South African Journal of Childhood Education
ISSN: (Online) 2223-7682, (Print) 2223-7674

South African COVID-19 school closures: Impact on children and families

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Dates:
Received: 07 Aug. 2023
Accepted: 06 Dec. 2023
Published: 22 May 2024

How to cite this article:
Haffejee, S., Simelane, T.M. & Mwanda, A., 2024, 'South African COVID-19 school closures: Impact on children and families', *South African Journal of Childhood Education* 14(1), a1415. https://doi.org/10.4102/sajce.v14i1.1415

Background: The COVID-19 pandemic and subsequent school closures have had profound impacts on learners and their families globally, affecting their psychosocial wellbeing. However, the extent and nature of these effects, particularly in diverse socioeconomic contexts, remain largely under-explored.

Aim: This study aimed to investigate the effects of school closures on the psychosocial wellbeing of children and parents in South Africa's Gauteng province.

Setting: The research included families from various socioeconomic backgrounds in Gauteng province, South Africa.

Methods: Using an ethnographic research approach, diary-style entries via the WhatsApp mobile app were collected from 43 families, and semi-structured telephonic interviews were conducted with 21 families.

Results: The study found that children experienced adverse emotions, including loneliness, boredom, anxiety and isolation during school closures. Parents reported elevated stress levels and increased caregiving burden. The severity of impact was influenced by access to resources for online or home-schooling.

Conclusion: The findings highlight the multi-dimensional implications of school closures on families and underscore the importance of providing adequate support during such disruptions, taking into account the varying effects across socioeconomic backgrounds.

Contribution: This study fills a crucial gap in understanding the psychosocial impacts of school closures due to the COVID-19 pandemic on children and parents within diverse socioeconomic contexts. The findings call for equitable access to educational resources, evidence-based remediation efforts, and integrated mental health support services.

Keywords: school closures; COVID-19 pandemic; children; parents; psychological wellbeing; South Africa.

Introduction

The COVID-19 pandemic resulted in the most significant educational disruption in recent history (United Nations [UN] 2020). Lockdown measures and school closures dramatically impacted children's access to education. Worldwide, almost 1.6 billion students in over 190 countries had limited or no access to education (UN 2020). Reports suggest that gains made in achieving the Sustainable Development Goals (SDGs) were partially reversed by the pandemic (UNDP 2020). In South Africa, approximately 17 million students were affected during the various lockdown phases the government mandated to prevent the spread of the COVID-19 virus (Landa, Zhou & Marongwe 2021). In 2020, around 60% of early-grade school days were lost due to COVID-19 (Ardington, Wills & Kotze 2021). This loss of learning time is particularly worrying in South Africa, given the pre-existing systemic challenges that negatively impact the majority of children's educational outcomes. Failing infrastructure, such as the lack of or broken toilet facilities, water shortages, inadequate classroom facilities and poor-quality roads to and from school, overcrowded classrooms, staff and material shortages, such as no computers, libraries and textbooks, and inadequate resources combined with poverty and food insecurity, placed South African children, already in a precarious position, at a greater disadvantage (Letseka 2014; Spaull et al. 2021).

Globally, school closures affected the most vulnerable populations. Studies show an increase in the learning gap between students from high and low-income backgrounds (Haerlemans et al. 2022),

exploitation of children for child labour (Mohammed 2023), early marriages (Okeke, Idriss-Wheeler & Yaya 2022), school drop-out rates (Moscovic & Evans 2022; Tsolou, Babalis & Tsoli 2021), and teenage pregnancy (Zulaika et al. 2022).

In this article, which reflects findings from a broader study, we explore how children and parents living across Gauteng in South Africa experienced the COVID-19 lockdowns; how school closures broadly impacted children's access to education and how school closures impacted on families' psychosocial wellbeing. Our study draws on a qualitative digital ethnographic study that engaged with a sample of children and parents living in the same household over a year between 2020 and 2021. We provide a glimpse into the daily experiences of children and their parents. Our findings show how the multiple and interrelated disadvantages, like socio economic status and poverty, affected the experiences of children and parents, all of which created specific experiences of marginalisation and exclusion (Dineen et al. 2022).

Intersections of COVID-19, education and socioeconomic challenges in South Africa

As with many governments worldwide, the South African government moved quickly and decisively to curb the spread of COVID-19. On 15 March 2020, the president declared a national state of disaster. Various COVID-19 preventative and control measures were implemented, including social distancing, mask-wearing, restrictions on the sale of alcohol, national and international travel restrictions and school closures. During the first weeks of the lockdown, all schools were closed, and in-person learning stopped. Following this closure, schools re-opened and closed again for various periods, in response to increases in COVID-19 cases and the identification of new strains of the virus.

As a result of school closures, new policies and regulations were implemented. These included adjustments to school timetables, the introduction of rotational schooling to limit the number of children at schools at a given time, screening for temperature of all children at the entrance of schools, and online teaching and learning. A limited number of schools managed to pivot to the new way of working, and for a minority of children, in-school teaching and learning resumed within the first 2 months of the pandemic. However, during the period of the study, structural and educational inequalities meant that for the vast number of children already attending poorly resourced schools, learning largely came to a halt. The South African Department of Basic Education (DBE) endeavoured to provide learning support through the South African Broadcasting Corporation (SABC). These programmes were available on three national television channels and 13 radio stations. These sessions were, however, aimed only at children in Grade 10, Grade 11 and Grade 12 and ran for under 2 h a day (Spaull & Van der Berg 2020). Research shows that in 2020, Grade 2 students lost 57% to 70% and Grade 4 students lost 62% to 81% of a typical year's learning, with learning to schooling loss ratios ranging from 1 to 1.4 (Ardington et al. 2021).

Across many middle- and low-income countries – and marginalised communities worldwide – it became clear that the ability to learn from home privileged a minority, including children who attended private schools or schools in better-resourced communities. Teaching children at home, with no support from teachers and the school community, was a challenge (Nayir & Sari 2021).

Children's ability to learn and do their schoolwork at home is also influenced by childcare arrangements, such as having one or both parents at home, parents' education levels, and their ability to assist with schoolwork. There are also spatial considerations: adequate space and resources facilitating a conducive learning environment. Historic spatial, racial segregation means that most black South African families live in population-dense areas, which are not conducive to learning from home. In South Africa, parents' education levels are likely to determine their occupation, and so working from a home 'office', which was the trend for higher income professionals, was not possible for the majority of black South Africans, who tend to have informal and precarious work opportunities available to them (Nwosu, Kollamparambil & Oyenubi 2022). Better-off families may have been better able to navigate an equal distribution of care work, thereby increasing the family's ability to cope with homeschooling (Dunatchik et al. 2021).

It further became clear early on that access to digital technology was crucial to function in a world suddenly closed off from in-person contact. For those living in technologically disadvantaged contexts, marginalisation and isolation increased (Hoskins et al. 2022). This situation meant that in South Africa, the majority of people were disadvantaged (Landa et al. 2021). Research showed that only 7% of households with people aged between 5 years and 24 years had access to the internet at home in 2020, and most families accessed the internet via smartphones (66.8%) (Statistics South Africa [StatsSA] 2022b). There was also a pronounced urban-rural divide. Twice as many individuals accessed distance learning in urban settings compared to those in rural settings (Belay 2020). Similar findings were noted in Uganda (Datzberger et al. 2023) and Ghana (Mohammed 2023).

Overview of the impact of lockdown

In a review of loss of learning time and school dropout rates, Moscoviz and Evans (2022) found that globally dropout rates fluctuated widely, ranging from less than 1% to more than 35%, with the highest dropout rates noted in older secondary school students. In Ghana, Mohammed (2023) found that school closures resulted in children being forced by worsening economic conditions to enter the labour market to support their families. In some contexts, girls were at increased risk of dropping out. School dropout rates in South Africa increased during this period: approximately

3% to 5% of 15-year-olds to 18-year-olds dropped out of school in 2020. Reasons given included illness, inability to pay school fees and poor academic performance (StatsSA 2020a). Of the dropout number, approximately 13.4% of girls dropped out of school to attend to family obligations compared to 5% of boys who lost interest in their studies (StatsSA 2020a). Research suggests that girls, more so than boys, are expected to leave school and take up care duties (Burzynska & Contreras 2020). Data from the COVID-19 period also suggest an increase in teenage pregnancies due to the closure of schools, with approximately 34 000 pregnancies in teenagers under the age of 17 recorded (StatsSA 2021a). Children in the early grades were not exempt from COVID-19-related shocks. In 2019, the percentage of 5-year-olds who did not participate in school increased from 10.9% in 2019 to 37.7% in 2020 and then declined to 19.4% in 2021 (StatsSA 2021a).

Schools are places of learning, and they are also vital spaces where children are able to access social protection services, like social workers and nurses, and in-school feeding schemes. When schools closed, many children no longer received in-school meals and food parcels (Matidza et al. 2023). Findings from the NIDS-CRAM survey show that approximately 16% of South African children went hungry in the third wave of the pandemic (Spaull et al. 2021).

Unemployment rates increased from 29.1% in 2019 to 32.6% in 2021 (when the study ended) (StatsSA 2019, 2021b). Approximately 3 million South Africans lost their jobs during the first months of lockdown (Nwosu et al. 2022). Research showed that female-headed households, common in South Africa, were most vulnerable to poverty caused by the hard lockdown measures (Spaull et al. 2021). For women in the informal economy, their typical work hours decreased by 49% compared to 25% for men in the same position. The overall gender gap in earnings in this sector widened considerably between February and April 2020 (Rogan & Skinner 2022).

Mental health during the COVID-19 pandemic

In their systematic review of global child and adolescent mental health during the COVID-19 pandemic, Samji et al. (2021) found that most studies revealed worsening trends in participants' overall mental health, and an increase in the frequency of participants reporting depression and anxiety symptoms during the pandemic. Similarly, in a review of mental health in the general population, Singu (2022) found increased rates of anxiety, depression, post-traumatic stress disorder and psychological distress. Increased worry, fears of contracting the virus and losing loved ones, loneliness and boredom emerged from studies conducted with children in South Africa and other low- and middle-income countries (Coetzee et al. 2022).

During the first initial lockdown, also called the hard lockdown, children were exposed to longer screen time, limited physical activity, poor nutritional diets and increased social isolation, all of which impacted on their mental health (Watts et al. 2018). Data from various psycho-social helplines, like Lifeline, the South African Depression and Anxiety Group and Childline suggest an exponential increase in daily calls during this period (eNCA 2021).

Globally, research shows that the pandemic disproportionately affected those who were already marginalised prior to its onset (Spaull 2013). In South Africa, the pandemic and the lockdowns interacted with pre-existing structural inequalities, lack of resources, food insecurity, limited digital access and high rates of unemployment, all of which negatively impacted the wellbeing of children and families (Maestripieri 2021).

Research methods and design

We used an ethnographic design to understand how the pandemic impacted the daily lives of children and families in Gauteng. Data were collected between June 2020 and March 2021 through digital diaries and telephonic interviews. We found digital diaries particularly effective for capturing real-time data and receiving rich contextual information and insight into family life over an extended period (Grinter & Eldridge 2001). Digital diaries were used to capture data over a period of time, while the telephonic interviews captured data at one point in time. Similar questions were posed across both data collection methods.

Sample

Participants were recruited through existing social media networks, for example, through the researchers institutional Facebook page and through various community WhatsApp groups; these covered different regions in Gauteng. Forty-three individuals from 20 families agreed to participate in the digital diaries. These families comprised both parents and children under 18 years of age. Invitations were sent out a second time to increase participation numbers. To accommodate participants who would not commit to the longitudinal diary data collection, we invited participants to participate in once-off telephone interviews. As a result, an additional 21 adult participants joined the study. The total sample was 64 South African individuals: 16 children (11 girls and 5 boys) and 48 adults. Five of the children in the sample were in primary school, 10 in high school, and 1 in tertiary education.

All participants lived in Gauteng, and their socioeconomic status ranged from middle- to low-income. The majority of the participating families had access to electricity, piped water, and sanitation; most of the families resided in brick homes, and three families lived in informal housing. Two families did not have consistent access to electricity, and one did not have a flushing toilet. Just under one-third of the adult participants were unemployed; all parents had some form of education. The lowest level of parent education was Grade 8, the first year of high school.

Data collection

We used the smartphone application WhatsApp to send out questions to families participating in the study with digital diaries. This application was a viable option because it is widely accessible in South Africa. In order to limit the financial strain, mobile data was provided to participating families. Participants were asked to reply to prompts about their experiences. Prompts focused on daily household experiences, including childcare routines, homework, partner and parent relationships, psychological health and compliance with COVID-19 safety regulations. These prompts considered the different phases of lockdown and asked questions relevant to each. For example, the first prompt invited participants to make a short video or write a brief description about the family unit, who lives in the home and three things that the individual, and family, would spend time on before the lockdown was imposed. A later prompt, sent out approximately 6 weeks to 7 weeks later, asked what changes the family were experiencing and how family members were coping. The questions and language used were adjusted for prompts directed at children. Participants could send text or voice messages, videos, or images and there was no length or frequency limits to their responses. Younger children typically used their parents' device to respond, whereas adolescent participants, who had access to their own device, responded directly to the researchers.

Telephone interviews were conducted using a semi-structured interview schedule. This schedule was developed based on questions used in the diary prompts. Interviews were approximately 60 min long and were recorded with participants' permission.

Ethical considerations

Ethical clearance to conduct this study was obtained from the University of Johannesburg, Faculty of Humanities, Research Ethics Committee (No. REC-01-084-2020). Participation was voluntary, and informed consent was obtained from all adult participants and assent from all children. Permission to use the images shared and produced by participants was also obtained. Pseudonyms were assigned to each family to ensure anonymity.

Data analysis

All videos, voice notes and telephone interviews were transcribed verbatim, and together with the textual data and images, constituted the study's data set. It consisted of 278 texts and/or voice messages, 350 images and 45 videos, and the transcripts of the 21 telephone interviews. Data were managed using Atlas.ti (Kalpokas & Radivojevic 2022). All three of this article's authors reviewed transcripts independently. The data were analysed using inductive thematic analysis (Braun & Clarke 2019). According to Braun and Clarke (2019), this method of data analysis is reflective, recursive and rigorous. It involves a thorough immersion in the data, the creation of preliminary codes and later themes, and a review of the themes before they are finally defined and named (Braun & Clarke 2019). This article focuses on a limited scope of a larger study. As such, the following two questions guided our analysis for this article: (1) How did school closures impact children's access to education? (2) How did school closures impact children's and parents' psychosocial wellbeing?

Results

Intersecting challenges

We begin to outline our findings by showing how families experienced school closures. We specifically focus on how economic disparities, geographical location and socioeconomic status intersect to privilege some and disadvantage others. We then look at the impact of these factors on children and their parents.

For some families, access to education during the pandemic was determined by where they lived and the type of school the children attended. For children in private schools, and schools located in more-resourced areas, disruptions to learning were minimal even during the hard lockdown, and children adapted to online learning. However, access was severely limited at best for children residing in poorly-resourced areas. For example, the excerpt below from the Crocodile family shows that they did not report any financial hardship, and the children had no challenges with continuing their education:

> 'We haven't been affected negatively financially during the lockdown … I think I'm coming from a very privileged point of view. So, it's difficult for me to even say that it [*COVID-19*] has affected their education because they are in a private school for all intents and purposes. Their schools have adapted very easily in terms of moving to online schooling.' (Mother, Crocodile family, white person, aged 50, middle-income household)

Like the Crocodile family, a few other families in our study also noted that financial security meant access to better schools, which translated into uninterrupted education. In the quote below, we see how education continued for children attending private schools:

> 'My sister's kids attend X [*name of school*] … one would be having her classes in the morning and the other one in the afternoon- but it was a daily thing. They never stopped learning. It takes us back to the fact that when you pay, then, you get a good service.' (Mother, Dove family, black person, aged 39, low-income household)

Middle- to high-income families in South Africa tend to live in or near suburbs where their children can access more resourced and better-funded schools:

> 'My biological children have been learning from home from the beginning of the lockdown and had an advantage of both parents being teachers, and as their school is a private school, so they have been sending work through D6 platform and WhatsApp groups.' (Mother, Impala family, black person, aged 45, middle-income household)

A father from the Fox middle-income family also noted that his daughter's school could move to online learning and rotational school days resulting in no loss of learning time. He said:

> 'Their school is having classes differently, so there are some who are going to three days then attend online the next week two days and three days online, so it's alternative.' (Father, Fox family, black person, aged 38, middle-income household)

Limited access to electricity has become a common occurrence throughout South Africa; however, in some, less resourced areas, it remains a remnant of apartheid (Ledger 2021). In some of these areas, electricity was out for weeks at a time due to cable theft (Baker & Phillips 2019). Thus, while some efforts were made to ensure that children could continue learning through educational lessons broadcast on television and radio, this arrangement also proved difficult, if not impossible, for those without electricity. One mother speaks of this challenge and suggests that schools should have prepared learning packs to aid learning:

> 'I can say that it's a setback because there's no TV [*television*] playing. It's almost 3 months now without electricity, so it's not helping us in any way. So, if they could send us at least once or twice a week work that they can do, at least it would be better.' (Sibling, Ostrich family, black person, aged 33, low-income household)

For the Peacock family, interrupted power resulted in the child and parent having to live in different places. The child's mother remained in the township, which had prolonged periods with no electricity, while her daughter moved to stay with relatives in a better-resourced community:

> 'My daughter is also staying in Alberton for the sake of electricity so that she can be able to study because in Orange Farm we don't have electricity. Sometimes, we don't even have water.' (Mother, Peacock family, black person, aged 43, low-income household)

Pre-existing and current challenges during the time of the study meant that the more privileged families continued to have access to education, albeit in changed formats, while for those less privileged, the disadvantage was further deepened.

Research shows that online learning requires self-motivation, while for younger students, considerable parental involvement is needed (Alharthi 2022). Thus, parents' availability and education levels may impact the child's learning experience. Many South African parents may not have the adequate skills or education to support their children's learning from home (Nayir & Sari 2021). In our study, this absence was evident: parents' levels of education varied, with only a few holding graduate or postgraduate qualifications. One young person noted the difficulty in receiving support at home, saying:

> 'So, transitioning really becomes difficult because even at home itself, nobody really understands what you are doing, so it becomes difficult.' (Youth, Peacock family, black person, aged 17, female, university student)

Even when parents appeared willing to help children, their limited knowledge in some subject areas caused frustration for both parties. The youth from the Peacock family added:

> 'They do offer to help, but the problem is they do not understand. So, when you complain, they become frustrated. So, it was really pointless rather, to say the least.' (Youth, Peacock family, black person, aged 17, university student)

A parent from the Lion family concurred, noting that learning at home, without teacher support, was not feasible as children could not receive necessary help from their parents. She said:

> 'And most of the children that have been home schooled have returned to school have not done anything. So homeschooling was just a waste of time because parents do not have the skills or the necessary time to go through the work with the children.' (Mother, Lion family, black person, aged 31, low-income household)

Having no one to rely on for help with schoolwork left some children feeling alienated. When friends were also unable to help, the situation was even worse. One 18-year-old Grade 12 student commented:

> 'There was no one to help me. So, I was alone, and my friends do different subjects from mine. We couldn't help each other. I was really alone and my subjects are complex. I need someone to help me because they are not subjects you can understand when learning from home.' (Youth, Blue Crane family, black person, aged 18, female, Grade 12)

The historical exclusion of black people from education in South Africa continues to have an enduringly negative impact, as the constant intersection of the parents' social stratification, income, occupation, and area of residence amplifies inequalities in education.

Despite government efforts to promote racial diversity in all schools, schools in township and rural areas remain predominantly occupied by black children, and tend to be under-resourced (Gerard 2011; Kanyopa & Hlalele 2021).

Psychosocial impact

School closures during the COVID-19 lockdown, which necessitated emergency distance learning, affected children and their parents' wellbeing. For parents, it appeared to heighten stress levels, while children experienced feelings of boredom, loneliness and demotivation. Both parents and children expressed concern over the lost learning time due to the school closures. While the depth of impact depended on access to school resources and support, all parents felt the pressure of homeschooling children while managing work and worrying about health and finances.

Psychosocial impact of school closures on parents

Closures and temporary reopening of schools meant that some parents, particularly those from disadvantaged backgrounds, became increasingly concerned about their children's educational progress. Parents' emotions ranged from worry, to anger and guilt. One mother expressed her concern about her child's education, saying:

> 'As for school, I feel so bad for my daughter because it seems like she will never see school again up until next year. Imagine, it

> was her first year at school, doing Grade 1. But I pray to God that I may get time and be able to teach her so that when she goes back to school next year, at least she has learnt some phonics, vowels, writing, and a little bit of reading.' (Mother, Dove family, black person, aged 39, low-income household)

She felt angry at not being in a position to provide for her children, saying:

> 'I'm found screaming [*at the family*] for nothing at all. Most of the time I'm angry because of the lack in the house.' (Mother, Dove family, black person, aged 39, low-income household)

Interestingly, even children who could continue learning and had access to support from schools struggled to learn from home, away from peers and the school environment. Even though learning continued online for her children at home, this mother, a teacher at a private school from the Hadeda family, experienced her children's lack of motivation as difficult to manage:

> 'I was not able to manage the schoolwork at home even though I am a teacher and I have 14 in my class at a private school, and I can teach all three of my kids, but I did not manage the schoolwork at home. Their motivational levels were poor. They were not interested. They were demotivated.' (Mother, Hadeda family, mixed-race person, aged 49, middle-income household)

Consistent with global findings (Power 2020), mothers in our sample, regardless of location or socio economic status, appeared to shoulder the responsibility of care work. Mothers in our study also often complained about the expectations they carried in terms of caring for the family, which resulted in them being tired and stressed:

> 'I find it more difficult because everything is on me. And the children, when they are hungry, they won't go to their father, but they will come to me.' (Mother, Springbok family, black person, aged 35, low-income household)

The temporary cessation of the in-school nutrition programme during the hard lockdown meant increased financial difficulties for many parents who relied on the programme. Although government departments and non-governmental organisations attempted to alleviate food insecurity through food parcels, access to them was erratic, and the situation was particularly dire for some parents in our study:

> 'I cannot afford to buy the groceries I used to buy before the lockdown; my family is not living the life we lived before. This lockdown really affected me, I can't buy food, cosmetics, nothing because my situation is tight. Even my [*insurance*] policies have lapsed, none of them is active because I cannot afford to pay as I used to before.' (Mother, Blue Crane family, black person, aged 43, low-income household)

Psychosocial impact on children

Schools are essential for children's socialisation (Jukić & Kakuk 2019). It is therefore not surprising that school closures affected children's psychosocial wellbeing. This impact was more pronounced among those who could not access online distance learning and those children whose parents were struggling financially. In addition to missing friends and not being allowed to play outside, young people found themselves bored and forced to find other ways to keep busy. A youth in the study commented:

> 'This corona is annoying. And before it came, I was able to go to school. We were able to study well at [*anonymised name of school*], now it's just for me to read old books.' (Youth, Dove family, black person, aged 16, male, Grade 10)

Children were also concerned about their progress at school and their futures. One young person became quite emotional when she commented:

> 'And for me as a Grade 12 learner, I had to stay [*home*], I think, two months. So that meant that I was going to be behind with work, and that brought unnecessary anxiety because right now, I don't know if I am going to pass my Matric the way I wanted to pass it. So I feel like if I fail, I am going to be a failure, and my dreams are going to be put on hold because of this corona.' (Youth, Blue Crane family, black person, aged 18, female, Grade 12)

Even after schools reopened, students' high anxiety levels did not seem to subside; they still faced uncertainties navigating the changed classroom environment with new rules. These regulations included attending school rotationally, wearing masks, social distancing and regular hand sanitising:

> 'I was very stressed during the lockdown because I was uncertain about whether we will return to school or what because I was thinking that I need to finish school and then work to help my mom and things like that. So now, I didn't know what my future will be like, whether I am moving forward or backwards. So, I was really stressed because I was also worried about school – whether when we return, I will be able to catch up and be okay or focus, and things like that because now we are learning with masks on.' (Youth, Blue Crane family, black person, aged 18, female, Grade 12)

Another source of anxiety for children stemmed from an increased school workload. Teachers were under pressure to complete the academic year and therefore increased the workload for students. One young person expressed his frustration:

> 'Yeah, it has been a bit tough now that we are going back to school. The workload is a lot. We get homework in every subject, in every period. Every second day there is a test like we have like 3 tests tomorrow, so it has been a lot now that I am back in school.' (Youth, Jackal family, Indian person, aged 16, male, Grade 10)

Pre-existing structural inequalities worsened these educational inequalities, thus creating a negative experience of homeschooling and learning during the pandemic.

Discussion

The extended COVID-19 pandemic experience has had multiple and varied impacts in South Africa and globally.

Intersecting and pre-existing challenges ensured that for many, the pandemic raised not only health concerns. It also increased concerns related to food security, poverty, employment, exposure to violence and education. Public health and COVID-19 policy did not recognise this diverse experience of the impact of the pandemic (Dineen et al. 2022). School closures deemed essential to curb the spread of the virus and protect children created additional challenges. In their systematic review of school closures, Viner et al. (2020) cautioned that there was weak evidence to suggest that school closures are effective. Research has pointed out that school closures may have had several adverse consequences, including increased economic strain on parents due to loss of access to feeding programmes, loss of education, and increased child welfare issues, such as exposure to abuse and violence (Munir 2021; Spaull et al. 2021; Vermeulen, Alink & Van Berkel 2023). This evidence supports the findings in our study that similarly showed that school closures had differential impacts. Against a backdrop of continuing inequalities and intersecting challenges of poverty, the historical and generational impact of racial policies of apartheid, the gendered burden of care, socioeconomic factors, and spatial divides, we found that, for many children and their parents, the COVID-19 public health policies implemented by the South African government created adverse conditions.

Democratisation in South Africa sparked considerable reforms in educational policy in the mid-1990s, including curriculum revision and restructuring (Keswell 2010). However, evidence suggests that the quality of education has remained racially disparate (De Clercq 2020). As a result, most underprivileged children, namely black children in South Africa, start life at a disadvantage and may remain disadvantaged. Access to quality education guarantees that children from lower socioeconomic strata can advance through well-resourced schools, access better employment opportunities and break the cycle of poverty (Aunio et al. 2016; Kromydas 2017). However, the continued inequity in accessing quality education perpetuates inequality.

Findings from our study illustrated that for children living in better-resourced areas and attending private or better-equipped schools, learning continued, albeit in a different format. For children and parents living in financial and other resource-constrained environments, loss of learning was compounded by worries about household unemployment and food insecurity. The COVID-19 pandemic and the lockdowns had significant negative economic ramifications. Prior economic recessions have demonstrated that economic pressure can seriously endanger mental health even in the absence of social estrangements, such as endured during the lockdowns (Fegert et al. 2020).

Parents expressed anger and frustration about their inability to provide for their families, and their children's interrupted education. The DBE's provision of student support on national television was minimal, was directed at children in the higher grades and amounted to less than 5% of actual instruction time (Spaull & Van der Berg 2020). Participants in our study noted that frequent power outages meant they could not always access this support. In 2020 the country experienced a record high of 859 hours of load shedding (Council for Scientific and Industrial Research [CSIR] 2022). Researchers modelling learning losses in South Africa suggest that educational advancements gained in schools over the past 20 years may have been undone by COVID-19 lockdowns, and inequality in schooling may increase (Gustafsson & Nuga 2020). Similar modelling of learning losses over time in other sub-Saharan countries suggests that learning deficits for a child in Grade 3 could lead to 2.8 years of lost learning by Grade 10 (Angrist et al. 2021). These learning deficits will likely exacerbate poor educational outcomes for many and widen overall inequality in South Africa. The majority of learners in South Africa attend no-fee-paying schools. Research shows a gradual increase in learners attending no-fee-paying school, from 66.2% in 2016 to 70% in 2020 and 70.2% in 2021 (StatsSA 2021c). In 2020, the gap between bachelor passes produced by fee-paying and no-fee schools increased from 14% in 2014 to 24% in 2020 (Government Communication and Information System [GCIS] 2023). Reduced access to university-level education may have an impact on employment opportunities.

Participants from across the socioeconomic spectrum noted psychological challenges due to school closures arising from lockdowns. Our study found that parents were not always adequately equipped to support their children's education at home. Children needed time to acclimatise to a new way of learning, increased autonomy and self-responsibility and limited social interactions. Children shared feelings of loneliness and boredom, and parents spoke of their frustration at the increased burden of care. This finding is consistent with research conducted in South Africa (Van der Berg, Zuze & Bridgman 2020) and globally (Brooks et al. 2020; Fegert et al. 2020; Lee 2020) during the height of the COVID-19 pandemic. Tedja et al. (2023) noted a 55% increase in mental health referrals for young people in Australia, while Brookes et al. (2020) noted an increase in symptoms associated with depression, anxiety and post-traumatic disorder in the studies they reviewed. Similarly, in their scoping review, Jones, Mallon and Schnitzler (2023) found that adolescents' loss of social interaction and routine disruptions were critical concerns.

Fegert et al. (2020:8) noted that 'during the current pandemic, risk factors accumulate like under a burning glass'. This finding resonates with the experiences of many children in our study. Risk factors associated with school closures were compounded by food insecurity, parental unemployment and mental health concerns. For some children in our study and many children in South Africa (Soudien, Reddy & Harvey 2022), the closure of schools meant limited access to in-school meals, further intensifying financial stressors for families for whom the programme alleviates food insecurity.

Studies show a marked increase in hunger during this period in South Africa (Van der Berg et al. 2020). This situation is concerning as regular access to nutritious meals improves educational outcomes, and food insecurity is associated with low educational attainment and significant hazards to children's physical and mental health (Cohen & Kupferschmidt 2020; Schwartz & Rothbart 2019).

At the height of the pandemic, children's primary burden was associated with enforced isolation and increased economic and care burdens on their families. Post-pandemic economic struggles intensified, and the long-term effects of anxiety and stress were being played out in an increase in behavioural difficulties and an increased incidence of depression and anxiety-related disorders (Fegert et al. 2020). Despite evidence that emerged early on during the pandemic that questioned the efficacy of school closures, many countries persisted with this practice (El Jaouhari et al. 2021). A growing body of global research demonstrates the potential harms and long-term adverse impacts (Sultana, Bari & Munir 2022). Efforts at remediation at the child and family level are therefore crucial. Evidence supports the integration of mental health services into educational settings to ensure early identification and intervention (Richter 2022). In South Africa, there are existing mechanisms to support this strategy. For example, the Integrated School Health Policy (ISHP), introduced in October 2012, was established to offer such support services within schools. The ISHP emphasises the importance of integrating local health agencies, such as primary health care facilities, into school health services. However, research findings confirm that intersectoral and multidisciplinary collaboration between schools and other stakeholders, like mental health service providers, are limited (Ntshingila & Du Plessis-Faurie 2023; Rasesemola, Matshoge & Ramukumba 2019). Efforts at adequate implementation of the ISHP are likely to go a long way in supporting the mental health needs of children, families and teachers.

Angrist et al. (2021) note that while the impact of school closures is severe, many of the challenges existed prior to the pandemic. This post-pandemic period provides an opportunity to rethink how learning and education are structured. Ensuring equitable access to education is a necessity. In addition to the inclusion of remedial programmes targeted at children who have fallen behind, this approach also includes efforts at bridging the digital divide by providing devices to all learners and ensuring internet connectivity to ensure access to online learning resources. Investing in early childhood programmes further ensures better outcomes for all children (Patel et al. 2021). Given the worsening economic conditions, and the impact they have on parent mental health, continued efforts need to be directed at facilitating access to social and economic resources.

Limitations

A limitation encountered in conducting this research during the pandemic was our inability to meet with participants face-to-face. We were also mindful of the changing conditions (employment, rotational schooling, illness) experienced by our participants and had to supplement our weekly WhatsApp diary prompts with once-off telephone interviews. This addition meant that we could gather longitudinal data on some, but not all, participants. We also note that our recruitment strategies may have meant that only those who were interested in this research question joined and this leads to a non-representative sample. We were also mindful of the contexts in which we work and that the lack of digital access may have excluded those without regular internet access or devices. Our limited sample size and study population thus mean our findings cannot be generalised.

Conclusion

In our sample, as found globally, the most vulnerable people have been most impacted by school closures during the COVID-19 pandemic. In South Africa, this impact occurs alongside ongoing challenges. Most students in South Africa attend schools with limited resources, including limited access to water, electricity, toilets, and textbooks. Large classrooms (over 50 per class) are a norm in many schools, and psychological and social work services are limited or non-existent. This situation is compounded by fragmented services and poorly implemented policies (Patel et al. 2021) which have long-term effects on social and economic conditions and educational outcomes (Gustafsson & Nuga 2020). In light of this situation and worsening economic conditions, it is crucial to support children and families through a holistic approach; mental health support and education remediation efforts should be implemented alongside longer-term evidence-based interventions that focus on enabling all South African children to access equitable education.

Acknowledgements

We are deeply grateful to the participating children and families who so generously engaged with us during a challenging time. We would also like to thank Katherine Twamley, Humera Iqbal and Charlotte Faircloth for inviting us to be a part of the ICO-FACT research consortium and sharing their study vision. Many thanks to all members of the consortium for the stimulating discussions.

Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

S.H. directed the project; A.M. and T.M.S. collected and managed data. A.M. and T.M.S. analysed data. S.H., A.M., and T.M.S. reviewed data and themes. S.H. developed the theoretical framework. S.H. wrote the article. A.M. and T.M.S. contributed to the article.

Funding information

The authors received no financial support for the research and authorship of this article. The University of Johannesburg provided financial support for the publication of this article.

Data availability

The data that support the findings of this study are available on request from the corresponding author (S.H.). The data are not publicly available due to it possibly containing information that could compromise the privacy of research participants.

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