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**HOW TO CITE:**Marchetti-Mercer MC. Resilience is not enough: The mental health impact of the ongoing energy crisis in South Africa. *S Afr J Sci.* 2023;119(9/10), Art. #16608. <https://doi.org/10.17159/sajs.2023/16608>**ARTICLE INCLUDES:**

- Peer review
- Supplementary material

**KEYWORDS:**

load shedding, resilience, mental well-being, psychological distress

**PUBLISHED:**

31 August 2023



# Resilience is not enough: The mental health impact of the ongoing energy crisis in South Africa

**Significance:**

Load shedding has become an intrinsic part of South Africans' daily experience. The devastating impact of load shedding on the economy is often foregrounded, but limited attention has been paid to its effects on the population's mental health. South Africans are often depicted as inherently resilient, able to withstand additional disruptions to their lives. However, this reasoning underestimates the ecosystemic nature of load shedding and its severe psychological impact on people's physical and mental well-being. Fostering the mental health of the population is ultimately the responsibility of the government, which urgently needs to address the energy crisis.

In 2008, Eskom, South Africa's public electricity company, first implemented load shedding. 'Planned rolling blackouts' were deemed necessary to protect the integrity of the national electricity grid. The general public did not expect this decision, which created immediate chaos in the lives of all South Africans. At the time, most people did not understand the terms used in the media to explain this sudden disruption to our daily lives – South Africans were faced with a totally new and alien experience and vocabulary.

Some South Africans have never had electricity at home, but for all who do (whether they are legally or illegally connected), and for all who have come to depend on it in any daily activity – at home, at work, for transport, for communication, and in financial and commercial transactions – the disruption is enormous. Now in 2023 – 15 years later – load shedding is an integral part of almost every day of our lives. South Africans have become electricity experts, and technical jargon has become their daily parlance, as some discuss different types of inverters, generators and the solar panels available in the market in ordinary social conversations.

South Africans are often praised for being resilient. In his most recent State of the Nation Address, on 9 February 2023, President Ramaphosa stated: "The energy crisis is an existential threat to our... social fabric. But... we are, at our most essential, a nation defined by hope and resilience."<sup>1</sup> From a psychological perspective, "[r]esilience is the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioural flexibility and adjustment to external and internal demands"<sup>2</sup>. Generally, the ability to be resilient is often regarded as a positive personal quality, as it allows people to face adversity and cope with it more effectively. However, one could argue that an overemphasis on the 'resilience' of South Africans can trivialise and underestimate the role that the prevailing socio-political and economic forces in the country are playing in creating a daily living experience where 'resilience' is continually needed in order to survive and is constantly tested by the ongoing energy crisis. From an ecosystemic perspective, the daily experiences of people can be understood in terms of multiple interconnecting systems. Most South Africans already face massive structural challenges, such as poverty, unemployment, and high levels of crime. A collapsing national energy system that disrupts economic activities, as well as all citizens' educational, social and family pursuits, may be the psychological tipping point for many. Not surprisingly, there has been a rise in emigration figures: migration agencies reported increased interest in 2022, especially from younger people.<sup>3</sup>

Increasingly, the prevailing complaints from South Africans relate not only to the practical disruptions caused by load shedding, but also to the psychological distress that accompanies them. The mental health impact of load shedding is particularly critical because the country is just emerging from the COVID-19 pandemic, which had a significant impact on the economy<sup>4</sup>, and on people's social and mental well-being<sup>5,6</sup>. The aftermath of the pandemic, especially for those who suffered severe economic losses and who lost their jobs, is severe.

Since mid-2022, load shedding has become progressively worse. In 2022, 200 days of load shedding were recorded, escalating to Stage 6. At the time of writing, at the beginning of June 2023, the country was moving between Stages 5 and 6, with rumours that Stages 8 to 10 were likely as the heart of winter approached.

Given the enormous economic disparity in South African society, load shedding gravely affects most South Africans' daily living activities, with accompanying psychological distress. Only a privileged few are able to cushion themselves from the worst aspects of load shedding and some of the daily inconvenience of limited electricity supply by installing inverters, generators and solar panels in their homes and workplaces. The constant disruptions brought about by blackouts have led to an overwhelming sense of frustration and uncertainty, as people feel they have no control of their lives and environment. Breakages, cable theft, and sabotage exacerbate the situation by adding unscheduled outages, some for as long as 10 days. Outages are also increasingly leading to water shortages as reservoirs cannot refill in the short periods between outages, and to telecommunication problems. Significantly, such disruptions in work and educational activities, as well as in the domestic domain, have been shown internationally to increase psychological distress.<sup>7</sup>

Disruption in electricity supply potentially further affects people's physical health, which can in turn increase people's risk of developing mental health problems. At the most basic level, food safety is affected as constant refrigeration cannot be guaranteed, placing people at risk of food poisoning and diarrhoeal diseases. Water purification systems also require electricity to function optimally, so load shedding leaves people without water or facing the threat of contaminated water.<sup>7</sup> South Africa has recently experienced a cholera outbreak and the contamination of rivers and sea water in different provinces, because sewage plants did not have electricity.<sup>8,9</sup>



International research has shown that 'energy poverty', where people have inadequate access to electricity, for example, in order to keep warm during the winter months, can lead to adverse health outcomes, with concomitant depression and anxiety.<sup>10</sup> Exposure to household air pollution from solid fuel combustion, often the only source of energy available in poorer communities, has also been linked to strong depression outcomes.<sup>11</sup>

The absence of uninterrupted electricity adds to stress in some occupational sectors, especially in the public health sector, where workers have already suffered significant stress because of the COVID-19 pandemic. Hospitals have called to be exempted from load shedding, but at the time of writing, only a few hospitals countrywide are exempted. The rest rely mostly on generators to keep their operations going. For example, the Chris Hani Baragwanath Hospital in Soweto, which claims to be the third largest hospital in the world (with more than 400 buildings, 3200 beds and more than 6500 staff), has to work on very large generators. The effects of power outages on health care are diverse and far-reaching. Hospital equipment and other services rely heavily on power.<sup>7</sup> In hospitals that are not exempt from load shedding, and in clinics in rural areas which have no access to generators, patients and health workers are at risk, and experience frustration and uncertainty. People with disabilities and other health concerns may indeed face severe risk, as they rely heavily on medical devices, such as life-support equipment, that require an electricity supply. This situation places additional stress on their caregivers. The QuadPara Association of South Africa has also drawn attention to the plight of many disabled people as a result of load shedding.<sup>12</sup>

The above examples illustrate how the effects of load shedding on the larger social and work environment impact on mental health. The World Health Organization defines mental health as "a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well and contribute to their community"<sup>13</sup>. Mental health is best understood as a state of wellness that goes beyond the absence of mental disorders, but falls along a continuum of well-being that is experienced differently from person to person, affected by the social, economic and political systems in which people operate.<sup>13</sup>

Mental health concerns are not new in South African society, especially in the economic aftermath of the COVID-19 pandemic.<sup>5,6</sup> Structural concerns such as rural poverty and a lack of infrastructure, poor education and unemployment have long been linked to poorer psychological well-being.<sup>14</sup> Many South Africans – already traumatised by discrimination, inequality and interpersonal violence – are vulnerable to mental health challenges.<sup>13,15</sup>

Against this background, the overwhelming impact of load shedding on individuals' mental well-being must be considered from an ecosystemic perspective. Such an approach highlights the important role that different systems and contexts play in individuals' functioning and well-being. Although Bronfenbrenner's ecological systems theory<sup>16,17</sup> was not developed specifically to address mental health, it offers important insights into how the ongoing energy crisis influences individuals' mental health and well-being at several levels.

In his original theory, Bronfenbrenner<sup>16</sup> proposes that the ecological environment is made up of four different systems: the micro-, meso-, exo- and macrosystems. In the microsystem, which consists of the relationship and connection between an individual and that individual's close environment such as the home, workplace, and school<sup>17</sup>, load shedding disrupts daily work, home routine and activities, including education. For instance, if someone relies on electricity for medical equipment or to work and/or study from home, unreliability of the electricity supply can create stress and anxiety. The mesosystem refers to interrelations between a person's immediate environment or key settings, for example, between home and the workplace, or home and school.<sup>17</sup> Load shedding regularly disrupts such connections, as people struggle to attend school or work regularly, leading to increased stress and anxiety levels as people struggle to maintain their responsibilities and relationships. The exosystem – social structures such as a person's world of work, public agencies, and the mass media<sup>17</sup> – is also affected. Exosystem factors, such as a lack of supportive social policies, community resources, or access to health care, can pose barriers to mental health services, promotion and interventions. Load shedding

can reduce the availability of basic resources such as food and water, increase the risk of crime and violence in some areas, as well as restrict access to proper health care, adding to stress and anxiety.<sup>5,6</sup> Lastly, the macrosystem refers to the broader cultural, social, and economic values, beliefs, and norms that influence people's development, consisting of the blueprints of society, including laws and regulations.<sup>17</sup> Ongoing load shedding can be directly attributed to such larger systemic socio-political factors, resulting in political instability, inadequate investment in infrastructure and corruption.

In later work, Bronfenbrenner included the concept of the chronosystem to address changes over time, both in an individual and in the larger environment.<sup>18</sup> The current political and economic context of post-apartheid South Africa, and specifically 'state capture', has weakened Eskom's ability to provide stable energy, increasing the occurrence of load shedding. Stressing the interconnectedness of the different systems within which people function thus provides us with a useful theoretical lens to understand the far-reaching impact of load shedding on the mental health of South Africans.

In this context of psychological vulnerability, it is concerning that current information regarding the psychological impact of load shedding is largely anecdotal, rather than based on rigorous academic research, and it is mainly media articles that point out that load shedding adds to South Africans' levels of anxiety and depression. Recently, psychologists interviewed on television and radio have also raised awareness around increasing mental distress, and some have suggested strategies for dealing with the psychological distress caused by load shedding. However, thus far, there is a lack of comprehensive South African academic research examining the specific impact of load shedding on mental health so that we can address its consequences more effectively. One exception is a recent online survey by the South African Depression and Anxiety Group (SADAG), which collected data from a sample of 1831 participants. Not surprisingly, it found increased symptoms of depression and anxiety amongst participants arising from constant exposure to load shedding.<sup>19</sup> Research in other countries that also experience regular electricity outages, such as Zambia, shows that load shedding affects daily routines and school performance, reducing time for studying, social and family activities, and leading to economic and psychological problems.<sup>11</sup>

Academic psychological research to explore the micro- and macro-elements associated with load shedding must thus be urgently initiated to illuminate the complex relationship between load shedding and mental well-being. Three main issues should be foregrounded. Firstly, it is vital to identify, examine and assess the common stressors related to load shedding. Secondly, the coping strategies currently employed by people and their perceived effectiveness need to be investigated. Lastly, the relationship between the perceived stressors linked to load shedding, and mental health in general, needs to be determined. Data gathering should be targeted at providing a strong evidence-based foundation for developing targeted psycho-social interventions to support mental health in the current South African context.

Mental health professionals must also push back against the larger socio-political system when it ignores its responsibility to stop creating a living situation where 'resilience' is continuously required in order to survive, and where the responsibility for mental health rests on the shoulders of the dedicated few. South Africans may not reach a state of 'learned helplessness'<sup>20</sup> where people come to believe that no matter what they do, nothing will change their situation, and where they passively accept their circumstances. Such a sense of resignation and long-suffering forbearance – even if it is portrayed and praised as 'resilience' – must be resisted at all costs.

The mental health impact of load shedding on the lived experiences of all South Africans must move to the forefront of current debates. It is not a secondary issue. It has been argued that it is crucial to conduct comprehensive academic research on the psychological impact of these constant disruptions to our daily lives, exploring its effects on both individual and familial functioning, but this is not enough. Mental health professionals need to become activists: they need to speak out and draw attention to the extreme psychological distress that the South



African population is experiencing because of continued and worsening load shedding – the larger socio-political system has a fundamental responsibility to promote the well-being of all South Africa's people.

## Competing interests

I have no competing interests to declare.

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