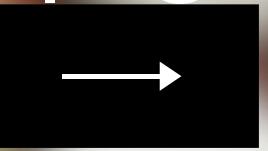


# DIGITAL IN SOUTH AFRICA



Topic: Examining the state of Digital Divide in South Africa

Selected tutorial presentation slot: 1E

Name	Student Number & Stream Code	Group
Milani Sani	230371574 - 262S	1E
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Precious Lebohang Mtsweni	230604048 - 261S	1E

# Points for discussion:

## Topics and highlights

- Given Scenario
- What is the Digital Divide?
- Factors that Contribute Current Reality in SA

...and more important topics



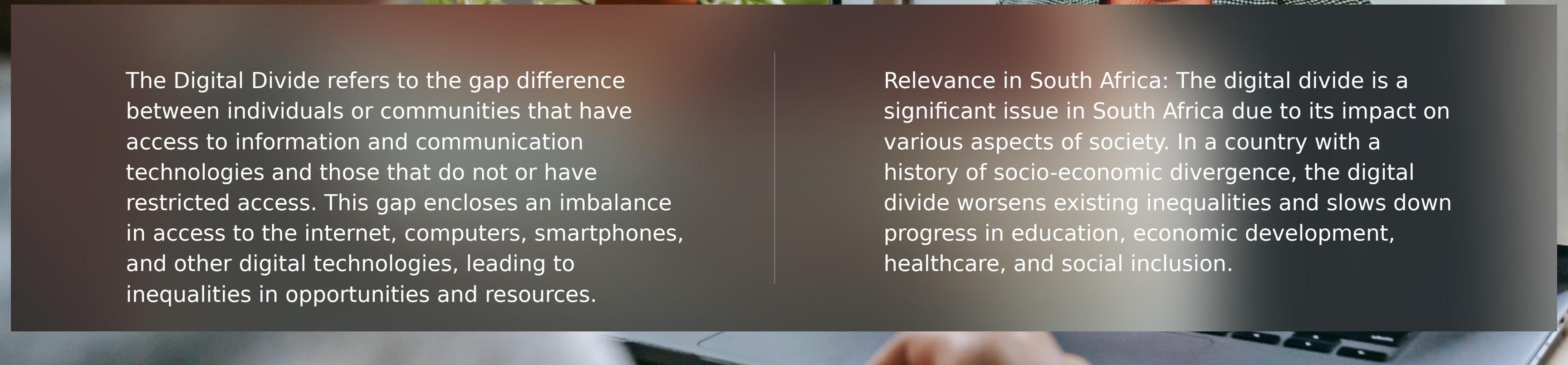
# INTRODUCTION TO THE DIGITAL

What is the Digital  
**DIVIDE**  
Divide?



The Digital Divide refers to the gap difference between individuals or communities that have access to information and communication technologies and those that do not or have restricted access. This gap encloses an imbalance in access to the internet, computers, smartphones, and other digital technologies, leading to inequalities in opportunities and resources.

Relevance in South Africa: The digital divide is a significant issue in South Africa due to its impact on various aspects of society. In a country with a history of socio-economic divergence, the digital divide worsens existing inequalities and slows down progress in education, economic development, healthcare, and social inclusion.



# Factors contributing to the Digital Divide

## Socio-Economic Status

Individuals with higher incomes are more likely to afford digital devices and internet access, while those in lower-income brackets may struggle to access these resources. This economic inconstancy maintains the digital divide.

## Urban vs. Rural Inequalities

Urban areas in South Africa generally have better Information and Communication Technology infrastructure and connectivity compared to rural regions. This urban-rural divide results in unequal access to digital technologies, limiting opportunities for those in rural areas.

## Education

Limited access to quality education can delay digital literacy skills among certain populations. Without sufficient education and training in digital technologies, individuals may struggle to fully participate in the digital world, widening the gap between the digitally literate and the digitally excluded.

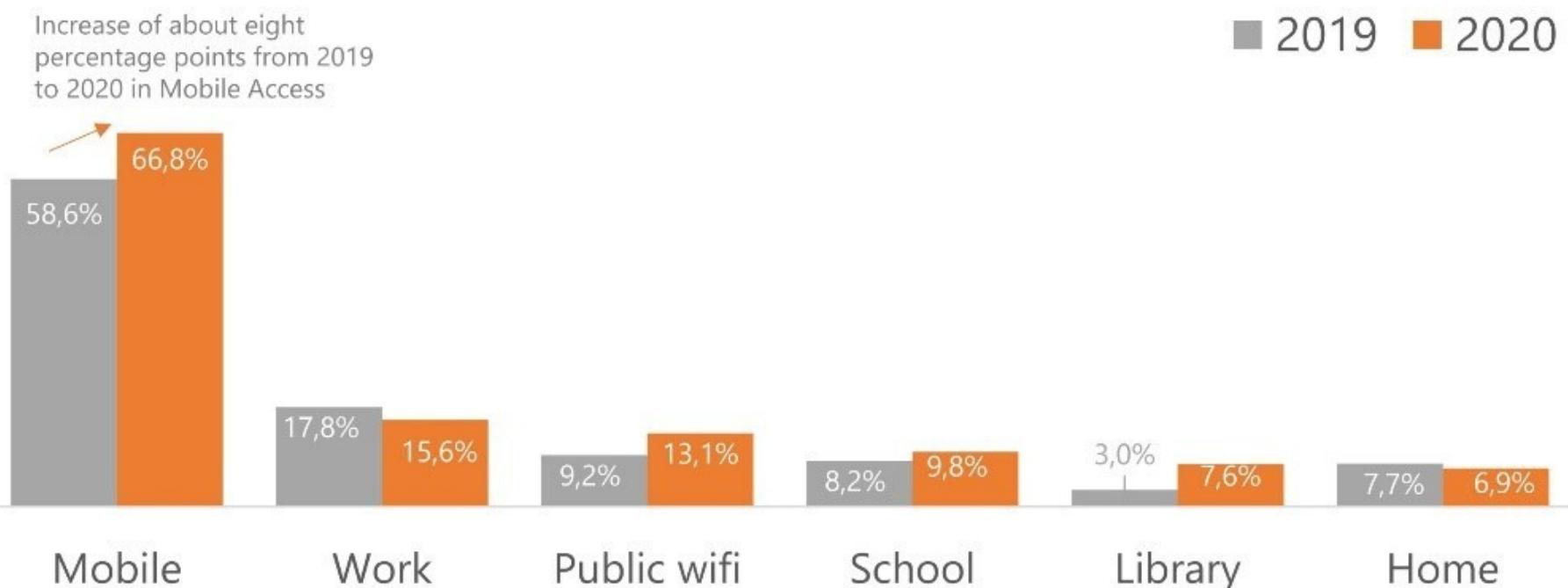
## Infrastructure

Limited Information and Communication Technology infrastructure, such as limited broadband coverage and unreliable electricity supply, create a barrier to digital access in many parts of South Africa. Without proper infrastructure, individuals and communities face challenges accessing and using digital resources effectively.



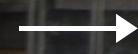
**More than two-thirds (66,8%)** of households with individuals 5-24 years were likely to **access the internet through mobile phones**.

Percentage of households with individuals aged 5–24 years by internet access in South Africa 2019-2020



AUGUST 2024

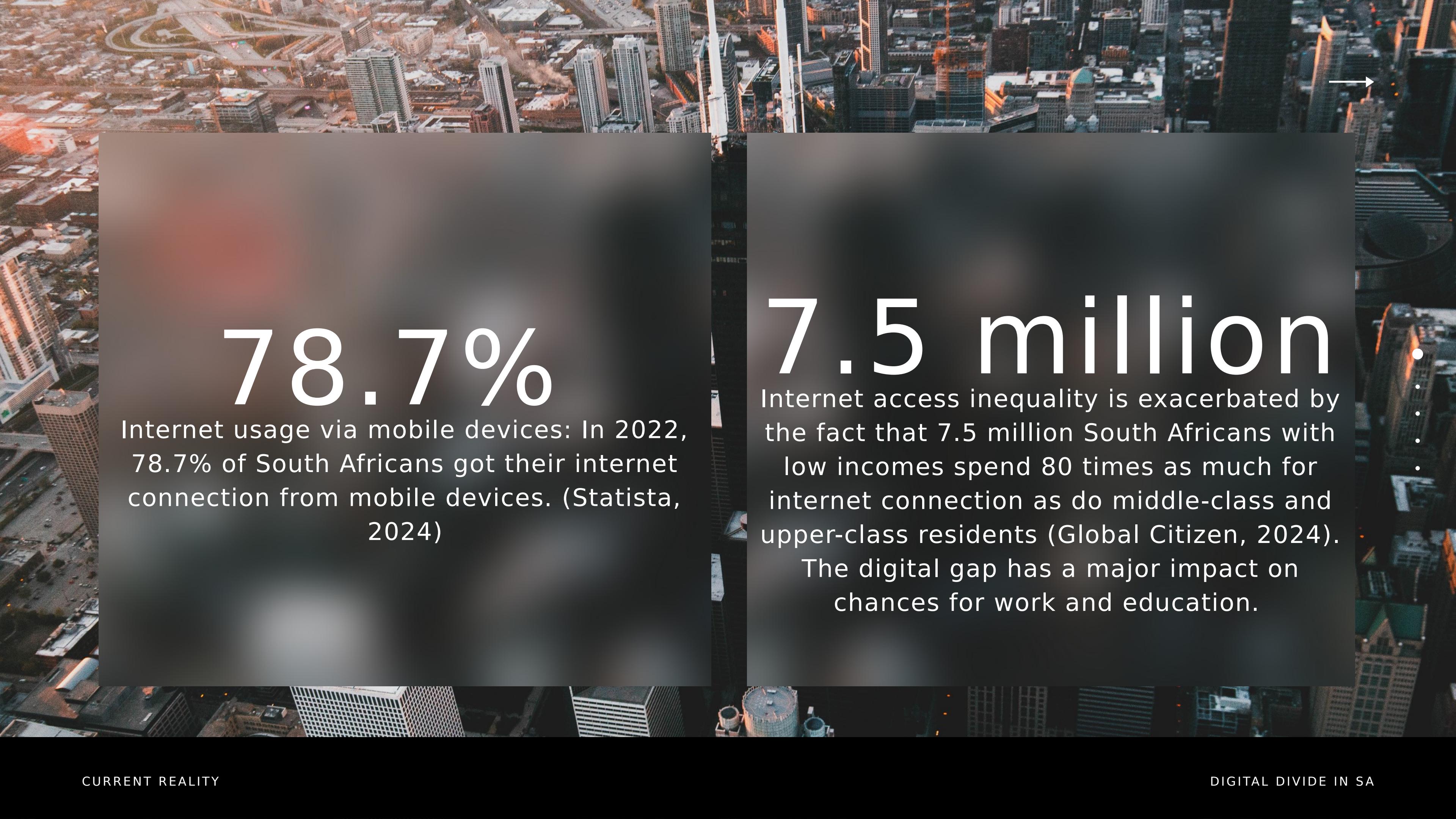
# Current Reality in South Africa



CURRENT REALITY

Internet  
Penetration  
Rate of  
As of Beginning of 2024 (DataReportal,  
2024).

74,7%  
DIGITAL DIVIDE IN SA



**78.7%**

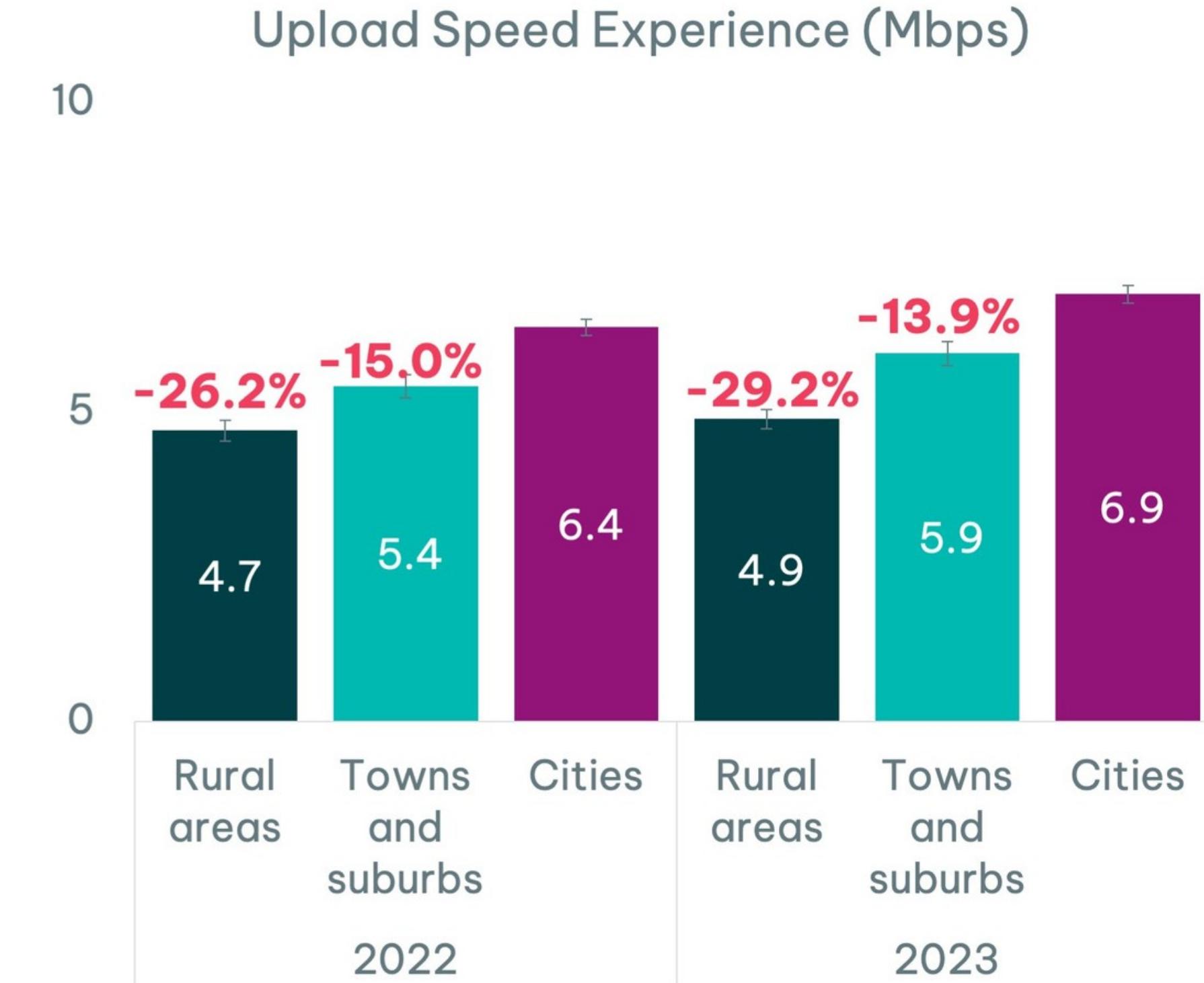
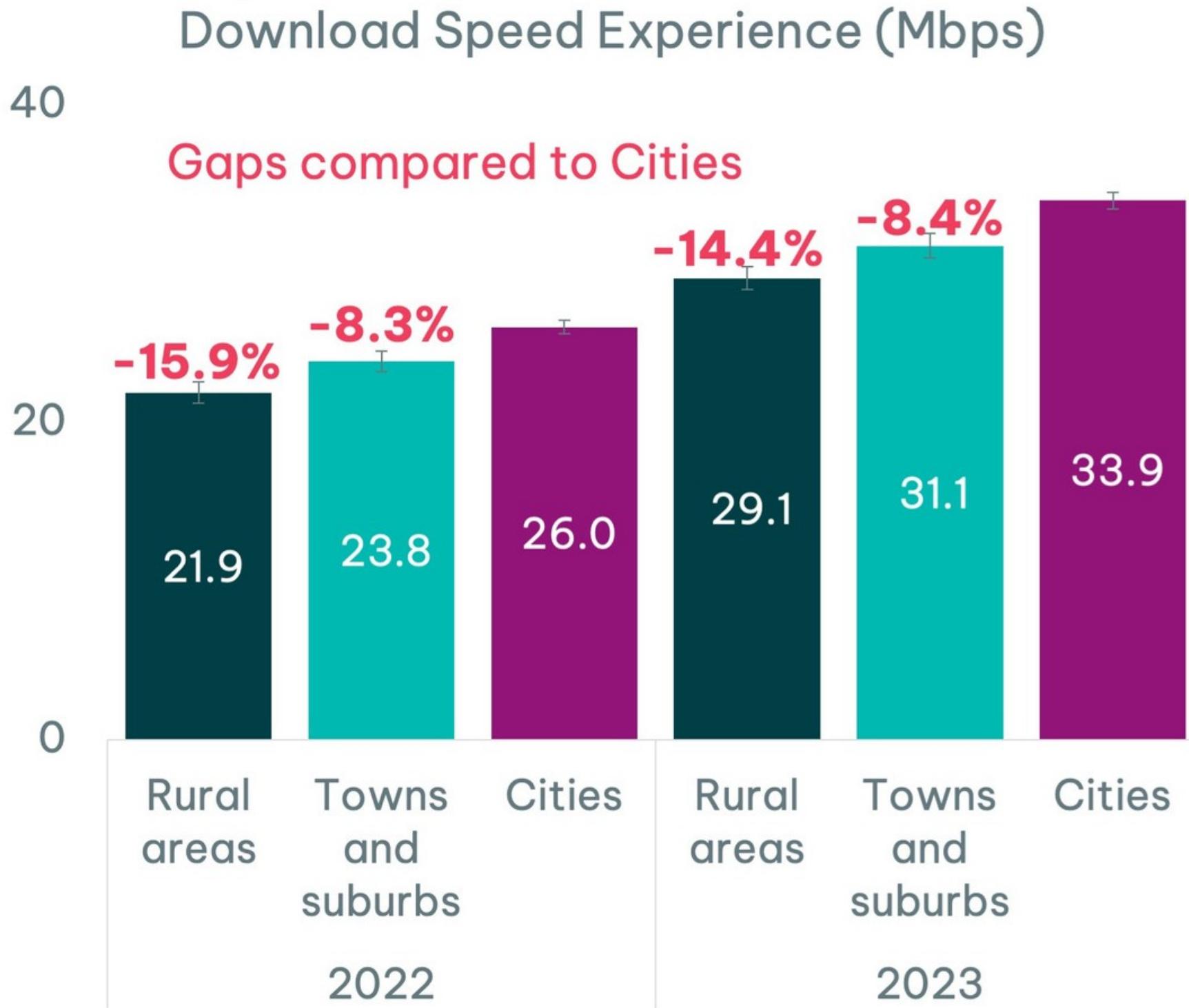
Internet usage via mobile devices: In 2022, 78.7% of South Africans got their internet connection from mobile devices. (Statista, 2024)

**7.5 million**

Internet access inequality is exacerbated by the fact that 7.5 million South Africans with low incomes spend 80 times as much for internet connection as do middle-class and upper-class residents (Global Citizen, 2024).

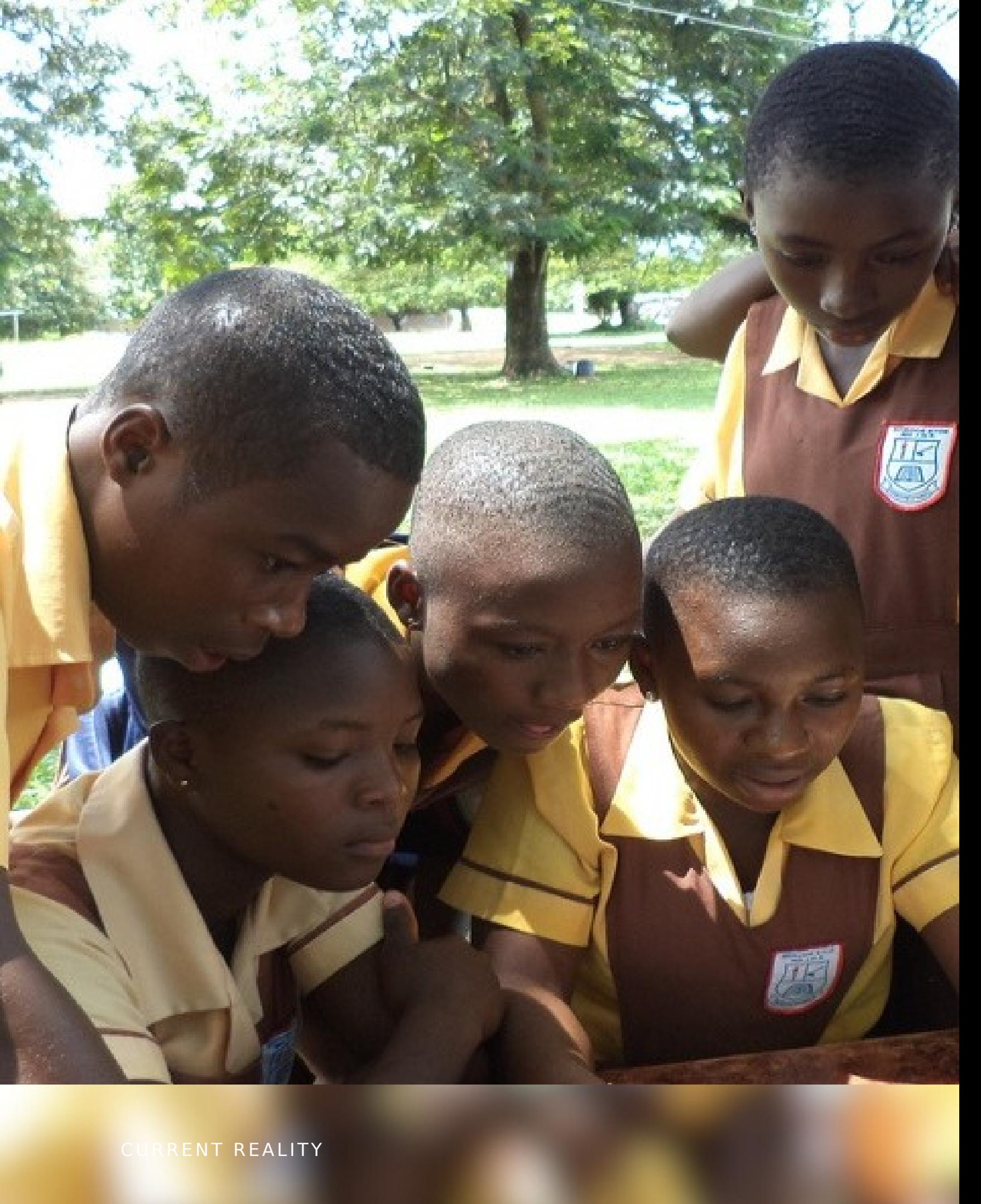
The digital gap has a major impact on chances for work and education.

In 2023, our South African smartphone users observe 14.4% slower average download speeds in rural areas than in the cities



OPEN SIGNAL

Data collection period: September 1– November 29, 2022 and September 1– November 29, 2023 | © Opensignal Limited



# Impact of Lockdowns and Shutdowns on the Digital Divide in South Africa

## Pandemics on Education

South Africa's digital divide has grown as a result of the Covid-19 pandemic, particularly in the area of education. With technology and internet access, students in urban areas (cities) were able to switch to online learning when schools shut during the national lockdown. But many students in rural areas, who often lacked the necessary devices and internet connectivity, were unable to continue well with their education. According to estimates, students in disadvantaged or poorer communities may have missed out on 38% to 118% of their education because of this, resulting in massive loss of learning. Covid-19 has shown us how a student's socio-economic status affects educational opportunities and resources.

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-

## Strikes and Shutdowns

Strikes and shutdowns have shown how unfair digital access is in South Africa. When there were protests or shutdowns, many city schools moved to online learning. But rural schools without the right technology and internet stayed closed for a long time. This did not only disrupted education but exposed the inequalities in education. Students from poorer backgrounds struggled to join remote classes which resulted in higher dropout rates and a widening of the education gap. Imagine being cut off from education, all because you're on the wrong side of the digital divide. The lack of digital resources during these disruptions has had a lasting impact on students' marks and futures.



AUGUST 2024

# COVID PANDEMIC ON AND SOCIAL DISTANCING AND LOCKDOWN ANTI-VIRALS



# ON UNDER LOCKDOWN

## CURRENT REALITY

## DIGITAL DIVIDE IN SA

# Rural Online Learning in the Context of COVID-19 in South Africa: Evoking an Inclusive Education Approach

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(Received: 5<sup>th</sup> May 2020; Accepted: 11<sup>th</sup> May 2020; Published: 13<sup>th</sup> May 2020)

This paper was written at the time a pandemic known as COVID-19 was ravaging the world, and which changed the way of life of many people. The pandemic has required drastic measures to be pursued as a way of limiting the spread of the virus. One of the measures taken by the South African government to address the spread of COVID-19 was to prohibit public gatherings, enact social distancing and close schools, which required a move to online teaching and learning. While the move to online teaching and learning, as opposed to the traditional approach to education, was inevitable, many learners in rural contexts now find themselves excluded from schooling and unable to access online resources, due to a lack of infrastructure, the unavailability of electricity and electronic gadgets, and a lack of qualified teachers who can assist with online learning. It appears that online learning favours urban and well-privileged learners, thus, widening the gap between the poor and the rich, instead of uniting the nation in the fight against COVID-19.

## Methodology: Participatory Action Research

To collect data, in line with the need for social distancing, a WhatsApp group was created involving 15 participants, which included 10 learners in Grade 10, aged between 14 and 17, and five teachers at rural schools in the

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KwaZulu-Natal province of South Africa. Purposeful sampling was used for this study. In addition, the snowball or chain method was used to recruit participants, whereby participants were requested to identify other possible participants who could provide useful data for the study (Onwuegbuzie, 2007).

The participation of the group members was guided by two research questions, namely, 1) what are the learning challenges faced by rural learners in South Africa, and 2) how can online learning be enhanced in the context of COVID-19? The following table gives details of the research participants in terms of the age, grade, and general location of their schools. Pseudo names are used to protect the identities.

Table 1.  
*Characteristics of the participants*

Pseudonym	Age	Location of the rural school	Grade or Subject
Sipho (Learner)	16	UThukela	Grade 11
Zuzu (Learner)	15	UThukela	Grade 10
Nnuku (learner)	16	UMkhanyakude	Grade 11
Mpilo (Learner)	14	UMkhanyakude	Grade 9
Velo (learner)	15	Harry Gwala	Grade 9
Dlodlo (Teacher)	40	UThukela	English/ IsiZulu
Zalo (Learner)	17	Harry Gwala	Grade 12
Busi (Learner)	16	Harry Gwala	Grade 11
Mzi (Learner)	15	UMkhanyakude	Grade 10
Rams (Teacher)	44	Harry Gwala	Mathematics
Mzamo (Learner)	14	UThukela	Grade 9
Simiso (Learner)	15	UMkhanyakude	Grade 9
Xoli (Teacher)	30	UMkhanyakude	Life Science
Senzo (Learner)	17	UMkhanyakude	Grade 12
Msibele (Teacher)	52	UThukela	Geography

To ensure ethical considerations, participants were asked for consent to participate in the study. It was assured that pseudonyms would be used, that no-one was obliged to participate in the study, and that they could decide to withdraw from the study for any reason (Fritz, 2008). In addition, collected

data would only be used for academic purposes, and to raise the awareness of the Department of Basic Education about the realities faced by rural learners in the fight against COVID-19, particularly, teaching and learning online.

## Results and Discussion

The first section of the findings will address Question 1, which is, what are the challenges faced by rural learners and teachers on the use of online as alternative during the COVID-19?

### Challenges of Online Learning in Rural Areas

In response to the first question, participants raised a number of issues, which are summarised by pointing out the main themes that arose from participating in this research. Next, I discuss the first challenge, the unavailability of network access in rural schools.

**Unavailability of network in rural areas.** It emerged during the research that, in spite of online learning seeming to be one of the best ways of learning during the COVID-19 period, the innovation is hampered by the unavailability of connectivity in some rural contexts. During the discussion, the participants gave different responses. On the one hand, Muzi<sup>1</sup> reported that “most of the learners in rural areas are experiencing the problem with network, it is hard for them to access online learning material provided by the department of basic education”. On the other hand, Senzo added:

# Case Study

(Dube, 2020, p. 140) →

Yaa this is a serious challenge, it is not that we do not want online learning, it is because there is no or sometimes very limited network which makes it difficult for me to teach learners. This thing is only working for those in towns where network is always available.

*REMIE – Multidisciplinary Journal of Educational Research, 10(2)145*

Gorge said:

This online learning thing is like giving some one pots to cook without food and expect you have addressed his or her needs. Am scared that this year will be wasted because of COVID-19 and online learning that does favour us as rural learners

The essence of the participants' views is that they are not prepared to do online learning, due to limited or no network access. This implies that, while the idea to use online learning to compensate for the loss of face-to-face contact, is noble, it does not include all learners. To this end, World Bank (2020) points out that the students who will be able to make the best use of online learning are those who are already competent and knowledgeable about using technology tools to support their learning, online sources in particular, who have sufficient access to good bandwidth and connected devices, and who are supported by their family and peers.

It is clear that the COVID-19 arrangement, though noble, is exclusive in its nature, and excludes many learners in deprived communities. Thus, informed by CER, it is an injustice to institute systems and structures in education that exclude some on the basis of poverty, or because they live in deprived communities. In addition, the lack of connectivity does not only place a damper on academic matters, but also on strategies that are implemented in various contexts to fight COVID-19. In essence, the lack of connectivity affects online education and prevents access to information, which is essential in the fight against COVID-19.

**Shortage of devices for online learning.** Another challenge raised by research participants is the lack of devices to connect for online learning. The devices mentioned by the participants included cell phones, computers, laptops and smart phones that are compatible with low-tech teaching apps, such as Blackboard. During the discussion, the participants made the following comments. First, Simiso, a school learner, said:

The school head teacher sent a message to us that we will start with online learning, and to me this was new and was confused because at home we do not have even a single laptop or smartphones, the one I am



## Bridging the Divide:

What's Next?

South Africa has faced challenges in terms of digital divide especially in the years during and following the pandemic and that is due to the increase in demand of digital access to all areas rural or urban as we had seen during the epidemic just how useful these devices and technologies are useful to use. These challenges also include the socio-economic inequality as stated earlier.

Given these challenges, what steps can be taken to bridge the digital divide in South Africa?

Steps such as having Public Wi-Fi initiatives where people can have free Wifi at public places like the Library or Community Centres can be taken. Or even speaking to the government about implementing policies that promote digital inclusion such as ensuring policies on affordable internet prices and also policies that support and promote the construction of digital infrastructural projects.

Looking into the future, some emerging technologies can also play a role in bridging this gap. Implementation of Technologies such as 5G networks will drive other invention by years as this 5G network comes with high network speed meaning also we can create higher processing speed computers and so on as this technology is not limited to a singular invention but applicable to almost anything electronic, The internet of things(IOT) is also a technology that is at the forefront in bridging this gap like for example IOT devices that can assists farmers to keep track of and manage crops and livestock.

There are also inventions such as Satellite internet which has proven effective in providing high speed connectivity to rural areas lacking the traditional infrastructure we have spoken about.



# Final Thoughts

Bridging the Digital Divide in South Africa is a critical step towards creating a more inclusive and equitable society. It is essential for stakeholders at all levels - government, private sector, civil society, and individuals - to come together and prioritize efforts to improve digital access and literacy for all South Africans. By investing in infrastructure, providing affordable internet access, and offering digital skills training, we can empower excluded communities and bridge the gap in digital inclusion. Let's work collaboratively to ensure that everyone in South Africa has the opportunity to benefit from the digital world and contribute to the country's socio-economic development. Together, we can make a difference and create a more connected and prosperous future for all.