

SITE PROFILE REPORT:

Monwabisi Park, **Cape Town – South Africa**



ARUP







Acknowledgements

This document is a product of the partnership between Arup and the Bernard van Leer Foundation as part of the project "Proximity of Care – Designing for Early Childhood in Vulnerable Urban Context". Kounkuey Design Initiative (KDI) led the assessment for the Vuma neighbourhood in Makina Village Kibera (Nairobi, Kenya). Main contributors to this document are Vera Bukachi, Joe Mulligan, Allan Ouko K'oyoo, Pascal Mukanga Odira, Mary Mugeni, Amos Wandera, Manshur Talib, Campbell Clause, Franklin Kirimi and Gloria Tanui of KDI; Sara Candiracci and Spencer Robinson of Arup; and Irina Ivan of Bernard van Leer Foundation.

ARUP

<u>Arup</u> is an independent muti-disciplinary firm with more than 14,000 specialists working across every aspect of today's built environment. Our mission to Shape a Better World is driven by our commitment to make a real difference, stretch the boundaries of what is possible, help our partners solve their most complex challenges and achieve socially valuable outcomes.

The Arup International Development group partners with organisations operating in the humanitarian and development sector, to contribute to safer, more resilient and inclusive communities and urban settings in emerging economies and fragile contexts around the globe.



<u>The Bernard van Leer Foundation</u> is an independent foundation working worldwide to inspire and inform large-scale action to improve the health and well-being of babies, toddlers, and the people who care for them.

The Urban95 Initiative aims to improve, through urban planning, policy, and design, the way babies, toddlers, and the people who care for them live, play, interact with and travel through cities. It asks a bold but simple question:

"If you could experience the city from 95cm - the height of a 3-year-old - what would you change?"



Violence Prevention through Urban Upgrading (VPUU) is an area-based community development organisation that aims to reduce crime, increase safety and security, and improve the living and social conditions of communities through urban improvements and social interventions. Based on a structured, participatory approach, VPUU focuses on assisting with the improvement of the level of safety, social cohesion factors, community data and the willingness of the local community and other partners to cooperate in implementing a transformation programme.



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Executive Summary

Arup and the Bernard van Leer Foundation have partnered to combine their design expertise and knowledge of early childhood development, to support urban practitioners, city authorities and development and humanitarian actors working in vulnerable urban contexts to design and build healthy, protective, supportive and stimulating environments where young children can thrive.

The Proximity of Care approach was developed to better frame the correlation and interdependencies between the built environment and early childhood development in informal and refugee settlements. It provides a framework to assess how various urban systems and social factors observable at different levels of the built environment relate to the needs, strengths and challenges facing young children, their caregivers and pregnant women, and ultimately influence early childhood development. The framework is also intended as a tool to support the identification and design of childand family-friendly interventions in a given urban context, and to measure their long-term impact.

Proximity of Care is at the core of a Design Guide we are developing for professionals and decisionmakers operating in vulnerable urban contexts, such as informal and refugee settlements, to help them profile their work as child- and family-friendly. The Guide incorporates design principles, tools and policy





recommendations, to support the assessment, design and implementation of interventions aiming at improving the conditions and well-being of young children, their caregivers and pregnant women in the environment where they live.

To optimise the Proximity of Care approach and develop a practical and useful Design Guide, Arup and the Bernard van Leer Foundation have partnered with experienced organisations operating in vulnerable urban contexts and piloted our approach in four sites. In El Mina, Lebanon we are working with Catalytic Action; in Azraq, Jordan with Civic; in Kibera, Kenya with Kounkuey Design Initiative (KDI); and in Khayelitsha, South Africa with Violence Prevention through Urban Upgrading (VPUU).

This report presents insights from the research study undertaken in Monwabisi Park in Cape Town, the legislative capital city of South Africa, in collaboration with Violence Prevention through Urban Upgrading (VPUU). The Proximity of Care Framework was used to frame and inform the research and understand the challenges and opportunities for early childhood development across the city. The report also identifies opportunities for enhancing the living conditions of young children, their caregivers and pregnant women, and for empowering communities through innovative and strategic spatial interventions.



The research identifies core challenges and opportunities for early childhood development at all four dimensions of the Proximity of Care approach.

In relation to **health**, no household in Monwabisi Park A Section is legally connected to piped water. Instead, caregivers and children must use communal taps, which are shared by up to thirtysix other households. Decreasing water pressure as the number of users increases could deny children the opportunity to wash before school or after playing outside. Futhermore, load shedding disrupts electricity supply to certain households, leading caregivers to use non-electrical cooking sources like parrafin stoves, which expose both caregiver and child to fumes and air pollution. To address these challenges, interventions by VPUU are an important opportunity to establish secure service supply lines to households, through maintaining and reporting breakages to service infrastructure. Furthermore, VPUU's community gardening initiatives, together with guarterly visits from nurses to monitor children's health, are promising entry points to creating a more healthy and enriching environment for optimal early childhood development.

In relation to **protection**, households in Monwabisi Park A Section are vulnerable to climate hazards, particularly flooding. The flammable and weak structural foundations of many dwellings, together with dangerous household practices like cooking with non-electrical, burning stoves, make for precarious conditions and very limited resilience to hazards. Crime is another challenge, not just in Monwabisi Park but also in Khayelitsha and the city of Cape Town. Opportunities for addressing these challenges include the large number of hotlines that abused caregivers can contact at the city and neighbourhood level. Furthermore, existing spaces like Emthonjenis offer safe, welcoming areas where caregiver and child can congregate and play with safe sightlines and clean environments. Lastly, national disaster risk management plans could offer entry points to mainstreaming climate resilience in Monwabisi Park, provided these are integrated with dayto-day behaviours of community members.

For **stimulation**, there are few formal play spaces in Monwabisi Park. In addition, rarely do households have accessible, formalised and safe outdoor space where children can participate in explorative and



unstructured play. Instead, children play in streets where they may be prone to dirt, violence and limited stimulation. Children aged between 0-2 are too young to attend early childhood development centres, limiting their learning and play experience to the home, where the burden lies on their parents to create optimal conditions. Furthermore, a large proportion of children aged 0-6 do not attend early childhood development creches with regular learning curriculums. Opportunities to create a more stimulative environment include VPUU's Community Emthonjenis centre, where children under 5 can participate in a structured education programme and experience optimal play conditions. Furthermore, existing public spaces, such as the Emthonjenis, are equipped with childfriendly features like benches and patterns for play.

Lastly, for **support,** informal work is common in Monwabisi Park, which suggests that some residents' livelihoods are characterised by precarity and poor remuneration. This might limit the affordability of nutritious foods and play aids for young children, as well as basic household supplies like electricity. Furthermore, caregivers in Monwabisi Park, particularly women, go unrepresented by community leadership and they are reportedly afraid to express the distinct challenges and needs they face. Lastly, it is difficult for early childhood development centres to register with the Government's Department of Social Development, which may limit their funding and therefore undermine their ability to provide optimal learning and play conditions. Opportunities to address these challenges include vocational skills training for caregivers in the neighbourhood, which also focuses on early childhood development education and information. In addition, advocacy for early childhood development issues at the city level suggest that conditions for a knowledgeable and supportive environment for optimal early childhood development exist, and that effective interventions can work to scale these down to the neighbourhood and household levels in Monwabisi Park.

This report includes key recommendations for enhancing early childhood development opportunities in Monwabisi Park.

1. Introduction



DESIGNING FOR EARLY CHILDHOOD IN VULNERABLE URBAN CONTEXTS

Vulnerable urban areas such as refugee and informal settlements house a growing population in critical need, and the number and size of these areas will only increase in the coming decades. While the specifics of these vulnerable areas vary, they consistently pose major challenges for children's optimal development.¹ Living in these contexts has particularly significant negative impacts on young children aged 0 to 5.²

At present, the specific needs, vulnerabilities and demands of young children, their caregivers and pregnant women living in informal and refugee settlements are frequently ill-considered and unaccounted by government, development and humanitarian organisations, and urban practitioners. The 0-5 age group's needs are different than those of older children, but are often 'lumped in' with them from a planning and policy perspective, or worse, go entirely unrecognised.

Arup and the Bernard van Leer Foundation have partnered to help bridge this gap, by combining their design expertise and knowledge of early childhood development. The Proximity of Care approach was developed to better understand the needs and constraints faced by young children, their caregivers, and pregnant women in vulnerable urban contexts, such as informal and refugee settlements; and to ultimately help improve their living conditions and well-being. The Proximity of Care approach is at the core of a Design Guide that we are developing to help urban practitioners, city authorities and development and humanitarian actors working in vulnerable urban contexts, mainstream in their projects child- and family-friendly design principles, processes and policy recommendations.

The Design Guide is intended to provide practical tools to enable users to thoroughly assess and design interventions in informal and refugee settlements, whilst considering the needs and demands of young children, their caregivers and pregnant women, to ultimately build healthy, protective, supportive and stimulating environments where young children can thrive.

The Guide builds upon the Bernard van Leer Foundation's Urban95 Initiative, which asks a bold but simple question: "If you could experience the city from 95cm – the height of a 3-year-old – what would you change?". Urban95 leverages urban planning, policy and design to improve the very youngest children and their caregivers experience, play in, interact with and travel through cities.

To ensure the needs of the Design Guide's end users are properly met, we are working closely with urban practitioners operating in informal and refugee settlements, and with development and humanitarian organisations. In particular, we are partnering with Civic, Catalytic Action, Kounkuey Design Initiative (KDI), and Violence Prevention through Urban Upgrading (VPUU), who are operating in vulnerable urban contexts in various sites across Jordan, Lebanon, Kenya, and South Africa respectively.

WHY AN EARLY CHILDHOOD DEVELOPMENT FOCUS IN VULNERABLE URBAN CONTEXTS

The early years of a child's life are crucial for healthy physical and mental development³. Neuroscience research demonstrates that a child's experiences with family, caregivers and their environment provides the foundation for lifelong learning and behaviour⁴.

Cognitive evolution from birth to age five is a 'golden period' during which the stage is set for all future development, including core skills acquisition, establishment of healthy attitudes and behaviours, and flourishing of mature relationships⁵. Without effective early childhood support, developmental deficits can become a cycle of lost human capital. Developmental



inhibition in the first two years of life has harmful effects on adult performance, including lower educational attainment and reduced earning⁶. Improving early childhood development, on the other hand, acts as a social and economic engine for communities and societies.

To develop to their full potential, babies and toddlers require not only the minimum basics of good nutrition and healthcare, clean air and water and a safe environment; they also need plenty of opportunities to explore, to play, and to experience warm, responsive human interactions⁷. To a large degree, the establishment of healthy patterns in human relationships depends upon the physical environment children inhabit in their very first years⁸.

The characteristics of physical space impact learning and memory formation⁹; chronic noise exposure can result in lower cognitive functioning and unresponsive parenting¹⁰; crowding can elevate physiological stress in parents and cause aggressive behaviour in young children. For young children to make the most of their surrounding built environment, those places need to cater to age-relevant developmental needs, while providing affordances and barrier-free access for caregivers¹¹.

Children, caregivers and expectant mothers living in rapidly urbanising informal and refugee contexts are a particularly vulnerable population, among the most severely affected by a lack of basic services, inadequate living conditions, and limited opportunities for individual and community growth. In addition, these populations are often on the front line of climate change impacts, compounding the difficulty of their situation. While the typologies of vulnerable urban contexts can vary, living in these environments is consistently demonstrated to have significant negative impacts on the optimal development of very young children, as well as their support networks¹².

With cities growing exponentially and population displacement on the rise globally, more and more children are likely to find themselves living in informal, resource-restricted, and otherwise vulnerable urban areas. In the coming decades, children's health, lives and futures will be increasingly determined by the shape of cities and urban settlements. Investing in early childhood development has been proven to be the single most effective method for poor and vulnerable societies to break out of poverty and vulnerability cycles¹³. For urban planners, development actors, and government authorities alike, there is no greater chance to reap long-term, society-wide benefits than by improving early childhood development for the generations being raised in vulnerable urban contexts around the globe.



THE PROXIMITY OF CARE APPROACH

The Proximity of Care Approach was developed to better understand the relationship between the built environment and early childhood development in vulnerable urban contexts, whose interdependencies are not always fully appreciated and addressed.

It is a tool that provides a structured, granular and holistic approach to assess how various urban systems relate to a child's developmental needs in a given context; and to help support, prioritise and design child- and family friendly interventions. The framework is also intended as a tool for ongoing outcome assessment, to measure the long-term impact of specific interventions. The Approach considers **four primary Dimensions** foundational to optimal early childhood development: **Health, Protection, Stimulation and Support**. Each dimension is assessed against a range of key factor areas, which are both hard and soft assets – physical space and infrastructure, human interactions and behaviours, economic, policy and planning elements, that individually and collectively contribute to enable optimal early childhood development in a given urban context.

To gain a holistic understanding of the needs and demands of young children, their caregivers, and pregnant women in their settlement, these factor areas are assessed at different urban scales of human interactions– **the Household, Neighbourhood and City levels**, whose boundaries are highly context-dependent.

Dimension: Health

This dimension considers those factors that contribute to a healthy and enriching environment for optimal early childhood development, examining how to improve physical, mental, and emotional health and support cognitive development among young children, their caregivers, and pregnant women.

Dimension: Protection

This dimension considers those factors that contribute to a safe and secure environment for optimal early childhood development, determining how to reduce risks, mitigate hazards and increase safety for children, and improve caregivers' perception and experience of safety and security.

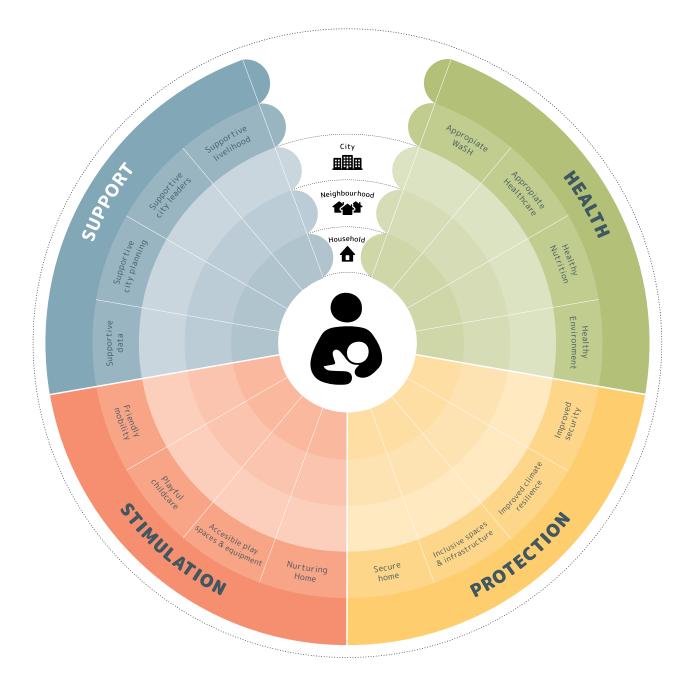
Dimension: Stimulation

This dimension considers those factors that contribute to a nurturing and stimulating environment for optimal early childhood development, addressing how to enhance the quality of children's interaction with caregivers, peers, other adults, and the physical space around them.

Dimension: Support

This dimension considers those factors that contribute to a knowledgeable and supportive environment for optimal early childhood development, looking at how to enhance knowledge, support from city authorities and community members, and include beneficiaries' voices in decision-making and planning.

Figure 1: Visualisation of the Proximity of Care Approach



This cross-cutting assessment allows a nuanced understanding of the specific areas most critical to improving early childhood development in a given context. The knowledge and evidence generated through the application of the framework can be used to support planners, authorities and built environment professionals to create a healthy, stimulating, safe and supportive environment that contributes to young children's optimal development, and enhances caregivers' and pregnant women's living conditions and wellbeing.

THE TOOLKIT

The application of the Proximity of Care Approach is supported by a toolkit for conducting a participatory assessment. The toolkit includes methods and tools for the following activities:

Desk-based Analysis of secondary socio-economic and spatial data on the selected neighbourhood.

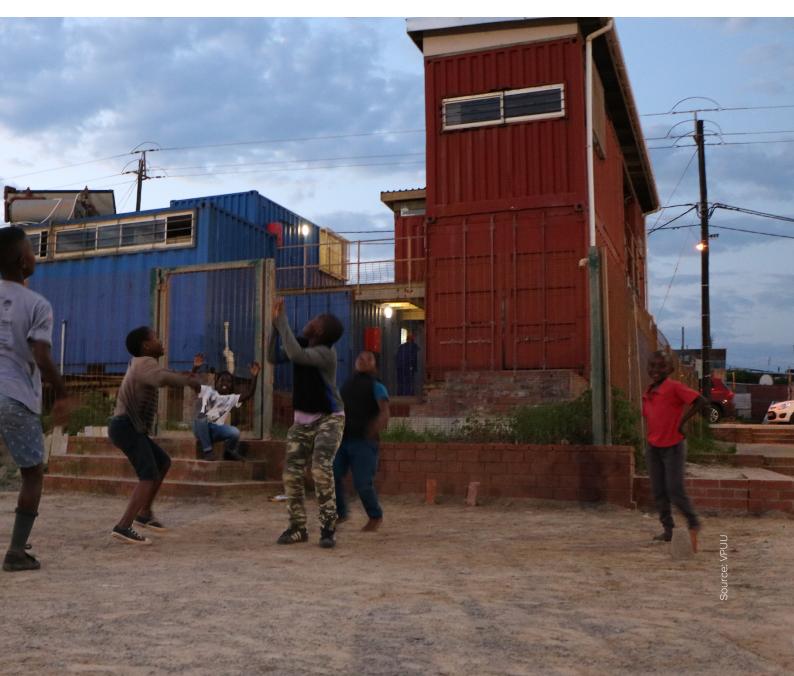
Transect Walks to map and assess site materiality and accessibility, social conditions, availability and conditions of child-friendly spaces, childfriendliness and child-specific hazards manifested by local infrastructure, pedestrian and vehicular traffic flows, and potential barriers to play access.

Key Informant Interviews with different stakeholders including academic experts, built environment professionals, NGO staff, city authorities, youth groups, educators and community leaders to better understand early childhood challenges and opportunities in the selected neighbourhood.

Focus Group Discussions with children, educators, and community members to examine local opportunities and challenges surrounding early childhood development.

Assessment Workshops with children (0-5 and 6-12), caregivers, local educators, community leaders and community members to map and understand early childhood challenges and opportunities in the selected neighbourhood, experienced by children and carers in the local community. **Co-creation Workshops** with children (0-5 and 6-12), caregivers, local educators, and community members to identify early childhood development opportunities in the selected neighbourhood, and come up with tangible ideas for intervention in key hot-spots, using participatory solution development exercises.





2. Monwabisi Park, Cape Town Profile



METHODOLOGY

The Proximity of Care Framework was used in Monwabisi Park, Cape Town, the legislative capital city of South Africa, to understand the challenges and opportunities for early childhood development across the city, and identify opportunities for enhancing the living conditions of young children, their caregivers and pregnant woment. The field research was conducted in collaboration with Violence Prevention through Urban Upgrading (VPUU), and focused on the neighbourhoods of Monwabisi Park A Section in Khayelitsha.

The field research enabled Arup and the Bernard van Leer Foundation to field test and refine the Proximity of Care Framework and associated toolkit, and to establish a baseline for site conditions, including challenges and opportunities, to inform the design of context-sensitive interventions.

The following methods were used in the elaboration of the research and production of the report:

- Desk based review and gap analysis of secondary data including demographic, geographic, and socio-economic. The majority of the desk based review was conducted using data that VPUU have collected in Monwabisi park over the past seven years through regular household surveys, mapping exercises, planning documents and their general experience in the neighbourhood.
- Key Stakeholder mapping to develop a database of key local stakeholders, sorted by specialisation and mapped against the Proximity of Care Dimensions and Goals, to engage for research activities including interviews, focus groups, and workshops.

- Semi-structured interviews (4) with
 community leaders who work in the
 area, representatives from relevant NGO
 organisations, municipal representatives and
 VPUU Education Staff. All interviews were
 conducted remotely using Skype or telephone
 due to government Covid-19 lockdown
 restrictions. The research team conducted one
 focus group discussion prior to the imposition
 of coronavirus-related lockdown measures.
- Transect walks were not conducted due to movement restrictions relating to the coronavirus pandemic. To compensate for the impossibility of movement during national lockdown, the research was based upon the empirical knowledge of the VPUU staff that has worked in the area for the past seven years. Some staff members that live in the area were also consulted.

Due to movement and proximity restrictions required by the 2020 Covid-19 pandemic, some research activities were performed remotely to ensure the safety of staff and participats. An envisioned workshop with children and caregivers was scoped out due to the government mandated social distance guidelines introduced during the project period.

The Monwabisi Park Profile Report is structured around the four Dimensions of the Proximity of Care Framework – Health, Protection, Stimulation and Support, with an introductory section presenting a general overview of the site, with geographic, demographic and socio-economic conditions.

Key challenges and opportunities to early childhood development are assessed for each Dimension at different urban scales – the Household, Neighbourhood and City levels. Recommendations on the type of interventions to be implemented to address these challenges and enhance these opportunities are provided.

OVERVIEW

Monwabisi Park is an informal settlement on the southern periphery of Khayelitsha, Cape Town. It was established late in 1996 after the national government urged people to move out of backyard shacks and integrate with formal urban planning processes. Later in 1996, the settlement grew to 1,000 dwellings as people arrived in Cape Town from the Eastern Cape in search of work. Monwabisi Park became an alternate living space for black people settled in Crossroads as well as other areas in Cape Town. The scale of land invasion meant that the settlement was initially referred to as Endlovini ("take by force mighty and big like an elephant" in the native Xhosa language), before being renamed Monwabisi Park in 1997.

The settlement's history is characterised by periodic disputes over land ownership. Disputes usually occur between land occupiers and the City of Cape Town's Anti-Land Invasion Units, which respond firmly to illegal occupations by destroying dwellings and homes. Nevetherless, land invasion continues and the settlement's population has proliferated. By 2015, the number of households had climbed to 6,500, and since 2017, the settlement has expanded further by fourfold.

During the coronavirus pandemic ('Covid-19'), a moratorium has been established that bans eviction of residents on illegally-occupied land in Cape Town. The moratorium represents a break period, and possibly an opportunity to revisit relations between illegal settlers and the City of Cape Town. However, cases of unlawful eviction have been reported throughout the lockdown period, and political tensions are high. In Monwabisi Park, the settlement spans different Wards run by different political parties. Political representation of people living in the settlement has shifted between the Democratic Alliance and the African National Congress.

Administrative boundary

Monwabisi Park is spread across four parcels of land, three of which are owned by the City of Cape Town and one by the Western Cape Provincial Government. It sits on the periphery of Khayelitsha, one of the largest townships in South Africa, located approximately 30-kilometres from Cape Town centre.

By 2013, Monwabisi Park had grown to more than 6,000 dwellings and an approximate total population of 25,000. While the true figure was likely higher, this represented one-tenth of all informal dwellings in Khayelitsha and almost 5% of those in the entire city of Cape Town.

Monwabisi Park A Section – this Report's focus site – is an area of study defined by VPUU, which organised Monwabisi Park into four sections, almost like neighbourhoods, when it began conducting Baseline Household Surveys. A Section is therefore not an official recognised boundary in the Cape Town, but it is generally recognised as a demarcated entity by residents living in Monwabisi Park. A Section sits within Khayelitsha Ward 98 and it extends over Mew Way into most of the Monwabisi Park settlement.



Map of Monwabisi Park; Source: VPUU

Demography

In 2018, Monwabisi Park A Section's population was estimated at 2,436 persons.

The 2018 Enumeration Report suggests that the largest share (~14%) of the population are aged between 30-34 years. A similar proportion is aged between 35 and 44 years, while more than 10% were aged between 6 and 12 years. The total population is split roughly 48% male to 52% female, and 99% of all people are of Black African ethnicity; 91% speak isiXhosa as their first language¹⁴.

Socio-Economic Conditions

During the 2011 Census for Ward 98, which includes Monwabisi Park A Section and formal parts of Khayelitsha, the average annual household income was R29,400 (ca. US\$1,800).

This was similar to the average in Western Cape and at the national level. Almost onefifth (16%) of households in Ward 98 had no income whatsoever. The Census also showed that in the Greater Khayelitsha area, of which Monwabisi Park is included, more than 44% of residents were unemployed or had given up entirely on finding work.





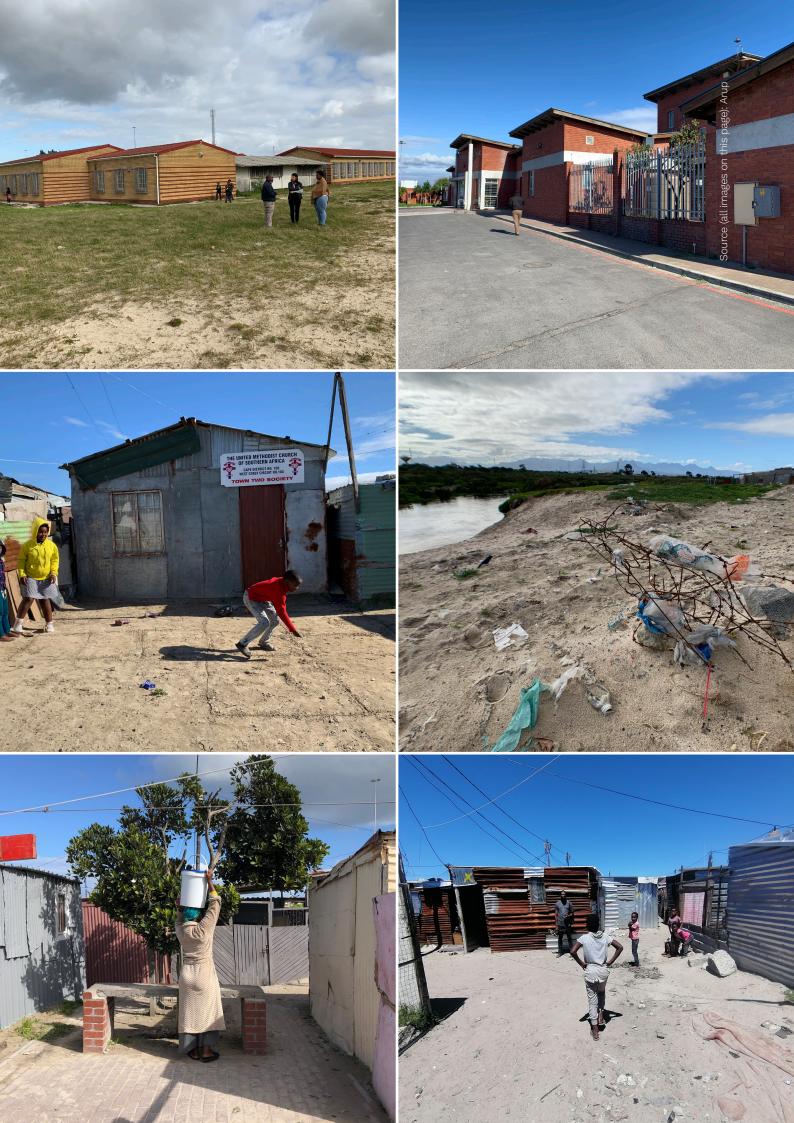
Furthermore, 74% of households earned less than the poverty line of US\$230 per month. A VPUU household survey in Section A, conducted in 2018, found that 44% of households received a formal income while 38% received an informal income and just 13% received child support grants. In addition, just 2% of households received disability support or old age pension grants.

In 2010, the most prevalent form of business in Monwabisi Park was the spaza shops. These shops provide basic foods, as well as toiletries and other basic items for maintaining a household. There is currently an initiative to train spaza shop owners through the Triple Trust Organisation, so that owners can learn the benefits of better business practices. In addition, the various Early Childhood Development centres in the settlement reportedly provide professional development training for caregivers and parents; courses include computer use and data tracking. Barber shops and hair salons are also widespread. It is difficult to determine the exact number of these facilities because many will close temporarily if their owner finds other work elsewhere. Some hair stylists have been formally trained, while others have learned themselves. There are at least four different stores where the barbers and stylists go to purchase supplies.

3. Key Challenges

This section outlines key challenges identified in Monwabisi Park, using the Proximity of Care Approach. Opportunities and recommendations on type of interventions to be implemented in the neighbourhood to address the challenges identified within the Health, Protection, Stimulation and Support Dimension are provided in Section 4.





HEALTH CHALLENGES

The Health Dimension of the Proximity of Care Approach assesses those factors that contribute to a healthy and enriching environment for optimal early childhood development, examining how to improve physical, mental, and emotional health, and support cognitive development among young children, their caregivers, and pregnant women.



Household level

Load shedding – the deliberate shutdown of power to ease pressure on the distribution system – affects many residents in Monwabisi Park. Where load shedding is excessive, many households are unable to use electrical cooking equipment. Instead, they use paraffin, despite community leaders advising against this. The use of paraffin and other non-eletrical cooking sources exposes both caregiver and child to increased risk of respiratory difficulties and general household air pollution. Cooking with paraffin also increases the risk of uncontrolled fire, especially during winter when energy demand is highest.

No households in the settlement are legally connected to piped water. Instead, households rely on communal taps that are distributed throughout A section; there is approximately one tap to every thirty-seven households. While these taps are monitored by VPUU, land invasions and the expansion of the settlement places increased pressure on the system. Occasionally, water pressure can reduce dramatically, which may lead to slower pour times and therefore longer wait times. This could limit opportunities for children to wash properly before school, or after they have returned from playing outside.

In Monwabisi Park A section, there is no doorto-door solid waste management system.

Instead, "containers" are placed along the main access corridors and routes in the settlement. There are seven of these containers lining the periphery of the settlement. While the capacity of these containers is unclear, they may be subject to overflow if levels of rubbish are high. Furthermore, households that are further away from the bins might need to carry waste through public spaces where caregivers and children congregate and play. Where there is a lot of household rubbish, this could require more than one trip.



No households in Monwabisi Park A Section are connected to a public sewage system. A Section does have several communal toilets that are serviced by the City, but occasionally neighbours reportedly will lock the facilities and share the key only with a select group. Limited access to toilet facilities due to this gate-keeping, and also for safety reasons during the night, could subject children to painful health repercussions should they need to stool-hold for long periods of time; it may also force some to defecate in the open. Furthermore, following heavy rainfall, puddles will begin to form around the toilets, and, in result, children generally feel unsafe using them.

Even in child-designated space, barriers to using hygiene services are high. For example, while the early childhood development centres in Monwabisi Park have toilet facilities, these are built to standard adult size, creating barriers for children to independently access and use them.

The nearest community health centre to Monwabisi Park A Section is the Michael Mapongoane Community Health Centre, a 45-minute walk away. Generally, residents in A Section face various difficulties in accessing health clinics as most of these clinics are located in Khayelitsha's formal neighbourhoods (on the northern side of Mew Way). This will have particularly adverse impacts on children and pregnant women in need of urgent medical attention. Compounding this, some parents do not have adequate identification documents for their children to be seen in the available clinics, and the community are still waiting on vaccinations for measles and polio.



City level

In the City of Cape Town, the most common sources of PM10 emissions are diesel-vehicle emissions, fuel and wood burning, as well as dust from construction activities on unpaved verges and roads. **Despite recording its lowest rate of PM10 in the past twelve years, Khayelitsha was the only ambient air quality site not to meet the 2015 South African standards.** Poor scores on air quality are attributed to informal burning for cooking and heating within close proximity to the Air Quality Monitoring Station in Khayelitsha. High ambient air pollution levels threaten to increase the incidence of respiratory symptoms and other acute health effects among caregivers and children.

PROTECTION CHALLENGES

The Protection Dimension of the Proximity of Care Approach assesses those factors that contribute to a safe and secure environment for optimal early childhood development, determining how to reduce risks, mitigate hazards and

increase safety for children, and improve caregivers' perception and experience of safety and security.



Household level

While most households in Monwabisi Park A Section sit on porous sand with a relatively quick drainage capacity, they are increasingly vulnerable to flooding as the population increases and flows of water become more concentrated. In addition, A Section is the lowest part of the Monwabisi Park Settlement and the surrounding areas. Compounding this, dwellings tend to be one-storey and made from wooden frames overlain with corrugated shingles. Households closer to the main roads are particularly vulnerable since the roads' drainage systems channel rainwater directly towards these households.

Cooking, heating and power systems inside households are sometimes not accidentresilient or pollution-free. Electrical appliances are regularly left running¹⁵, possibly creating a hazard to children while wasting electricity. Residents commonly use wood-burning imbawula devices or unsafe paraffin stoves because these are less expensive than electricity and gas stoves. These non-electrical stoves are dangerous for several reasons; mainly, the toxins they emit can cause respiratory illnesses, especially where household construction materials do not allow for much ventilation. Furthermore, when paraffin is sold, it is poured into recycled and unmarked soda bottles that children can accidentally drink from.

The primary protection concern for residents in Monwabisi Park is the fire hazard associated with these unsafe flame stoves. These stoves can easily be knocked over, causing them to explode and start fires. Given the close proximity of households in the settlement, together with their flammable wooden frames, this is an acute risk that compromises the safety of caregivers, children and all residents living in Monwabisi Park.



Fear of violence is widespread in Khayelitsha, especially in public spaces. The homocide rate in 2014 (76-108 per 100,000 people) in the area was more than two to three times higher than the national average (31 per 100,000 people). A 2017 household survey conducted by VPUU showed that few areas of Monwabisi Park A Section had experienced improved crime levels. Crucially, municipal support for community-based crime measures is "exceedingly small", especially as funding is directed toward Covid-related streams. Though the local politician reportedly advocated for crime prevention to be prioritised in the city budget, security has been neglected, especially during the Covid-19 pandemic.

Installing fire safety and escape routes in creches, nurseries or primary schools in Monwabisi Park is limited sometimes by restrictions on space and the construction materials used for the buildings. More specifically, apart from VPUU's centre, the early childhood development centres are built from wooden frames and corrugated metals, with minimal resilience to fire hazards.

The streets in A Section are carve-aways from the dune landscape. While they are compacted and levelled twice per year, streets may deteriorate and erode over time. The quality of roads means people reportedly drive slowly, and "the streets in the settlement are therefore play spaces for children exactly for the fact that they lack maintenance"¹⁶. However, unstable ground, together with undesignated space for child's play, could affect the safety and stimulation value of these streets. The main road north of Monwabisi Park – which caregivers and children must cross to access a playpark - is tarred and buses, cars and minibus taxis speed along it. There is no defined pavement on one side, and, on the other side, the pavement is mostly occupied by informal businesses and shops. Children have little space to play, and accidents are reportedly common.



City level

Hazards in Cape Town are most common during winter, when houses are prone to flooding. While the Disaster Management Unit of the City of Cape Town convenes workshops on mitigating flood risk (for individual houses), they only educate attendees, rather than providing them with materials to build resilience into their homes. Furthermore, training occurs just once per year for community leaders, and there is an annual mass workshop for communities. The last of these sessions were held at the end of 2019. Besides this, one community leader was unaware of any disaster risk management plans in Monwabisi Park, and there is little evidence of particular attention in disaster risk assessment plans focused on children.

STIMULATION CHALLENGES

The Stimulation Dimension of the Proximity of Care Approach assesses those factors that contribute to a nurturing and stimulating environment for optimal early childhood development, addressing how to enhance the quality of children's interaction with caregivers, peers, other adults, and the physical space around them.



Household level

Children aged between 0 and 2 years are taught inside the home, rather than with early childhood development programmes. Those children living in smaller houses with limited outdoor space and few designated play aids will be disadvantaged in their learning and play experience. This also increases the burden on caregivers and parents to provide optimal conditions for their children to learn inside the home. For older children, it is reportedly uncommon to find books inside the household. This may limit older children's home learning to self-made toys made from bottles, paper and plastic bags.

It seems that households in Monwabisi Park A Section do not have designated accessible and safe outdoor space for playing activities. Instead, children play in the street or in improvised spaces around the bounds of the household. While community leaders urge drivers to pass through the settlement slowly, it is unlikely that these improvised outdoor spaces provide a nurturing, safe and stimulating play space wherein children can build and interact with play aids. Furthermore, during the rainy season and cold periods, it is likely that children will be confined to the household, where conditions for play are sub-optimal for some.



Monwabisi Park A Section totals 200,150m2 in size. Of this, approximately 1.5% is formalised public space and soccer fields. A Section is characterised by sandy roads and walkways, which children navigate and build games around. Crucially, there is a shortage of stimulants for play in the areas, and children must therefore "generate their own fun and stimulation". While this encourages creativity, it may deprive children of rewarding play experiences in which they can safely explore their surroundings.

Caregivers in Monwabisi Park have raised the importance of more play parks being established within the Monwabisi Park settlement, suggesting that those which exist are

insufficient. Some caregivers also feel unwelcome when they take children to parks in the formal part of Khayelitsha: "they are not always welcome there" on the basis that they are "from a different area"¹⁷.

In 2019, just 10% of children aged between O and 6 years in Monwabisi Park A Section were attending a registered creche with a regular learning curriculum¹⁸. The remaining 90% were attending a non-registered creche or they were not exposed to a regular learning programme at all. Furthermore, most facilities do not provide after-school activities for children, and recreational materials are limited in number.



City level

The City of Cape Town's "Investing in Early Childhood" document (2015) concludes that many early childhood development facilities in the city remain unregistered owing to their failure to comply fully with the health, safety and pedagogic requirements of the national Children's Act. This mirrors the situation in Monwabisi Park A Section, where 90% of children attend an unregistered creche or are not exposed to a regular learning programme at all. Crucially, the failure of early childhood facilities to comply with national standards "negatively impacts on child safety and the wellbeing of preschool learners who attend these facilities"19. Furthermore, it restricts young children's access in these facilities to stimulative environments, which is essential given the limited stimulation some children achieve in the household or in their improvised play spaces, especially in informal settlements.

SUPPORT CHALLENGES

The Support Dimension of the Proximity of Care Approach assesses those factors that contribute to a knowledgeable and supportive environment for optimal early childhood development, looking at how to enhance knowledge, support from city authorities and community members, and include beneficiaries' voices in decisionmaking and planning.



Household level

A 2018 household survey conducted by VPUU concluded that just 44% of households in Monwabisi Park A section received a 'formal' income, while 38% received an 'informal' **income²⁰.** While by no means representative (the sample size was 76 households in A Section), the results offer insight into the nature of livelihoods in the settlement. Typically, informal income and work are characterised by precarity, uncertainty and poor remuneration. For caregivers, inconsistent or insufficient income may limit the affordability of nutritious foods and play aids for young children, as well as basic household supplies like electricity. Compounding this, just 13% of households in the survey received child support grants, so additional support for child-related matters is also limited²¹.



It is very difficult for early childhood centres in informal neighbourhoods – like Monwabisi Park – to register with the Government's Department of Social Development. Currently, just two out of twenty centres in Monwabisi Park are receiving funding from the Department of Social Development. As one interviewee expressed: "The help is not enough". A lack of funding or support will undermine the activities and facilities the centres can offer, eroding conditions for optimal early childhood development.

Just one community group in Monwabisi Park, the Early Childhood Forum, works explicitly on child welfare issues. Furthermore, **there are no 'formal' structures or community groups that focus on gender-related issues, excluding the distinct challenges and needs of women in particular.** This could leave caregivers and children without access to necessary support systems, while contributing to feelings of helplessness and isolation.

In fact, **caregivers and pregnant women in** Monwabisi Park have very few representatives among community leadership. Furthermore, many are "scared" to openly express any difficulties they experience and to represent themselves. This, together with an absence of community groups or structures working on gender-specific issues, likely sidelines the unique challenges related to caregiving and pregnancy. Even where events have been organised, turnouts among women are weak. In 2019, a workshop convened by the City for pregnant women invited thirty participants, but only ten attended²².



City level

In the University of Cape Town, child-centred design modules do not feature in architecture or built environment courses. And while a student with interests in child-centred design can reportedly access relevant learning or reading resources, most available resources are more general and focused upon more pressing issues in South Africa, such as spatial inequality. Though an important topic in itself, it is unlikely that this issue includes a distinct and focused curriculum on child-centred design and planning. In turn, the likelihood that graduate designers and planners in Cape Town will acknowledge or understand the importance of designing for early childhood is small. For those that work at the city level, this could restrict the number of municipal 'champions' advocating for child-centred issues, especially if these issues are subsumed by broader challenges like spatial inequality. In fact, in the city's 2015 Design and Management Guidelines for a Safer City, there is minor reference to safe spaces for children²³. And prior to this, the City's 2006 Integrated Development Plan was criticised for its lack of child-focused planning or guidelines²⁴.

4. Opportunities

Applying the Proximity of Change approach has enabled a diverse set of opportunities to be identified in Monwabisi Park across the Health, Protection, Stimulation and Support dimensions, and at different urban scales – the Household, Neighbourhood and City levels.





HEALTH OPPORTUNITIES

Health outcomes among children in Cape Town are improving. It is essential that the progress at the city level filters down to the neighbourhood and household levels, and that caregivers and children in informal settlements like Monwabisi Park are not neglected on the basis of illegal residence or of being unregistered with a health clinic. Non-governmental interventions - like those led by VPUU - are important opportunities to ensure stable service supply lines to households, and, possibly, to address the existing limitations on systems for energy, waste and water. This must be done with consideration of the broader challenges facing certain groups. For example, there is clearly a need for more proximal health clinics inside the settlement. However, simply constructing a facility without considering the wider cultural. economic and social context risks neglecting the distinct challenges facing caregivers and children in accessing and receiving quality healthcare, such as a lack of appropriate identification.



Household level

VPUU's early childhood development programme combines development needs with gardening initiatives to encourage households to grow their own vegetables. Currently, there are approximately thirty-six gardens in Monwabisi Park A Section that are utilised for crop cultivation. VPUU also supports a community garden near the community centre. Communal gardening offers various health benefits to the Monwabisi Park residents, including the provision of healthy, nutritious food and opportunities to ameliorate loneliness and to socialise. VPUU's joint early childhood development-gardening initiative can be leveraged to encourage healthy eating habits among children in the settlement, while engaging them in enjoyable physical activity. Community gardening also reduces the burden on poorer families to purchase expensive foodstuffs.



Basic health infrastructure in Monwabisi Park is checked and monitored by VPUU's 'Check It' programme. VPUU conducts daily check-ups of sanitary and water infrastructure, and it reports any breakage to the City of Cape Town. The municipality reportedly arrives to repair broken items within three days. Furthermore, communal toilets in the settlement are built upon sewer tanks that are cleaned once per week. There are 36 blocks of 10 flush toilets in Monwabisi Park, as well as 866 portable toilets. While some facilities will be affected by 'gatekeepers' that lock them as described above - and while no households are connected to the sewage system, there is clearly some provisions for caregivers and children to access toilets. More descriptive information on barriers to entry should be gathered.

The local clinic to Monwabisi Park reportedly deploys nurses on a quarterly basis to conduct growth and health monitoring for children in ECD programmes. This is done according to a health card, which routinely charts a child's growth against "typical" percentiles. During these medical visits, children are also provided with Vitamin A supplementation and deworming medication. These health drives are complemented by quarterly hygiene campaigns that the local clinics and the environmental health department conduct in Monwabisi Park. And through its 1000 Days Programme, VPUU provides breastfeeding awareness and education resources for pregnant women and new mothers. The programme includes advice on optimal nutrition for these caregivers. Scaling these interventions and making them more regular presents an opportunity for improved health outcomes among caregivers and children in Monwabisi Park.



City level

Cape Town's infant mortality rate has declined slowly over time, indicating gradual improvements in overall health provisions as well as improved living and social conditions in the city. More specifically, infant mortality in Cape Town fell from 25.2 per 1,000 live births in 2003 to 22.1 in 2019, outperforming the national rate of 27 per 1,000 live births in 2019 . This may be related to the city government's food security and distribution programmes for creches and nurseries in poorer communities. These programmes are run through organisations including Rise Against Hunger, with funding from the national government. Again, there is an opportunity to scale these programmes to continue improving child health scores in Cape Town.

While Khayelitsha had the highest recorded PM10 levels of the ambient air quality sites in Cape Town in 2015, the City government maintains an air quality reading service that provides real-time air quality information. Monthly reports and annual episode reports (where pollution levels exceed accepted guidelines) are available, and these could be an entry-point to addressing pollution issues in Khayelitsha and Monwabisi Park.

PROTECTION OPPORTUNITIES

By clearly differentiating private and public space in busy or crimeprone parts of the settlement, community leaders can control access and better monitor criminal behaviours. This could be achieved through designing higher density pedestrian routes, ensuring good lighting and creating open spaces in which residents can conduct informal surveillance as they use the space. Including ordinary residents in crime prevention, with the support of municipal police forces, could contribute to a heightened sense of pride and value in the settlement, and could see invigorated efforts to mainstream protection.

Furthermore, building climate resilience into early childhood development centres, community halls and households will better protect caregivers and children from periodic floods. This could take the form of educating people on how to elevate their households, or how to strengthen them with flameresistant, reinforced materials. Safe points where residents can congregate in the event of flooding could also support in this regard.



Household level

While violence is a prominent threat in Khayelitsha and Monwabisi Park, there are several hotlines in Cape Town that abused caregivers can contact. These include RAPCAN (Resources Aimed at the Prevention of Child Abuse and Neglect), Childline South Africa (a 24-hour toll-free helpline) and Childline Western Cape. For domestic violence cases in particular, caregivers can report to the Metropolitan Police Services hotline, or contact one of several women's shelters in Cape Town. Crucially, these mechanisms can enhance protection and provide a reporting mechanism for caregivers to address the crime and/or violence they experience. It will be important to understand what happens once a hotline is contacted and an instance of abuse is recorded. It will also be important to understand how many careigvers currently rely on these services.



The various early childhood development centres in Monwabisi Park are areas in the neighbourhood where caregivers can feel safe and welcome. In addition to this, water points at the emthonjenis in A Section are spaces where caregivers can meet with safe sightlines to children at play. While these emthonjenis vary in maintenance quality, some have agreements with neighbourhoors to look after them to ensure they are clean and safe. More specifically, some emthonjenis are used for ECD outreach activities; and parents, in return for their children receiving education for free, are encouraged to contribute to cleaning the emthonjenis that their children learn in. These spaces set an important precedent for safer conditions that caregivers and their children can visit in Monwabisi Park.



City level

As well as those mechanisms described for the household level, numerous organisations in Cape Town provide domestic violence education at the city level. Such organisations present an opportunity to continue scaling up awareness about gender-based and sexual violence in Cape Town. These organisations include: MOSAIC, which focuses on the links between gender-based violence and women's reproductive and sexual health; domestic violence awareness is one of four priority areas of the City's Metropolitan Police Departments Social Crime Prevention (SCP) interventions; the 16 Days of Activism campaign led by UN Women; and the city Men and Masculinity Project, which explores aspects linked to violence against children and women, including gender relations, abuse of substances, parenting and HIV/AIDs.

The City of Cape Town has a Municipal Disaster Risk Management Plan, which is led by a Disaster Coordinating Team (DCT). This, together with the National Disaster Management Act No 57 (2002) and the National Disaster Management Framework (2005), could represent an opportunity to embed disaster resilience into physical restructuring processes across Monwabisi Park. However, efforts must be made to integrate legislative, national actions with the daily behaviours and experiences of ordinary residents in the settlement.

STIMULATION OPPORTUNITIES

A more stimulating built environment will provide caregivers and children with accessories that they can tailor to their play needs. Street furnitures can be designed to promote equal opportunities for children to utilise a space. Bringing children together around an urban feature can boost sociability and create common purpose when moving through the space. Furnitures and other built environment interventions also offer resting spaces for caregivers, who can watch over their child.

Currently, the limited play space inside many households in Monwabisi Park A Section pushes children into nearby streets that they repurpose to their play ambitions. However, undesignated play space, coupled with the risk of crime and possibly waste, indicates that these spaces are not as stimulating as is required. Where possible, expanding emthonjenis or using these as focal points in larger play ecosystems throughout the settlement, will contribute to more positive and stimulating ECD outcomes. Establishing more proximal parks and play spaces can also protect ECD facilitors from the unfavourable treatment they receive when they take children to the play spaces in formal Khayelitsha.



Household level

Inside the household, children play with selfmade toy cars and hula-hoops, as well as making their own balls from paper and plastic **bags.** Children construct the toy cards from cardboard, coca-cola bottles and metal wires. While potential stimulation with these aids may be less than that with books, drawings, and other toys, repurposing these objects is a an opportunity for creativity and stimulation in itself. Crucially, appetite for play exists in many households, as well as a natural inclination among children to recreate the environment around them in order to learn and play. There is an opportunity to harness this through establishing more play spaces and supporting the early childhood development centres and other child-focused actors in Monwabisi Park to provide new play equipment.



While a large proportion of children in Monwabisi Park A Section were attending unregistered creches in 2019, more stimulating facilities are available. The VPUU early childhood development centre is a classroom that is filled with "stimulating materials". Here, children under 5 can participate in a structured education programme and experience optimal play conditions. The programme is free to attend, eliminating barriers to entry for children in poorer households. Its curriculum is also aligned with national standards; activities include communication and mathematics. Furthermore, VPUU use spaces in the neighbourhood centre as temporary activity spaces when class sizes are particularly high.

In addition to this, VPUU has designed and plans to a build another pre-school facility nearby the neighbourhood centre. This facility will abide by national construction standards, and integrate optimal ECD conditions. Furthermore, it is designed specifically for children, and the facility therefore presents an opportunity to scale-up the availability of accessible, safe and stimulating spaces in Monwabisi Park for larger groups of children.

Currently, the available public spaces (while limited in number) appear to be equipped with child-friendly and functional play

elements. More specifically, the emthonjenis have low-lying benches for children to sit on and build games around. In addition, playful patterns are printed on the pavers to encourage child's play. Other equipment and toys are provided "for special functions", but this equipment is not a permanent intervention because of the risk of theft or vandalism.



City level

A review of city documents and legislation in Cape Town reveals promising initiatives for supporting early childhood development and enhancing the relationship between young children and their physical surroundings. In the City's Social Development Strategy (2012), for example, early childhood development was a "top priority"²⁵. Support included increasing access for children to recreation, sport, arts, culture, library and information resources. Furthermore, the city's 'basket of services' included support for establishing compliant, quality early childhood development centres. The emphasis here was to address the large number of unregistered facilities in Cape Town.

Expressed commitments of this kind to early childhood development, and their inclusion in legislative mandates, are suggestive of improved access for young children to more stimulative environments in the city. Given the large share of children in Monwabisi Park A Section who attend unregistered early childhood facilities, these policies are particularly relevant, and it is important therefore that they are integrated at the neighbourhood, as well as the city, level.

SUPPORT OPPORTUNITIES

A child-friendly built environment offers multi-level benefits to all elements of society, including unsupported caregivers. Stimulating spaces that build in consideration of children are often green, playful and without traffic, and they can become havens for individuals to spend time in. Integrating accessible and safe spaces with the built environment in Monwabisi Park could address the current shortfalls in formal support mechanisms for female caregivers in the settlement.

With areas to congregate and socialise, caregivers could experience more nurturing, rewarding relationships with others. These areas could also become safe spaces in which women discuss the distinct challenges and needs they face, and build confidence and solidarity. This is critical since, currently, many are "scared" to represent themselves or express their unique concerns to community leaders.



Household level

Vocational skills training in Monwabisi Park presents an opportunity for caregivers to improve both their parenting and professional skillsets. One skills development programme teaches 150 caregivers per year, across ten sessions. Training includes basic computer skills, data tracking, leadership and communication. Trainees also take courses focused upon education and information; these courses include early childhood development programme implementation and assessment and observation of children. Professional training can increase caregivers' employability and open entry points to the formal labour market, possibly in the formal areas of Khayelitsha or in Cape Town city.

As well as these trainings, four programmes are held at one of the early childhood centres each year; these programmes are aimed specifically at supporting the delivery of quality early childhood development, and include modules on health and nutrition. Attending this training provides caregivers with the opportunity to learn good parenting practices and principles, which in turn will improve conditions for optimal childhood development in the home.



In Monwabisi Park, there are several small organisations that provide advice and counselling for victims of abuse and crime; in the entrance to early childhood development centres, the contact numbers of these organisations and hotlines for reporting incidents are provided. These groups represent a support system for individuals that are excluded from formal, government protection mechanisms. Furthermore, community leaders are in talks with the Department of Health to forge greater partnerships and create better social safety nets. A focus in these meetings has been to create strategies of support for parents. This partnership is an opportunity to create a more inclusive and supportive environment for caregivers in Monwabisi Park.

Caregivers in Monwabisi Park are well-informed about existing campaigns and initiatives.

Early childhood development staff call meetings with caregivers, and they host workshops too. Information is also distributed via WhatsApp; during the Covid-19 pandemic, for instance, early childhood development lessons and workshops are being conducted via WhatsApp. These lessons show caregivers how to conduct classes in the home. Early childhood development staff occasionally visit caregivers and children at home to ensure that activities and classes are going well, and to provide educational materials. Clearly, there exists strong infrastructure - in the form of classes and support from early childhood development facilitators - for helping caregivers and children during adverse circumstances. Leveraging this and ensuring that all caregivers are included is an opportunity to embed knowledge-sharing on child-friendly issues in the neighbourhood. This is crucial as, currently, there is no system for distributing information to parents whose children are not in the early childhood development centres.



City level

City officials reportedly assist early childhood development actors with advertising and disseminating information on their programmes. In fact, some authorities "do everything in their power" to raise awareness about campaigns and initiatives on child-matters. During open days, for example, police officers are instructed to provide escorts and protection. There is also a city authority early childhood development inspector, who assists communities in Monwabisi Park with programmes and workshops and with registering children in early childhood development programmes. Workshops on the requirements for registering an early childhood development centre are available; this might be an opportunity to address the low funding coverage of most centres in Monwabisi Park, discussed under Challenges above. Together with city-wide initiatives like the Early Childhood Development Centres in Informal Settlements project (for which R44-million [US\$2-million] has been earmarked over the 'medium' term), these interventions indicate both a knowledgeable and supportive environment for early childhood

development issues at the city level in Cape Town.

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