply the absence of real-world issues; instead, it may signify the inventiveness and resourcefulness of restaurant owners in navigating a challenging operational environment. The recommendations were made based on the findings and literature.

LIMITATIONS

The limitations of the study might be viewed as prospects for future research projects. The key limitation was the geographic scope of the research study, which was limited to Mthatha restaurants. It is recommended that future research studies of similar interest investigate the study in other cities and provinces. It is also advised that similar studies investigate their studies in larger geographic areas to increase the target population. Furthermore, despite the fact that this study contributes to current literature and the restaurant industry as a whole, it was carried out with limited resources and time, despite data from 51 respondents. Furthermore, because of the small number of respondents, results may be influenced, and as the small sample sizes limit the generalizability of the research findings, the results obtained from a small sample may not be representative of the larger population of interest, making it difficult to extrapolate the findings to a broader context[85]. The methodology used in the study may be one of the limitations, as it is a quantitative method only. Qualitative methods may unearth other findings and also give an opportunity to managers/owners to tell their stories**.**

Implications for Future Research

Future studies in this area may need to widen the geographic scope of the study by incorporating other provinces to increase generalizability. Additional studies should be undertaken on how restaurants might

[85]Faber, Jorge, and Lilian Martins Fonseca. "How sample size influences research outcomes." *Dental press journal of orthodontics* 19 (2014): 27-29.

progress during load-shedding situations and adapt to their existing condition, especially with growing technology. The researcher should not only focus on the impact but also on technology, which can help tackle the load-shedding situation.

BIBLIOGRAPHY

Abeberese, Ama Baafra, Charles Godfred Ackah, and Patrick Opoku Asuming. "Productivity Losses and Firm Responses to Electricity Shortages: Evidence from Ghana." *The World Bank Economic Review* 35, no. 1 (2021): 1–18.

Adonis, Vusi. "Load Shedding: Permanent Stage 2 or Not, Small Businesses Are Dying." *South Africa, Web*, 2023.

Ajibola, Akinyemi Alao, Gbemi Moses Sodeinde, Timothy Ayomitunde Aderemi, and Modupe Ololade Yusuf. "Impact of Electricity Supply on the Performance of Small and Medium-Scale Enterprises (SMEs) in Nigeria: A Case Study." *Economic Insights-Trends & Challenges*, no. 4 (2021).

Aliahmadi, Saeid. "Does CEO Power Moderate the Link between Labor Productivity and Financial Performance: Agency Theory or Stewardship Theory." *Asian Journal of Accounting Research* 9, no. 1 (2024): 47–56.

Allcott, Hunt, Allan Collard-Wexler, and Stephen D O'Connell. "How Do Electricity Shortages Affect Industry? Evidence from India." *American Economic Review* 106, no. 3 (2016): 587–624.

Apuke, Oberiri Destiny. "Quantitative Research Methods a Synopsis Approach." *Arabian Journal of Business and Management Review (Kuwait Chapter)* 6, no. 11 (2017): 40–47.

Arnold, Christopher. "The Foundation for Economies Worldwide Is Small Business." South Africa, Web, November 11, 2019. https://www.ifac.org/knowledge-gateway.

Ateba, Benedict B, Johannes J Prinsloo, and Remigiusz Gawlik. "The Significance of Electricity Supply Sustainability to Industrial Growth in South Africa." *Energy Reports* 5 (2019): 1324–38.

Ballim, Faeeza. "Eskom and the Electricity Act 42 of 1922." *South African Historical Journal* 74, no. 4 (2022): 680–82.

Banda, Gerald, Garry Simukoko, and Tailoka Frank Patson. "Effect of Load Shedding on Small Scale Entrepreneurs: A Case of Kitwe District of Zambia." *Economy* 7, no. 2 (2020): 104–9.

Banderker, S I. "The Perceived Psychosocial and Economic Impact of Load-Shedding on Employees in Selected Small Micro Medium Enterprises." *Cham: Springer International Publishing*, 2022.

Barney, Jay. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 17, no. 1 (1991): 99–120.

Barney, Jay B, and Delwyn N Clark. *Resource-Based Theory*. Oxford: Oxford University Press, 2007. https://doi.org/10.1093/oso/9780199277681.001.0001.

Bernard, Bawuah, and Dinah Koranteng Anaman. "Power Outages in Ghana: Did They Have an Effect on the Financial Performance of Listed Firms?" *International Journal of Management Excellence (ISSN: 2292-1648)* 10, no. 3 (2018): 1434–39.

Bhagwan, J., and H. Narsee. " Investigating the Impact of Load Shedding on Small Businesses in South Africa: An Exploratory Study."*Journal of Economics* 8(2017):43–53.

Blimpo, Moussa P., and Malcolm Cosgrove-Davies. " Electricity Access in Sub-Saharan Africa: Uptake, Reliability, and Complementary Factors for Economic Impact." *World Bank Publications*, 2019.

Chimaihe, A. Venon, Miston. Mapuranga, and Rirchard Chinomona. "The Influence of Training and Development Dimensions on Employees' Performance at an Institution of Higher Learning in South Africa." *Business & Social Science Journal (BSSJ)* 6, no. 2 (2021): 21–44.

Creswell, John W, and Vicki L Plano Clark. *Designing and Conducting Mixed Methods Research*. Sage publications, 2017.

Damnjanovic, Aleksandar M, Vladimir Dimitrijevic, Sandra Nesic, Miroslav Miskic, Gordana Mrdak, and Sinisa M Arsic. "Risk Influence of Employee Productivity on Business Failure: Evidence Found in Serbian SMEs." *Sustainability* 15, no. 6 (2023): 4705.

Delice, Ali. "The Sampling Issues in Quantitative Research." *Educational Sciences: Theory and Practice* 10, no. 4 (2010): 2001–18.

Ef Ii, Pami-Pami. "The Impact of Electricity Insecurity on the Performance of Small and Medium Size Enterprises-The Case of Cameroon," 2021.

eKomani Blog. "The Impact of Loadshedding on Restaurants and Negative Customer Reviews: A Case Review of Ons Huisie," January 15, 2022. https://blog.ekomi.com/archive/the-impact-of-loadshedding-on-restaurants-and-negative-customer-reviews-a-case-review-of-ons-huisie/.

Fakhrurrazi, Fakhrurrazi, and Muhammad Isa Indrawan. "The Influence of Work Motivation and Work Discipline on Employee Performance Mediated by Organizational Commitment at Teungku Fakinah General Hospital Banda Aceh City." *International Journal of Social Science, Education, Communication and Economics* 2, no. 2 (2023): 943–58.

Fakih, Ali, Pascal Ghazalian, and Nancy Ghazzawi. "The Effects of Power Outages on the Performance of Manufacturing Firms in the MENA Region." *Review of Middle East Economics and Finance* 16, no. 3 (2020): 20200011.

Fiawoo, Evitta Ersinam. "Assessing the Effects of Load Shedding (Dumsor) on SMEs and the Coping Strategies Used to Survive Load Shedding in Madina, Accra," 2016.

Fjose, Sveinung, Leo A Grünfeld, and Chris Green SQW. "Identifying SME Roles and Obstacles to SME Growth." *MENON-Publication No* 14 (2010).

Grainger, Corbett A, and Fan Zhang. "Electricity Shortages and Manufacturing Productivity in Pakistan." *Energy Policy* 132 (2019): 1000–1008.

Habanabakize, Thomas, and Zandri Dickason-Koekemoer. "Assessing the Significance of Electricity Supply, Inflation and Fuel Price on Food and Beverage Production and Sales in the Manufacturing Sector." *African Journal of Business and Economic Research* 16,no.4 (2021): 137.

Holdford, David A. "Resource-Based Theory of Competitive Advantage – a Framework for Pharmacy Practice Innovation Research." *Pharmacy Practice* 16, no. 3 (September 30, 2018): 1351. https://doi.org/10.18549/PharmPract.2018.03.1351.

Kadam, D. M., and R. K. Shah. " An Overview of Refrigeration and Its Importance in Food Preservation." *Journal of Food Science and Technology* 55, no. 2 (2018): 387–95.

Katlego, Keeletse, and Gan Yin. "The Effects of Loadshedding on Small and Medium South African Enterprises Using Statistical Analysis." *International Journal for Research in Applied Science and Engineering Technology* 12, no. 10 (2024): 238–51.

Kepadisa, Keeletse Katlego, and Gan Yin. "The Effects of Loadshedding on Small and Medium South African Enterprises Using Statistical Analysis." *International Journal for Research in Applied Science and Engineering Technology* 12, no. 10 (October 31, 2024): 238–51. https://doi.org/10.22214/ijraset.2024.64493.

Khan, Shahid, and Mumlikat Begum. "Social Impact of Energy Crisis on Small Scale Industrial Workers in District Swat." *Pakistan Journal of Society, Education and Language (PJSEL)* 6, no. 1 (2020): 81–93.

Kibirige, I., and Benon Basheka. " Effects of Load Shedding on Business Operations in Kampala, Uganda." *International Journal of Management and Commerce Innovations* 5, no. 1 (2017).

Kohler, Charlotte. " How Load-Shedding Destroys Small Businesses." Africa Web, November 15, 2022. https://www.nichemarket.co.za/blog/nichemarket-advice/load-shedding-kills-smesouth-africa.

Kor, Yasemin Y, and Joseph T Mahoney. "Edith Penrose's (1959) Contributions to the Resource-based View of Strategic Management." *Journal of Management Studies* 41, no. 1 (2004): 183–91.

Ledermann, Thomas, and David A Kenny. "Analyzing Dyadic Data with Multilevel Modeling versus Structural Equation Modeling: A Tale of Two Methods." *Journal of Family Psychology* 31, no. 4 (2017): 442.

Li, Cheng-Hsien. "Confirmatory Factor Analysis with Ordinal Data: Comparing Robust Maximum Likelihood and Diagonally Weighted Least Squares." *Behavior Research Methods* 48, no. 3 (2016): 936–49.

Lubasi, Nelson. "Impact of Energy Distribution on Small and Medium Enterprise (A Case Study of

Chongwe District)," 2020.
Mabunda, Mkateko Vivian, Ricky Munyaradzi Mukonza, and Lufuno Robert Mudzanani. "The Effects of Loadshedding on Small and Medium Enterprises in the Collins Chabane Local Municipality." *Journal of Innovation and Entrepreneurship* 12, no. 1 (2023): 57.
Mabuza, Semanga, and M Maphosa. "R. The Impact of Load Shedding on the Performance of Manufacturing SMES in South Africa." In *Proceedings of the 10th Biennial Academy of World Business, Marketing and Management Development Conference, Perth, Australia*, 25–28, 2023.
Mahomed, I., and M. Taute. "Load Shedding's Impact on Restaurants in South Africa." *African Journal of Hospitality, Tourism and Leisure* 8, no. 1 (2019): 1–9.
Makgopa, S, and Z Mpetsheni. "Exploring the Impact of Load-Shedding on SMME's in Nelson Mandela Bay Municipality." *Academy of Entrepreneurship Journal* 28, no. 03 (2022): 1–10.
Makhdoom, Tayyaba Rafique, Muhammad Nawaz, and Nabi Bakhsh Narejo. "Effects of Loadshedding on Retail Business: A Glimpse From Hyderabad, Pakistan." *Grassroots* 51, no. 1 (2017).
Mlobothi, Lusanda. "The Impact of Direct Marketing on Consumer Buying Decisions in Mthatha's Cosmetic Industry." Walter Sisulu University, 2022.
Mupani, Honest. "Environmental Factors, Employee-Resourcing Strategies And Performance Of Small Restaurant Businesses In South Africa: A Structural Equation Modelling Approach." Central University of Technology, 2019.
Mutambo, Humphrey, Sidney Kawimbe, Charity Meki-Kombe, and Austin Mwange. "Impact of Electricity Load Shedding on Operations of Small-Scale Enterprises in Selected Developing Countries: A Review of Literature," 2023.
Ndabeni-Abrahams, A. "Power Cuts Killing Small Businesses." South Africa Web, June 19, 2022. https://www.enca.com/news/ndabeni.
Ngenda, Lubinda. "Project Report Title: The Impact of Load Shedding on Manufacturing Industries in LUSAKA, Zambia," 2020.
Njiraini, Winfred. "Effects of Electric Power Outage Dynamics on the Performance of Manufacturing Firms in Kenya." University of Nairobi, 2021.
Nyanzu, Frederick, and Josephine Adarkwah. "Effect of Power Supply on the Performance of Small and Medium Size Enterprises: A Comparative Analysis between SMEs in Tema and the Northern Part of Ghana," 2016.
Olajuyin, Olayide F, and Stephen Mago. "Effects of Load-Shedding on the Performance of Small, Medium and Micro Enterprises in Gqeberha, South Africa." *Management and Economics Research Journal* 8, no. 4 (2022): 1–8.
Phiri, James. *Electricity Demand and Load Shedding: Impact on Zambian Business: A Case Study of Selected Solwezi Based Businesses*. LAP LAMBERT Academic Publishing, 2018.
Pretorius, Ilze. "Impacts and Control of Coal-Fired Power Station Emissions in South Africa." North-West University (South Africa), Potchefstroom Campus, 2015.
Rahn, Maike. " Factor Analysis: A Short Introduction, Part 5–Dropping Unimportant Variables from Your Analysis." South Africa Web, April 9, 2021.
Rathi, Anusha. "Why South Africa Is in the Dark, Again, Foreign Policy." Ghana Web, June 17, 2022. https://foreignpolicy.com/2022/07/08/south-africa-energy-crisis-eskom-power-cut/.
Ringle, Christian M, Sven Wende, and Jan-Michael Becker. "SmartPLS 3. SmartPLS GmbH, Boenningstedt." *Journal of Service Science and Management* 10, no. 3 (2015): 32–49.
Robert, S., and S. Karen. "The Impact of Load Shedding on SMEs' Profitability: A Study of South African SMEs." *Journal of Small Business Management* 58, no. 3 (2020): 773–99.
Rud, Juan Pablo. "Electricity Provision and Industrial Development: Evidence from India." *Journal of Development Economics* 97, no. 2 (2012): 352–67.
Sarosa, Samiaji. "The Role of Brand Reputation and Perceived Enjoyment in Accepting Compulsory Device's Usage: Extending UTAUT." *Procedia Computer Science* 161 (2019): 115–22.
Schoeman, Thea, and Michael Saunders. "The Impact of Power Outages on Small Businesses in the City of Johannesburg." In *10th International Conference on Education, Business, Humanities and*

Social Sciences Studies, Vol. 19, 2018.
Shyu, Chian-Woei. "Ensuring Access to Electricity and Minimum Basic Electricity Needs as a Goal for the Post-MDG Development Agenda after 2015." *Energy for Sustainable Development* 19 (2014): 29–38.
Tshangana, Venny. " Eskom Has Become a Big Factor as Well as Power Outages." South Africa Web, March 12, 2022. https://scontent.fcpt2-1.fna.fbcdn.net/v/t39.3080.
Uppal, Karan. "Creation of Smart Energy." *Business Connects* 1, no. 2 (2018).
World Bank. "Small and Medium Enterprises (SMEs). Improving SMEs' Access to Finance and Finding Innovative Solutions to Unlock Sources of Capital," 2020. https://www.worldbank.org/en/topic/smefinance.
Zwane, Faith N, Lindie Du Plessis, and Elmarie Slabbert. "Analysing Employers' Expectations of Employee Skills in the South African Tourism Industry." *SA Journal of Human Resource Management* 12, no. 1 (2014): 1–9.

Competing interests
The authors declare that they have no financial or personal affiliations that might have improperly affected their decision to write this work.

Authors' contributions
All authors contributed to this research.

Funding information
The authors disclose that they did not get any financial assistance for this article's research, writing, or publication. This research received no particular support from public, commercial, or non-profit entities.

Data availability
Data is available from the author upon reasonable request.

ABOUT AUTHORS
Lelethu Mantangayi is a lecturer at Walter Sisulu University, Butterworth Campus, where she is committed to advancing knowledge and fostering student success. Her research interests focus on Business Management and the development and sustainability of Small and Medium Enterprises (SMEs). Passionate about community impact and academic excellence, she brings a thoughtful and driven approach to both her teaching and research. Lelethu has presented at the Multi-Inter-Transdisciplinary Conference (MITC).

Obert Matarirano is an Associate Professor of Business Management at Walter Sisulu University, South Africa, with over 17 years of experience in higher education. He holds a Doctor of Commerce (DCom) in Business Management and is an NRF-rated researcher. His work spans teaching, research, and postgraduate supervision. His research focuses on corporate finance, digital transformation in education, and higher education development, particularly the adoption and use of technology by students and academic staff in resource-constrained environments. He is committed to innovative teaching, curriculum development, and student success, actively mentoring postgraduate students. Prof. Matarirano has presented at national and international conferences, published in peer-reviewed journals, and participated in collaborative research projects. He continues to contribute to initiatives that promote quality teaching, inclusive education, and research excellence.

Dr Cuthbert Muza is a Senior Lecturer in Management Accounting and Finance at Walter Sisulu University and a certified professional accountant with over 10 years' experience in academia and practice. He holds a PhD in Environmental Management Accounting (Stellenbosch University), an MCom in Accounting (Midlands State University), and a BBA in Accounting (Solusi University), with research focused on sustainability in extractive industries. He teaches undergraduate and postgraduate

courses, supervises master's and doctoral students, chairs the departmental research committee, and serves on faculty committees, including CIMA. He is also active externally as an examiner, moderator, and peer reviewer, and has published and presented at regional and international conferences. His research interests include environmental management accounting, sustainability reporting, public sector financial management, and forensic accounting. He is a member of PAAB(Z), CPA(Z), and the Institute of Certified Forensic Accountants (Canada), and holds additional qualifications in postgraduate supervision (Rhodes University) and education and training (City & Guilds, UK).