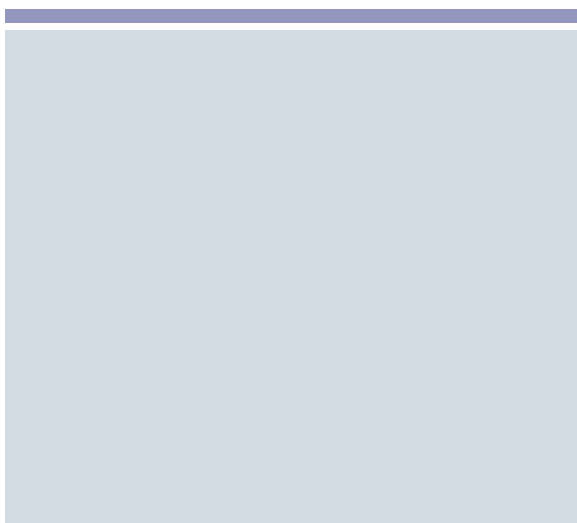


**Identifying behavioural barriers affecting ECD outcomes in the
Western Cape using behavioural science**

Policy Brief | May 2022

A new perspective on early childhood development

Identifying behavioural barriers affecting Early Childhood Development (ECD) outcomes in the Western Cape using behavioural science is a Western Cape Government (WCG) initiative developed as a response to the severe impact of COVID-19 on children under five, and the evidence that shows substantial ECD interventions help improve children's cognitive and physical development. The project reflects the WCG commitment to improving citizen's wellbeing, particularly building strong foundations for young children to thrive, as well as the focus on using innovative methodologies to do so. As such, both the Provincial Strategic Plan (PSP) 2019-2024 and the subsequent Recovery Plan (2020) focus on early childhood development as a key intervention. This project is located within the Wellbeing Priority of the Recovery Plan.



1. Introduction

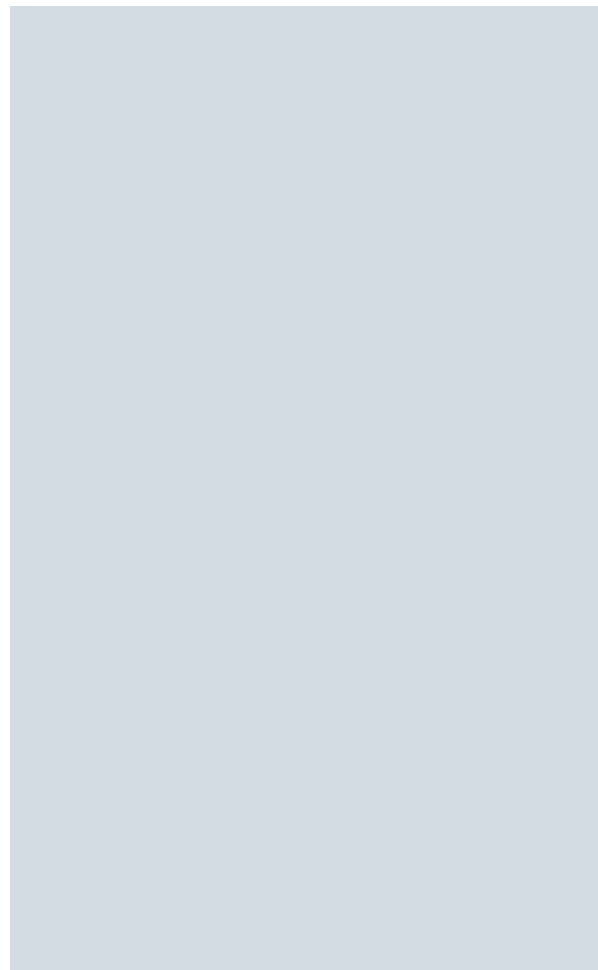
Children need **positive social and educational interactions** from caregivers in the early years of their life, particularly in the first 1000 days, to achieve their **full development potential**. Evidence suggests that substantial **Early Childhood Development (ECD) interventions and caregiver engagement** can help to **improve** children's cognitive and physical development and prepare them to succeed in school and in life. Accordingly, the developmental consequences of a lack of caregiver engagement can be severe for young children, given the crucial role these early years play in their development. Across South Africa, many young children are at **high-risk of not achieving their full development potential**. For instance, in 2018, only 59% of caregivers report reading to their children, and only 37% of children 0-4 years old were enrolled in any ECD programming.

The emerging field of **behavioural science** offers **a new way of thinking** about improving ECD outcomes among young children by providing caregivers and ECD practitioners with the support they need to take the many actions that are critical to healthy child development. **Awareness, motivation, and financial incentives** may all contribute to improved caregiver and ECD provider behaviour.

However, behavioural science suggests that features of the **environment** may be even more influential, because of how the environment influences caregivers' and ECD providers' abilities to make decisions and take actions. Behavioural science-based solutions have begun to show **large impacts on decisions and actions across contexts**. In Madagascar, for example, [helping parents set goals and make plans to practice better parenting techniques](#), after receiving a cash transfer accelerated children's socio-cognitive development. Similarly, [reminding parents to attend group parenting sessions and participate in guided interactions](#) with their children increased children's receptive vocabulary and socio-emotional development in Chile. It is possible to expect similar impacts on caregivers and ECD providers in South Africa. Thus, there **may be an opportunity for light-touch, low-cost behavioural interventions** to help **bridge the gap** between intentions and actions, lead caregivers and ECD providers across South Africa and in the Western Cape to engage in activities that help promote young children's development and improve the effectiveness of more traditional ECD interventions.

In collaboration with the Policy and Strategy Unit at the Department of the Premier in the **Western Cape Government**, in 2021 [ideas42](#) conducted a problem definition exercise to understand what ECD related challenges in

the Western Cape may be particularly well-suited to be addressed through behavioural science-based solutions. Problem definition revealed a promising opportunity to use applied behavioural science to uncover insights into how the environment influences caregivers' decisions and actions related to engaging in quality interactions to promote cognitive development and early learning with their young children. Following this, in 2022, a deep investigation into how the context influences caregiver behaviour was the focus of the next phase of work, behavioural diagnosis.



2. Methodology

2.1 Problem Definition

The problem definition exercise enabled us to gain a deeper understanding of the context surrounding ECD related challenges in the Western Cape and uncover behaviours well positioned to benefit from behavioural science-based solutions. The activities we conducted during problem definition included desk-research, to understand the current state of ECD behaviours and practices in the province, and a series of in-depth key-informant interviews. We held a total of fifteen interviews with individuals in Drakenstein Municipality, including with ECD experts from the NGO sector (n=5), ECD practitioners (n=6), and children's caregivers (n=4). During the interviews, we sought to learn more about individuals' behaviours and the challenges they face with regards to ECD, and explored the following themes:

- Caregivers' and ECD providers' interactions with children
- Caregivers' and ECD providers' use of positive, non-violent discipline methods

- Caregivers' and ECD providers' health behaviours
- ECD providers' communications with caregivers
- The impact of COVID-19 social support on ECD service providers
- The impact of fathers' parenting and presence in the home

Following the interviews, the analysis of interview transcripts elevated ten distinct behavioural challenges, and nineteen discrete behaviours that affect ECD outcomes in the Western Cape. These were evaluated based on the following criteria: behavioural-ness (Can this be adequately addressed using a behavioural science-based approach?), feasibility (Would this be feasible to implement in this context?) and potential for impact (Does the evidence suggest the behaviour change will lead to a large impact on ECD outcomes?). Based on this evaluation, the following behavioural challenge was identified as most behavioural, feasible and with the highest potential for impact:

Caregivers do not consistently engage in quality interactions with their young children.

ideas42's methodology



2.2 Diagnosis

Between January-March 2022, we employed a behavioural diagnosis approach to **identify the barriers and drivers of caregivers' behaviour**, with the ultimate goal of leading caregivers across the Western Cape to engage in activities that **help promote young children's development** and improve the effectiveness of more traditional ECD interventions. The activities we completed included an in-depth desk review, behavioural mapping process, preparation for and conducting of qualitative research (in the form of extensive in-depth interviews), data analysis and development of actionable lessons and recommendations for further work. To diagnose the barriers and drivers of caregiver behaviour, we conducted qualitative research, in the form of **fifteen in-depth interviews with young children's primary caregivers in Masiphumelele and Atlantis**, in the Cape Town metropolitan area. This was done in collaboration with two local non-governmental organizations to recruit caregivers and coordinate the interviews.



Figure 1: Our 'office' at a local ECD centre

3. Diagnosis finding

Behavioural diagnosis revealed that for the most part, caregivers are **highly motivated** to engage in positive behaviours to promote their children's development. Caregivers articulated the importance of **providing responsive care** to their children (one key component of the [WHO's framework for Nurturing Care](#) and discussed regularly engaging in communication-oriented activities to promote early learning. However, **caregivers are missing many opportunities to engage in play-based activities** to promote early learning with their children (another essential part of the WHO's guidance for Nurturing Care).

This is especially true for caregivers with children under 3 years old. Thus, the insights presented in the section below highlight barriers faced by caregivers in engaging in play-based activities for early learning with their children.

“I need to be a role model to her. To give the love, always. Play with her sometimes. To make sure that they are ok every day, and that they feel free to talk to me.” – Caregiver

We elevated **five discrete behavioural barriers** which prevent caregivers from engaging in play-based early learning activities with their children. Underpinning the five insights is a key behavioural science concept: **scarcity**. When caregivers live in a context where resources are scarce – be it the money, time, or food – they must **devote much of their mental bandwidth to thinking about these resources** (for example how to allocate them, how to get more of them, etc.) In this way, scarcity depletes caregivers' finite mental resources, such as their attention or working memory, and **can lead them to make poorer-quality decisions**. Diagnosis revealed that scarcity affects both if and how caregivers decide to engage in play with their children and if they follow through to act on those intentions.

“(We didn’t read last night because) we were actually worrying... we didn’t have money for bread, so that was taking up all of my (mental) space last night...we were meant to read the Jonah story.” – Caregiver

4. Identified behavioural barriers

4.1 *Engaging in play-based learning is simply not on caregivers' radars*

Caregivers have a **strong mental model**, or view of the world, that to be a good caregiver is to give **children love and attention and meet their basic needs** (e.g., food, shelter, hygiene, etc.). Engaging in play-based activities to promote early learning is not even on their radars. Caregivers' mental models are **informed by their life experiences**. For example, many caregivers were raised in households where playing with children was not the norm (i.e., caregivers stated that they rarely engaged in interactive activities with their own caregivers), and so play does not seem like an essential caregiving activity. Additionally,

for caregivers **living in the context of poverty**, safety, food, clothes, and hygiene are top-of-mind: caregivers can't always meet these needs for their children. Caregivers are also acutely aware when the basic needs of another child in their community aren't met. When caregivers were asked "How do you know if a child in your community is well cared for?" most replied that **a well-cared-for child is a one who is clean and well fed**. The **availability heuristic** means that because caregivers can easily recall the importance of meeting children's basic needs, the perception of their relative importance is increased. Further, caregivers subscribe to the identity of a 'good caregiver' and take actions that reflect the mental model they have of **what it means to be a 'good caregiver': prioritizing love, attention, and meeting children's basic needs** (i.e., other elements of caregiving, such as engaging in play-based interactions, aren't even on their radars).

"It's (the role of a caregiver) to make sure that they are safe, taking good care of them. As myself, I make sure that they are clean, they have clothes, they have food. Everything." – Caregiver

"I get many compliments, because people always tell me you look good after your kid, because you're a small young mother. Your kid doesn't ask us for bread, and he doesn't wear dirty clothes. Stuff like that..." – Caregiver

4.2 Caregivers assume their children aren't ready for learning yet

Caregivers have the perception that **children's cognitive development occurs 'naturally'** and is outside of their control. This is because whereas caregivers know what actions they can take to promote children's physical development and language capabilities and can see direct impacts on their children from their efforts, it is **not clear if or how they can contribute to their child's cognitive development**. This leads caregivers to experience **low self-efficacy** with regards to cognitive development: caregivers don't believe they have the capacity to execute the behaviours necessary to help their children develop. Additionally, for caregivers with older children (+3 years old), the impacts of engaging in specific learning-oriented activities, such as reading or writing, are **salient**. For instance, a caregiver who teaches their child to write can visually see how the child's writing is progressing. However, the impacts of play-based

learning on children's development are less salient. This leads caregivers to assume that play's primary role is for entertainment.

Additionally, diagnosis revealed that caregivers usually only begin to consider engaging in learning-oriented activities when **children signal that they are interested in learning** (e.g., by remembering something they were told), or show they are developing (e.g., by learning how to write their name). As children only begin to provide these cues when they are older (+3 years old), caregivers may **assume younger children aren't ready to learn yet**. Caregivers use their **child's age as a rule-of-thumb**, or heuristic, when deciding when their child is ready to engage in learning-oriented activities. The fact that children commonly start school or creche when they're around 3 years old further cements caregivers' perceptions that children start developing cognitively around age 3.

“Out of my perspective, I think two years old or maybe three (is when a child should start learning). Can I add something to the question? I will send my child to creche when he's three years old. Because the child will be able to speak then. Because when I asked him what happened today, he can tell me what happened at creche.” – Caregiver

“What can you do to help your children grow properly?” – Interviewer
“Nothing, we don't do anything. They grow on their own. I don't do nothing.” – Caregiver

4.3 Caregivers aren't sure how to engage in play-based learning with their children

Caregivers typically rely on **external sources for guidance** on how to engage in play-based learning activities with their children. For example, caregivers often reference information from ECD teachers, use physical props or toys to play with children, or take direction from their children on how an activity should be conducted. While these types of external sources can serve as inspiration for caregivers (particularly for caregivers living in a context of scarcity who have little cognitive capacity), they can also **crowd out other ideas** caregivers may have about how to engage. Caregivers often **anchor to what they've heard from their children, children's teachers**, and other external sources about what they can do to help children learn, and other ways of engaging may seem less viable, feasible or effective.

External guidance about how to engage in play also reinforces caregivers' mental model of who can help children learn. Unlike teachers or ECD practitioners, caregivers typically have limited formal experience with early-childhood development topics. Their lack of understanding makes it difficult for them to assess how much they do or don't know – a psychological phenomenon called the **hard-easy effect**. Accordingly, **caregivers are under-confident in their abilities** to engage in learning-oriented activities. They assume that activities are more difficult or complex than they really are, and so they may decide not to engage at all.

“My child likes to cut things, paint, write – he does these things at the centre. Even when he’s home he says mama give me scissors I want to cut...if I have them, I give them to him, but if I don’t have then I don’t...he just goes outside...if I don’t have what we need, I’ll tell him no it’s for school.” –

Caregiver

“We have pens and crayons and stuff to work with. All the stuff he needs. If I don’t have that, then he does it at school, so I’m just going to tell him to ask the teachers to ask for those things, like stationery and stuff.” – Caregiver

4.4 Caregivers are not regularly prompted to engage in play for learning

Caregivers have busy schedules and many tasks to complete within their daily routines. The context of scarcity causes caregivers to **narrowly focus on meeting their most urgent or pressing unmet needs** (e.g., keeping children safe, cooking food for the child, etc.), and crowds out other concerns or tasks that would otherwise compete for their attention. When caregivers are **tunnelling** on meeting these pressing unmet needs, they typically only consider engaging with children in play-based learning activities when a child prompts them to do so. In the absence of being prompted by a child to play, caregivers will **tend towards the status quo or default option** when they are completing their household chores: sending children outside to play with others or letting them watch TV. For children who are too young to explicitly prompt caregivers to engage but need play-based activities in order to develop, this has particularly strong negative implications as caregivers may never be prompted to engage with them.

“Are there times when it’s easier to play with her?” – Interviewer “When I have time. When I don’t feel any pressure, I’m not rushing anywhere. I have time I sit there.” – Caregiver

"I want to play more with him...but I think about things that must be done (in my house). I do things by the time – what time I must cook, what time I must bathe, what time I must watch TV. I have a schedule for everything. Sometimes I'm busy doing something else I can't just stop and play with him." – Caregiver

4.5 Caregivers change their mind when they experience or anticipate discomfort

Caregivers must **split their cognitive bandwidth**, physical energy, and limited free time between their children and completing other important tasks. Accordingly, if caregivers **expect or experience discomfort from playing with their child**, they will change their mind about engaging to preserve these precious resources. In this sense, caregivers are **present biased** and will favour taking actions that (a) provide them immediate rewards (i.e., sleeping) or (b) must be completed (i.e., cooking). This is partially because it **can take years for caregivers to see the benefits** of engaging in play-based learning with their children (rather than providing immediate rewards as such as in the activities outlined above).

Caregivers are especially likely to act in a present biased way when **engaging in play presents immediate costs**. Costs that can deter caregivers from engaging in play with their young children include anything from time-spent to feelings of emotional pain. Emotions have significant influence on whether caregivers will play with their children due to **affective forecasting**. Caregivers will tend to estimate what their and their child's emotional response will be to playing and **decide not to engage if they expect to experience emotional discomfort** (e.g., if the caregiver feels overwhelmed by other pressing tasks, if a child becomes frustrated or bored with an activity, if the caregiver feels guilt about how they don't enjoy playing, etc.). This is especially present for caregivers living in the context of chronic scarcity who have limited and inconsistent financial and/or socio-emotional support structures in place to help them manage discomfort.

"I don't make him do these things if he doesn't want to... then I must leave him because I don't want to upset him or make him angry" – Caregiver

"I give up quickly when he doesn't want to listen... I say okay I'm going to try another 2-3 times, but then I just drop it because I say you are wasting my time." – Caregiver

5. Recommendations for future work

These five behavioural barriers affect different components of caregiver behaviour. Some of the barriers affect whether caregivers even **place attention** on play-based learning. Other barriers affect whether caregivers **form the intention** of playing with their children, and how strong that intention is. And finally, some barriers affect whether caregivers follow through on their intentions and **take action** to engage in play. Although each of the barriers affects a different component of the behaviour, all components must be addressed to change caregivers' behaviour and improve outcomes for young children in the Western Cape. Thus, we recommend all barriers are targeted in future work to design behaviour change interventions. See a visual depiction of the five barriers, and how they map to different components of the behaviour, in the figure below.

Future work – in the form of ideation,

prototyping, and deep user-testing – is needed to ensure intervention designs directly **address the barriers**, are **feasible** to implement, and are **desired by caregivers**. However, some potential, preliminary design directions emerged. Designs to target caregiver behaviour should:

- **Reshape** caregivers' understanding of the **benefits of play**
- **Enable** caregivers to plan for how to **operationalize** play
- Present caregivers with **opportunities to integrate play** into their **everyday lives**
- Provide **guidance and scaffolding** for caregivers on how to engage in play-based learning
- Provide **psycho-social support** to caregivers
- Facilitate **connections and idea-sharing** between caregivers of young children
- Make young children's (i.e., under 3-years old) **cognitive development visible** to caregivers

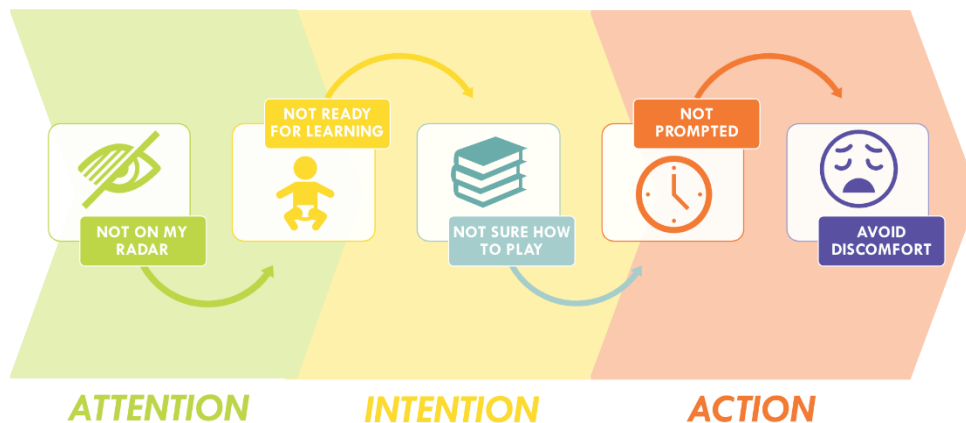


Figure 1: Overview of behavioural barriers

As outlined in this report, there is a **clear opportunity** to improve ECD outcomes in the Western Cape using behavioural science to focus on caregivers' quality interactions with their young children. This will be further pursued in 2022/23 through the design of testing of proposed interventions identified in the past two phases.

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