



Community of Practice for Social Systems Strengthening to Improve Child Well-being Outcomes

How well are our children faring?
An assessment of child well-being of early grade learners at selected Gauteng schools 2020 - 2021

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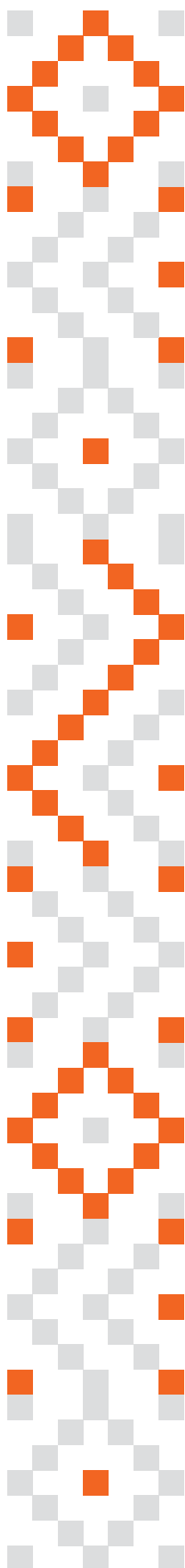


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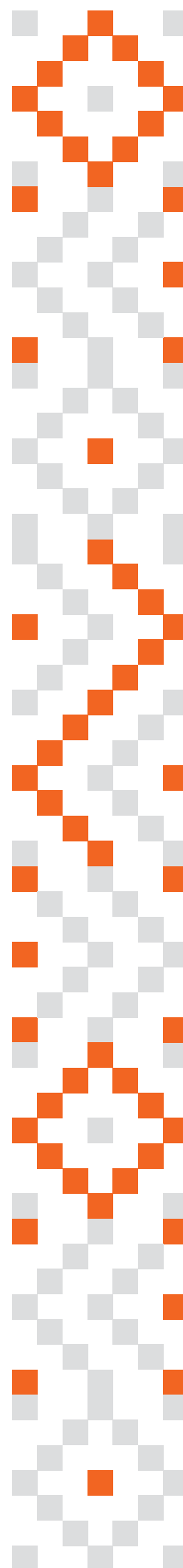
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Acronyms

ALCoP	– Advisory Level Community of Practice
CoJ	– City of Johannesburg
CoP	– Community of Practice
CSG	– Child Support Grant
CWTT	– Child Well-being Tracking Tool
CYRM	– Child and Youth Resilience Measure
DBE	– Department of Education
DSD	– Department of Social Development
GDE	– Gauteng Department of Education
DoH	– Department of Health
FAMSA	– Family Life Centre
ISHP	– Integrated School Health Programme
LLCoP	– Local Level Community of Practice
NSNP	– National School Nutritional Programme
SADAG	– South African Depression and Anxiety Group
SDQ	– Strength and Difficulties Questionnaire



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A study of this scope is only possible through a shared commitment to improving the lives of South African children. Partners in this project, worked collaboratively and with a sense of purpose to ensure that this innovative community of practice collaboration grew into a successful two-year project with multiple stakeholders.

From the onset, this project was met with enthusiasm and interest from academic partners, NGO partners as well as government departments, all similarly invested in ensuring better child well-being outcomes. All these stakeholders recognised the complexity of challenges facing children in South Africa, and the need for an integrated, multi-disciplinary approach. Prof Patel's early ideas of joining up services was shared with fellow South African Research Chairs (SARCHI), Prof Elizabeth Henning and Prof Jace Pillay. Both have considerable experience and expertise in the fields of education, learning and mental health. With their support, the CoP collaboration was born, and other key partners brought into the community. Prof Shane Norris, Prof Arnesh Telukdarie, Prof Lauren Graham and Dr Ntshingila, were early collaborators and were joined by Dr Ida Faurie-Du Plessis, Dr Wanga Zembe-Mkabile and the CSDA project team, including Tania Sani, Dr Sadiyya Haffeejee, Sonia Mbowa and Matshidiso Sello.

The project was scheduled to begin in 2020, but as with all well-laid plans, unforeseeable challenges arose. This time in the form of a global pandemic. This demanded adjustments from all members of the team, and the CoP project was no different. COVID-19 containment measures resulted in slight delays in accessing participants, this meant forming new inter-sectoral partnerships, and moving ahead without some partners. All in all, the Centre for Social Development's project team, and the CoP partners, met the challenges of this period with flexibility and ingenuity. Tania Sani, the project coordinator is to be commended for finding solutions to the problems COVID-19 presented.

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- Childline Gauteng
- MES, Johannesburg

Community Health Services

- University of Johannesburg Optometry Clinic
- University of the Witwatersrand Speech & Hearing Clinic

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Executive Summary

Child well-being for early grade learners aged 6-8 years is a national development priority and is integral to the achievement of the United Nations Agenda 2030 and the Sustainable Development Goals, such as eradicating extreme poverty, achieving zero hunger, quality health and education. These social challenges are significant risk factors associated with compromised physical, cognitive, material, and psychosocial well-being of children. The benefits of investing in the early years of childhood in these domains could be realised in an improved quality of life of children in later years. In South Africa, early grade learners are often exposed to poverty, poor living conditions, limited access to resources, violence, abuse, and neglect. These conditions are compounded by uncoordinated, fragmented, and inadequate service provision which increases exposure to risks, leading to negative outcomes. Increasing innovative evidence-based solutions that integrate services across these key sectors at home, at school and in the community, are necessary to ensure that children receive the care, support, and services they need to learn and thrive.

A Community of Practice (CoP) to strengthen social systems to improve child well-being outcomes was initiated and implemented in 2020 and 2021. The CoP brought together a community of practice that included teachers, nurses, social workers, and educational psychologists to conduct multi-level developmental assessments of 162 children over two waves in 2020 and 2021 respectively. The schools were purposively selected and all the children in grades R and grade 1 were eligible to participate in the study. All were beneficiaries of the Child Support Grant (CSG), the country's flagship programme, reaching 80% of poor children in Grade R and Grade 1. The same children were assessed a year later when they were in grades 1 and 2 respectively. The findings of the assessments are contained in this research report and are for the matched sample of 140 children only. The assessments were conducted in five public schools located in disadvantaged and poor communities in the City of Johannesburg, South Africa. The CoP aimed to address among others, issues of hunger, material deprivation, parental engagement in learning, psychosocial well-being, caregiver mental health and child health while also improving learning outcomes in mathematics and language competencies to disrupt the cycles of disadvantage for this age group. The CoP tested and implemented an innovative digital tool to assess children in the above domains. This resulted in a risk assessment of the children who were classified into low, medium and high-risk categories and individually tailored interventions were provided to them and their families over a nine-month period.

The key findings are summarised here.

Economic or material risks

- Improvements in key well-being indicators by year two suggest a stabilisation of their family circumstances.
- The most significant stressors experienced were of an economic nature which was due to the COVID-19 pandemic and the resultant lockdown of the economy. Loss of a job (16%), not having enough money to buy food (13%) and an inability to seek work (12%) were the top three stressors of a material nature that affected the families with young children in the study.
- Economic risks declined by 7% over the two waves, but half of the children continued to live in families that experienced significant income constraints in Wave 2, including high rates of indebtedness as savings were expended following the first lockdown. These adverse economic conditions were mitigated by top ups of the CSG and the Relief of Social Distress Grant (SRD). By Wave 2 more participants accessed part-time work, and informal work coupled with a 10% decline in reported unemployment levels.
- A significant proportion of caregivers reported having access to social and material support from extended family, their social networks, and possibly, social services. In Wave 1, around 67% of participants did not have access to support while the situation was almost reversed at Wave 2 when 64% reported now having support.
- Access to school feeding improved marginally during this period as schools were not fully operational.

Protection and care

- There was a deterioration in the protection and care domain by Wave 2. This was driven by an increase in children's exposure to violence and verbal abuse in the home or the community.
- Harsh methods of discipline by parents and or caregivers such as hitting, pinching, or shouting at the child continued in Wave 2 for 55% of the respondents. There was also a decrease in adult engagement in bonding behaviour, such as spending time with the child or reading to them. More positively, talking to the child was widely used as a form of discipline by three out of ten caregivers.
- Worries about child safety during the pandemic seemed to have abated by Wave 2 as the situation began to normalise.
- Caregiver depression scores decreased from 49.4% in Wave 1 to 36% in Wave 2. The high rates of depression among caregivers of children remains a significant risk factor in promoting children's growth and development.

Child health

- Although there were small but positive changes in the number of children who were at high risk at Wave 2 (7%), those who experienced low (72.6%) and moderate (27%) health risks remained largely unchanged.
- At Wave 2, more children were identified with having difficulties with hearing and seeing with a marked reduction in their engagement in physical activities such as in sport and in cultural activities.
- There was a decrease of 6% of children who had incomplete vaccinations by Wave 2. Despite this positive change due to a concerted drive by the intervention team, 27% of children still had incomplete vaccinations.

Food security

- A positive finding was that child hunger declined from 10.4% in Wave 1 to zero hunger by Wave 2. The small improvements in the material situation of the families with increased access to feeding at school and additional food relief facilitated by the social workers in the intervention team, together with receipt of social grants, appeared to have helped.
- Although food access improved with 9% of children eating three meals per day, three out of ten children did not have enough food at every meal; 15% did not eat vegetables at least twice a week; and 10% did not have sufficient intake of protein. Sufficiency of food intake and the quality of food consumed remained a significant challenge for close to a third of the children.
- The malnutrition indicators showed no changes in stunting levels (13%) and minimal changes in wasting. More children were overweight by Wave 2, an increase of (6%) which may be due to the poor quality of the food consumed and possibly due to reduced physical activity reported above (e.g. sport and cultural activities).

Education

- Teachers reported no changes in school attendance (89.9%) and in the child's progress over the two waves (81%).
- Teachers reported concerns about fewer children doing homework as required, children not having the correct school attire and school supplies, and a decline in the level of children's participation in class.
- Parents/caregiver responses to the above questions provided a more positive picture compared to that of the teachers.
- Parents/caregivers reported that fears about attending school abated and was down from 33.6% in Wave 1 to 8.6% in Wave 2.
- Independent assessments by researchers of mathematics and language competencies showed 57% of the children were able to decode most of the letter sounds, however, the sub-task (letter sound) on the EGRA is flawed because it does not address all the isiZulu phonemes. Many of the children struggled with word recognition and passage reading.
- Learning assessments by education psychologists of at risk children found that the main domain challenge coming from the assessments were poor basic literacy and numeracy skills.

Psychosocial well-being

- A 10% reduction in vulnerability to psychosocial risk from Waves 1 to 2 was observed. Exceptional resilience scores almost doubled rising from 40.2% in Wave 1 to 70% in Wave 2. This suggests that their coping capacities improved as they adapted to changing circumstances during the pandemic. The children also reported increased reliance on peers which aided their resilience.
- There was however a 7% increase in children who were on the borderline in the Strengths and Difficulties Questionnaire.

The findings provide pointers for multi-sectoral interventions at family and community levels and for social protection policies such as social grants, food relief, health, education, and social work interventions to step up well-being outcomes for children in disadvantaged communities using the school-family and community as the nexus for social interventions. Investments in meeting the needs of the children holistically remains an important priority for government and other partners.

The CoP study draws attention to the important role of monitoring how children are faring in the early grades to guide not only remedial interventions, but also to devise early interventions that are preventive and promotive of their well-being. If left unattended, these difficulties can be long-lasting and can have a cascading effect over the life course.

With the aid of new technologies and digital tools to engage all role players involved in the child's life, new understandings of their strengths and challenges were generated and practical solutions were found. Some of the practical interventions coordinated by social workers who worked with teachers and families appeared to make a difference. Examples include strengthening family networks of support, home visiting, providing education and information on parenting, supervision of children and alternative forms of discipline, accessing supplementary food relief, providing a referral of a caregiver with depression to a relevant community service, or to assist with getting an eye or a hearing test.

Children with suspected learning difficulties received educational assessments and teachers who struggled with early grade teaching of mathematics and literacy were empowered with further teacher support interventions. Community education messaging via community radio on care practices had an audience reach of up to 250 000 people. The CoP also demonstrates the importance of making holistic and customised investments in the early grades to disrupt cycles of systemic disadvantage and improve social outcomes for South Africa's children in the short and long-term.

While new and existing policies are in place to support early grade learners, the gap between intention and actual implementation is large. Some of the challenges are the under-resourcing of school level services such as too few education psychologists to do learning assessments, inadequate school level integrated health services, uneven cooperation between local authority primary health care services and schools, and a lack of a focus on school and community level social work services.

The study findings also show that a community of practice approach focused on child well-being outcomes is a worthy endeavour, one which is already provided for in education policies in South Africa. Other recommendations emerging from the study are:

- There is need for fast tracking of school feeding to reach the scale achieved before the pandemic.
- Continued provision of material support in the form of social assistance for children and caregivers.
- Combining social assistance with the provision of social and care services to support and strengthen families in their care giving roles is needed.
- Concerted drive to provide support to caregivers with mental health challenges is also proposed.
- Improvements in the provision and coordination of integrated school health services and educational psychological interventions for children with learning and psychosocial difficulties are required.
- Finally, support to teachers in strengthening children's number, reading and vocabulary competencies in the early grades could improve learning outcomes in the longer term.

Introduction

In South Africa significant advances have been made in the formal recognition of the rights of children and in the adoption of wide-ranging social policies and legislation to promote their well-being. Improvements have been noted in some domains such as school enrolment, hunger and material well-being since the late 1990s. These positive changes may be attributed to the expansion of children's rights, high rates of enrolment in primary school, access to primary health care, and the country's extensive cash transfer programme, the Child Support Grant (CSG), which reaches two thirds of all children. However, high rates of child poverty persist, this coupled with food insecurity, poor education, health and nutrition outcomes, inadequate access to basic and social services, poor caregiver mental health, and exposure to adverse familial and community environments compromise children's growth and development in the short and the long run (Patel et al., 2017; Richter et al., 2018; Spaull et al, 2021; STATSSA, 2021; Whitten & Lake, 2020).

Exposure to adversity in the early years has a cascading effect and is cyclical, influencing individual health over the life course as well as educational attainments, employment opportunities and the health and well-being of future generations (Norris et al, 2020). Research shows that children who grow up in families where caregivers are unemployed, and are exposed to poverty and food insecurity, have poorer developmental, educational and employment outcomes themselves (Gregg et al., 2017; Sarriera et al 2014). Similarly, low socio-economic status, and inadequate early life nutrition is correlated with poorer health outcomes and higher mortality rates (Arpey et al, 2017; Kabudula et al., 2017; Norris et al. 2020; Wang & Geng, 2019). Poor health in the early years has in turn been linked with later learning difficulties and educational failure, increased chances of unemployment and poor overall productivity (Henning & Ragpot, 2015). Food insecurity is also associated with notable increases in behavioural problems of children and maternal depression (Black, 2012; Jyoti, Frongillo & Jones, 2005; Patel et al., 2017; Whittaker, Phillips & Orzol, 2006). The conditions in which children live impact on their mental health, determining prevalence and severity of mental health disorders (Lund et al., 2022).

To address the multiple threats to child well-being, which is a multi-dimensional concept, a purposeful, multisectoral approach that targets the whole child and that integrates interventions across different social sectors is needed (Clark et al, 2020 WHO, UNICEF and World Bank; 2018). Multidimensional, longitudinal data on the quality of life of children provides avenues for research on children's rights and their implementation, which may result in sustainable improvements in the life situation of all children in all life domains, including the family, school, and broader community (Andresen & Ben-Arieh, 2016).

In this report, we share findings from a Community of Practice (hereafter referred to as CoP), an intervention study, that attends to recommendations in the child well-being literature and is centred on the assumption that timely, relevant information on all aspects of child well-being may inform integrated interventions across education, health, social work, and care services; all of which are needed to ensure better outcomes for children.

Through the CoP, key role-players, involved in supporting children's development in their family and community context, across sectors and disciplines were brought together to develop a Child Well-being Tracking Tool (CWTT) that assessed how children in the early years (grade R to grades 2), at five schools in Gauteng are doing. All the schools are public schools, three of which are in the poorest areas of the City of Johannesburg and are no fee-paying schools while the fourth school was a fee-paying school located in a poor and deteriorating area on the eastern side of the city. The research was conducted during the COVID-19 pandemic over two separate waves in 2020 and 2021 respectively. The aim of the CoP study was to first assess the quality of life of a sample of children (n=140), and second, to explore what complementary interventions are appropriate to step up child well-being outcomes. Third, to determine how these interventions could be delivered across the health, education and social welfare sectors, and lastly, to ascertain if the CoP approach is a viable way of achieving social sector systems strengthening to improve child well-being in urban communities. In this research report we share findings only on how children are faring across two time points.

A Focus on Child Well-being

Globally there is a growing interest in children's quality of life, life satisfaction, and their subjective well-being (Savahl et al, 2014). Research on children has to date focused on their physical survival and how best to meet their basic needs; as such, attention was paid to child mortality rates, school attendance and dropout, immunisations, and childhood disease. While these continue to be important indicators, especially in developing country contexts, emerging research is now focused on the quality of the child's life in addition to ensuring basic minimums and survival (Ben-Arieh, 2019). Child well-being is thus no longer understood only as an absence of risk factors, but also includes the presence of promotive or protective factors.

Child well-being refers to the quality of a child's life, how well the child is faring and how his/her life is going and may include both the child's current situation and their prospects for future development (Alliance, 2019; Patel et al., 2021). Child well-being is thus made up of factors at the individual, family, community, and societal levels, and may be defined as:

A dynamic, subjective and objective state of physical, cognitive, emotional, spiritual and social health in which children are safe from abuse, neglect, exploitation and violence; meet their basic needs, including survival and development; are connected to and cared for by primary caregivers; have the opportunity for supportive relationships with relatives, peers, teachers, community members and society at large; and have the opportunity and elements required to exercise their agency based on their emerging capacities. (Alliance, 2019, pg. 22)

This holistic definition recognises that child well-being is not static and considers both objective and subjective measures of well-being, while acknowledging the importance of the systems surrounding the child. Pollard and Rosenberg (2003) proposed a similar systemic and holistic approach to well-being, acknowledging the impact of contextual factors, like culture and social relationships, as well as internal and environmental characteristics (Patel et al 2017; Savahl, et al, 2015).

This understanding that child well-being is deeply embedded in the environments in which they live, resonates with social development's pro-poor and a multi-sectoral approach to child well-being (Patel, 2015). Income poverty is recognised as a significant risk factor that compromises child and family well-being. However, a narrow focus on income only misses other aspects that are central to improved well-being outcomes. We therefore complement our analysis with insights from the socio-ecological model of child well-being, which frames our work.

We take child development to be a multi-level, multi-systemic framework which situates the child and his/her family at the centre of multiple and intersecting systems, recognising the bidirectional influences between children, their contexts (including home and family life, and neighbourhood, school, and peers), and their well-being (Ben-Arieh, 2010; Bronfenbrenner, 1989; Ungar, 2020). A socio-ecological framework reinforces policy and planning that identifies individual, household, community, and other distal levels of intervention; and allows for a more systematic and clear analysis of the key role-players and service providers involved in addressing child well-being (Bruckhauf & Cook, 2017).

It is well established that progress or shortfalls in one developmental period is influenced by challenges experienced in previous periods. At the same time, gains made in one period may be lost if the child receives little or no support in the next period (Patel et al., 2017; WHO and UNICEF, 2020). Based on this, a life course approach that conceptualises programming along a continuum of care, is also well aligned with our study.

The role that families, schools and communities play are important determinants in improving child well-being outcomes. Our focus in this study is on children in the foundation years of schooling as this period is often overlooked but is central to better outcomes in the longer term. We take children's well-being to be integrally connected to the well-being of their caregivers and families, their access to resources, and the community environments within which they reside. Thus, a multi-sectoral approach is adopted to understand the risks and challenges children and their families face to guide holistic interventions that intersect with child, family, schools and the wider social environment.

Well-being Indicators

Measuring and assessing the well-being of children is necessary to enable us to understand how children are faring. The indicators used to assess well-being may include the child's health and nutrition, education, socio-economic status, poverty levels, food access and hunger, family or community life, developmental context, service access, and safety and security concerns (Bray and Dawes, 2007; Patel et al., 2019; Patel and Ross, 2020). Indicators may be objective (for example, using validated assessment tools relating to education, poverty, morbidity, and psychosocial assessments) or subjective (expressed from the child's or caregiver's point of view).

In the CoP we identified six interconnected domains for child well-being. These are, good health, optimum nutrition, protection and care, access to material and economic resources, education and learning and psychosocial health (See Figure 1 below).



Figure 1: Child Well-Being Domains

Within each of these domains, the requirements for children to achieve well-being are set out. These domains are aligned with the domains identified by the child participants in a study on subjective child well-being by Savahl et al (2015) and aligned with child well-being domains identified in the South African and international literature.

Methodology

To assess how children in the early years are faring, children were tracked over two waves, first between October to December 2020, and over the same period in 2021. The CoP, made up of an interdisciplinary, multi-sectoral team, developed the Child Well-being Tracking Tool (CWTT) to assess how children are faring across the key domains described above, and to develop, based on findings, appropriate interventions for children at risk, and to assess the effectiveness of these through a follow-up assessment. Figure 2 below provides a comprehensive overview of the research process and methods used in this study, including establishment of the Advisory Level CoP, development of the CWTT, recruitment of participants, Wave 1 assessment, interventions directed at children at risk, and the establishment of Local Level CoPs at five schools in Johannesburg, and a follow-up Wave 2 assessment. Findings from the baseline assessment have been reported previously and may be found [here](#). Following the base line assessment in Wave one, the children were classified as experiencing low, medium and high risk of compromised well-being. Social work and health interventions were offered to high-risk children and families, and those with learning difficulties were assessed by education psychologists. A brief description of the range of interventions implemented is described in Box 1 (on page 26), and detailed information regarding the interventions may be found [here](#). A year later, the same children were assessed to determine how they were faring. This report provides the findings over the two waves, thus tracking changes in the lives of children and their families.

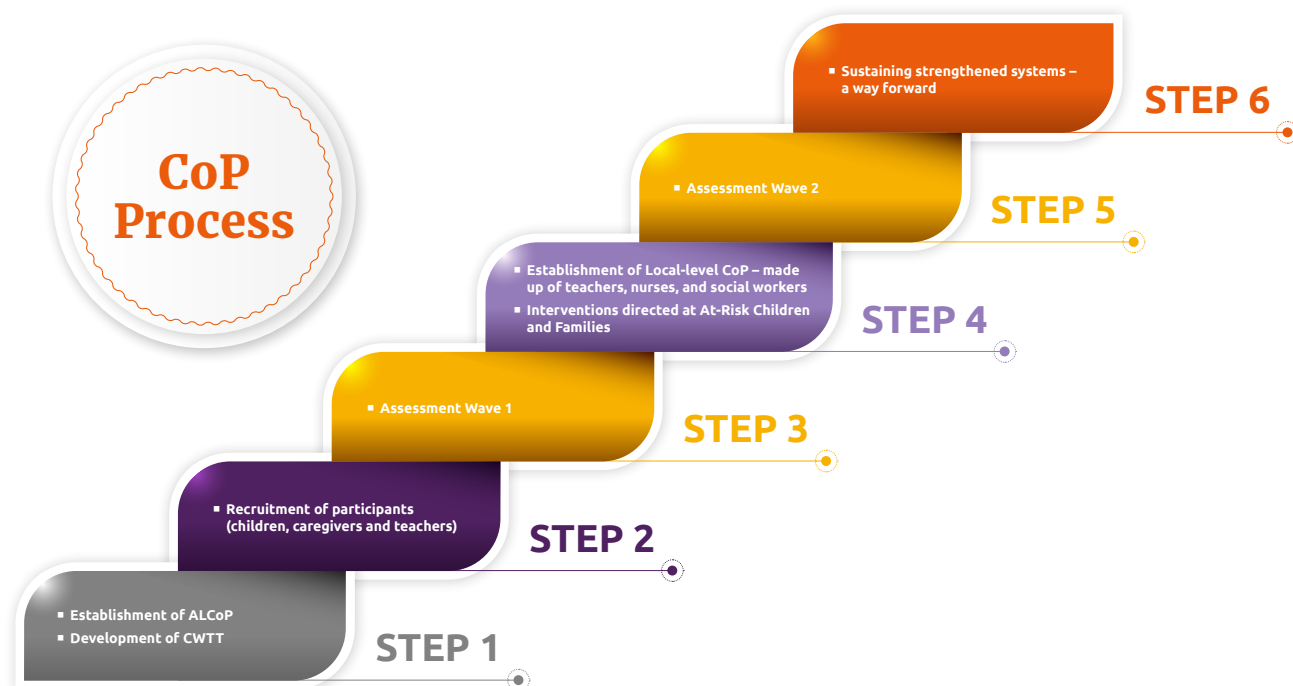


Figure 2: CoP Process

The Child Well-being Tracking Tool

The digital Child Well-being Tracking Tool (CWTT) was developed by academic collaborators and colleagues at UJ's Engineering Department in consultation with practitioners in the respective communities. The tool assessed how children were faring in learning, health, nutrition and growth, resilience and psychosocial well-being. In addition, it also assessed how the sampled children's caregivers were faring in relation to their family and social functioning, child-caregiver relations, behavioural management of children, and involvement in the child's education. The caregivers' mental well-being and coping during COVID-19 was also assessed. The Centre for Epidemiological Studies' Depression Scale (CES-D-10), shown to be valid for the South African population (Baron, Davies, & Lund, 2017) was used to assess depressive symptomology.

In the CWTT, poverty was measured by assessing household financial security, disposable income (ability of caregivers to save), levels of indebtedness and material deprivation (access to basic resources). To assess children's health and nutritional intake, we attempted to establish children and families' access to different types of food as well as food quantity. We also assessed the levels of physical activity of the child and obtained anthropometric data of the child's weight and height. This assessment was carried out in accordance with the World Health Organization's child malnutrition indicators (WHO, 2008). In assessing child health, we also examined the child's Road to Health card, noting immunisations and growth. Information regarding immunisation is necessary, with timely immunisations preventing illness, disability, and death from vaccine-preventable diseases.

Educational progress was assessed with two standardised instruments and one custom-designed picture vocabulary tool, measuring aspects from the Grade 1 curriculum, namely reading, numeracy and vocabulary. To assess early number concept development, the MARKO-D SA test was used, The Early Grades Reading Assessment (EGRA) was used to assess children's first steps into literacy, and The Meerkat Maths Language Test (MMLT) was selected to assess vocabulary knowledge required for early mathematics learning. Additional information on these measures and the assessment may be found [here](#). Psychosocial development and well-being were further assessed using two standardised psychometric measures, that is, the Child and Youth Resilience Measure (CYRM) (Ungar & Liebenberg, Assessing Resilience Across Cultures Using Mixed Methods: Construction of the Child and Youth Resilience Measure, 2011) and the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997).

Table 1 below describes the domains, indicators, requirements, and the measures included in the CWTT. For each domain a set of questions were asked, with response options of yes, no or sometimes.

	Domains	Indicators	Requirements	Measurements included
1	<ul style="list-style-type: none"> Good health 	<ul style="list-style-type: none"> Morbidity Inoculation Obesity/Stunting Exercise and activity Accessing health services 	<ul style="list-style-type: none"> Having the highest attainable physical and mental health, access to highest standard healthcare 	<ul style="list-style-type: none"> History of illness/hospitalisations/inoculations Anthropometric measures Ability to hear/see and talk Participation in sporting and other physical activities Access to available services
2	<ul style="list-style-type: none"> Optimal nutrition and food intake 	<ul style="list-style-type: none"> Food security Quality of food Quantity of food 	<ul style="list-style-type: none"> Access to nutritious, healthy food daily 	<ul style="list-style-type: none"> Availability and access to food Nutritional quality of available food
3	<ul style="list-style-type: none"> Economic and material access 	<ul style="list-style-type: none"> Access to financial resources Indebtedness Ability to save Household living conditions Access to basic services 	<ul style="list-style-type: none"> Access to material and economic resources Freedom from poverty 	<ul style="list-style-type: none"> Sources of household income Access to money to purchase necessary items Ability to save Ability to pay off debts Access to basic services (electricity and water) Safe, secure and comfortable physical home
4	<ul style="list-style-type: none"> Education and learning Achieving at school 	<ul style="list-style-type: none"> School Attendance Progression Mathematics and language competency Caregiver involvement 	<ul style="list-style-type: none"> Quality education, guided and supported in learning, ability to learn in a safe, enabling environment 	<ul style="list-style-type: none"> Regular attendance at school Academic progression Ability to do homework Support in doing homework Access to resources Fear related to going to school Involvement of parents in school
5	<ul style="list-style-type: none"> Protection and care Being safe and nurtured 	<ul style="list-style-type: none"> Family relationships Presence of supportive others Exposure to violence/conflict 	<ul style="list-style-type: none"> Protected from harm and abuse in the home, and community, access to responsive, nurturing caregiving and family relationships. 	<ul style="list-style-type: none"> Caregiver awareness of child's whereabouts Presence of supportive, caring adults Concerns regarding child safety Exposure or witness to violence/conflict Victim of abuse/violence Disciplinary methods

6	<ul style="list-style-type: none"> ■ Psychosocial health 	<ul style="list-style-type: none"> ■ Behaviour at home and in the classroom ■ Coping ■ Self-regulation ■ Problem solving ■ Depression ■ Anxiety ■ Resilience ■ Strength and difficulties ■ Caregiver mental health 	<ul style="list-style-type: none"> ■ Guided and supported in the development of skills needed to build self-esteem, self-regulate and problem solve, ■ Access to psychosocial resources 	<ul style="list-style-type: none"> ■ Ability to problem solve ■ Ability to make friends ■ Ability to regulate behaviour ■ Ability to focus and pay attention when needed ■ Symptoms of depression and/or anxiety ■ Child and Youth Resilience Measure ■ Strength and Difficulties Questionnaire ■ CES-D10 – Depression Scale
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Table 1: Description of CWTT Domains and Measures

A manual paper-based version of the CWTT and a digital application version were developed. The digital application was developed by collaborating partners in the Engineering Management Department at the University of Johannesburg. Fieldworkers were trained on the use of both versions of the tool.

The training manual and the CWTT was piloted with parents of children in Grade R from various Early Childhood Development (ECD) Centres in Orange Farm. Following the pilot, no changes were made to the questionnaire in Wave 1. Slight modifications were made to the digital version of the CWTT before Wave 2 assessments were conducted. Modifications included the addition of a geofencing functionality; Likert scale response options; a slider system (to ensure ranges could be controlled for), and the summary and edit screen was amended to allow field workers to edit responses captured in error; and a feature linking surveys to the Master survey was included to ensure that we could accurately follow up with individual children where necessary.

Research Sample

Through convenience sampling, five schools were selected from areas defined as critically poor by the City of Johannesburg. Four of the five schools are no-fee paying schools. The primary sample of the study at the Wave 1 assessment was 162 children who were in Grade R and Grade 1 in 2020. At Wave 2, in 2021, the children assessed were now in Grade 1 and 2. Due to attrition at Wave 2, fifteen new children were included to replace the sample. Of the 15 children, nine children were replacements of the children who had out-migrated from the schools, and the remaining six were the replacements of the sample that were lost to follow up. To sample the replacement children, a three-stage cluster sampling was applied. First, the replacement was done based on the school where children out-migrated or were lost to follow up. Secondly, the class from which a child was drawn from was randomly selected. Thirdly, a random selection of the child was based on the age and sex of the previous child in our sample. More details on how the initial study sample was drawn can be obtained from our Wave 1 research report¹. The study sample is described in Table 2 below.

	Wave 1	Wave 2
Child sample size from Wave 1	162	140
New children in Wave 2		15
Sample out-migrated but followed up		9
Loss to follow up		13
Total number of children who left sample		22
Attrition		14%
Remaining sample for each Wave	162	155

Table 2: Study Sample

¹ https://communitiesforchildwell-being.org/wp-content/uploads/2022/03/CSDA_-_CoP_-_Research-Report_-_A4_-_Oct-2021_-_edit-FINAL.pdf

Data Collection

The digital CWTT was used to collect data from the caregivers, the child's teacher, and the children themselves. The children and caregivers were interviewed by a social worker and a nursing preceptor; teachers completed the questionnaires themselves. With caregiver consent, nursing preceptors conducted a physical examination of children and collected anthropometric data. The child's teacher was asked to assess and report on the child's competence, progress and psychosocial behaviour in class.

Data Analysis

Data from Wave 1 and Wave 2 were merged and reshaped from wide to long format to do the analysis. The focus of this analysis is on describing the dynamics associated with child well-being outcomes. To retain the focus of this study, the analysis was restricted to the balanced panel of 140 children – which is inclusive of all children who have complete interview data for both Waves². Furthermore, transition matrices cross-tabulations were used to measure the transitions among selected variables to see how they affect the child well-being outcomes. Thereafter the data were cleaned by running frequency distributions and deleting erroneous responses. The STATA 16 Statistical Software was used for the analyses.

At Wave 2, revisions were also made on how the CES-D 10, SDQs and the CYRM scores were calculated. In Wave 1, the Strengths and Difficulties Questionnaire (SDQ) was coded as a self-report measure rather than as per the parent/caregiver-scoring in the manual. In Wave 2, we amended this by re-coding the data and scoring the items pro-rata as per scale instructions and then coding the scores as the parental/caregiver report³. Similarly, with the CYRM and CES-D 10, adjustments were made in line with the scoring manual, and data from Wave 1 was re-coded for comparative purposes.

Overview of Interventions Implemented with At-risk Children and their Families

Findings from the baseline assessment allowed us to identify vulnerable children and their families. Together with the ALCoP and LLCoP's at each of the schools, we developed a suite of specific interventions; these were implemented by collaborating partners. Here we share a summary of the interventions, for a full review refer to the full intervention report, which can be accessed [here](#).

Interventions at Child and Family Level:

- *Children and families at risk of hunger*
 - ◆ Identification of food insecure children and families.
 - ◆ Community mapping of food programmes and knowledge sharing with social workers and families.
 - ◆ Facilitating access to existing community food relief programmes by community based social workers.
 - ◆ Ensuring children in need accessed the in-school NSNP during school time and on the days when not at school.
- *Children's health*
 - ◆ Provision of health education and coordination with local clinics to ensure that all children in the samples (and within the school) were brought up-to-date with vaccinations.
 - ◆ Enabling access to existing services. In this case, the University of Johannesburg's Optometry clinic and the University of the Witwatersrand's Audiology clinic conducted on-site eyesight and hearing/speech screenings of CoP and some non-CoP children at CoP schools.
- *Assessment of educational and psychosocial well-being of children at risk*
 - ◆ Assessment of children in need of a full psycho-educational learning assessment by qualified educational psychologists. In each school, 6 children were assessed with caregiver permission and an individual intervention plan was developed and shared with caregivers.
 - ◆ A total of 30 children with learning difficulties were assessed by educational psychologists.
 - ◆ Case management by social workers for each of the children assessed, this involved feedback sessions with caregivers, educational psychologists, and teachers to better support the child.
 - ◆ More details on the Math and language teacher intervention can be found [here](#).

² The sample includes children for whom we have responses, for the individual children, caregiver, teacher and health care interviews data for Wave 1 and Wave 2.

³ [https://www.sdqinfo.org/py/sdqinfo/b3.py?language=Englishqz\(UK\)](https://www.sdqinfo.org/py/sdqinfo/b3.py?language=Englishqz(UK))
https://depts.washington.edu/dbpeds/Screening%20Tools/Strengths_and_Difficulties_Questionnaire.pdf

- *On-going support and monitoring of at-risk children and families*
 - ◆ On-going support and monitoring of children at risk by social workers, working in collaboration with foundation phase teachers and Heads of Department at schools.
 - ◆ Regular contact with and support of families in need by the social worker.
 - ◆ Where required, social workers linked caregivers and children to specialist community support services e.g. GBV and child abuse counselling and monitored their progress.
- *Parenting intervention for families at risk*
 - ◆ Identification of families (5 in each area) in need of additional support based on pre-set criteria.
 - ◆ Invitation to participate in the Sihleng'imizi Family Strengthening Programme. More about the programme and the manual can be found at <https://communitiesforchildwell-being.org/>
- *Referral of caregivers with depression to telephone counselling services*
 - ◆ Caregivers who indicated high levels of depression in Wave 1, were contacted telephonically by a social worker, and if willing, were referred to the South African Depression and Anxiety Group (SADAG) for further support and counselling.

Intervention at School Level

- Establishment of Local level CoPs (LLCoP) at each participating school, included foundation phase teachers, CoP social worker and outside stakeholders e.g. nursing/health workers from the nearby clinics; local NGO community workers/ social workers; educational psychologists who assessed the children for learning difficulties as well as school governing body representatives. The purpose of this LLCoP was to support children and families in need, learn about how to make appropriate referrals to service providers and manage risk.
 - ◆ LLCoP members met 5 times between April 2021 and December 2021 (extended due to COVID-19 lockdown) to discuss progress and follow up.
- Provision of training by ALCoP Early Childhood Education partners to teachers at each school, to provide them with the skills and material resources to improve learning support and numeracy and literacy outcomes.

Community Level Intervention: Community Radio Campaign

- Family strengthening programmes aimed at community. This was facilitated through a community radio programme initiated in two of the five communities where the schools are based. Programme focused on: (a) promoting parental involvement in children's schooling; (b) nutrition and healthy food practices; (c) tips for caregivers to manage stress and difficult behaviours in children; and (d) money matters.
- Dissemination of information on multiple platforms and with key stakeholders in health, education, and welfare.
- Additional information on the Sihleng'imizi Family Strengthening radio campaign and the intervention report can be found [here](#).

Box 1: Overview of Interventions Implemented with At-Risk Children and their Families

Reliability and Validity

The reliability and validity of the Child Well-being Tracking Tool was enhanced through different efforts during the design and testing of the tool. The tool was designed by experts and partners in the advisory board from various fields (social welfare, social work, psychosocial health, education, maths and language, and health and nutrition). In some cases, standardised questionnaires were used, such as the CES-D10 scale, the CYRM, and the SDQ scales. In Wave 1, the tool was piloted to enable the research team's understanding of how the questionnaire was received by children, caregivers, and teachers. From then, lessons learned were implemented in Wave 2, where rigorous testing and training of the field team was conducted. The CWTT tool allows for real-time data submission. This functionality allowed for the control and monitoring of the data in real-time and an improvement in the quality of data collected.

Limitations

Despite the advantages of using quantitative and panel data methods, there are some disadvantages. These include the loss to follow up on the study sample (attrition) and non-response to some questions. This affects the comparability of data. We attempted to resolve the problem of attrition by replacing the missing sample. This does however present comparative challenges across the two waves of data collection.

We also noted that in 23.4% of the matched sample, the caregiver who responded was different. This is reflective of the South African household where typically children live in families where kin also assume a caregiving role. This could have impacted on information shared. In view of the sensitive nature of the questions asked, it is likely that some caregivers may have provided socially desirable responses.

The study was conducted during the COVID-19 pandemic in 2020 and 2021 when schools were operating on a rotational system. Despite the difficulties encountered in reaching the intended sample, valuable data was still collected, which is reflective of the unusual time in which field work occurred. Finally, only the children who were at risk of compromised well-being in specific domains were referred for further intervention which were of varying degrees of intensity. It is therefore not possible to attribute overall changes in the sample to the intervention. Also, other extraneous factors may have a bearing on the changes that were observed. However, based on qualitative assessments of changes reported on by the individual children and families who received additional support, it is highly likely that they benefited from the intervention. This was also confirmed in the deployment of advanced statistical data analytics and Artificial Intelligence tools (AI). These analyses showed that positive results reported by children and families may be attributed to the Sihleng'imizi intervention which was received by 12% of the children in the sample (Telukdarie et al., forthcoming).

Ethics

Approval for the study was obtained from the University of Johannesburg's Faculty of Humanities Ethics Committee (REC – 01-050-2020), the Gauteng Department of Education's Research Office, the Department of Health, and the District Research Offices. Consent to participate in the study was obtained from each of the five principals and each of the caregivers. Caregivers completed the consent forms in the presence of a social worker who explained the content to him/her, as well as what was required of them and their child. Social workers also discussed confidentiality and emphasised the voluntary nature of the study. Children were similarly informed and gave assent in the presence of a social worker and their caregiver. Caregivers, in need, were referred to local social workers where they could access psychosocial support and other governmental support services. All quantitative data were anonymised.

Findings

In the sections that follow, we present findings of data from caregivers, teachers and children, collected at two time points, a year apart. At Wave 2, the children were in Grade 1 and Grade 2. In the majority of cases the caregiver respondent remained the same, but in 23,4% of cases the caregiver was different.

We begin by describing the household in which the child lived, then the characteristics of the caregiver, before describing how the children themselves are doing across key domains in Wave 2, as compared to how they were doing a year earlier. For each domain we show the transition matrices; this shows the probability of transitioning from one state to another over time.

The Household

In this section we look at household composition, household access to resources and income.

Household Composition and Size

At Wave 2, we noted changes in household composition. There was a decrease (7.2%) in the number of households where children lived with 2 adults; and an increase (6.5%) in the number of households where children lived with one adult. In both waves, most households had an average of two children (46.5%) and just over half (52.5%) had 3-4 children. There were no significant changes in the number of children in a household between the two waves. This was also the case in larger households with more than five children which ranged between 10% in Wave 1 and 10.7% in Wave 2. These shifts are captured in Table 3 below. The changes over the two waves in the number of adults per household could be a result of the COVID-19 pandemic, which led to changes in household composition. The economic crises induced by the pandemic forced some families to migrate – either internally or externally (Ginsburg et al., 2022; Edmonds et al. 2005; Klasen & Woolard 2009; Hall 2017). Evidence from the NIDS-CRAM study shows that 5 to 6 million adults moved to different households during the first few months of the start of the pandemic in 2020, and of those about 1 million moved twice, indicating labour migration (Casale & Posel, 2020).

Household Composition	Wave 1	Wave 2	Newly enrolled pupils
	N=140		N=15
Distribution of adults in household			
1 adult	17 (12.1%)	26 (18.6%)	3 (20%)
2 adults	61 (43.6%)	51 (36.4%)	6 (40%)
3-4 adults	48 (34.3%)	46 (32.8%)	5 (33%)
5-6 adults	13 (9.3%)	14 (10 %)	5(6.7%)
7+ adults	1 (0.7%)	3 (0.7%)	
Distribution of children in the household			
1 child	17 (12.1%)	16 (11.4%)	5 (33.3%)
2 children	47 (33.6%)	46 (32.9%)	5 (33.5%)
3-4 children	50 (35.7%)	55 (39.3%)	4 (26.7%)
5-6 children	20 (14.3%)	18 (12.9%)	1 (6.7%)
7+ children	6 (4.3%)	5 (3.56%)	
Relationship of those living with the child:			
Both parents	38 (27.1%)	37 (26.4)	5 (33.3%)
Both parents and other relatives	9 (6.4%)	5 (3.6%)	2 (13.3%)
Father and other relatives	2 (1.4%)	4 (2.9%)	1 (6.7%)
Mother and other adult relatives	44 (31.4%)	55 (39.3%)	5 (33.3%)
One parent	35 (25.0%)	28 (20%)	1 (6.7%)
Relatives with no parents e.g. aunts	12 (8.6%)	11 (7.9%)	1 (6.7%)

Table 3: Summary Statistics of the Family and Household Living Arrangements

Household Access to Resources and Services

We assessed the households' access to water and electricity and noted characteristics of the dwellings in which children lived. There appeared to be an increase in the number of children who lived in households that did not provide protection from the elements in Wave 2. Our study found that 5% of those who lived in homes that provided protection at Wave 1, now lived in homes that did not do so. Similarly, 5% of children who lived in homes with electricity at Wave 1, did not live in homes with electricity at Wave 2. With regards to the latter, it should be noted that power cuts, and cable theft, impacted on access to electricity in some areas. In Doornkop, one of the communities included in our study, residents had limited to no access to electricity for up to nine months due to a number of challenges including non-payment of electricity bills, cable theft, vandalism, and illegal connections⁴. Table 4 below provides an overview of the findings.

Household Access to Resources and Services	Wave 1	Wave 2	New enrolment
Children that had no mattress/bed	15 (11.3%) N=133	16 (11.4%) N=140	2 (14.2%) N=14
House that did not offer protection from wind and rain	12 (10%) N=134	23 (16.4%) N=140	-
Households that had no access to drinking water	1 (0.7%) N=134	2 (1.4%) N=140	-
Households that had no electricity	5 (3.7%) N=134	8 (5.7%) N=140	-
Households that had no toilet at home	17 (12.1%) N=137	14 (10%) N=140	-

Table 4: Household Resources and Access to Services

Household Access to Social Grants

There was an increase in the uptake of social grants in Wave 2, specifically in the Old-Age pension (21%) and the new Social Relief of Distress (SRD) grant (32%). Table 5 shows participant uptake of various social grants.

Data from the General Household Survey in 2021 (Stats SA, 2022) show that for half of the South African population (51%) social grants are the most important source of income, and for 24.4% it is the main source of income. With the addition of the temporary SRD grant introduced during the COVID-19 pandemic, the percentage of individuals who accessed grants increased to 35,7% in 2021, with 25.2% noted in the metros. Our figures are closer to this latter figure.

The noted decrease in Wave 2 in accessing the Child Support Grant (CSG) is not consistent with existing research. This could be attributed to lack of knowledge of grants received in the household where the respondent answering the questions were different between Waves 1 and 2.

Grants Accessed in Household	Wave 1	Wave 2	New Enrolment
Child Support Grant	122 (89.1%) N=137	108 (77.7%) N=140	10 (66.7%) N=15
Old-Age Pension Grant	23 (16.7%) N=138	29 (20.7%) N=140	4 (26.7%) N=15
Social Relief of Distress Grant	3 (2.1%) N=138	45 (32.1%) N=140	4 (26.7%) N=15
Disability Grant	11 (8%) N=138	9 (6.4%) N=140	1 (6.7%) N=15

Table 5: Grants Accessed in Household

⁴ <https://www.sowetanlive.co.za/news/south-africa/2022-05-11-eskom-blames-residents-for-nine-month-blackout/>

Household Access to Income

In Table 6 below, we see that in both Wave 1 and Wave 2, the majority of households in the study had access to other forms of income, in addition to the social grants accessed. Across both waves however the majority of household did not have enough money to buy the things they needed, with this number increasing by almost 10% in Wave 2.

Household Income	Wave 1	Wave 2	New enrolment
Family has access to other income	77 (57.9%) N=133	80 (57.1%) N=140	9 (64.3%) N=15
Family has enough money to buy the things they need	52 (38.8%) N=134	41 (29.3%) N=140	5 (33.3%) N=14

Table 6: Household income

Findings from the transition matrix showed that 40.4% of those who said they could afford the things they needed at Wave 1, could not afford the same at Wave 2, and 34.9% of families who did not enough money to buy the things they needed at Wave 1, still could not afford the things they needed at Wave 2. Despite a gradual recovery of the country's economy towards the end of 2021, many households continued to be negatively impacted by the pandemic (Chitiga et al., 2021; Luc et al., 2021; World Bank, 2022).

The Caregiver

The profile of caregivers includes the caregiver's characteristics such as age, level of education, employment status, income, mental well-being and access to support.

Age and Level of Education

Participating caregivers were aged between 25-44 years old (74%), 6% were younger than 24 years old and 20% were over 45 years old. Of the sample followed up in Wave 2, half (50%) of the caregivers had some secondary education, just over a third had completed secondary education (30.7%) and 10% had post-secondary education. Levels of caregiver education in our sample are just below national levels reported by the OECD (2019); which showed that in 2018, a total of 59% of 25-65 years had attained upper secondary education.

Caregiver Employment

Unemployment rates in South Africa rose to a high of 35.3% in the fourth quarter of 2021, up from 32.5% recorded in the same period the previous year (Stats SA, 2020, 2021). Table 7 below shows the employment status of caregivers in our sample, which shows that unemployment rates in our study are significantly higher than the national average.

Our findings reflect some changes in employment status across the two waves. From Wave 1 to Wave 2 there was a decrease in both the number of caregivers in full time employment (15% at Wave 1 to 12.9% at Wave 2) and in the number of caregivers that were unemployed (67.9% at Wave 1 to 60.7% at Wave 2). This same period saw an increase in the number of caregivers engaged in piece work (4.3% at Wave 1 to 5% at Wave 2%) and those that were self-employed (5% at Wave 1 and 10.7% at Wave 2). The increase in piece work and self-employment, could to some extent account for the changes in employment.

Findings from the transition matrix, noted shifts within this cohort of caregivers between Waves 1 and Waves 2.

- 56.8% of those who were unemployed at Wave 1, remained unemployed at Wave 2.
- 12.6% of those who were unemployed at Wave 1, were employed full time at Wave 2.
- 13,7% of those unemployed at Wave 1, were self-employed in Wave 2.

This churning of the job market has been noted in other research, with the NIDS-CRAM study showing that 23% of those who were employed before the pandemic in February 2020, lost their jobs in 2021 and 30% of those who were unemployed in February 2020 found employment by March 2021 (Spaull et al., 2021).

Employment Status	Wave 1	Wave 2	New enrolment
Full-time employed	21 (15%)	18 (12.9%)	3 (20%)
Part-time employed	11 (7.9%)	15 (10.7%)	-
Piece work	6 (4.3%)	7 (5%)	-
Self-employed	7 (5%)	15 (10.7%)	-
Unemployed	95 (67.9%)	85 (60.7%)	12 (80%)
TOTAL	140 (100%)	140 (100%)	15 (100%)

Table 7: Caregiver Employment Status

Caregiver Indebtedness

Inability to pay off debts appeared to increase between Wave 1 and Wave 2 as seen in Table 8 below, with 43.6% of caregivers reporting struggles as compared to 25% who reported the same in Wave 1. Findings from the transition matrix showed that 48.5% of those who were not struggling to pay off their debts at Wave one, were now struggling with paying off their debts at Wave 2. Similarly, caregivers in the newly enrolled sample also appeared to have difficulties paying off their debts (71.4%). These findings reflect the economic crisis felt by many because of the pandemic. This is consistent with levels of indebtedness reported in the first quarter of 2021, with the South African Human Rights Commission showing that in March 2021, half of South Africans who were credit-active were over-indebted, and is likely a result of the job cuts and retrenchments initiated during this period (Roets, 2022). Roets (2022a, 2022b) also noted that data from Old Mutual Savings and Investments, shows that 30% of the credit active consumers were buying food on credit. While this provides relief in the present, it is likely to have severe long-term consequences due to high interest rates.

Caregiver Indebtedness	Wave 1	Wave 2	New enrolment
Are you able to save? (Yes)	62 (47%) N=132	67 (47.9%) N=140	6 (42.9%) N=14
Do you struggle to pay off debts? (Yes)	33 (25%) N=132	61 (43.6%) N=140	10 (71.4%) N=14

Table 8: Caregiver Indebtedness

Caregiver Mental Health and Access to Support

Caregiver mental health and well-being was assessed using the CES-D-10 (Andersen, Malmgren, Carter, & Patrick, 1994). The scale consists of 10 questions that probe the occurrence of a range of feelings or behaviours in the preceding week. Findings (Figure 3 and 4 below) from our data show that caregiver depression decreased from Wave 1 to Wave 2, correlating with a substantial increase in caregiver access to support. In the Wave 1 data collection period, more stringent lockdown levels were implemented, which meant that people were isolated, with limited access to external support systems.

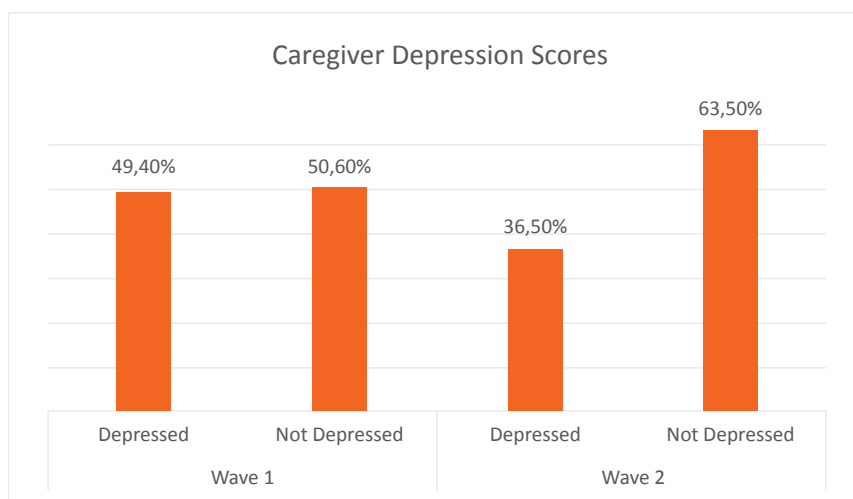


Figure 3: Caregiver Depression Scores

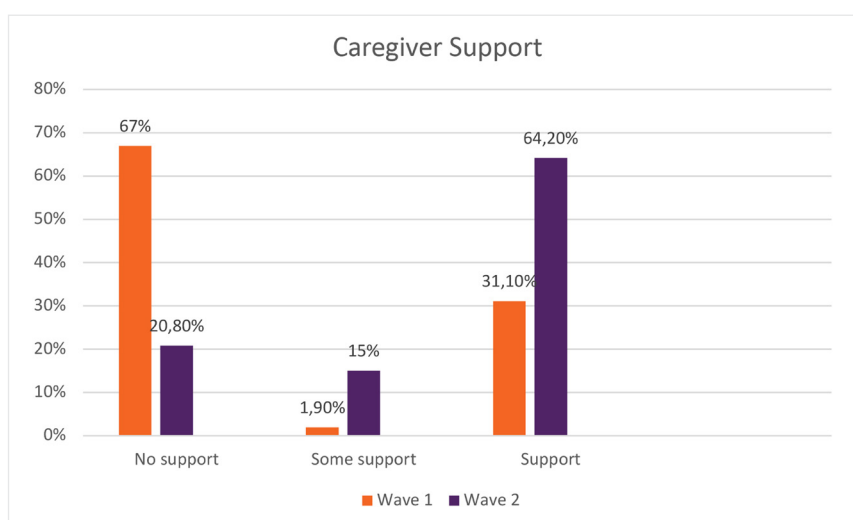


Figure 4: Caregiver Access to Support

The Children

We begin by providing a description of children included in our sample, this is followed by findings on how children were faring across multiple domains, including health, education, protection and care.

Age, Grade and Gender Distribution of Sample across the Five Schools

At Wave 2, we followed up 54.3% of females and 45.7% males. Of those interviewed, 50% were aged 7 years and 31.4%, 8 years. Most children appeared to be in the correct grade for their age, as seen in Table 9 below.

Child's Age	Grade 1	Grade 2	Total
6 years	19	-	19
7 years	61	9	70
8 years	4	40	44
9 years	2	5	7
Total	86	54	140

Table 9: Child Age and Grade Level at Wave 2

Children's Health

The health domain assesses whether the child's health prevents him/her from playing or going to school, if the child can speak, see, or hear well, if the child has any underlying health conditions, including malnutrition, a cardiac condition, diabetes, or seizures, if the child has been a victim of abuse and if the child's vaccinations are up to date. Questions and responses for this domain are presented in Table 10 below. At both waves, we assessed other health ailments such as danger signs (dehydration, shock or refusing feeds), respiratory problems, dermatological conditions, or receiving TB or HIV treatment. There were negligible changes.

From Wave 1 to Wave 2, we noted an increase in the number of children who were hospitalised and a decrease in the number of children participating in sporting, cultural or spiritual activities. Reasons for hospital admission were not queried but it should be noted that during the later waves of the pandemic, children too were impacted.

The lack of participation in activities could also be attributed to changes due to the pandemic; for most public schools in South Africa, cultural and sporting activities were halted until the latter part of 2021; and even once lockdown levels were adjusted, activities did not resume as before. Mncube et al. (2021) notes that schools instead focused on academic activities to make up for the loss of learning time.

We also noted an increase in the number of children who appeared to have difficulties hearing, seeing, or talking. We speculate that this could be a result of greater awareness of caregivers; having been asked this question at Wave 1, caregivers could have been more observant at Wave 2.

Children's Health	Wave 1	Wave 2	New enrolment
Child's health stopping them from going to school	21 (15.8%) N=133	14 (10%) N=140	-
The caregiver takes the child to the clinic, hospital, or doctor when they are sick	127 (94.8%) N=134	134 (95.7%) N=140	14 (100%) N=140
Has your child been hospitalised?	16 (12.1%) N=132	24 (17.1%) N=140	2 (14.3%) N=140
Does your child struggle to hear, see or talk?	22 (16.4%) N=134	31 (22.1%) N=140	(14%) N=140
Does your child have good hygiene habits?	112 (86.2%) N=130	110 (78.6%) N=140	10 (71.4%) N=140
Does your child participate in sporting, cultural, spiritual, arts, or recreational activities outside of school hours?	70 (53.8%) N=130	44 (31.4%) N=140	1 (7.1%) N=14
Does your child engage in physical activities?	116 (86.6%) N=134	105 (75%) N=140	12 (85.7%) N=14

Table 10: Caregiver's Perception of Children's Health and Nutrition

Health Worker's Perception of Child's Health

In addition to asking caregivers about children's health and access to food, children were also assessed by a qualified healthcare professional (Professional Nurse). The nurse reviewed both the child's Road to Health card and carried out anthropometric assessments on each of the children and tested for diabetes as well. Figure 5 below provides a summary of findings.

The Professional Nurses noted an increase in the immunisations of children in the sample, with 60% of the children who were not vaccinated at Wave 1 being vaccinated at Wave 2. This is attributed to the interventions implemented by the CoP team; social workers visited the households of all children where immunisations were not up to date and set up appointments for caregivers and children at the local clinic.

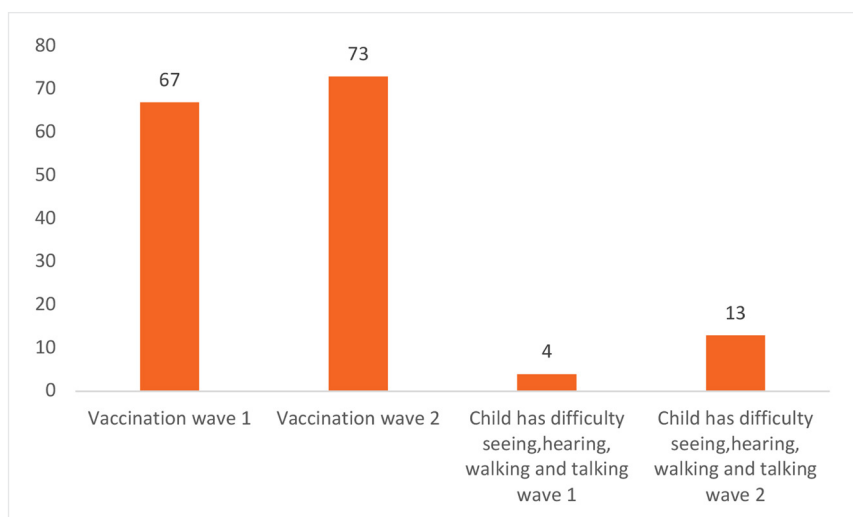


Figure 5: Health Worker's Perception of Child Health

Children's Access to Food and Nutrition

Food Access

Across both waves we asked caregivers about the child's food access, hunger, sufficiency of food intake, and the quality of food. Nutrition was accessed by healthcare workers. From Table 11, we can see that at Wave 2, no caregiver answered yes to their children going to bed hungry. However, from the descriptive statistics we found that 9% of the caregivers reported that their children **sometimes** go to bed hungry. There was an increase of 9% in the number of children eating

three meals a day compared to Wave 1. This suggests some material improvements due to improved formal and informal employment and access to social grants. It may also in part be attributed to the interventions implemented after Wave 1. Children, and families found to be at risk in Wave 1 were followed up to see if they were accessing the National School Nutritional Programme at school, if not, access was facilitated, and the provision of additional food parcels over the weekend was ensured. Social workers also worked to connect at risk families and children with local non-governmental organisations that provided food parcels.

Food Access and Nutrition	Wave 1 (Yes)	Wave 2 (Yes)	New enrolment (Yes)
Does your child ever go to sleep hungry?	14 (10.4%) N=134	0%	-
Does your child eat protein at least twice a week?	117 (88%) N=133	127 (90.7%) N=140	12 (80%) N=15
Does your child eat vegetables at least twice a week?	115 (87.1%) N=132	120 (85.7%) N=140	10 (67%) N=15
Does your child eat three meals a day?	89 (66.4%) N=134	105 (75%) N=140	15 (100%) N=15
Does the child eat a meal provided by the school nutrition scheme?	78 (61.9%) N=126	88 (64.7%) N=136	9 (64.3%) N=14

Table 11: Food Access and Nutrition

Child malnutrition indicators

Participating children were assessed according to the World Health Organization's child malnutrition indicators and scored according to the WHO guidelines for assessing child growth (WHO, 2008). Malnutrition is a risk factor for morbidity and mortality and the risk factors include stunting, wasting, underweight, overweight and obesity. These risk factors increase the child's susceptibility to a range of illnesses and infections, impairs their cognitive and physical development, impairs their linear growth, and is associated with increased mortality (Modjadji et al., 2020; Nyati et al., 2019; UNICEF et al., 2020), all of which have lasting long term adverse effects (WHO, 2021). Moreover, they contribute to the child's poor academic performance, reduced school attendance, poor academic achievements, and decreased chances of survival in adulthood (Chowdhury, Chakrabarty, Rakib, Saltmarsh & Davis, 2018).

Levels of child stunting however remained the same across Wave 1 and Wave 2 (described in Table 12 below). There appeared to be an increase in the number of children that were overweight, and from the transition matrix 11% of children who were not overweight at Wave 1, were overweight at Wave 2. In addition, the transition matrix showed that 20% of children who were underweight at Wave 1 were still underweight at Wave 2. From the newly enrolled sample, 20% of the children were wasted and 7% were underweight.

Malnutrition Indicators	Wave 1	Wave 2	New enrolment
Stunting	13%	13%	-
Wasting	6%	7%	20%
Underweight	7%	6%	7 %
Overweight	4%	10%	-
Obesity	3%	1%	-

Table 12: Child Malnutrition Indicators

Children's Education

The educational well-being of the child measures whether the child attends school regularly if the child is progressing well with their schoolwork and whether or not the child is afraid of going to school. This domain is of particular importance as poor school performance in the foundation years of schooling have 'knock on' effects on subsequent educational attainment. The foundations for learning in school are laid in early childhood development (Shonkhoff, Boyce & McEwan, 2009). For young children to advance in the early grades, when they learn symbolically through written

language and mathematical codification, they require interaction and care that can prepare them to learn symbolically (Henning & Ragpot, 2015).

Caregiver Perception of Educational Progress

In Table 13 below, we see that at Wave 2 caregivers reported an improvement in children's educational progression, their compliance with homework, their involvement in children's homework and children's access to adequate uniforms and school supplies. There was also a significant decrease in the number of children who were afraid to go to school, which could be related to children's greater familiarity and comfort with school as they progressed. Children were also significantly less fearful of going to school and were possibly less anxious about contracting the Coronavirus by Wave 2. Through the CoP intervention (Sihleng'imizi programme), caregivers with children at risk were informed of the importance of participating in their children's education and were strongly encouraged to do so.

Caregiver Perception of Education	Wave 1	Wave 2	New Enrolment
Is your child progressing with their schoolwork?	114 (85.1%) N=134	123 (87.9%) N=140	15 (100%) N=15
Does your child do homework as required?	120 (89.6%) N=134	130 (92.9%) N=140	15 (100%) N=15
Does someone in your home help the child with homework?	127 (94.8%) N=134	135 (96.4%) N=140	15 (100%) N=15
Does your child have a school uniform and school supplies?	101 (75.9%) N=133	109 (77.9%) N=140	9 (60%) N=15
Is your child afraid of or refusing to go to school?	45 (33.6%) N=134	12 (8.6%) N=139	2 (13%) N=15

Table 13: Caregiver Perception of Child's Education

Teachers' Assessments of Child Well-being at School

Children's learning, educational progress and well-being at school was assessed through interviews with class teachers. In Table 14 we share teacher responses to questions related to progress, attendance, and parental involvement. There appeared to be little change in school attendance, and progression. Participation in class appears to have decreased, and fewer children appeared to be coming to class with the correct attire and school supplies. This latter decline may be attributed to worsening economic conditions.

Teacher Assessment	Wave 1	Wave 2	New Enrolment
Does the child attend school regularly?	113 (89.7%) N=126	124 (89.9%) N=138	15 (100%)
Is the child progressing with their schoolwork?	111 (81.6%) N=136	114 (81.4%) N=140	14 (93.3%) N=15
Does the child do homework as required?	88 (71.5%) N=123	85 (61.2%) N=139	15 (100%) N=15
Does the child participate in class?	70 (53.8%) N=130	44 (31.4%) N=140	11 (78.6%) N=14
Does the child come to school with the correct uniform and school supplies?	111 (90.9%) N=122	118 (84.9%) N=139	13 (92.9%) N=14
Is the child neat and clean?	114 (91.2%) N=140	115 (82.7%) N=139	13 (92.9%) N=14

Table 14: Teacher Perception of Children's Educational Progress

Mathematics and language assessments

Children at the five schools were also assessed for their number concept development, their early reading competence, and their vocabulary. These tests were administered by CoP partners in Education and were carried out in April 2021.

Two standardized tests and one custom designed vocabulary test were used.

The numeracy test, known by its German acronym, MARKO-D SA, has been translated into six South African languages, with four of them standardized and normed for South African use. The Meerkat Maths Language Test (MMLT) is a much shorter test and learners are required to identify a picture with words that the test administrator calls out. The words are qualifiers for number calculations, such as 'more', 'less', 'bigger', 'smaller' and so forth. The initial reading test is the Early Grades Reading Assessment (EGRA) which assesses beginner readers' phonemic competence and comprehension of a short passage after having read it.

Findings on the mathematical skills

A significant correlation between number concept development and mathematics vocabulary (0.60, $p < 0.01$) highlights that mathematics vocabulary is a key tool for early number concept development. For instance, only 37.2% of children correctly answered the question of 'in between' on the numeracy assessment and 34.9% answered the corresponding item on the mathematics vocabulary assessment correctly. Therefore, we suggest that explicit teaching of mathematics vocabulary should be included in the Foundation Phase curriculum.

Early Grades Reading Assessment

- 57% of the children were able to decode most of the letter sounds. However, the sub-task (letter sound) on the EGRA is flawed because it does not address all the isiZulu phonemes. It was evident when children were expected to read the words. Many of them struggled with word recognition and passage reading, and the comprehension scores were even lower.
- The results of this study align with Simelane's doctoral research (in progress), indicating that the way in which initial reading is taught in schools is not effective. Children are not taught to read according to the science of reading.
- Increasing difficulty is indicated in the data of this sample's EGRA results. Participants achieved an average of 49.98% on the letter sound items, 13.03% on word reading, 11.06% on passage reading and a concerning 2.14% on comprehension.
- In terms of comprehension, it appeared that although they could read the words, they did not understand what they were reading. This could be attributed to a lack of vocabulary knowledge and weak linguistic skills; although most of the children spoke isiZulu, they spoke the colloquial language.
- Although English-speaking children performed better on the MARKO-D SA, their results were the weakest on the EGRA. Researchers such as Dehaene (2009) have explained why English is one of the most difficult languages to decode because of its complex linguistic structures and its 'opaque' orthography. In comparison, isiZulu and Sesotho, which are known as languages with a 'transparent' orthography, are more easily decoded because of the direct connections between graphemes and phonemes.

Box 2: Findings from the Math and Language Assessments Conducted in April 2021

Psychometric assessments

Six children from each school who met most of the criteria below were identified as struggling with schoolwork and were selected to be assessed conducted in April 2021 by the educational psychologists:

- Child is above the age range for their grade
- Child identified by teacher as having learning difficulties
- Child identified by caregiver as having learning difficulties
- •Child is repeating their grade, or was progressed to a higher grade but did not meet the required academic outcomes for grade R or Grade 1
- Poor academic performance of child in the first term of school (school reports)

Findings from the Psychometric assessments:

The main domain challenges coming through from the 30 assessments were scholastic, with poor basic literacy and numeracy skills, cognitive skills, perceptual skills (coordination and perception), poor concentration and short-term memory.

- The psychoeducational assessment process highlighted the clear link between the psychosocial needs of the learners and their physical, cognitive, academic, parental awareness of learning challenges and financial support needs.
- Sensori-motor perceptual developmental challenges directly played a role in the literacy and numeracy competence of the learners who were referred for the full psychoeducational assessment.
- Psychosocial and socioeconomic realities impacted directly on the intervention and systemic support processes. Parental awareness of learning challenges was a significant factor.

As per the ethical processes which govern the practice of psychologists, and the confidential and sensitive nature of these processes, details of each of the 30 assessments were shared with the parents/caregivers at each step in the process.

Box 3: Findings from the Education Assessments of the Children

Child's Safety and Access to Protection and Care

The protection and care domain assesses whether there are significant others (e.g. partners, siblings and relatives) who are present and available to respond to the child's needs and an awareness of the child's whereabouts. It also probes safety concerns and direct or indirect exposure to violence at home or in the community. In Wave 2, there was an increase (5.8%) in the number of children exposed to violence in their homes or communities, but a slight decrease in caregiver concern regarding children's safety. There was also a slight decrease in adult or sibling involvement and time spent with the child.

Children's Care and Safety	Wave 1	Wave 2	New enrolment
Has the child seen people fighting, swearing or hurting each other at home or in the community?	76 (57.1%) N=133	88 (62.9%) N=140	10 (71.4%) N=14
Have you ever had concerns about the safety of your child?	81 (57.9%) N=130	74 (52.9%) N=140	10 (71.4%) N=14
Does an adult or older sibling read, sing or spend time with the child?	108 (83.7%) N=129	104 (74.3%) N=140	5 (35.7%) N=14

Table 15: Children's Care and Safety

Child Discipline

Caregivers were asked about the way in which they disciplined children. At Wave 1, the question on child discipline was an open-ended question, allowing parents to give qualitative responses on how they disciplined their children. At Wave 2, this variable was measured quantitatively and was a multiple response variable, where caregivers could select multiple options as to how they disciplined their children. In Table 16 below, Column 2 depicts the actual count of the responses and columns represents the percentage count of the response to the overall question, from this it is apparent that the primary means by which caregivers discipline children included talking to the child (30%), shouting at the child (29%), and giving the child a hiding (22%). Similarly, in Wave 1, there was a higher number of caregivers who reported that they used the same measures to discipline their children, with shouting and grounding (n=30) and talking to the child (n=23) emerging as typical disciplinary methods.

Discipline Method	Frequency of responses	Percentage of responses
Depriving them of treats/privileges	24	9.38%
Giving the child a hiding	57	22.27%
Not allowing them to play with friends	7	2.73%
Other	5	1.95%
Pinching the child	13	5.08%
Shouting at the child	73	28.52%
Talking to the child	77	30.08%
Total	256	100

Table 16: Disciplinary Methods (Wave 2)

Impact of COVID-19 Lockdown on Households

Given the importance and novelty of this period, caregivers were asked to share how lockdown affected their family. At Wave 1, caregivers were asked an open-ended question, and at Wave 2, we used a multi-response option, drawing on answers provided in Wave 1. For participating families, it appeared that loss of employment (16%), food insecurity in the household (13%) and an inability to go out to look for employment opportunities (12%), were the most significant stressors experienced by families as a result of the lockdown.

Impact of Lockdown on the Family	Frequency	Percentage of responses
A family member passed away	12	5.31%
I could not do things I usually do because my child's school was closed	4	1.77%
I couldn't go where I needed to go (e.g. school/work)	12	5.31%
I couldn't look for work	28	12.39%
I did not have access to services like electricity	1	0.44%
I did not have enough food for everyone in the house	30	13.27%
I didn't receive any wages	24	10.62%
I felt depressed/anxious/sad/angry all the time	6	2.65%
I got sick with COVID-19	6	2.65%
I lost my job	37	16.37%
My salary was cut	14	6.19%
No effect	20	8.85%
Other	12	5.31%
There were long queues at the shops or health facilities	20	8.85%
Total	226	100

Table 17: COVID-19 Lockdown Effects on Families

Psychosocial Well-being of the Child

The Strengths and Difficulties Questionnaire (SDQ) and the Child and Youth Resilience Measure (CYRM) was administered at both waves to assess children's subjective well-being. The SDQ includes various subscales (emotional, conduct, hyperactivity, peer and prosocial conduct) and classifies scores into three ranges: normal, borderline and abnormal. The normal range suggests that the presence of clinically significant problems are unlikely, the borderline range a slightly raised risk and an score within the abnormal range is indicative of substantial risk of difficulties.

From the SDQ (Figure 6 below) we observed that while findings from the normal range remained the same, there was a 10% decrease in those who were at substantially high risk (33.3 % at Wave 1 vs 23% at Wave 2). Evidence of reduced risk, and greater coping was also demonstrated in the CYRM results (Figure 7 below); which shows that at Wave 2, 70.7% of children demonstrated exceptional resilience and only a few children had moderate resilience (5.7%). This was a significant improvement in the proportion of children who exhibited exceptional resilience since Wave 1 when 40.2% presented with exceptional resilience and 22.8% had moderate resilience. This suggests that children's coping capacity improved over the year and that they learnt to adapt to the changing circumstances. Shifts occurred in the peer problem subscale at Wave 1 with 59.5% of children having a slightly raised and substantial at-risk scores. At Wave 2, it was down to 34.5% and the majority (65.5%) now had average scores with peer problems being unlikely. From the Qualitative process, teachers noticed this change in various children, i.e. the willingness to socialise and fit in with peers instead of being by themselves and withdrawn.

Evidence of peer influence as a predictor of high resilience among children has been found in international studies during disasters and adverse events (McDonald-Harker et al., 2021) as well as in South Africa (Theron et al., 2013). Children rely on peer relations as a form of distraction from daily life stressors. Connecting and communicating with peers helps children establish a sense of security and aids their adaptation during difficult times.

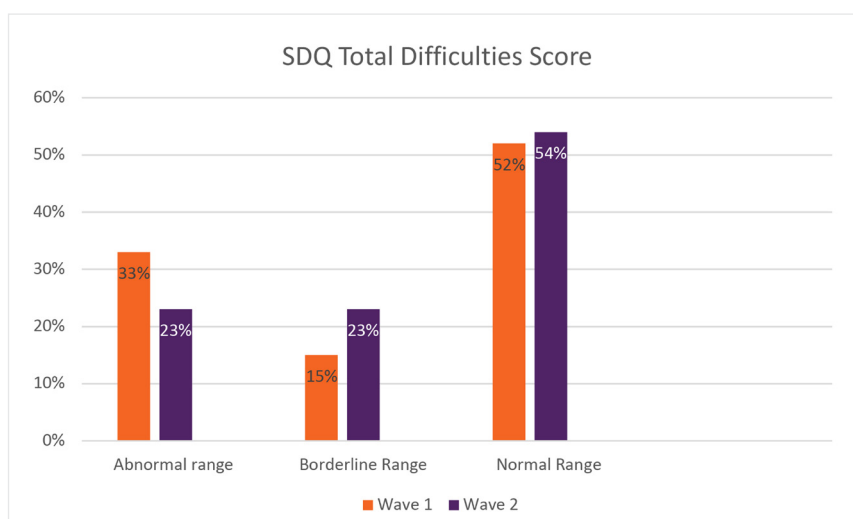


Figure 6: SDQ Total Difficulties Score

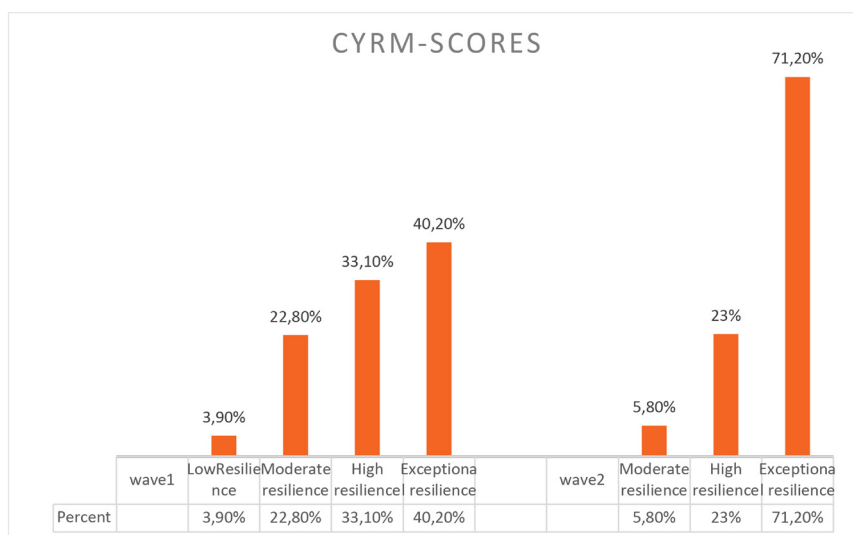


Figure 7: CYRM in Full Scores Waves 1 and Wave 2

Risk Profiles of Children per Domain

As in Wave 1, at Wave 2 we provided an overview of children, and their families that were at risk per well-being domain. In figure 8 (below) we see that at Wave 2, children were at the highest risk in the domains of protection/care (61%). The high risk profile for this domain was derived from a yes response on whether the child had been a victim of abuse or violence, has seen people fighting in the home and community and if the child gets along better with adults than with other children. We also found that half of the children, and their families were still at risk in the economic well-being (50%) domain. The higher risk for economic well-being was determined on the basis that the caregivers had no access to other sources of income and that they also struggled to pay off their debts. Children's risk in the nutritional domain decreased from 13% in Wave 1 to 5% in Wave 2. The high risk in this domain was based on whether the child ever goes to bed hungry and if there is not enough food for the child to eat at home.

Findings from the transition matrix of the protection and care domain, show that 23 children (16% of the sample) who were low risk at Wave 1, were at a high risk at Wave 2, and 33 children (23% of the sample) who were at high risk in Wave 1, remained at high risk at Wave 2. This suggests that due to changing circumstances some of the children who were not vulnerable previously became more vulnerable, and were in need of additional support, while those who were at high risk before continued to do at risk.

With regards to changes across the economic domain at Wave 2, for 24 children (57.1%) at high risk in Wave 1 there was no change in Wave 2, there was however a change for 7 children (16.7%) of the children who were at high risk at Wave 1 and were low risk at Wave 2. There was therefore an improvement in the material well-being of 16% of the children in Wave 2.

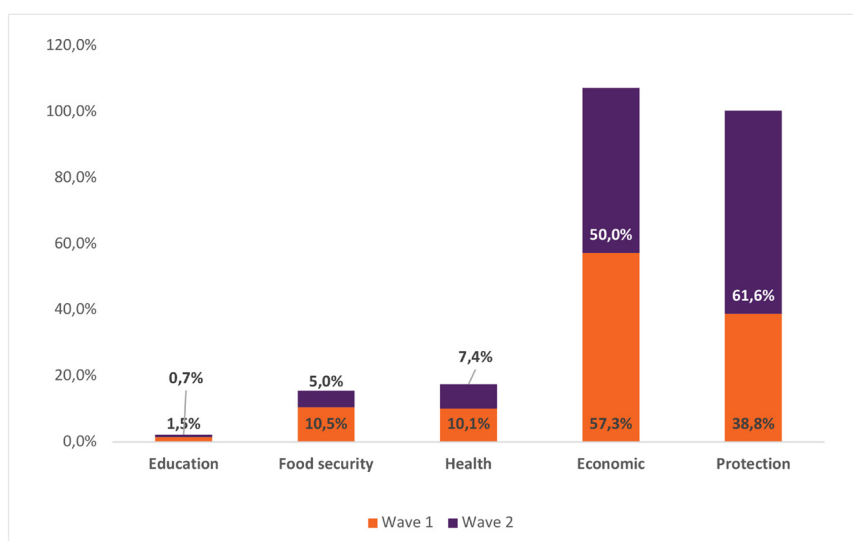


Figure 8: High Risk Profiles of the Children across Both Waves

Risk per domain	Wave 1	Wave 2
Education Domain		
High risk	2 (1.5%)	1 (0.7%)
Moderate	21 (15.7%)	17 (12.1%)
Low risk	111 (82.8%)	122 (87.1%)
	N=134	N=140
Food Security		
High risk	14 (10.5%)	7 (5%)
Moderate	44 (32.8%)	37 (26.4%)
Low risk	76 (56.7%)	96 (68.6%)
	N=134	N=140
Health		
High risk	14 (10.1%)	10 (7.4%)
Moderate	27 (19.4%)	27 (20%)
Low risk	98 (70.5%)	98 (72.6%)
	N=139	N=135
Economic		
High risk	59 (57.3%)	53 (50%)
Moderate	13 (12.6%)	26 (24.5%)
Low risk	31 (30.1%)	27 (25.5%)
	N=103	N=106
Protection Well-being		
High risk	52 (38.8%)	85 (61.6%)
Moderate	45 (33.6%)	17 (12.32%)
Low risk	37 (27.6%)	36 (26.1%)
	N=134	N=138

Table 18: Risk Profiles of the Children at Wave 1 and 2

Table 18 above shows the risks per domain. The education well-being had the lowest risk across both waves (82.3% in Wave 1 and 87.1% in Wave 2). The low risk of the education domain was obtained if the children were attending school on the days that they were supposed to and if they were progressing with their schoolwork. The section on the risk assessment (page 54) above gives additional details on the other high-risk assessments.

Conclusions

The multi-dimensional assessment of the children over the two years showed improvements in key well-being indicators and a stabilisation of their family circumstances. The most significant stressors experienced were of an economic nature which was due to the COVID-19 pandemic and the resultant lockdown of the economy. Loss of a job (16%), not having enough money to buy food (13%) and an inability to seek work (12%) were the top three stressors that affected the families with young children in the study. This was evident in the risk profiles of the children in Wave 1 when 57% of the children were at high risk of material deprivation. Although economic risk declined at Wave 2 by 7%, half of the children continued to live in families that experienced significant income constraints. This was reflected in high rates of indebtedness of caregivers eighteen months after the first lockdown started, as savings and other resources were expended. These adverse economic conditions were mitigated first by the initial top-ups of the CSG, and second, by the subsequent extension of access to the SRD to the primary caregivers of the children reaching a third of the caregivers by Wave 2. Third, despite declining full-time employment by some of the participants, more were able to access part-time work (piece work) and were able to do informal work coupled with a 10% decline in reported unemployment levels. Lastly, a significant proportion of caregivers reported having access to social and material support from extended family, their social networks, and possibly, social services. In Wave 1, around 67% of participants did not have access to support while the situation was almost reversed at Wave 2 when 64% reported now having support. Access to school feeding improved marginally during this period as schools were not fully operational. It is therefore recommended that material support through the social grants system should continue to be provided including access to additional food relief for struggling households and full access to school feeding to return to the same levels as before the pandemic. This is especially necessary in a current context of rising food and energy prices including slow recovery of the economy and extraordinary high unemployment levels.

The second significant set of risks were related to the protection and care domain which worsened in Wave 2. The main driver of this increase was due to the exposure of the children to violence and verbal abuse in the home or the community. This finding should be read together with the widespread use of harsh methods of discipline by parents and or caregivers such as hitting, pinching, or shouting at the child, which made up 55% of the sample. Over the two waves, there was also a decrease in adult engagement in bonding behaviour, such as spending time with the child or reading to them. More positively, talking to the child was widely used as a form of discipline by close to a third of caregivers which should be encouraged. Worries of child safety during the pandemic seemed to have abated by Wave 2 as the situation began to normalise. The deteriorating situation in the protection and care domain points to the need for caregiver, family, and community level interventions to improve child protection, safety and care.

Children's well-being is integrally connected to the well-being of their caregivers. Although depression scores decreased from 49.4% in Wave 1 to 36% in Wave 2, the high rates of depression among caregivers of children remains a significant risk factor in promoting children's growth and development. All caregivers were referred to service agencies, although reluctance among caregivers to seek help was observed. Interventions to support caregivers with depression are strongly indicated, as failure to do so could further compromise their care and protection with adverse long-term consequences.

A third risk factor is associated with children's health. Although there were small but positive changes in the number of children who were at high risk at Wave 2 (7%), those who experienced low (72.6%) and moderate (20%) health risks remained largely unchanged. We also assessed other childhood illnesses such as underlying cardiac conditions, diabetes or seizures; as well as danger signs such as dehydration or refusing feeds. However, there were negligible changes. Also, at Wave 2, more children were identified with having difficulties with hearing and seeing with a marked reduction in their engagement in physical activities such as in sport and in cultural activities. Encouragingly, due to follow-up by the intervention team, fewer children had incomplete vaccinations a year later, and all identified children who needed hearing and visual assessments, were appropriately referred. A significant drive to increase the vaccination rates of early grade learners remains a challenge with 27% still having incomplete vaccinations.

A fourth risk relates to the food security domain. Positively, child hunger was reported by caregivers to have declined for this cohort of children from 10.4% in Wave 1 to zero hunger by Wave 2. The small improvements in the material situation of the families with increased access to feeding at school and additional food relief facilitated by the social workers in the intervention team, together with receipt of social grants, appeared to have helped. Although food access improved with 9% of children eating three meals per day, three out of ten children did not have enough food at every meal; 15% did not eat vegetables at least twice a week; and 10% did not have sufficient intake of protein. Sufficiency of food intake and the quality of food consumed remained a significant challenge for close to a third of the children. The malnutrition indicators showed no changes in stunting levels (13%) and minimal changes in wasting. More children were overweight by Wave 2, an increase of (6%) which may be due to the poor quality of the food consumed and possibly due to reduced physical activity (e.g. sport and cultural activities).

A fifth risk that was assessed was in the educational domain. Overall, teachers reported no changes in school attendance (89.9%) and in the child's progress over the two waves (81%). Concerns were raised about more children not doing

homework as required and not having the correct school attire and school supplies. There appeared to be a decline in the level of children's participation in class. Parents/caregivers were of the view that improvements occurred in these areas but significantly, fears about attending school abated and was down from 33.6% in Wave 1 to 8.6% in Wave 2. However, children fared poorly in mathematics and language assessments. The overall numeracy performance and vocabulary knowledge of this sample of children showed that they were not ready to engage with the curriculum of the first grade, with the children's reading indicating that the way in which initial reading is taught in schools is not effective. These findings are in line with the psychometric assessments which highlighted poor basic literacy and numeracy skills, indicating a clear link between the psychosocial needs of the learners and their physical, academic and cognitive learning challenges.

A final set of risk factors addressed psychosocial well-being. Here both the child and caregiver's perceptions were scored in two separate tests, the CYRM and the SDQ. The children reported a 10% reduction in vulnerability to psychosocial risk from Waves 1 to 2. Exceptional resilience scores almost doubled rising from 40.2% in Wave 1 to 70% in Wave 2. This suggests that their coping capacities improved as they adapted to changing circumstances during the pandemic. The children also reported increased reliance on peers which aided their resilience. Despite the positive developments in children's resilience scores, there was a 7% increase in children who were on the borderline in the SDQ. These children too would benefit from further social interventions.

In conclusion, multi-dimensional assessments of children's well-being across several domains with inputs from the children themselves, their caregivers, teachers, nurses, educational psychologists, and social workers provided significant insight into the children's strengths, that of their caregivers, of their family life, and the challenges they face. The findings provide pointers for multi-sectoral interventions at family and community levels and for social protection policies such as social grants, food relief, health, educational and social work interventions to step up well-being outcomes for children in disadvantaged communities using the school-family and community as the nexus for social interventions. Although over half of the children continued to experience material risks to their well-being, other social risks such as in protection and care, health and education and the poor mental health of their caregivers also need attention if they are to learn, grow and thrive. Investments in meeting the needs of the children holistically remains an important priority for government and other actors.

The CoP study illustrates the importance of a transdisciplinary approach to understand and develop solutions to a multi-dimensional construct such as child well-being. It also draws attention to the important role of monitoring how they are faring in the early grades to guide not only remedial interventions, but also to find early evidence-based preventive and promotive interventions. If left unattended, these difficulties can be long-lasting and can have a cascading effect over the life course. With the aid of new technologies and digital tools to engage all role players involved in the child's life, new understandings of their strengths and challenges were generated and practical solutions were found drawing on the diverse knowledge of a cross section of service professionals, researchers and para-professionals collaborating around a common purpose.

The CoP approach tackles systemic barriers in the life space of the child – the school, family, and community – that compromise children's health, nutrition, their cognitive and psychosocial development, and their protection and care. Some of the basic and practical interventions coordinated by a social worker who worked with teachers and families appeared to make a difference. This involved practical interventions such as strengthening family networks of support, home visiting, providing education and information about parenting, supervision of children and alternative forms of discipline, or assistance with accessing additional food relief, providing a referral of a caregiver with depression to a relevant community service, or to assist with getting an eye or a hearing test. Children with suspected learning difficulties received educational assessments and teachers who struggled with early grade teaching of mathematics and literacy were empowered with further teacher support interventions. Although the support was provided over a two-year period only, the CoP demonstrates the importance of having holistic and customised investments in the early grades to disrupt cycles of systemic disadvantage and improve social outcomes for South Africa's children in the short and long-term.

However, to achieve this, new mental maps and models are needed to reimagine learning, support, and care in the foundation years of schooling in under resourced environments. This is especially important as the Department of Basic Education takes over the responsibility for early learning from the Department of Social Development in 2023. While new and existing policies are in place to support early grade learners, the gap between intention and actual implementation remains a significant challenge (Du Plessis, 2013; Pillay, 2021; Patel et al., 2022). Some of the challenges are the under-resourcing of school level services such as too few educational psychologists to do learning assessments, inadequate school level integrated health services, uneven cooperation between local authority primary health care services and schools, and a lack of a focus on school and community level social work services. There is much innovation at school and community levels by non-governmental organisations and corporate social investment initiatives that could provide practical and workable solutions to learn from. The CoP model is one such innovation. Practice-based research such as the CoP could provide insight into learning about what might be feasible in a particular community

environment; the potential for resource sharing between governmental and non-governmental organisations, and the value of partnering in service provision and in the harnessing of knowledge and tested interventions across sectors and disciplines. The study findings also show that a community of practice approach focused on child well-being outcomes is a worthy endeavour, one which is already provided for in education policies in South Africa⁵.

The other recommendations emerging from the study include first, the fast tracking of school feeding to reach the scale achieved before the pandemic, including material support in the form of social grants for children and caregivers combined with social and care services to support and strengthen families in their care giving roles. Second, there is urgent need to develop intersectoral responses to address the mental health challenges of caregivers. Third, the effective provision of integrated school health services and educational psychological interventions for children with learning and psychosocial difficulties are strongly indicated. Finally, support to teachers in strengthening children's number, reading and vocabulary competencies in the early grades could improve learning outcomes in the longer term.

⁵ South African Schools Act of 1996

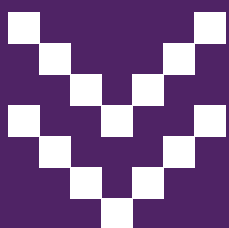
References

- Andersen, E., Malmgren, J., Carter, W., & Patrick, D. (1994). Screening for depression in well older adults: Evaluation of a short form of the CES-D. *American journal of preventive medicine*, 10(12), 77-84.
- Andresen, S., & Ben-Arieh, A. (2016). Can We Compare Children's Well-being Across Countries? Lessons from the Children's Worlds Study. In C. Hunner-Kreisel, & S. Bohne (Eds.), *Childhood, Youth and Migration, Connecting Global and local perspectives* (pp. 15-30). Springer. doi:10.1007/978-3-319-31111-1_2
- Arpey, N., Gaglioti, A., & Rosenbaum, M. E. (2017). How socioeconomic status affects patient perceptions of health care: a qualitative study. *Journal of primary care & community health*, 8(3), 169-175.
- Aunio, P., Korhonen, J., Ragpot, L., Törmänen, M., & Henning, E. (2021). An early numeracy intervention for first-graders at risk for mathematical learning difficulties. *Early Childhood Research Quarterly*, 55, 252-262.
- Baron, C., Davies, T., & Lund, C. (2017). Validation of the 10-item Centre for Epidemiological Studies Depression Scale (CES-D-10) in Zulu, Xhosa and Afrikaans populations in South Africa. *BMC Psychiatry*, 17(6).
- Ben-Arieh, A. (2008). The child indicators movement: Past, present, and future. *Child Indicators Research*, 1(1), 3-16.
- Ben-Arieh, A. (2010). Developing indicators for child well-being in a changing context. *Child well-being: Understanding children's lives*, 129-142.
- Ben-Arieh, A. (2019). Review of the book: Psychosocial Well-being of Children and Adolescents in Latin America: Evidence-based Interventions. Jorge Castellá Sarriera & Livia Maria Bedin (Eds.)(2017). *Children's Well-Being: Indicators and Research.*, 909-910.
- Ben-Arieh, A., Casas, F., Frønes, I., & Korbin, J. (2014). Multifaceted Concept of Child Well-Being. In A. Ben-Arieh, F. Casas, I. Frønes, & J. Korbin (Eds.), *Handbook of child well-being: Theories, Methods and Policies in Global Perspective* (Vol. 2, pp. 1-27). Springer.
- Black, M. (2012). Protect children from household food insecurity: Promote access to food and stress-alleviating resources. . *Journal of applied research on Children: Informing policy for children at risk*, 3(1), 18.
- Bray, R., & Dawes, A. (2007). Monitoring the well-being of children: historical and conceptual foundations. In A. Dawes, R. Bray, & A. van der Merwe (Eds.), *Monitoring child well-being: A South African rights-based approach*. Cape Town: HSRC Press.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513-531.
- Bronfenbrenner, U. (1989). Principles for the Healthy Growth and Development of Children. *JM Henslin 2nd ed) Marriage and Family in a Changing Society*.
- Bruckauf, Z., & Cook, S. (2017). *Child-centred Approach to Sustainable Development Goals in High income Countries: Conceptual Issues and Monitoring Approaches*. . Innocenti Working Paper, UNICEF Office of Research , Innocenti, Florence.
- Casale, D., & Posel, D. (2020). *Gender and the early effects of the COVID-19 crisis in the paid and unpaid economies in South Africa*. . National Income Dynamics (NIDS)-Coronavirus Rapid Mobile Survey (CRAM) Wave, 1.
- Chitiga, M., Henseler, M., Mabugu, R., & Maisonnave, H. (2021). How COVID-19 Pandemic Worsens the Economic Situation of Women in South Africa. *European Journal of Development Research*, 34(3), 1627-1644.
- Chowdhury, T., Chakrabarty, S., Rakib, M., Saltmarsh, S., & Davis, K. (2018). Socio-economic risk factors for early childhood underweight in Bangladesh. *Globalization and health*, 14(1), 1-12.
- Clark, H. (2020). A future for the world's children? A WHO-UNICEF-Lancet Commission. *Lancet*, 395, 605-658.
- Dehaene, S. (2009). Reading in the brain. *New York*.
- Ginsburg, C., Collinson, M., Gómez-Olivé, F., Harawa, S., Pheiffer, C., & White, M. (2022). The impact of COVID-19 on a cohort of origin residents and internal migrants from South Africa's rural northeast. *SSM-population health*, 17(101049).
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: a research note. . *Journal of Child Psychology and Psychiatry*, 38(8), 581-586.
- Gregg, P., Jonsson, J., Macmillan, L., & Mood, C. (2017). The role of education for intergenerational income mobility: A comparison of the United States, Great Britain, and Sweden. *Social Forces*, 96(1), 121-152.
- Henning, E., & Ragpot, L. (2015). Pre-school children's bridge to symbolic knowledge: first literature framework for a learning and cognition lab at a South African university . *South African Journal of Psychology*, 45(1), 71-80.

- Hunt, X., Breet, E., Stein, D., & Tomlinson, M. (2021). *The COVID-19 pandemic, hunger, and depressed mood among South Africans*. National Income Dynamics (NIDS)-Coronavirus Rapid Mobile Survey (CRAM) Wave, 5.
- Jyoti, D. F., Frongillo, E., & Jones, S. (2005). Food insecurity affects school children's academic performance, weight gain, and social skills. *The Journal of nutrition*, 131(12), 2831-2839.
- Kabudula, C., Houle, B., Collinson, M. A., Kahn, K., Gómez-Olivé, F. X., Tollman, S., & Clark, S. J. (2017). Socioeconomic differences in mortality in the antiretroviral therapy era in Agincourt, rural South Africa, 2001–13: a population surveillance. 5(9), e924-e935.
- Kawohl, W., & Nordt, C. (2020). COVID-19, unemployment, and suicide. *The Lancet Psychiatry*, 7(5), 389-390.
- Klasen, S., & Woolard, I. (2009). Surviving unemployment without state support: Unemployment and household formation in South Africa. *Journal of African economies*, 18(1), 1-51.
- Luc, J., Aa, E., Mangalani, & Makananisa, P. (2021). Impact of COVID-19 on the South African economy: A CGE, Holt-Winter and SARIMA model's analysis. *Turkish Economic Review*, 7(4), 193–213. doi:https://doi.org/10.1453/ter.v7i4.2129
- Lund, I. O., Andersen, N., Handal, M., Ask, H., Skurtveit, S., Ystrom, E., & Burdzovic Andreas, J. (2022). Parental drinking, mental health and education, and extent of offspring's healthcare utilisation for anxiety/depression: A HUNT survey and registry study. *Scandinavian journal of public health*, 14034948221076212. .
- May, J., Witten, C., & Lake, L. (2020). *The South African Child Gauge*. (J. May, C. Witten, & L. Lake, Eds.) Cape Town:: Children's Institute, University of Cape Town.
- McDonald-Harker, C., Drolet, J. L., Sehgal, A., Brown, M. R., Silverstone, P. H., Brett-MacLean, P., & Agyapong, V. I. (2021). Social-ecological factors associated with higher levels of resilience in children and youth after disaster: the importance of caregiver and peer support. *Frontiers in public health*, 9.
- Mncube, D., Uleanya, C., & Dube, M. (2021). Challenges Primary School Teachers Face In The Resumption Of Sports Events And Activities Amidst Covid-19 Pandemic. *Multicultural Education*, 7(6).
- Modjadji, P., Molokwane, D., & Ukegbu, P. (2020). Dietary diversity and nutritional status of preschool children in North West Province, South Africa: A cross sectional study. *Children*, 7(10), 174.
- Nyati, L., Pettifor, J. M., & Norris, S. (2019). The prevalence of malnutrition and growth percentiles for urban South African children. *BMC Public Health*, 19(1), 1-13.
- Patel, L. (2015). *Social Welfare and Social Development in South Africa* (2nd ed.). Cape Town: Oxford University Press.
- Patel, L., Sani, T & Yasmin, T. (2022). Communities of Practise for Social Systems Strengthening to improve Child Well-being Outcomes: Exempar of Developmental Social Work on Schools: Using a Community of Practise (CoP) Multi-disciplinary Approach for Early Grade Learners. *CSDA: University of Johannesburg*
- Patel, L., & Ross, E. (2020). Connecting Cash Transfers with Care for Better Child and Family Well-Being: Evidence from a Qualitative Evaluation in South Africa. *Child and Adolescent Social Work Journal*, 1-13.
- Patel, L., Hochfeld, T., Ross, E., Chiba, J., & Luck, K. (2019). *Connecting cash with care for better child well-being*. The Centre for Social Development, University of Johannesburg., Johannesburg, South Africa:.
- Patel, L., Knijn, G., Gorman-Smith, D., Hochfeld, T., Isserow, M., & Garthe, R. .. (2017). *Family contexts, child support grants and child well-being in South Africa*. Johannesburg .
- Patel, L., Pillay, J., Henning, E., Telukdarie, A., Norris, S., Graham, L., . . . Rhamasodi, R. (2021). *Community of Practice for Social Systems Strengthening to Improve Child Well-being Outcomes*. Johannesburg : UNICEF .
- Pollard, E., & Rosenberg, M. (2003). The Strength-Based Approach to child well-being: let's begin with the end in mind. *Well-being: Positive development across the life course*, 13-21.
- Richter, L. (2018). Interactions between the family and the state in children's health, education and social development. In K. Hall, L. Richter, Z. Mokomane, & L. Lake (Eds.), *South African Child Gauge 2018*. Cape Town: : Children's Institute, University of Cape Town.
- Richter, L., Mathews, S., Kagura, J., & Nonterah, E. (2018). A longitudinal perspective on violence in the lives of South African children from the Birth to Twenty Plus cohort study in Johannesburg-Soweto. *South African Medical Journal*, 108(3), 181-186. doi:10.7196/SAMJ.2018.v108i3.12661
- Sarriera, J. C., Casas, F., Bedin, L., Abs, D., Strelhow, M., Gross-Manos, D., & Giger, J. (2014). Material resources and children's subjective well-being in eight countries. *Child Indicators Research*, 8(1), 199–209.
- Savahl, S., Adams, S., Isaacs, S., September, R., Hendricks, G., & Noordien, Z. (2015). Subjective well-being amongst a sample of South African children: A descriptive study. *Child Indicators Research*, 8(1), 211-226.
- Savahl, S., Malcolm, C., & Slembrouk, S. (2015). Discourses on Well-Being. *Child Indicators Research*, 8, 747–766. doi:10.1007/s12187-014-9272-4

- Simelane, W.F. (in progress), 'Learning to read in isiZulu', Doctoral thesis study in the Faculty of Education of the University of Johannesburg, Johannesburg.
- Shonkoff, J., Boyce, W., & McEwen, B. (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: building a new framework for health promotion and disease prevention. *Jama*, 301(21), 2252-2259.
- Snyder, W., Wenger, E., & de Sousa Briggs, X. (2004). Communities of practice in government: Leveraging knowledge for performance. *PUBLIC MANAGER.*, 32(4), 17-22.
- Spaull, N., Daniels, R., Ardington, C., Branson, N., Breet, E., Bridgman, G., & ... & Casale, D. (2021). Synthesis Report: *NIDSCRAM Wave 2*. National Income Dynamics Study–Coronavirus Rapid Mobile Survey.
- StatsSA. (2020). Retrieved from http://www.statssa.gov.za/publications/P0211/Presentation%20QLFS%20Q4_2020.pdf
- StatsSA. (2021). Retrieved from <http://www.statssa.gov.za/publications/P0211/Presentation%20QLFS%20Q42021.pdf>
- Telukdarie, A., Munsamy, M., Graham, L., Rensburg, N., & Mongwe, R. (forthcoming). Digitalization of data gathering for childhood development in Africa.
- Theron, L., Theron, A., & Malindi, M. (2013). Toward an African definition of resilience: A rural South African community's view of resilient Basotho youth. *Journal of Black Psychology*, 39(1), 63-87.
- The World Bank. (2022). *South Africa Overview: Development news, research, data*. Retrieved from <https://www.worldbank.org/en/country/southafrica/overview>
- Ungar, M. (2020). *Working with Children and Youth with Complex Needs: 20 Skills to build resilience* (2nd ed.). Abingdon, Oxon: Routledge.
- UNICEF. (2013). *UNICEF Data: Monitoring the situation of children and women*. Retrieved from UNICEF: <https://data.unicef.org/children-sustainable-development-goals>
- UNICEF, WHO, World Bank. (2020). *Levels and trends in child malnutrition: Key findings of the 2020 Edition of the Joint Child Malnutrition Estimates*. Geneva:: WHO. Retrieved from <https://doi.org/10.18356/6ef1e09a-en>
- Wang, J., & Geng, L. (2019). Effects of socioeconomic status on physical and psychological health: lifestyle as a mediator. *International journal of environmental research and public health*, 16(2), 281.
- Whitaker, R., Phillips, S., & Orzol, S. (2006). Food insecurity and the risks of depression and anxiety in mothers and behavior problems in their preschool-aged children. *Pediatrics*, 118(3), e859-e868.
- WHO. (2008). *Training course on child growth assessments: WHO Child Growth Standards*.
- WHO; UNICEF . (2020). *Investing in our future: A comprehensive agenda for the health and well-being of children and adolescents*. WHO.





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