Bernard van Leer FOUNDATION

The Behavioural Science Issue

Early Childhood Matters

Behavioural insights, ideas and action for the early years

2022

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Early Childhood Matters aims to elevate key issues, spread awareness of promising solutions to support holistic child development and explore the elements needed to take those solutions to scale. It is published annually by the Bernard van Leer Foundation. The views expressed in *Early Childhood Matters* are those of the authors and do not necessarily reflect those of the Bernard van Leer Foundation. Initiatives featured are not necessarily funded by the Bernard van Leer Foundation.

 ISSN 1387-9553

Cover photo: Courtesy of Alexis Camejo/Bernard van Leer Foundation

This 2022 issue of *Early Childhood Matters* is no. 131 in the series. Also published in Spanish: *Espacio para la Infancia* (ISSN 1566-6476)

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the early years

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What I learned about behavioural science when I became a dad

And how I often failed to parent the way I imagined I would

Michael Feigelson
Chief Executive Officer
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***Early Childhood Matters* 2022 is a unique contribution to answering the question, "How to apply behavioural science in early childhood?" It covers a wide range of topics: promoting reading to kids, teaching coaching techniques to healthcare workers, the role of new technologies in changing behaviour, the importance of humour and joy, turning public spaces into parenting places, how simplifying bureaucracy can change parents' lives. As the CEO of the Bernard van Leer Foundation, an organisation that invests in using behavioural science to make early childhood policies more effective, I was asked to share my own thoughts.**

To write an honest article, I had to start by reflecting on my experience as a father. Why – despite spending my working hours immersed in the latest science and talking to the world's best early years experts – did I still fail on so many occasions to parent the way I imagined I would?

What happened next? I put off writing the piece for a month, sharing a draft several weeks past my deadline. Between my paid job and my caregiving responsibilities, it's been difficult to find the time for this kind of reflection. That's what I told myself, but maybe there was also another reason ...

With all my knowledge about child development, I planned to be the dream partner during Melania's pregnancy, but it was a very stressful period at work. I was physically present doing the things I was supposed to do, but my mind was constantly wandering. Combined with a difficult first trimester, my wandering mind caused a lot of tension at home. Both of our perspectives on pregnancy quickly shifted from a romanticised idyllic to embattled cohabitation. My own role went from a model 21st-century supportive partner to a preoccupied, defensive husband.

After our daughter Mila arrived, practising all the positive parenting behaviours I knew were important also proved difficult. An example: I wrote an article suggesting companies should include messaging on diapers to remind parents to talk to their babies. The moment when a parent changes a diaper was a perfect time to nudge them to tell a story. Yet I would

regularly find myself finishing the task and realising I had completely forgotten to talk to Mila. Usually the culprit was exhaustion. No one was getting much sleep. I felt like a zombie and changed diapers like one too.

Another example: at age 3, Mila got very sick and spent 10 days in the hospital. The only thing that would keep her calm was the iPad. Today, at 8 years old, she is very healthy, but we never broke the habit. Despite having easy access to the best thinking on screen time from the American Academy of Pediatrics, we continue to let her watch more than we should on an almost daily basis. Why? At first, we were chronically tired, we needed a break, and this was the easiest way to get one. Then came Covid and it became a survival mechanism so that we could work from home. With each passing year the behaviour became more engrained and harder to change.

Finally, there is the subject of patience. If there was one characteristic that reflected the art of fathering when practised as its best, I thought it was patience. Listening. Respecting the child's voice. As educators early in our careers, Melania and I were trained to put these principles into practice. When we became parents we wanted to embody them. We have dedicated a lot of energy to this, but at a cost. When parenting feels like a never-ending negotiation with your child, patience wears very thin. As a result, I've lost my temper on more occasions than I like to admit.

One of the most common mistakes in early childhood programmes is to assume that the problem is knowledge; that if parents and caregivers know more, they will behave differently. But, as I've tried to illustrate, knowledge is not enough.

To be effective, programmes need to first recognise that parents and caregivers are chronically busy and tired. They need to be designed with an understanding of the constraints this puts on the cognitive space required to learn and practise new behaviours.

Second, programmes should nudge, but not judge. The real reason I procrastinated in writing this article is that in my community, social norms around parenting make it hard to admit mistakes. There is a lot of pressure to do the job perfectly and strong ideas about what 'perfectly' entails. In other cultures, the norms will be different, but the principle remains the same. Programmes need to understand the social norms guiding parents as these will shape what is possible and what is not.

> "After our daughter Mila arrived, practising all the positive parenting behaviours I knew were important also proved difficult."

For parents and caregivers, early childhood is beautiful, but also chaotic, stressful and messy. We inevitably make mistakes on a daily basis and are inclined to judge ourselves and others with a fierceness reserved for few other parts of life. Once we recognise these realities, behaviour change gets easier.

↓ Michael and his daughter Mila

Photo: Courtesy of Michael Feigelson

↗ **Find this article online at earlychildhoodmatters.online/2022-1**

Can a nudge make us all better caregivers?

Even as an early childhood journalist, behavioural science was not on my radar

Photo: Courtesy of Ilan Spira

Introduction

Irene Caselli
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If you are reading this year's *Early Childhood Matters* with little to no prior knowledge on how behavioural science and early childhood development can be combined to generate better outcomes for children, caregivers and professionals, you are not alone.

When I was approached to guest-edit this issue, I had been a journalist for nearly two decades – with the past five years specialising in early childhood. I'm also the mother of a toddler and a newborn baby. The relevance of behavioural science to child development should have been on my radar. Yet I found myself asking: what is behavioural science? And why have I never heard about it?

So I started investigating. I quickly learned that behavioural science is a growing area of research and implementation which covers a wide array of topics that touch the daily lives of caregivers. I had written about many of these topics, from cash handouts to programmes to get more parents to read to their children. But in covering the world of early childhood development, I had not come across many people who understood how behavioural science could usefully inform and shape their work.

My own knowledge-building journey, through guest-editing this year's *Early Childhood Matters*, has made me acutely aware of how important it is to bring these two worlds closer together – not only for early childhood experts to learn from behavioural scientists about generating and testing ideas, but also for experts in behavioural science to look at and learn more about early childhood.

Photo: Courtesy of Cuna Más

Embedding a behavioural lens in early childhood policies and services means looking deeply at what people do, and why they do it. Too many well-intentioned early childhood programmes and policies still focus too much on educating parents or telling them what to do – rather than understanding and addressing the real-world reasons why they may not be able to stick to better child-rearing practices.

"Embedding a behavioural lens in early childhood policies and services means looking deeply at what people do, and why they do it."

A real understanding of the culture in which behaviours take place is especially important, as shown by the article on Eritrean pregnancy groups in the Netherlands. Behavioural science has not yet fully got to grips with cultural particularities in the Global South, as Neela Saldanha says.

Behavioural science can have a real impact on families and child development, with huge repercussions for society. In Madagascar, for example, evidence shows that combining cash transfers with behaviourally informed parenting programmes had a stronger impact on children's outcomes than giving parents more cash.

It is not only parents who can benefit from nudges to shift their behaviour, but the early childhood workforce, too. I appreciated learning about efforts in Jordan and the Netherlands to help healthcare professionals in counselling parents effectively.

Governments from Argentina to the UK to India are beginning to apply behavioural approaches to their early childhood programmes at scale. I hope this marks the beginning of a larger trend.

Like many of the authors in this issue – and many readers of this journal – I feel the daily pressures of parenting. I struggle to find the time to do the behaviours I believe deeply that I should be doing. Perhaps that is why I especially enjoyed reading about the ideas behind the Magic Moments campaign in Israel. There is powerful potential in

transforming what seem like chores into moments to connect and bond.

My biggest takeaway from editing this issue is how deeply rooted behavioural science can and should be in all areas of caregiving. Behaviour change can be applied everywhere, at any moment – from reading in the comfort of your own home, to quality interactions in doctors' waiting rooms, to multi-tasking in supermarkets. Sometimes we need just a little nudge to switch our perspective and remind us to do the things we know we want to do and sometimes fail to do because of huge pressures.

In behaviour change, there are no one-size-fits-all solutions. But I hope that *Early Childhood Matters* prompts a conversation about the methods we use to improve outcomes for young children. Can nudges inspire – rather than dictate – how we can all be better caregivers?

"Sometimes we need just a little nudge to switch our perspective and remind us to do the things we know we want to do."

↗ **Find this article online at earlychildhoodmatters.online/2022-2**

Behavioural science insights

Connecting behavioural science and early childhood development: opportunities and misperceptions

The next frontier of behavioural science

Applying behavioural insights to parenting interventions

Photo: Courtesy of Jon Spaull/Bernard van Leer Foundation

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Parents' behaviour during the first few years of their children's lives has a major, long-term impact on how children develop. Research consistently finds that parents with lower levels of income and education are less likely to engage in behaviours such as breastfeeding, vaccination, reading and positive disciplinary practices. Recently interventions to change parental behaviours have been increasingly influenced by a behavioural insights approach, which departs from the conventional approach.

The conventional approach to parenting interventions is based on the assumption in classical economic analysis that people behave rationally with the aim of maximising something, even if the "something" is unorthodox. For example, a parent who spends time reading to their young child is assumed to be rationally choosing to maximise their child's future potential for learning. A parent who instead watches television, for example, might be assumed to be rationally maximising their own relaxation in the present moment.

Until recently, few economists were willing to concede that people may simply not know what they are doing: individuals were conventionally assumed to do what they expect is best, given their situation. They may lack information – for example, a parent may not know how much reading to their child can benefit them in future. Or they may lack the money to buy books. Interventions based on the conventional approach may seek to overcome these challenges by telling parents it is important to read to their children, and giving them books.

One potential consequence of this conventional approach is a discourse that blames parents for the lower developmental outcomes of their children. In this discourse, if parents have been told about the importance of reading to their children and given books to read, but still choose to prioritise doing other things with their time instead, they are deemed to be responsible for their children's educational outcomes later in life.

Yet research clearly shows that many lower-income, less educated parents say they want to do things such as reading to their children, even if they do not actually do them in practice. Interventions based on

a behavioural insights approach understand this and aim to identify the factors that create a gap between knowing and doing. They look beyond information and money to issues such as attention and decision-making processes.

Changing how parents make decisions

When faced with the need to make quick or difficult decisions, people often rely on mental shortcuts known as "heuristics" (e.g. Gigerenzer and Selten, 2001, p. 12). Behavioural science describes a set of "cognitive biases" that shape these heuristics, and which can lead to the kind of "irrational" decision making in which what people actually do differs from what they say they want to do. At least two potentially important characteristics of parenting make it especially susceptible to the use of heuristics and cognitive biases.

First, parenting investments have returns that are both uncertain and far in the future. When parents invest time in activities such as reading to their children, the costs are immediate but the payoffs will not become apparent for many years. Alternative ways a parent could spend that time will often provide more immediate payoffs. "Present bias" is a cognitive bias that leads people to give more weight to payoffs that are certain and immediate than those which are far-off and uncertain (O'Donoghue and Rabin, 2015).

"In many situations parents respond automatically, in ways that save the time and effort of thinking but that also form habits."

Second, parenting often requires quick, on-the-spot decisions: when a child runs towards a busy street, or screams in the supermarket when refused candy, there is little time for the parent to reflect on what to do. In many situations parents respond automatically, in ways that save the time and effort of thinking but that also form habits – for example, when a child is cranky and fidgety, a parent's automatic response may be to give them a screen rather than try to engage them in a song, a game or a book.

The cognitive biases that affect people, and the heuristics they rely on, can differ for a variety of reasons – such as levels of stress, the composition of someone's social networks, or what they experienced in their own upbringing. A behavioural insights approach to parenting interventions seeks to identify and target the cognitive shortcuts that may interfere with some parents engaging in specific parenting practices.

An intervention on reading shows what is possible

Mayer et al. (2019) tested a behaviourally informed intervention designed to increase the amount of time low-income parents spend reading with their children. The researchers hypothesised that present bias might be key, and designed the intervention to overcome this bias with a set of behavioural tools (goal setting, feedback, timely reminders and social rewards) to "bring the future to the present" and help parents form a habit of regular book reading. These tools were all deployed using text messages to make participating in the programme relatively easy for low-income parents with hectic, unpredictable schedules and high levels of daily stress.

Before the intervention, the researchers used standard techniques to assess the extent to which each of the participants is affected by present bias (Andreoni and Sprenger, 2012). Parents who were not present biased were already reading to their children frequently, and the intervention had little impact on them. However, the intervention had a very large impact on increasing the time which present-biased parents spent reading with their children – around one standard deviation, in statistical terms.

These findings show it is possible to identify and address cognitive biases that affect parenting decisions – not just on reading, but potentially a whole suite of nurturing caregiving behaviours that we know are critical to the development of children. Behaviourally informed tools to change parents'

behaviour often have the advantage of being light-touch, low cost, and potentially scalable.

However, these tools must be designed to lead not only to change in behaviour, but also to the expected change in child outcomes: for instance, more reading will not necessarily translate into higher literacy skills if the reading is done reluctantly by caregivers who dislike it (Kalil et al., 2022).

Identifying behavioural approaches that improve both the quantity and quality of parenting is the next frontier for the science and practice of behavioural insights and early childhood development.

"Tools must be designed to lead not only to change in behaviour, but also to the expected change in child outcomes."

↗ **Find this article online at earlychildhoodmatters.online/2022-3**

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What pregnancy taught me about behavioural science

Pre-natal and beyond: a few behavioural insights for improving healthcare

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I'm a behavioural scientist. And a very new mother. Pregnancy was a wild experience for me – but not only for the reasons most people experience. It was a minefield of behavioural insights.

A little background: I'm the co-founder of Irrational Labs, a behavioural science design and consulting firm. Over the last decade, we have worked with hundreds of teams from tech companies such as Google, Microsoft and LinkedIn and US healthcare companies such as Anthem, Talkspace and Livongo. Using behavioural science, our team has seen incredible results – we have increased access to telehealth, decreased shares of misinformation on TikTok and decreased consumer defaults on auto loans.

While I have all this experience of applying behavioural insights in the real world, it was my own pregnancy experience that hit me with new insights into how to get people to take their medicine, how to communicate with patients, and some small ways that we as a society can drive better health outcomes.

How to get people to take their medicine

Nonadherence – that is, forgetting doses of medication that doctors have prescribed, or not completing the course – is a major problem: it could account for up to 50% of treatment failures, 25% of hospitalisations, and around 125,000 deaths each year in the USA (Viswanathan et al., 2012). Sometimes medicine takes a few days to work – and when people start to feel better, they stop taking the pills. With many medications for chronic conditions, such as high blood pressure or cholesterol, you never feel any different. There is zero feedback – your body feels the same, even if you take the medication religiously.

"While I have all this experience of applying behavioural insights in the real world, it was my own pregnancy experience that hit me with new insights."

↑ Kristen and her newborn daughter

People are present-biased – we give today's self more weight than tomorrow's self – so to increase adherence, we need to give people a more immediate benefit. There is plenty of behavioural science research in this area, and some ideas in this issue – for example, the "advent calendar" idea in Neela Saldanha's article (pp. 32–34), in which every day taking the tablet reveals a picture of a baby.

But when it comes to the pre-natal vitamins, there's a reason why I was so diligent in taking them every day – they tasted good. I looked forward to taking my vitamin gummies every morning. One morning I had to scold my husband for sneaking a few. It made me wonder: what if *all* meds were designed as candy bites?

There's an obvious danger here: while it doesn't matter too much if you're tempted to take a few too many vitamin gummies, that would be much more serious with prescription medicines. But perhaps there's a more practical approach. What if we packaged a piece of chocolate in the pill pack, for example, that was only released when your weekly pills were gone? The idea seems worth testing.

How to communicate with patients

At every appointment, the nurse read off the list of medications I was taking and asked me to confirm: "Are these still correct? Baby aspirin, pre-natal iron …?" She did *not* ask me if I was actually taking these meds every day at the right time. There is a simple

solution for this that might drive higher adherence: make the question more specific. If I'm missing meds, make me lie to her face about it.

I came across other examples of questions being framed in an unhelpful way. At 28 weeks my healthcare provider asked: "Do you want the TDAP vaccine?" The question made it seem as if the TDAP vaccination (against tetanus, diphtheria and pertussis) was optional – if I hadn't already known that it was highly recommended, I would not have guessed that from the question. A better way to ask? "The medical plan is to give you the TDAP today to protect your child, are you OK with that?"

I also found there was often unnecessary friction in healthcare communications. The "after-visit summary", for example, had a list of actions I needed to take. But they were not communicated clearly to me. I had to log into a portal, navigate multiple tabs, download an eight-page pdf, and scroll to the end. I'm an engaged healthcare consumer, and I know technology. So if I found many things hard or annoying to do, how many people just don't bother?

The worst week of my pregnancy was waiting for the genetic test results after they were delayed by a mix-up at the lab. I checked the portal three times a day to see if the results had come back yet. I was sick with worry about what they would say. It made me realise how uncertainty is the worst symptom of many diseases, and how simple expectation setting could help to alleviate it – for example, getting regular SMS updates letting you know the status of your tests. This won't solve the problem if your results aren't positive, but it will help with mental health, which is also important.

How we as a society can drive better health outcomes

Pregnancy is a multi-user game, but I found that healthcare treats it as single player. In the USA, a privacy law called Hippa prevents healthcare

Photo: Courtesy of Kristen Berman

providers from sharing medical data. The law is well-intentioned. But it meant that everything fell on me to remember, manage and communicate the health journey. Why not allow me to choose for my husband, the baby's father, also to get automatic reminders of appointments, summaries after visits, and test results?

During my pregnancy, there was a change in my mindset. It wasn't *my* health – it was my baby's health. It's easy to make excuses if you're the only one who suffers. It's much more difficult to make excuses when others suffer. It's not just you any more. It's you, your baby and your partner.

Returning to the question of how to get people to take their medicine, my experience of pregnancy made me wonder: could we improve adherence to blood pressure medication, for example, by reminding at-risk men that their children care whether they live or die? It would be worth testing. Accountability and caregiving can drive health outcomes. We should be looking for ways to make it easier for patients to involve those who love them.

My pregnancy gave me one last insight into how society can promote better health. Before pregnancy, I would normally have a glass of wine at dinner every night. During pregnancy, I immediately changed that habit. For a long time there has been a pretty clear rule of thumb: don't drink at all. But the American economist Emily Oster has recently shown that a small amount of wine will do no harm.

The question is: how small? Oster's answer: one glass of wine a week. That's a clear rule for how to behave. I didn't finish one glass and make a decision on another glass. No grey area. One glass a week.

> "Pregnancy is a multi-user game, but I found that healthcare treats it as single player."

Often doctors recommend lifestyle changes such as "drink less" or "exercise more". But how would you follow this? What is "less"? How would you know if you're successful? Clear and simple rules of thumb can make lifestyle recommendations more cognitively easy.

Our health and longevity or happiness come down to small decisions like how much wine to drink. And these small decisions are made of small details – like how the nurse asks about vaccination, or the type of vitamins you buy. As a behavioural scientist, I really got to appreciate the small details of life while bringing another life into the world.

↗ **Find this article online at earlychildhoodmatters.online/2022-4**

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The power of simple behaviours for human connection

Promoting intuitive parent–child interactions for healthy development

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Human babies evolved to thrive in interactions with loving adult caregivers. Babies' brain development depends on exposure to others and feedback on their actions (Kurismaa, 2021). They preferentially respond to their parents' face, voice, touch and smell. Parents and other caregivers are likewise wired by evolution to be attracted to their baby's 'cute' appearance (Kringelbach et al., 2016) and respond to their crying (Witteman et al., 2019). Non-verbal interactions consisting of eye contact and responsive gestures during the first six months of life are ingredients for strong connections between parent and child. Yet sometimes parents need additional support and guidance to engage in the rich communicative interactions that underlie early cognitive and language development.

There are three main reasons for this. First, some infants may demonstrate developmental delays that make it difficult for parents to "read" them, resulting in anxious and frustrating encounters. Second, parents experiencing mental health challenges or struggling with substance abuse may find it hard to connect with their child. Unpredictable and inconsistent caregiving can have a confusing effect on a young child and lead them to withdraw. The third and most common reason is stress. In my work I have seen long-standing stress and withdrawal among refugees and families experiencing poverty in southern Africa and Southeast Asia. Severely affected caregivers appear hopeless and inert, unable to muster the energy to bathe, consistently feed or talk to a young child (Richter, 2004).

Principles to reinforce intuitive parenting

Working with Karsten Hundeide and other members of International Child Development Programmes (ICDP) in southern Africa, we developed principles for brief interventions to help activate and reinforce intuitive parenting among families affected by war, natural disasters and extreme poverty (Hundeide, 1991, 1997). Our approach, which is designed to focus on parents and caregivers struggling to cope, including bonding with their child, differs fundamentally from "telling parents" what is good for children and teaching them techniques to enhance their child's development at each age or stage. We aim instead to enable the fundamental cultural and biological drivers of parenting and

child development, awakening parents' intuitive capacity to perceive and respond to their children in a sensitive and positive way (Parsons et al., 2017). When developing this approach we drew on our own experiences and existing perspectives from research (see box).

Initiating human connection through simple caring behaviours

We always begin by greeting and focusing on parents, before turning attention to their child. We ask about parental and family wellbeing and concerns in an open way. Listening to parents, and communicating compassion by physical proximity, eye contact, unobtrusive contact, and speaking in a soft, caring voice, helps parents feel accepted and understood, and helps to build trust.

We continually mention positive aspects of their child's appearance and behaviour, remarking on similarities to the parents themselves. We especially comment on children's communicative and affiliative gestures towards parents, for example: "see how she listens to your voice"; "he wants to sit close to you because you make him feel safe". We encourage parents to observe their child and interpret their state of mind ("what do you think he is thinking?") and their emotions ("what do you think she is feeling?").

"Non-verbal interactions consisting of eye contact and responsive gestures during the first six months of life are ingredients for strong connections between parent and child."

We use familiar age-specific routines to elicit a child's interest. For example, depending on a child's age, gently touching a baby's cheek to elicit smiling; imitating gestures and vocalisations, even if unintentional, like a cough; initiating culturally appropriate games like "round and round the garden", "pat-a-cake" and "where's [child's name]?"; waving hello; and pointing to and naming body parts.

Some perspectives that informed our approach to reinforcing intuitive parenting

- Donald Winnicott's concept of the "good-enough parent". Winnicott held that the foundations of health are laid down by the "ordinary mother in her ordinary loving care of her own baby" (1973). The mother herself needs a "holding environment" provided by a supportive other, not a person whose approach implies that she is uninformed and needs to be taught to be a better parent.
- Selma Fraiberg's idea of "ghosts in the nursery" (1975) – the influence of love, ambivalence or neglect that a person brings to their caregiving role from their own childhood.
- Colwyn Trevarthen's work (2001) on developmental processes in the first 18 months of life, in which pre-verbal communication – such as prolonged eye contact, imitation, responsive touch and voice – leads to incorporating "topics" into interactions, for example through repetition of simple rituals like waving bye-bye.
- Work by Lev Vygotsky (Wertsch & Sohmer, 1995) and Pnina Klein (2000) on how cognitive and language development originates in the interpersonal exchanges between parent and child.
- An emphasis on touch, voice and eye contact as ways to express empathy and elicit trust (Stack, 2004).
- Infant observation, as taught in developmental psychoanalysis, in which a parent simply watches their baby in a relaxed way and attempts to interpret their child's feelings.
- The powerful influence of parental states of mind (Dix, 1991) and parental self-efficacy (Albanese et al., 2019), and the deteriorating spiral of negative parental attributions to children's motives and behaviour (Miller, 1995).

Photo: Courtesy of Jon Spaull

Such actions almost always elicit positive responses from a child after a while and, together with repetition, help to establish responsiveness and put children at ease.

As we do these things, we sit close to parents and slowly begin to use their hands or encourage their voice to accompany our own, until their interaction is independent of our participation. We provide a quiet and reassuring narration for the parent, observing and praising what they are doing and how their child responds. We suggest in what ways their child's behaviour may prompt them to vary games, but we refrain from recommending specific actions or toys.

We use emotive language, stressing love and warmth, the joy of interaction, and the pleasure of sitting quietly together – singing, telling a story, or just enjoying holding one another. We encourage parents to feel proud of their ability to interact with their children and to elicit their children's smiles and laughter; we reassure them that while such loving and learning interactions may be brief, because of young children's limited attention span, they can take place at any time and in any situation.

With older children, we emphasise the importance of child-directed speech, talking with rather than at a child, taking turns, telling or reading stories, and commenting in response to children's vocalisations. We model elaborated speech and the importance of enriching descriptions of objects and events and linking them to events and objects beyond the immediate place and time.

Interventions may continue over several days or weeks, depending on the severity of emotional and physical withdrawal of the parents and child. Encouraging evaluations of the ICDP approach (Dybdahl, 2001; Sherr et al., 2014; Skar et al., 2014), showing positive attitudinal and behavioural changes in parents and children, support our conviction that the key to long-lasting change in parental behaviour is igniting and sustaining their intuitive responsiveness to their child.

"We encourage parents to feel proud of their ability to interact with their children."

↗ **Find this article online at earlychildhoodmatters.online/2022-5**

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Why we need more behavioural approaches focused on fathers

Evidence from Uganda and Vietnam suggests ways to engage male caregivers

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Over the past decades, there has been growing recognition globally and across various sectors about the importance of targeting male caregiving behaviours and engaging men in nurturing care interventions for young children. Fathers can promote their young children's healthy development through supportive caregiving behaviours that include responsive interactions with children – such as play, feeding and non-violent discipline – and positive relationships with their partners (Cabrera et al., 2018). However, the vast majority of early childhood interventions focus on mothers only (Panter-Brick et al., 2014). Little evidence is available about how best to design and deliver interventions to reach, engage and support male caregivers.

Many factors influence how involved fathers are in raising young children. These include their awareness of childcare-related matters, marital satisfaction, mental health, socioeconomic status and gender attitudes (Jeong et al., 2018). Across diverse cultural contexts, social norms are changing with more men co-residing with their partner and children and paternal engagement in childcare is more accepted than ever before (Kato-Wallace et al., 2014; Martin & Zulaika, 2016). This highlights the present potential for engaging men globally in nurturing care interventions.

My team at Harvard University systematically reviewed social and behavioural interventions that engage male caregivers in improving the nurturing care of children from birth to age 5 in low- and middle-income countries. We aimed to identify effective approaches, barriers and enablers to engaging male caregivers, and to uncover evidence gaps for future research. While our overall findings are currently under peer-review elsewhere for publication[1], in brief, we discovered 33 interventions that met our inclusion criteria. Most invited fathers to participate alongside their partners in community-based programmes that primarily focused on addressing child nutrition and health.

1 Further information about the systematic review can be found under Prospero on the UK National Institute for Health Research website at: https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=310288

Photo: Courtesy of MelvinDyson (via iStock)

Our review found that most of the 33 interventions used only a few basic behaviour change techniques with fathers – mostly counselling or information sharing – and these were of limited effectiveness, in part due to typically low attendance rates among fathers for such programmes. However, we identified a handful of noteworthy real-world examples, two of which we highlight below, that creatively used a range of behaviour change techniques to engage and support male caregivers.

Positive examples from Uganda and Vietnam

Conducted in Northern Uganda, the REAL Fathers Initiative was a 12-session mentoring programme designed to reduce child maltreatment and intimate partner violence that was implemented by volunteer mentor fathers (Ashburn et al., 2017). It combined individual meetings and peer group sessions to build social interactions and support among men.[2] Further family support was fostered by involving female partners in two individual sessions and one group session together with fathers.

During the sessions, mentors demonstrated strategies to avoid violence, such as a "yellow card" system for pausing a discussion with a partner when it looked likely to escalate to violence. The couples practised this system during the mentoring sessions. At the end of each session, the fathers were given new skills to practise as homework and they discussed their progress at the following session.

The initiative also used print media to disseminate messages more widely. Posters showing male involvement in parenting were displayed in community locations frequented by young fathers. The programme culminated in a "community celebration" event with the female partners and families of the participating fathers, at which the fathers set goals for applying the lessons learned and sustaining behaviours after the programme.

Another intervention, in Vietnam, trained health workers to deliver counselling sessions with groups of fathers at health centres, and to conduct home visits during the first few months after birth.[3] Health workers counselled fathers on how to engage in responsive interactions with their infants, support their partners to breastfeed, and work with their partners as part of a parenting team (Rempel et al., 2017).

The health workers showed fathers how to pay attention to their babies, talk with them, recognise their cues, and engage in activities such as diaper changes. Fathers were given a calendar with

2 More about the REAL Fathers Initiative mentoring programme in Uganda is available at: https://www.usaid.gov/global-health/health-areas/family-planning/fathers-can-prevent-violence-too-lessons-real-fathers

3 A blog post about the project can be accessed on Family Included at: https://familyincluded.com/fathers-bond-child-development-breastfeeding-vietnam/

suggestions on how to interact with their babies during different developmental periods. Posters in the community shared messages about the importance of father involvement in childcare, and each week a ten-minute broadcast over outdoor speakers encouraged fathers to get involved.

Organised using a Facebook group, "Fathers clubs" were held regularly in the community, inviting not only fathers but also community leaders to discuss challenges and successes and offer mutual support. The programme culminated in "Fathers contests", where men publicly demonstrated the parenting skills they had learned to their broader communities.

Two opportunities for future research

In addition to these selected encouraging examples, our review uncovered two strategies in particular that were rarely used with fathers and merit further research into their effectiveness. The first is providing opportunities for fathers to actually interact with children during the sessions while receiving coaching and live feedback from facilitators about their interactions – an approach that has proved impactful with mothers (Aboud & Yousafzai, 2015).

Use of text or video messages was another underutilised approach that has previously shown effectiveness when used with mothers (Obasola et al., 2015). Incorporating technology may have unique potential for reaching out to fathers, given the in-person attendance challenges commonly encountered by male engagement programmes. There is growing recognition of the importance of involving men in nurturing care interventions (Plan International and Promundo, 2021; World Health Organization, 2015). We hope designers of those interventions will increasingly incorporate and refine behaviour change strategies to maximise the interest and engagement of men and the impacts on their child and family caregiving behaviours.

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Racial biases emerge in childhood

How caregiver behaviour can promote anti-racist worldviews

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By 5 years old, most children from culturally dominant groups will hold some form of racial or ethnic bias (Raabe & Beelmann, 2011; Roberts & Rizzo, 2021; Umaña-Taylor, 2016). Yes, even your child (Scott et al., 2020). Racial and ethnic biases are ubiquitous throughout history and across cultures. No behavioural intervention has yet reduced them in a long-term, generalisable way. However, it would be problematic to conclude that racism is innate, for three reasons.

First, race is a social – not biological or genetic – construct (Roberts, 2011; Smedley & Smedley, 2005). Second, children vary widely in when and to what extent they develop racial biases (Rizzo et al., 2021, in press). And third, viewing racial biases as inevitable removes accountability from the adults in children's lives for ensuring they develop anti-racist worldviews (Bigler et al., 2022; Eberhardt, 2019; Kendi, 2019; Salter et al., 2018).

How, then, do racial biases develop? And what can we do to disrupt this process and promote anti-racist worldviews?

How do racial biases emerge?

Children learn by observing patterns in the world and forming beliefs about why those patterns exist. Racial and ethnic segregation and inequality are pervasive throughout societies around the globe, and everyday life provides ample opportunities for children to observe how interpersonal and structural racism work (Devakumar et al., 2020; Roberts & Rizzo, 2021; Salter et al., 2018).

> "Children naturally pick up on patterns of racial segregation, inequality and prejudice, and do so whether parents realise it or not."

Various experiences – such as walking to school with a parent, a playdate at a friend's home, or visiting a local park – will tell the child a lot about the racial segregation, inequality, and prejudices in their

neighbourhoods. For example, how do teachers treat students from different racial backgrounds (Brey & Pauker, 2019)? Who lives in higher- and lower-income neighbourhoods (Olson et al., 2012)? Who plays with whom in the playground (Killen et al., 2017)? How does mum respond when a person of a different race walks by (Richeson & Shelton, 2005)?

Through experiences like these, children naturally pick up on patterns of racial segregation, inequality and prejudice, and do so whether parents realise it or not. By as young as 4–5 years old, 68% of US children expect their friends to prefer playing with same-race peers and 63% associate White people with wealth and Black people with poverty. Similar percentages are documented cross-culturally, and they increase with age (Olson et al., 2012; Rizzo et al., 2021, in press; Shutts, 2015).

"Children draw conclusions from observing how adults in their life behave towards others."

Awareness of racial segregation and inequality is not necessarily problematic – being aware of racism is the first step in fighting against it – but harmful biases can emerge when children form beliefs to explain why these things exist. Around 70% of 4- to 5-year-old children think their parents would prefer they played with a same-race peer and 48% assume that racial inequalities are caused by internal differences between racial groups. Children who hold beliefs like these are known to develop more racial biases over time (Rizzo et al., 2021, in press).

These early-emerging attitudes and beliefs have important implications for children's behaviours, including decisions about who they befriend, who takes leadership positions, and how to allocate resources (Elenbaas et al., 2016; Shutts, 2015; Williams et al., 2021). Children from marginalised groups experience increased stress, decreased wellbeing and sense of belonging, and restricted educational and extracurricular opportunities because of their peers' biased behaviours (Sellers et al., 2006; Umaña-Taylor, 2016).

To disrupt the cycle of racial segregation and inequality, interventions need to address how children make sense of the interpersonal and structural racism they see in the world around them and emphasise them as unjust and changeable systems that should be fought against.

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How to promote anti-racist worldviews?

More research is needed to identify robust and generalisable guidelines on how to promote anti-racist worldviews during early childhood, especially among dominant- or majority-group children, who are more likely to develop racial biases (Dunham et al., 2015; Raabe & Beelmann, 2011). We do, however, have three suggestions for caregivers.

1 Take active steps to reduce racism in children's worlds.

Children develop racial attitudes through their observations of the world around them. By taking active steps to redress the racial inequality, segregation and prejudice that exist in children's worlds, caregivers can help children see how the world ought to be and serve as a role model for anti-racist change.

2 Monitor your own actions and the actions of people around you.

Children draw conclusions from observing how adults in their life behave towards others (Pahlke et al., 2012; Perry et al., 2022; Xiao et al., 2022) – for example, a parent tensing up when a Black man walks by, or a shopkeeper frowning at a Spanish-speaking person in a store (Brey & Pauker, 2019).

> "Do not wait until a child behaves in a biased way, as by then the underlying beliefs will have been formed."

Caregivers need to reflect carefully on their own biases and those of the adults around them and work to fully address these biases. For example, if an adult in a child's life expresses racist views, educate them and closely monitor the time they spend with the child. Caregivers should also talk to their children about these adults and explain why what they are saying is hurtful and wrong. Anti-bias workshops provide effective reflection and training opportunities to prepare folks for these experiences.

3 Focus on children's *beliefs*, not just their behaviours.

Do not wait until a child behaves in a biased way, as by then the underlying beliefs will have been formed. Instead be proactive in understanding children's developing beliefs and correcting problematic beliefs and stereotypes before they lead to discriminatory behaviours.

Research finds that discussions that explicitly point out and condemn racist behaviour lead to less racial bias among children (Perry et al., 2022). If the child attends a racially or ethnically diverse school, ask them about how people get along, who others in the class want to play with the most, and if there is anyone in the class people don't like playing with. Look for racialised patterns and address them immediately.

If the child attends a racially or ethnically homogeneous school, talk to them about children from different groups – for example, characters from books or television shows – and ask how they might get along in their school. As you drive through different neighbourhoods, ask your child what they think about the houses and the people they see. Do they notice that some are larger than others? Talk to them – in words they can understand – about how some people have more privileges and opportunities than others, and how these privileges make it easier for some folks to afford larger houses.

The goal of these conversations should not be to minimise racial segregation or inequality, but to *explain* it. When children understand that interpersonal and structural racism characterise unfair systems that need to be fought against and actively challenged, the cycle of bias can begin to be broken.

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interview with
Neela Saldanha

“Behavioural interventions seem so simple when you read the books”

Why we need more behavioural science in the Global South

The vast majority of the most-cited papers in psychology are authored by researchers from the Global North – and the interventions they describe may not work in the same way in the very different cultural contexts of the Global South. Neela Saldanha, Executive Director of the Yale Research Initiative on Innovation and Scale, USA, talks to Irene Caselli about the gaps in the Global South on behavioural science and how to fill them.

How did you become interested in applying behavioural science to early childhood?
I come from a marketing background in the private sector. My PhD in consumer behaviour was my first introduction to behavioural science, and I found it fascinating. I began to think: we're using behavioural science to sell consumer products, but are there better or more powerful uses to help people? Early childhood development is interesting because of the potential to do something that has disproportionate effects down the line.

What are the challenges when it comes to applying behavioural science outside of the Global North?
Behavioural interventions seem so simple when you read the books. The biggest lesson I learned was how hard it was to apply even simple interventions when they have not been tried out in a particular context. You have to understand the culture deeply before you can think about working towards behaviour change solutions.

Implementing interventions as simple as a text message reminder, for example, can be much more complex in India than in other places. You need to understand who has access to phones, how they use them and when. Many women, for example, do not have access to phones or social media, so interventions may privilege men.

And what are the challenges that relate especially to early childhood?
Behavioural interventions for one-time actions, such as getting a vaccination, are simpler than developing habits – and early childhood development is a series of small behaviours. It's not one big thing that you do. There are small things that you do every single day for two, three years. Every individual behaviour seems easy, but to do many small behaviours, consistently, every day is very hard.

For example, when a woman is anaemic during pregnancy, the impacts on her child can be long-lasting. In India, iron tablets are provided for free by the government, but many pregnant women who need them do not take them consistently. So we talked to rural women and healthcare workers, and observed their lives, to understand the barriers and see if we could come up with interventions.

What did you find, and how did that inform the intervention design?
One common reason was the side effects. Many women said they stopped taking the tablets because they were worried when their stools turned black – which is normal and harmless, but nobody had told them that this would happen. Others said the tablets made them nauseous. They were also unclear about when to take the tablets, which meant they didn't get into a habit of taking them. So we created a simple visual card for healthcare workers to use to explain side-effects and suggest how to tackle them, such as taking the tablets just before bedtime to minimise nausea.

Another common reason for non-compliance is simply forgetting. To avoid this and encourage building consistency, we created a calendar – kind of like an advent calendar – bundling goal progress with a reward. The calendar had stickers which the pregnant woman would peel off when she took a tablet, and it revealed a cute baby picture underneath – a tiny moment of joy that helped with keeping her focused on why she was taking the tablet.

You recently conducted research into behavioural messaging around Covid-19 in the Global South. What did you learn?
Together with a colleague at Cambridge, UK, Sakshi Ghai, we collected insights from behavioural scientists from around the Global South on how their interventions were being informed by the cultural context (Saldanha & Ghai, 2020). Two fellow behavioural scientists from India emphasised in their response how social norms on things like mask wearing and social distancing were hyper-local,

varying not just from city to city but even from one housing block to another.

A lot of Covid-19 responses touched on the importance of understanding culture. For example, in South Africa there is this cultural concept of Ubuntu, or togetherness – the translation is "I am because we are" – and that made it very difficult to communicate the idea that you should physically distance yourself from people you care about. Another response suggested that a good angle might be to talk about respect for elders, which also runs very deep in South African culture.

What can be done to strengthen behavioural science research with other perspectives and experiences?
Rigorous and relevant behavioural science depends on trained talent and resources, both in education and in organisations in the Global South. For universities, this means funding and partnerships – to develop courses, train students and enable researchers to run studies and collaborate with others via conferences, access to high-quality journals and so on. For organisations, this means training and long-term partnerships to understand, implement and embed behavioural science, as well as hiring and developing the right local talent.

"I'd really advocate for more local language, more local understanding and more local production of this kind of knowledge even if it isn't perfect."

And there is one more simple wish – that we could have more translations in local languages. In many languages there isn't an easy way to make people understand the idea of a "nudge". I think the more we translate the more we'll understand and get ideas from the ground up. So I'd really advocate for more local language, more local understanding, and more local production of this kind of knowledge even if it isn't perfect.

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Spaces that make children want to play

If you build it, will they come – and will they stay?

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When you think about children and urban public space, what image tends to come to mind? Most likely it is the playground, with its familiar template of primary-coloured pieces of equipment spread across a flat patch of land. However, children can and do play almost anywhere, and with almost anything. Observational and survey studies into families' behaviour suggest lessons for how to create public spaces that make families actually *use* public space to enhance their children's play.

Many of these studies contain insights relevant to behavioural science, even if they are not framed as such. For example, a common insight is that children tend to play more in spaces where there are benches for caregivers to sit. This reflects the tension, which is at the centre of behavioural science, between wanting to do something and actually following through on that intention: parents may want their kids to play, but actually let them play only when it is comfortable for them to stay around to supervise.

Good public spaces enhance the lives of urban citizens of all ages, not just families with young children. But they are particularly important for families living in low-income areas or substandard housing, who have the most to gain from outdoor space, yet typically have the least access to it (World Health Organization, 2016). For children, outdoor play is intertwined with wellbeing and healthy growth and development (Ginsburg, 2007). For caregivers, outdoor space that is abundant with nature and restorative qualities creates opportunities for relaxation, leisure, and positive interactions with their children and with family and friends (Roe & McCay, 2021).

Sadly, some public spaces manifestly fail to attract and retain families. The minimalist lines of Schouwburgplein – a square in central Rotterdam – are much admired by modernist architects, but the space was so unloved by families that the city gave it a year-long makeover, introducing artificial grass, water fountains and sports equipment (see below).

↓ Temporary redesign of Schouwburgplein, Rotterdam

Photo: Courtesy of HUNC/Studio ID Eddy

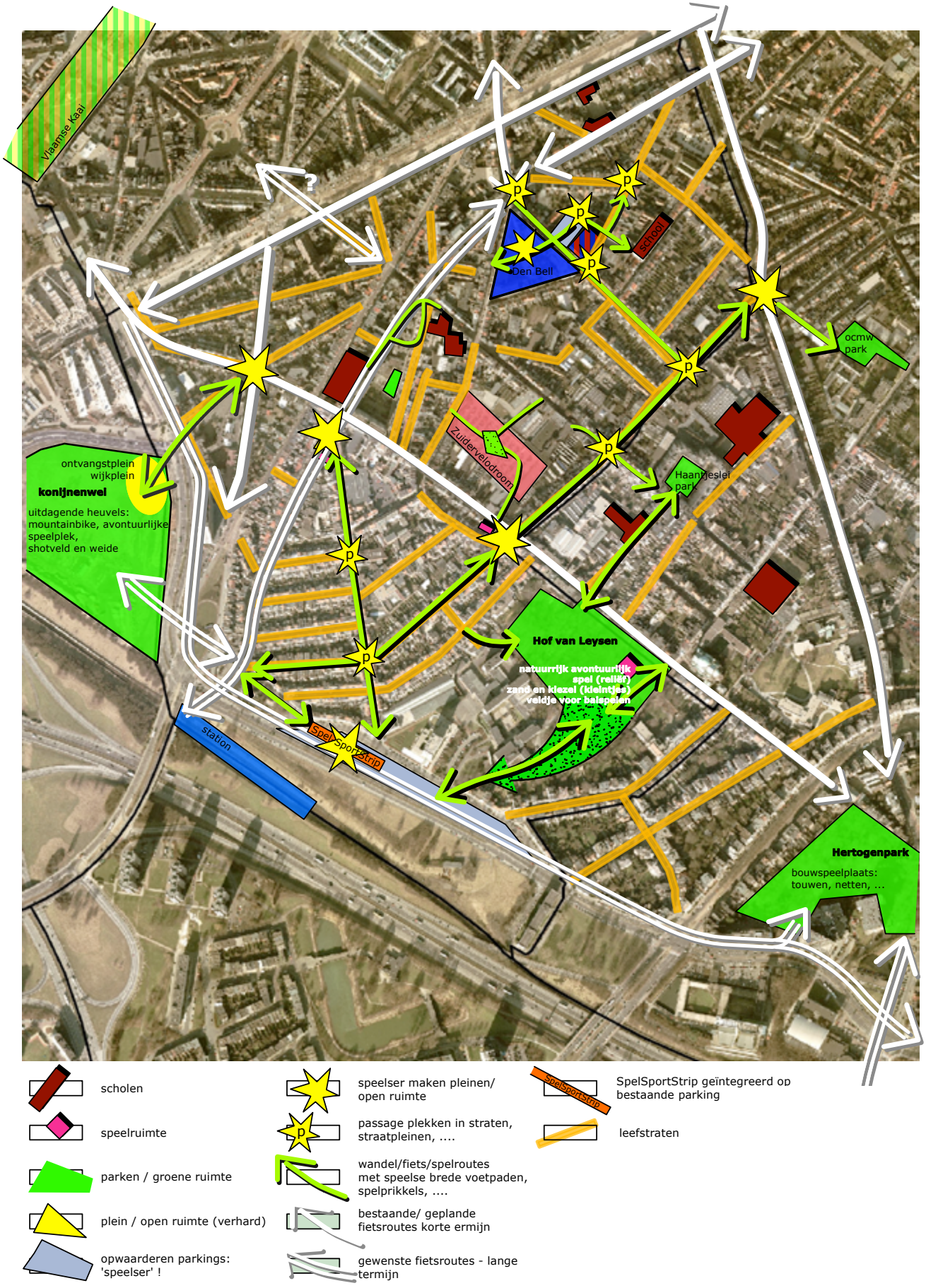

Illustration: Courtesy of City of Antwerp/Kind & Samenleving, Fris in het Landschap and Luc Deschepper

← This spatial analysis of one Antwerp neighbourhood (see opposite) explores how improving walking routes can make space more accessible, potentially boosting usage levels

Photo: Courtesy of Tim Gill

↑ Tumbling Bay playground in the Queen Elizabeth Olympic Park, London

What helps to ensure that public spaces fulfil their potential for families? Recent observational and survey studies suggest that the key ingredients are location and access; a variety of play offers and invitations, including natural elements; and places to sit and linger (Talarowski, 2017; Hellerman, 2021). Beyond these location and design factors, successful public spaces need good stewardship, management and maintenance to ensure they feel socially safe and well cared for.

Studies consistently show that children spend more time playing outside in greener neighbourhoods, and in areas that do not have heavy traffic: a finding that resonates with initiatives to reclaim street space for play and socialising (Bertolini, 2020). Perhaps surprisingly, the number of playgrounds in a neighbourhood appears not to be as significant (Lambert et al., 2019). However, playgrounds are clearly popular places for children to play, as shown by surveys and observational studies (Dodd et al., 2021; Hellerman, 2021). Location, walkability and ease of access all appear to promote usage (Bornat, 2016).

Public spaces will have the biggest pool of potential users if they are located near key family destinations, such as schools, group childcare settings, health services and shopping areas. Map-based analyses of the public spaces and facilities in a neighbourhood, and the routes that connect them (see Figure 2, opposite), can highlight areas of need, shortages of different types of space, sites with potential and barriers to access. The results of such analyses can also form the basis for local engagement work (Gill, 2021).

Design for fun – and an element of risk

How should a well-located public space be designed to encourage play, exploration and connections? One ingredient everyone can agree on is fun. Young human brains are highly attuned to the playful possibilities of the world around them: see, for example, the enduring attraction of walking along a low brick wall next to a sidewalk. Successful play designers build on this insight. They think in terms of "play affordances": physical features in a space that invite or encourage different types of playful interactions and behaviours (see page 38).

Affordances are not just a matter of physical interactions; they can embrace many different modalities – and, in doing so, foster more inclusive designs. Seating and "sittable objects" allow caregivers to rest and socialise while keeping an eye on their children; they are a key requirement for any public space that aims to engage people for any length of time (Gehl, 2010). Loose materials such as sand, grit and water create endless possibilities for construction and imaginative play – as any good early childhood educator knows.

Adding flowers and plants invites sensory exploration through smell and touch. Natural elements in urban public space are linked with improved mental health in both children and adults, including lower levels of

EVERYTHING IS PLAY!

Every skill that a child is learning can create play opportunities. Skills such as crawling, standing, and walking learned in the first three years can inspire designs for playgrounds for young children.

Standing up - Being able to Stand

Crawling

Walking

Climbing

Sound

Loose parts

Jumping

Balance

Small Spaces

Plants

Sand

Water

← Play affordances for young children: ideas from Turkish design team Superpool (Gürdoğan et al., 2019)

ADHD, depression and anxiety, with some evidence of a "dose–response" effect. In other words, more frequent experiences lead to better outcomes (Roe & McCay, 2021).

Another helpful design insight is that children – even very young children – actively seek out uncertainty, challenge and even a hint of danger in their play. That "scary-funny" feeling of butterflies in the stomach is what keeps play engaging for so many children (Sandseter, 2009). Child psychologists argue that risky play helps children to become familiar with experiences that involve uncertainty and potential harm, and with the bodily sensations that accompany them, reducing the anxiety and panic that can

How exciting it must be for a young child to play with the simplest things like water, sand, and sound! What is needed to experience cause-effect relationships, learn by observation, and to start first friendships?

Illustration: Tan Cemal Genç

otherwise prove debilitating for some children as they grow up (Dodd & Lester, 2021).

Some adults struggle with the concept of risky play, however. A balanced approach to risk management – one that recognises the benefits as well as addressing the risks – can help support sound decision making (Gill, 2018). In Scotland, for example, childcare regulators have embraced risk–benefit approaches as a way to support challenging outdoor play and learning experiences (Care Inspectorate, 2016).

Greater scope for behavioural science

In this article I have been summarising a large and growing body of observational and survey studies into the behaviour of children and caregivers. These studies make it clear that good design, in the right location, will go a long way to ensuring that children and caregivers can reap the benefits of regular outdoor activity.

To my knowledge, there is not yet a similar body of work using a behavioural insights approach to rigorously test alternative hypotheses about design of public space. However, this is starting to change. For example, Jeschke et al. (2022) recently conducted behavioural studies that suggest that children are indeed more attracted to – and play for longer on – less standardised and more challenging play features. Behavioural studies have the potential to provide further insights into locating and designing public spaces for play, and ensuring that children and their caregivers can take their rightful place as active, engaged participants in the public life of cities.

↗ **Find this article online at earlychildhoodmatters.online/2022-9**

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Save the Children introduces CUBIC

The first behavioural science team focused on marginalised children's rights and welfare

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Have you ever seen a small child riding on a motorcycle? If you are reading this article in Asia, Africa, Latin America or the Middle East, you would not be surprised to walk out into the street and see a mother sitting side-saddle and carrying an infant in her arms, or a father driving three kids to school. In most cases, only the driver may be wearing a helmet.

Back in 2013, I was living in Bangkok as Save the Children's Thailand Country Director. Road crashes were the top cause of child injury and disability in the country. I spearheaded a rapid research project to investigate how we could encourage more helmet use among children.

During this project I encountered for the first time an expert in behavioural influence, who introduced me to the work of Robert Cialdini and the UK's Behavioural Insights Team. I was hooked. Working with this expert, we designed a comprehensive programme to increase children's helmet wearing, including a school toolkit that incorporated behavioural science principles. For example, we asked the children to publicly sign pledges to wear their helmets; we made it easier for them by creating helmet storage areas in schools; and we got them to decorate their helmets with paints and marker pens – aiming for the "IKEA effect", by which people value something more if they have contributed to making it themselves.

Applying behavioural science to early childhood

From this experience I began to appreciate how behavioural science could offer three big advantages to interventions focused on early childhood development.

First, behavioural science tends to emphasise a rigorous focus on **testing** interventions to understand what effects – positive and negative – they have, and how they might be improved for next time. From our intervention in Thailand, we saw that the rate of helmet wearing among students tripled to 30%. We also observed other schools during the same period as a point of comparison: in these schools the rate of helmet wearing remained much lower, which gave us more confidence that our intervention had an effect.

Still, having subsequently learned more about behavioural science methods, I now know we should have been more rigorous in how we selected schools for the treatment and control groups. One of the paradigms the behavioural science field is pushing is the need to learn from failure, and having a meaningful counterfactual – through a well-chosen control group – is essential for seeing when you have failed or succeeded.

Second, behavioural science values **process**. In essence, the field seeks to bring scientific rigour to places where it has often been lacking. There are many different names and acronyms for processes, but they are all an adapted version of the scientific method, and they all follow the same basic phases:

- we narrowly define the behaviour we want to encourage
- we conduct formative research (e.g. literature reviews, observations and interviews) to try to understand the behavioural challenge
- we co-create potential solutions based on behavioural insights along with local stakeholders, and
- we test these solutions, preferably via experiments where feasible.

This step-by-step process means we continually consider and incorporate evidence and data, rather than designing programmes based on our intuition.

Third, behavioural science embraces **empathy**. It seeks to uncover why we do what we do, and how we react to the pressures we face. It is based on an understanding that our brains are imperfect and the decisions we have to make are often complex, so we

often don't behave "rationally", especially when we are distracted, tired or stressed.

The world's first behavioural science team for marginalised children

My experience in Thailand motivated me to found the Center for Utilizing Behavioral Insights for Children (CUBIC), which launched in early 2020 as the world's first behavioural science team to focus on marginalised children's rights and welfare. CUBIC aims to enhance Save the Children's work around the world by applying the decades of evidence from behavioural science to the needs of children and their families.

As with any new "start-up", CUBIC's first year was challenging. We had committed to launching behavioural science projects in partnership with six Save the Children country offices in Asia. Their staff would first need training in the methods and tools we chose to apply – and we would have to develop this training course while still learning ourselves. We reached out to the Busara Center for Behavioral Economics, which seconded two behavioural scientists to us part-time for six months. This proved to be invaluable: when you are just starting out in applying behavioural science, it is worth investing in hands-on learning from the best.

CUBIC also aimed to introduce the wider Save the Children movement to behavioural insights through an email newsletter. In such a big organisation, with teams working in 118 countries, I was aware that often email newsletters were deleted or never read. Applying a behavioural science principle to explaining behavioural science, I knew we had to make it easy for people. Instead of trying to get them to read heavy, technical documents, I began sending a weekly email called "In a Nutshell", which explains one behavioural science principle in 150 words or less, in a simple, conversational manner, sharing tips for how to apply it in work or life.

We estimate that over 1,000 staff read these emails each week, and we constantly receive new sign-up requests. We have now shared more than a hundred "In a Nutshell" emails, in English, French and Spanish.[1]

Testing texts in the Philippines

There is no "magic bullet" in behavioural science: behaviourally informed solutions need to be tested in every new context. What works for low-income families in US cities, for example, may not necessarily work in Asian or African cities. CUBIC's first field experiment involved taking a proven programme – Tips·by·Text, which uses text messages to encourage parents to support their children's literacy[2] – and adapting it for a new context: Metro Manila, in the Philippines.

> "Behavioural science embraces empathy. It seeks to uncover why we do what we do, and how we react to the pressures we face."

We implemented the intervention during the pandemic, when preschools were closed. Our adaptations for the local context included adding messages about social and emotional learning, positive discipline, Covid-19 prevention and parental wellbeing. We sent three messages each week for 40 weeks, including simple activities caregivers could do with their child.

To evaluate their impact, we conducted a randomised controlled trial involving over 1,800 parents divided into three groups: parents who received the text messages, parents who received the text messages plus a short encouraging phone call every two to three weeks, and a small comparison group of parents who received neither.

1 You can read CUBIC's In a Nutshell messages at https://sci.shorthandstories.com/in-a-nutshell/

2 The Annenberg Institute's innovative texting programme Tips·by·Text supports parents and caregivers in creating positive educational environments and building social-emotional skills. Information can be found at https://annenberg.brown.edu/projects/tipsbytext/overview

At the end of the trial, we evaluated children's literacy and numeracy skills using a remote learning assessment tool pioneered by Innovations for Poverty Action.

Unfortunately, we did not find a statistically significant difference in test scores among the three groups. When we delved further into the data, however, and looked only at the parents who remembered getting the three text messages we sent (with or without phone calls), we do find that their children ended up with better literacy and numeracy skills than the children of the parents in the control group, equivalent to an additional four months of school. We will soon share the findings on the Open Science Framework (OSF) website.[3]

3 The Open Science Framework is an online tool and repository which aims to increase openness, integrity and reproducibility of research by encouraging researchers to pre-register their research and analysis plan. Tips by Text is at: https://osf.io/9846n

Our takeaway: Tips by Text interventions *may* be effective in the Philippines, but *only* for parents who are able to receive text messages and pay attention to them. Due to its low cost, we would love to test Tips by Text again, with a focus on identifying and enrolling parents who are interested in and receptive to a text message-based parenting programme; this would be in contrast to our pilot research, in which we automatically enrolled parents without first gauging their interest.

CUBIC continues to learn and build evidence by applying behavioural science to a range of projects: as of August 2022, CUBIC was working on 18 Save the Children projects in 12 countries in Asia, Africa, and Europe, in partnership with our colleagues on the ground. In addition, we're introducing this approach to eight countries in Latin America through our first Spanish-language course. This work is helping us achieve our overall mission: to apply behavioural science to create change for the world's most marginalised children.

↗ **Find this article online at earlychildhoodmatters.online/2022-10**

Applying behavioural science ideas

Implementing a behavioural approach starts with research, testing and adaptation

Applying behavioural science to work across cultures

How a group model helps Dutch midwives to serve pregnant Eritrean women

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Eritrean women who recently arrived in the Netherlands experience a higher rate of complications in pregnancy than Dutch women. This is partly due to their traumatic journeys as refugees, but it is also typically seen with immigrant groups when cultural differences make it harder to communicate with health professionals. Our group-based work with Eritrean women in the Netherlands shows how an approach informed by behavioural insights can bridge the cultural divide.

Let us introduce ourselves. We are Amy and Anne. Anne is a midwife from the Netherlands with a degree in behavioural science. Amy is an interpreter and cultural mediator with a background in nursing. In 2018 we joined forces and adapted the Centering Pregnancy model to help midwives and pregnant Eritrean women to overcome language and cultural barriers. Centering Pregnancy is a tried and tested model for delivering antenatal care to women in group settings.[1]

1 More information about the group care approach and Centering can be found at: https://groupcare.global/about-group-care-global/

During the pandemic, we experimented with online groups. They enabled us to reach Eritrean women who were not living in close enough proximity to each other to sustain an in-person group, and women who could not arrange childcare. So far we have run 30 groups in total, each of 10 to 15 women.

Most midwives, of course, don't have degrees in behavioural science. But all midwives try to influence the behaviour of the women they work with – for example, to encourage healthy eating, informed choices about birthing, and preparation for providing nurturing care in parenthood. But most effective behavioural approaches for a Dutch woman and an Eritrean woman can be very different.

Why a cultural mediator is critical

It starts with recruiting women to join the groups. If you publicise a free government service, Dutch women tend to sign up – but Eritrean women do not. You have to contact them personally to explain what the goals are and persuade them it will be worthwhile. Many health professionals don't appreciate this – they think it's enough just to put up a poster.

We cannot emphasise enough the importance of working with a cultural mediator who understands the women you want to reach. For example, often an Eritrean woman will initially say she already knows everything she needs to know, so why should she join a group? We explain that she could really help other women in her community if she comes to the group and shares her knowledge.

All Centering midwives learn the importance of asking questions to guide women towards conclusions and better choices, rather than lecturing them. But to ask the right questions you need to have a strong sense of what base knowledge they start with. This is where you need a cultural mediator.

A good example from our experience is alcohol. When you talk to Dutch women, they will almost always know that it's a bad idea to drink alcohol when pregnant, even if they don't know why. With Eritrean women, if you did not know about the drink called *suwa*, you would completely miss out on having this important conversation.

Suwa is a home-brewed beer that is central to Eritrean culture and rituals, but many Eritreans do not think of it as alcohol – for them, "alcohol" is a different, European drink. Because they do not put "alcohol" into *suwa*, they think *suwa* is non-alcoholic. Most pregnant Eritrean women drink *suwa* routinely, and they initially dismiss the idea that it might be bad for their baby.

Humour is an effective tool to change their behaviour. We ask them to think about Eritrean weddings, and all the men drinking *suwa*. As they drink more and more, how does their behaviour change? What does that tell you about what kind of drink *suwa* is?

In these groups Amy talks to the women on their level, sharing how she too drank *suwa* when pregnant because her mother told her it would help the baby and she didn't then know better. Anne joins in by sharing her memories of an Eritrean wedding she went to with Amy. These conversations unfold with laughter and reminiscences, and by the end most women in the groups are convinced to stop drinking *suwa* during their pregnancies.

"We cannot emphasise enough the importance of working with a cultural mediator who understands the women you want to reach."

↓ Anne and a group of Eritrean women during a Centering Pregnancy session

Photos: Courtesy of Caro Bonink

Empowering women to ask questions

When we evaluate these groups, the women often say one of the main things that changed is that they feel empowered to ask questions. Dutch health professionals explain possible choices – for example, about how to give birth – and expect a dialogue. Eritrean women typically expect to be told what to do. They also often feel a deep mistrust of authority figures, and are scared to ask questions even when they don't understand.

> "Humour is an effective tool to change their behaviour."

Our groups provide a safe space to raise their concerns: for example, what are these iron pills I was given? Are they safe? What do they do? We give them tips on asking questions across language barriers. Many do not realise, for example, that they can ask for a translator, or ask the doctor to draw a picture.

Photo: Courtesy of Caro Bonink

Health professionals tell us that the quality of their interactions has improved as the women are now more engaged and ask questions. This is an important change, as feeling more confident about asking questions of authority figures will help the women to navigate Dutch culture and access the help they need from public services as they raise their child.

In response to demand from women in the Centering Pregnancy groups, we also started a pilot to run groups called "Centering Parenting" for new mothers, with a session for fathers as part of the programme. We took a bottom-up approach by asking what topics we should cover. These included legal processes and non-violent discipline – Eritrean mothers are often surprised by how the Dutch government expects them to act in certain ways, such as registering with public service providers and not using physical punishment. Both men and women felt that themes such as domestic violence and sexuality were better addressed during gender-specific group sessions.

While helping the women to navigate Dutch culture, we take care to validate positive pregnancy and parenting behaviours that are connected to Eritrean culture. When we ask about breastfeeding, for example, almost everyone in the group says they will breastfeed for at least two years.

Taking forward our approach for different cultures

We are currently working with scientific researchers to assess the impact of our work, with the hope of persuading more municipalities it is worth investing in. And we are advising on similar models for other communities, such as Ukrainian refugees who arrived in the Netherlands in 2022, and women in refugee camps. Although we believe in the strength of cross-cultural groups to broaden people's networks, in some cases this can be a bridge too far: it is important to have culturally cohesive groups for Centering sessions, because this enables women to feel safe in speaking freely. We also emphasise the importance of session-by-session evaluation to learn and improve.

↗ **Find this article online at earlychildhoodmatters.online/2022-11**

Short films influence caregiving behaviours in Côte d'Ivoire

Culturally relevant stories shared as videos on SD cards get fathers involved

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In cocoa-growing areas of south-western Côte d'Ivoire, children are at especially high risk of poor developmental outcomes. Children of cocoa farmers typically grow up in work camps and villages that lack the early childhood services or infrastructure usually found in urban centres, and their caregivers earn less than 2 USD per day (Balineau et al., 2016). In these vulnerable communities, children's development can be facilitated by promoting their caregivers' knowledge and practice of early childhood stimulation. Development Media International (DMI) designed an intervention called ENFANCE to promote such interactions.

We began by exploring caregivers' knowledge and how they interact with their young children (from birth to 3 years) through extensive in-depth interviews and focus group discussions conducted in eight villages. The aim was to identify norms that appeared amenable to change, and the underlying beliefs. We identified the following beliefs:

- Violent discipline methods are effective.
- Caring for children is the job of mothers and grandmothers, not fathers.
- Praising children will make them vain and disrespectful.
- Children who are too young to talk do not need stimulation.

The ENFANCE intervention was designed to encourage more responsive, playful and caring interactions between young children and their caregivers. It consisted of nine short live-action films, each lasting two to three minutes.[1]

Radio listenership is high in our target communities, but most people have no access to television or the

1 The films are available to view at: https://www.developmentmedia.net/project/enfance/

← Scan the QR code to watch the nine short live-action films

Video: Courtesy of DMI and Apolline Traore

↑ Scan the QR code to watch the film

internet. However, many of them have smartphones and use them to share videos and music via Bluetooth (Food and Agriculture Organization, 2018). We made short films hoping that they would go "viral" in local communities as people shared them with each other. Evidence shows that a message can be more persuasive when it is socially endorsed by a person someone knows (Dearing & Singhal, 2006).

"Evidence shows that a message can be more persuasive when it is socially endorsed by a person someone knows."

Humour and cultural sensitivity

The approach was based on a successful intervention conducted by DMI in Burkina Faso called Viral Videos. The nine films were shot in Côte d'Ivoire. We pre-tested all the film scripts with members of the target audiences to ensure they came across as culturally relevant and accurate in terms of storylines and characters. We shot the films in a village that was visually similar to those in the intervention areas.

South-western Côte d'Ivoire is ethnically diverse, and there is a strong appetite for audio-visual content in minority languages. We made the films in French and then had them dubbed into the seven most commonly spoken local languages in the intervention area: Baoulé, Bété, Guéré, Malinké, Moré, Wobé, and Yacouba.

The films focus on the relationship between brothers Angelin and Jean, and the competition between them to have the most intelligent children. The actors use humour to engage the target audience and get the messages across. One film, for example, shows their mother thinking that her son Angelin has gone crazy when she finds him crouching in front of his laughing infant, clucking like a chicken and meowing like a cat. Jean explains that this kind of responsive interaction helps the child develop.

We distributed the films on SD cards, so that people could view them on their phones without requiring an internet connection.

Early evidence of spread and impact

In partnership with Innovations for Poverty Action (IPA)[2] and two independent researchers, we conducted a randomised controlled trial to assess the impact of the campaign on caregivers' knowledge and children's developmental outcomes. As part of it, we randomly selected 100 villages to receive the viral video intervention and a further 100 villages as controls. In the intervention villages, we also randomly selected "target" households with children aged under 24 months to receive the films on SD cards from village health workers. In total, we gave 1,000 SD cards to local village health workers to distribute directly to the targeted households, and an additional 1,000 cards to village leaders to distribute in a non-targeted way.

A paper detailing the results of this independent evaluation is expected to be published later this year. Preliminary results, however, suggest positive changes in knowledge and behaviours among caregivers in targeted households in the intervention villages compared to those living in control-group villages. In particular, they indicate that the campaign had an effect on increasing male caregivers' involvement in stimulating interactions with their young children, and that there was a reduction in the prevalence of physical punishment.

2 More about Innovations for Poverty Action and its work in Côte d'Ivoire can be found at: https://www.poverty-action.org/country/côte-d'ivoire

Qualitative evidence also suggests that people enjoyed watching the films and shared and discussed them with family members, friends and neighbours and how watching the films led to changes in caregivers' behaviours. As one female caregiver said: "My husband used to hit the children … They would say 'Dad is coming!' and run off. Now, if the children have done something he doesn't like, he says, 'It's okay' and he is gentle. He is not like he was before."

Encouragingly, the evaluation found that 29.4% of non-targeted households in the intervention villages had watched at least one video. This suggests that the viral video approach could effectively facilitate behaviour change at scale among isolated and vulnerable communities.

Photo: Courtesy of DMI and Apolline Traore

↗ **Find this article online at earlychildhoodmatters.online/2022-12**

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First steps to make reading a routine in Jaffa

Jaffa Reads integrates behavioural design to meets the needs of the Arab caregivers in Tel Aviv

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Jaffa Reads is a programme led by the Urban95 initiative in Tel Aviv, and the Tel Aviv-Yafo municipality, Israel that focuses on encouraging Arabic-speaking families living in Jaffa to read with their young children. The results of an intervention with 90 families point to the importance of working with the community at the planning stage and throughout the project. This helps to understand the context-specific barriers parents face, as a basis for applying insights from behavioural science.

Jaffa is an ancient port city and part of Tel Aviv-Yafo municipality ("Yafo" being the Hebrew version of Jaffa). It has a large Arab community, comprising about 40% of residents – a much larger proportion than for the municipality as a whole. We know that among this community there is widespread caution of the municipal government, and a reluctance to participate in activities we sponsor.

Much of the Arab population in Jaffa faces considerable socioeconomic barriers and many families are large. Parents find it difficult to find time or dedicate resources for activities aimed only at children in a specific age range. About half of children under the age of 3 do not attend any formal early childhood education. Additionally, there is little awareness in the community of the importance of education at this very young age.

Arab parents in Jaffa speak Arabic at home, but many have never learned to read Modern Standard Arabic – instead they learned to read Hebrew. There are also too few age-appropriate Arabic-language books available. As a result, parents in this community are less likely to read to their children, who are 2.5 times more likely to have delayed language development than children across Tel Aviv as a whole.

To make reading a regular routine, we set out to create a programme that would support parents to read more often with their young children at home. We partnered with strategic consultants from Q Behavioral Thinking, the Jaffa Community Department, CET evaluation and Al Qasemi Academic College to design a behaviour-based intervention and monitor its results.

Workshops, nudges and a sense of community

The project included 90 families with children aged 2–3, divided into six groups. Each group participated in four weekly workshops, held in Arabic. These

included dinner and a guided activity for the children, which allowed for some distraction-free time for discussions with parents.

In these workshops, parents shared their previous experiences of reading at home. Instructors explained the importance of reading, passed on tools and tips, and guided parents as they read with their children. The participants also received books to take home.

We believe that four factors were especially important in making the groups work.

First, we were able to build trust through personal involvement. One of this article's authors, Nasra Shanir, is a member of the Arab community in Jaffa and works for the Tel Aviv-Yafo municipality. She was in charge of the project and personally persuaded the parents to participate, meeting them at each workshop and creating a sense of community around the project.

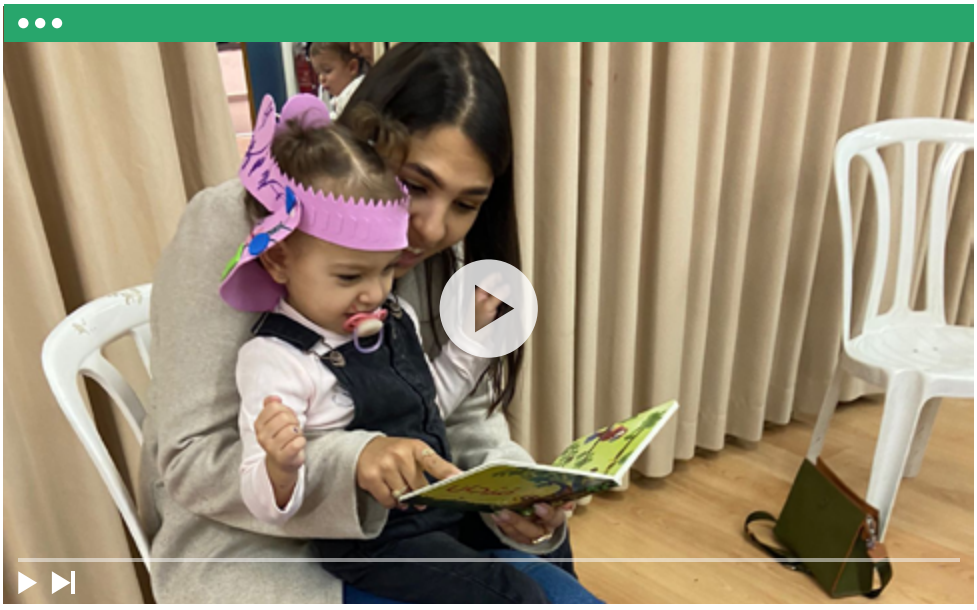
Second, we reached out to early education teachers to explain the project and ask them to help with recruiting parents. Some even came to the workshops during their free time. This was important, because Arab parents in Jaffa generally have a high level of respect for teachers, even if their own children do not go to kindergarten.

Third, we created WhatsApp groups for parents to share comments about the project's activities and pictures of them at home with their children and books. This helped to build a sense of community and encourage more parents to read at home, as they saw their peers doing so. As one parent put it: "The group reminded me that there are other mothers and fathers in exactly the same situation."

Finally, we used individual text messages as personal reminders. The messages encouraged and congratulated parents for their efforts, while reminding them of tips such as "it is enough to simply point and describe out loud what you see in the book: animals, colours, objects, people". We sent the texts just before the children's usual bedtime.

As one parent said about these nudges: "The messages give motivation and encouragement, you feel that it was sent to you personally … as if there is someone standing behind us and reminding us to read. It gives support."[1]

1 Watch highlights from the Jaffa Reads programme in March 2022 on this YouTube video from Urban95: https://www.youtube.com/watch?v=3Rem9LG_-PU&t=1s



Video: Courtesy of Talia Kadosh/ Tel Aviv-Yafo Municipality

↑ Scan the QR code to see the programme in action

Photo:Courtesy of Talia Kadosh/ Tel Aviv-Yafo Municipality

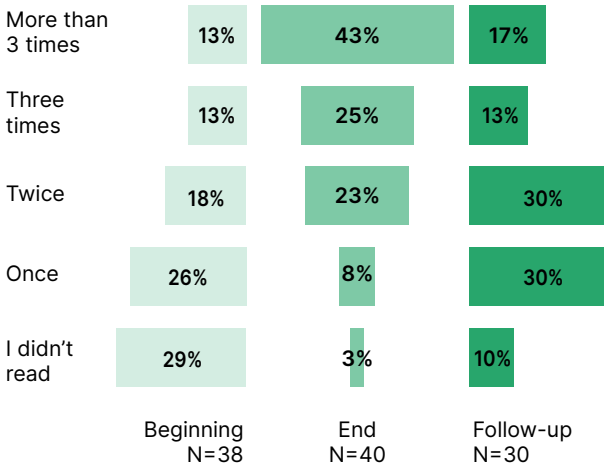
↑ Parents practise reading to their children during in-person workshops

Results were positive but faded with time

Almost every family who started the workshops came to all the sessions. We asked parents about their reading habits before the intervention, at the end, and again a month after it had finished. The results show that the programme had a large immediate impact, but this had weakened a month afterwards – although, encouragingly, some changes in behaviour did persist.

For example, before the programme only 26% of parents reported having read with their children

↓ More parents read to their children after the programme but maintaining frequency is challenging
Source: CET/Q Behavioural Thinking



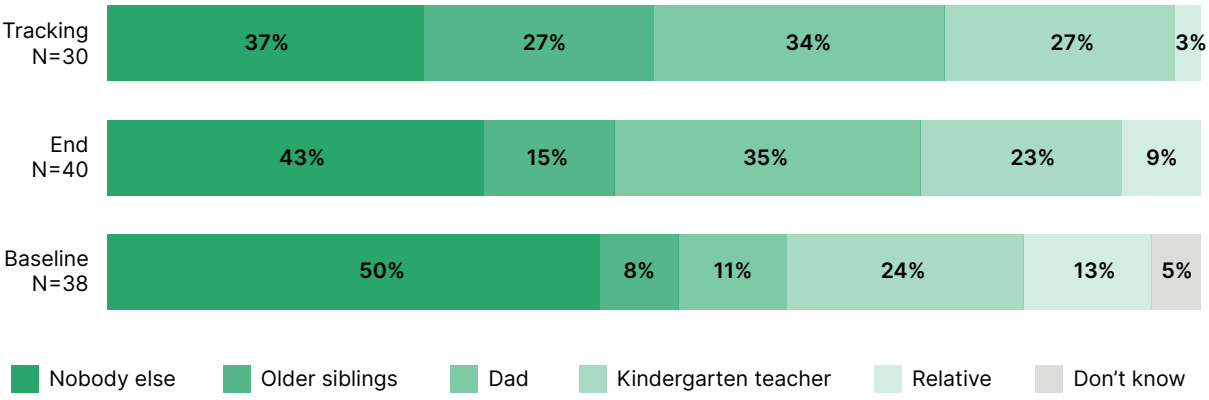
three or more times in the previous week. At the end of the programme that had jumped to 68%, but a month later it had fallen back to 30% – barely above the baseline figure. However, the proportion of parents who said they didn't read at all during the previous week fell from 29% before the programme to 10% a month after: the lasting change appears to be a rise in the number of parents who are reading at least once or twice a week.

When we asked parents how long they spent reading with their children, before the intervention only 41% said over five minutes, and none said over ten minutes. A month after the intervention, 56% said they read for at least five minutes, including 8% who read for over ten minutes.

An unexpected but exciting result was that the intervention motivated additional family members to get involved. Although the workshop was directed at mothers, our survey showed a large and enduring jump in the number of families reporting that fathers and older siblings were reading to the young children. Before the programme, 11% of families said that the father had read to the child in the previous week, and 8% said that an older sibling had done so. A month after the programme ended, those figures had risen to 34% and 27% respectively.

Did someone other than you read to your toddler during the past week?

multiple choice



Source: CET/Q Behavioural Thinking

One mother said: "I shared the things I learned in the workshop with my husband. I think it's very good to share with those who live with you." This aspect of the results has broader social implications and merits further study.

Photo: Courtesy of Talia Kadosh/ Tel Aviv-Yafo Municipality

Challenges of sustainability and scale

Overall we consider Jaffa Reads to have been a success, though the survey results tell us it will be important to continue these activities so that reading is adopted as a habitual behaviour.

In our view the most significant result of the programme was that it contributed to strengthening trust between the municipal government and Jaffa's Arab community. Parents overwhelmingly appreciated the workshops and were willing to take part in follow-up activities. We hope this indicates potential to scale up and reach more children in Jaffa. For others considering similar work elsewhere, we believe the key lesson is working with the community to understand the context-specific barriers that parents face.

↗ **Find this article online at earlychildhoodmatters.online/2022-13**

Prompting parent–child reading in Jordan

Chatbot behaviour-informed messages tested to increase Arabic literacy

Photo: Shutterstock

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Queen Rania Foundation (QRF) is preparing a national behaviour change campaign in Jordan to promote parental engagement in early literacy activities. The campaign includes both a communications component and interventions that build-in behavioural science. We recently tested an intervention that uses a chatbot to encourage mothers to read to their children, which generated useful learning for the design of the national campaign.

Jordan, like many Arab countries, faces huge challenges with literacy. International assessments show that many children, from the early years until secondary school, are unable to read with comprehension (World Bank, 2021). Developing early literacy skills is vital, as it forms the foundation of all learning. Yet early childhood education in Jordan is not mandatory: only 2% of children up to 4 years old are enrolled in early childhood education, 5% of 4–5-year-olds, and 63% of 5–6-year-olds.

Studies show that 88% of children below age 6 in Jordan spend most of their time with their mother (O'Donnell Weber et al., 2021). This makes it critical to create literacy-rich home learning environments.

We conducted a national survey to better understand existing parental behaviours in Jordan (ibid.). We found that only 6.3% of parents reported reading to their children in the previous three days, and only 0.3% said they read to their children on a typical day. Most parents of children under 6 also had not sung with them or engaged them in conversation in the three days preceding the survey – behaviours that also help to develop early literacy skills.

Image: Flaticon.com

← Sample filled-out pledge

However, we also know from the study how much parents value education and want the best for their children (ibid.). When asked about her aspirations for her child, Um Fursan, a mother of a 4-year-old child, responded: "Education. I really want him to learn." Mohammad, father of two, said he wants his son to "succeed in his life when he grows up, get an education, and turn out better than me".

Using a chatbot to ask parents to pledge new behaviours

Our earlier study had given us initial insights into barriers and motivating factors for parents in engaging in early literacy activities with their children. We then held observation sessions to get a better sense of home environments and routines, and brainstormed potential solutions to the most salient barrier we identified: parents' perceived lack of time.

We know it is key to build behaviours into existing routines, so we designed an intervention that included a personal action implementation plan whereby mothers decide ahead of time when, where, and how frequently they will read to their child. This builds on the behavioural science concept that we are more likely to adopt a behaviour when we set a clear and precise goal and commit to doing it.

To test this experimental intervention quickly, we contacted parents who were already involved with our Parent Education Program, which currently targets mothers only and which we began to conduct virtually after the pandemic. We decided to use a chatbot[1] as it was a scalable solution that allowed for flexibility, so that mothers could respond whenever it suited them. We invited them to join a new, two-week home reading activity. The activity was simple: every time the mother read to her child, we asked her to send on Facebook Messenger either the title of the book or a photo of its cover.

Mothers who expressed an interest in joining were assigned to either a treatment group or a control group. Mothers in both groups were asked to share the titles or photos of the books they read. Mothers in the treatment group were additionally asked to specify in advance how often, at what time, and where they planned to read to their child over the next two weeks. Based on their responses, a customised virtual pledge, like the one shown above, was generated.

> "We are more likely to adopt a behaviour when we set a clear and precise goal and commit to doing it."

The results did not suggest that the intervention was effective in this form. At the end of the intervention, we asked mothers in both groups how much they had read over the last two weeks. Of those who responded, 60% of the mothers in the control group reported reading at least one book in the past two weeks compared to 58% in the treatment group. Only 17% of mothers in the treatment group reported reading as much as they had pledged.

Given that the intervention was carried out with a small group of mothers, these results should be

1 A Chatbot demo can be accessed at: https://qrf.eflow.app/embed

interpreted with caution. Further research is needed to improve our ability to interpret the findings, including identifying which factors helped some mothers read to their children and which factors hindered others. For example, some mothers said they did not know where to access age-appropriate books, which suggests it could help to include book gifting in future programmes. The usefulness of reminders, and their optimum frequency, would be another area for further study.

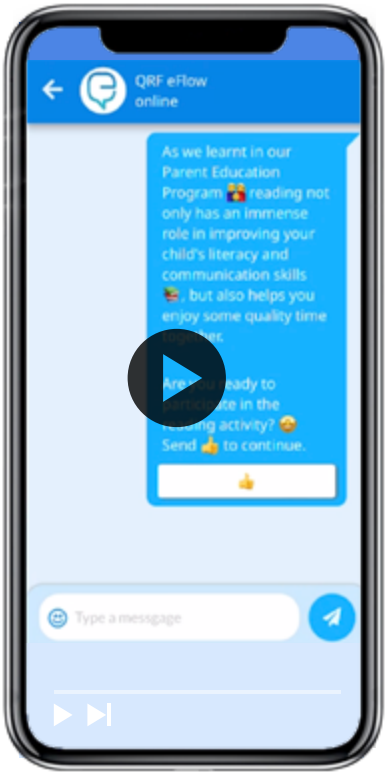
What we learned about automated interventions

This small-scale experiment taught us a lot about designing and implementing a behavioural science intervention using tech-based solutions. Our intervention used eFlow[2], an educational cloud-based platform with an interactive chatbot that runs over WhatsApp and Facebook Messenger. We found that this platform made it easy to:

- schedule different messages and reminders for the treatment and control groups
- automatically generate customised pledges based on mothers' responses
- track mothers' responses through individual chats, and analyse data.

"Virtual interventions have potential drawbacks. It may be harder to engage people virtually compared to face-to-face, leading to a higher risk of them dropping out."

2 Details of the eFlow application are available at https://www.eflow.app/



↑ Scan the QR code for a Chatbot demo

↓ Scan the QR code to watch the video

However, we also learned that virtual interventions have potential drawbacks. It may be harder to engage people virtually compared to face-to-face, leading to a higher risk of them dropping out, especially given that completion rates for online programmes tend to be low (Onah et al., 2014). It would also be interesting to study whether more mothers would follow through on a pledge if it were printed out in hard copy and they were asked to sign it, rather than the pledge being generated only in virtual form, as some evidence suggests that e-pledges generate a lower level of emotional investment (Chou et al., 2020).

As virtual interventions minimise logistical costs such as transportation, they make it feasible to scale to reach thousands of parents – a potential advantage that justifies further experiments. QRF plans to work with early childhood and behavioural science partners to conduct additional research and apply the learnings to a multi-year national behaviour change campaign where piloting will begin in 2023.

↗ **Find this article online at earlychildhoodmatters.online/2022-14**

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Technology meets face-to-face parenting workshops to create behaviour change

New evidence from Uruguay shows e-messages alone are not enough

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Crianza Positiva is a programme in Uruguay for families with children from newborn to age 3, which incorporates behavioural insights. It aims to strengthen parenting competencies and increase positive parent–child interactions through a face-to-face workshop followed up by e-messages. Because the Covid-19 pandemic forced us to suspend the face-to-face workshops, we were also able to test whether the e-messages worked as a standalone intervention.

The design of Crianza Positiva is inspired by a parenting model called ODISEA (opportunities to develop sensitive, effective and affectionate interactions) developed by Gómez and colleagues (Gómez & Muñoz, 2014; Gómez et al., 2022); by Nobody is Perfect in Canada; by Chile Crece Contigo in Chile; and by Families First in Finland. It starts with eight weekly face-to-face group sessions, each lasting 2 hours and 45 minutes, in which trained facilitators explore each family's life history, identify opportunities for them to learn, and put that learning into practice.

Immediately after the workshop, the next phase starts: an e-messaging intervention consisting of 72 SMS text messages sent to caregivers' mobile phones three times a week over six months. We developed the messaging intervention by combining insights from behavioural economics and developmental psychology to help parents sustain the competencies to which they are introduced in the workshop.

The messages address behavioural biases such as present bias (undervaluing activities that bring rewards only in the future), cognitive inattention (not thinking enough about important parental decisions), and negative identities (attaching a low value to existing resources and holding low expectations about parenting performance). They build on a baseline assessment that identifies factors associated with parents being less likely to engage with their children. A typical sequence of the three weekly messages might be:

1. underscore the benefits of a certain parenting practice
2. provide tips or suggestions for simple actions, and
3. offer encouragement and support.

The messages are organised into two-week modules that each focus on a particular parental competency. They are personalised to the gender of the child and adult, and the child's name.

Measuring changes in parental behaviours

We first evaluated the Crianza Positiva intervention in 2017–18. We implemented the workshop for 529 families, with a control group of 230 families who had also expressed an interest but could not participate due to limited space. While this initial allocation was not random, we were able to assess the effects of the workshop by using a technique called propensity score matching. Among the families who participated in the workshop, we randomly selected 237 to receive the follow-up e-messages, with the remaining 292 as a control group.

Parents who participated in the workshop expressed a high level of satisfaction. When we asked them what they would remember most, their responses included "be more aware of what I do, and think about the importance of the legacy that we leave to our children"; "be able to slow down and reflect on how I am and what I need in order to respond adequately to my child"; "take care of myself"; and "be more conscious about how I am and about my child's needs".

"The workshop triggers a higher quality of parent–child interactions, while the follow-up messages nudge parents into increasing the quantity of their interactions."

We assessed whether participation in the workshop had changed parents' behaviour by observing video recordings of them playing with their children, and comparing them to recordings of caregivers in the control group. We assessed the interactions using an instrument called the PICCOLO scale (Balsa et al., 2022a). We found that parents who had participated in the workshop showed more affection towards their children and played with them in ways that were more likely to stimulate their cognitive development. We also found that the workshop had increased parental knowledge.

When we evaluated the e-messages (Bloomfield et al., 2022), we found no further impacts on the PICCOLO scale or on parental knowledge. However, we found the e-messages did make parents more likely to engage more frequently with their children, reflect more on their parenting, and reach out for social support when they needed it. The messages increased the frequency with which parents talked and read to their children, using a wider range of intonation (Balsa et al., 2021).

In sum, we concluded that the workshop triggers a higher quality of parent–child interactions, while the follow-up messages nudge parents into increasing the quantity of their interactions. Effect sizes were around a quarter of a standard deviation overall, but greater for families who went into the workshop with a lower sense of their own parenting competence or with an initial higher cognitive load (more stressful events in the past).

Covid allowed us to test e-messages alone

In 2020 we conducted another evaluation. During the Covid-19 pandemic, early childhood centres closed and we tried implementing the e-messages without having had a prior workshop. We made the messages longer and modified them to accommodate pandemic-related elements such as the effects of lockdowns on relationships and child treatment. We randomly assigned 348 families to receive the messages, and 339 to a control group.

We found that the messages alone had essentially no impact on parenting knowledge or behaviours, child-rearing environments or family wellbeing (Balsa et al., 2022b).

We think there are three reasons for this. First, while we tried to make the messages self-contained, the absence of a prior workshop probably reduced both

their meaning to families and families' openness to them. Second, families in the 2020 intervention were more likely to be high school graduates, and less likely to be beneficiaries of cash transfers – that is, they were less vulnerable, and evidence generally shows that such interventions have the largest effects on the most vulnerable families. Third, both treatment and control groups were also receiving frequent WhatsApp messages from the local early childhood centres that had been forced to close. This may have diluted the impact of the additional messages from Crianza Positiva – especially as the messages were longer, to account for the absence of the workshop, and this was a stressful time at which parents had many other things to think about.

Our results suggest that, on their own, e-messages may not be enough to encourage and maintain change in parenting practices – their effectiveness relies on complementarity with intensive face-to-face programmes, even if they are short. An alternative hypothesis is that the stresses of the pandemic could explain the lack of impact, and they may work during more normal times. We are currently working with the Uruguayan government to test two new ideas: e-messages combined with a teleassistance programme, and with a chatbot targeting pregnant women and their partners.

> "We found that the messages alone had essentially no impact on parenting knowledge or behaviours."

↗ **Find this article online at earlychildhoodmatters.online/2022-15**

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WhatsApp Baby Nelson reminds Brazilians to be active caregivers

Nudges with humour include talking to adults as “former babies”

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How many of us know that exercising regularly promotes physical and mental health – and yet, how many of us actually exercise regularly? Behavioural science proves that knowledge is not synonymous with putting what you know into practice. The same is true of parenting. At the Maria Cecilia Souto Vidigal Foundation, we set out to create an effective campaign, both simple and scalable, that would help remind people to put into practice with their young children the behaviours they already know are good. To front our campaign, we chose to create a virtual character – a baby called Nelson Neto (“Nelson the Baby”) or sometimes Nenê do Zap (“WhatsApp Baby”).

Through his online content, Nelson promotes caregiving practices that relate to the five dimensions of the Nurturing Care Framework developed by the World Health Organization, UNICEF and the World Bank: health, nutrition, responsive care, safety, and opportunities for early childhood interaction.

Our strategy to influence parents and share knowledge was informed by the work of economist Richard Thaler, co-author of the book *Nudge* (Thaler & Sunstein, 2008), and psychologist Daniel Kahneman, who wrote *Thinking, Fast and Slow* (2011). For example, Nelson uses a light-hearted, humorous approach, as research suggests that people assimilate messages better when in a good mood. We avoid generating guilt, because people who feel that they are being criticised can resist messages.

The work of behavioural scientists such as Thaler and Kahneman makes clear that behaviour changes take time and need to be built layer by layer, constantly and with a long-term view. Understanding the importance of constant interventions helped us to determine the frequency with which Nelson posts new content.

Who and what is Nelson the Baby

We launched Nelson on WhatsApp, the major communications platform in Brazil, on 4 March, 2020 – just before the pandemic hit. He now reaches around 2,000 people every week on WhatsApp and has various other social media channels: he has more than 24,000 followers on Instagram and 38,000 on Facebook, together reaching over 6 million people monthly. If you search for @nelsononene on social media, you will see that he is a baby with curly hair, expressive eyes and a round face, and is very talkative. Nelson is black, like 75% of the caregivers we are trying to reach.

We post content every day, in which Nelson raises awareness about the importance of early childhood. Nelson uses humour to remind parents to do what they are already aware they should be doing. He addresses adults as "former babies" ("*ex-nenês*"), for example, to remind us that we all were babies once. Here is a translation of how Nelson reminds people of the importance of talking to babies:

> *Talking, cuddles, and kisses are as important as eating and sleeping. When we have an adult who accompanies our discoveries and learning very closely, giving us care and love, we grow up healthier, happier, and more confident. Did you know that 90% of our brain develops in the first years of life? It's for real! Until the age of 6, we learn a lot of things, and affection is fundamental for us children to feel safe and protected. This is why I send tips and information for those adults that have once upon a time been children ... I think they don't remember anymore what it's like to be a child!*

Nelson the Baby is a national initiative aimed at fathers, mothers and caregivers of children up to 6 years old, especially in more vulnerable

"Nelson uses humour to remind parents to do what they are already aware they should be doing."

socioeconomic groups. Nelson encourages parents and caregivers to talk and interact with their babies from birth, long before the baby can speak their first words. Once children are able to talk, he also encourages active listening by parents and caregivers.

We conduct research into our audience so that we can provide content with which they identify. We know that 94% of our audience are women, between 25 and 45 years old, especially in the north-east and south-east regions of Brazil. Of them, 60% are mothers and the rest are aunts, grandparents, and daycare and early childhood educators. We also adopted formats based on what we heard from this audience: for example, 80% prefer to watch video content, 70% share content via WhatsApp, and among the most popular requests was to receive suggestions for simple games.

A variety of formats

Nelson delivers his messages in a variety of formats. As Nenê Sincero ("honest baby"), he tells adults truths they need to hear. In the *Tuto do Nenê* ("baby's tutorial") series, he brings tips and suggestions for easy-to-make foods that can be prepared with children's help. The tutorial videos are our most saved and shared content on social media – a crucial engagement indicator, as it suggests that the public saves the material to use later with the child.

In Nenê Sincero's "difficult conversations", Nelson changes his playful and energetic tone to a more pensive one. The idea was born out of an experiment we conducted during Covid-19: Nelson shared how living through the pandemic was making him feel insecure and he gave caregivers tips on approaching the issue with children. This generated a lot of comments, and we saw there was demand for similar content. Since then, we've talked about subjects such as anger, war and absent fathers.

It is still early to carry out quantitative research on behaviour change through Nelson Neto, but we have early feedback from people who follow Nelson on social media. The data was collected through a survey on how Nelson's content inspired interactions with children. An aunt, responsible for the care of her nephews on a daily basis, told us during the survey that she started to talk more with the little ones and that, with this approach, their tantrums decreased. A father told us that one of Nelson's jokes inspired him to talk about emotions with his autistic son.

Early evidence also suggests that Nelson's content is inspiring parents to read to their children, learn new games and pay attention to their responses to stimuli. They have begun to search Nelson's social profiles for specific tips. Many people have mentioned on social media that they see physical and emotional traits of their own children in Nelson, which shows us that Nelson has characteristics that bring him closer to his target audience.

"Nelson encourages parents and caregivers to talk and interact with their babies from birth, long before the baby can speak their first words."

A bright future for Nelson

Nelson's gestation period took much longer than the classic 40 weeks. His birth depended on an interdisciplinary team, which included artists and experts on communications and early childhood. Just as the arrival of a baby changes a family, Nelson's arrival inaugurated a new phase at the Maria Cecilia Souto Vidigal Foundation, which has the mission of positively impacting the development of children during their first years of life. This was our first strategy to speak directly with underprivileged families.

We know that behaviour changes take time and require messages to be reinforced from a variety of angles. During the pandemic, for example, we

experimented with hip-hop songs to reinforce messages countering the misinformation that babies did not get sick from Covid-19 and urging everyone over 2 years old to use a mask and alcohol gel. These proved highly popular, and we continue to develop new approaches for Nelson – including working on a comic book and a television series.

Nelson's universe will be expanded. The public will soon meet his mother, his father, his sisters, and his dog. He will also have a grandfather, his father's father, called Seu Nenê – which is both a masculine term of endearment and an affectionate nickname meaning "your baby". The name was thought up to reinforce the importance of ancestry (mainly male), which is a challenging aspect of life in some communities in Brazil. Other characters are being created, such as friends, community members, and people at Nelson's daycare. Our intention is to contextualise Nelson's experiences and deepen engagement on topics such as pregnancy care, respect for differences, safety, and the impacts of stress.

Nelson, however, won't grow up. We want him to stay a baby so that he can continue his mission to represent the rights and needs of babies and children across the country. He will continue to ensure that "former babies" are aware of the importance of their affection, interaction and attention for their babies to grow up bright and healthy – just like Nelson.

"(Nelson) was our first strategy to speak directly with underprivileged families."

Images of Nelson Neto: Courtesy of Fundação Maria Cecilia Souto Vidigal

↗ **Find this article online at earlychildhoodmatters.online/2022-16**

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interview with
Yvonne Schönbeck

“Our aim is to get healthcare professionals to see themselves as parent coaches”

A pilot helping doctors and nurses to connect better with parents

A pilot project in the Netherlands is trying to change the working methods of healthcare professionals who assess early child development. The aim is to establish better connections with caregivers and to improve caregivers' experience of routine appointments to assess their child's developmental milestones.

Dr Yvonne Schönbeck is project manager and researcher in preventive child health at TNO, an independent Dutch research organisation that focuses on applied science. In conversation with Irene Caselli, she explains why this project is important and its potential to be scaled in other areas of healthcare.

Many behavioural interventions designed for the early years target parents. Why did you choose to focus on healthcare providers?
In the Netherlands, children have a lot of scheduled visits with preventive healthcare providers during the first four years of life. These visits are aimed at monitoring growth and development and administering vaccinations. During these visits, professionals assess the child's development according to a set of milestones for their age.

In a previous project, we developed short videos to help caregivers to self-assess their child's milestones, so they would be better prepared to ask questions to get more out of these routine visits (Grevinga et al., 2018; Van Dommelen et al., 2022). But then we realised that we also needed to work with healthcare professionals. How can they provide more child- and caregiver-centred care through the way they interact with caregivers?

What approach did you decide to take?
We chose to change the standard method healthcare providers use to assess milestones in child development. This set of milestones is great at identifying about 10% of children who are not meeting some of them and may need extra care, but is often not very informative or helpful for the 90% of parents whose children are considered to be on track. Some caregivers don't feel "seen" when professionals simply look at milestones that do not match their child's current developmental status.

Right now we are conducting a pilot study in which we are training professionals on a new methodology for assessing child development at routine scheduled visits, in combination with conversation skills. We ask them basically to consider the same milestones, but no longer at a fixed age. Instead of just checking that the child can do all the things you would expect at their age, you continue by looking at milestones matching the child's actual achievements.

> "We make small steps in the direction of making these sessions more useful and informative for the majority of parents."

So if a child is 6 months of age, and you see that he or she passes the milestones, you continue to talk to the parents about the milestones for 9 months of age. Milestones that are not yet achieved will be used to discuss next steps in the child's development. This way we make small steps in the direction of making these sessions more useful and informative for the majority of parents. For the professional it's not too much of a practical change, but it can imply a big change in mindset towards meeting the parents' needs.

Why is it important to train on conversation skills as well as the new methodology?
This speaks to a wider issue than just routine visits to monitor child development. In the past, healthcare professionals were generally seen as experts: what they said was true, and everyone believed them right away. Over time, parents have become more conscious, aware and informed. So rather than just dispensing advice, healthcare professionals increasingly need to focus on making parents feel safe so that they open up and ask all their questions.

When this does not happen, parents can come out of healthcare appointments feeling judged, insecure and not adequately supported. This can have a

large impact, especially on caregivers in vulnerable situations (Andersson Elffers Felix, 2020). As this group may benefit most from the available care, it is important to maintain the connection and trust.

> "Professionals increasingly need to focus on making parents feel safe so that they open up and ask all their questions."

What changes in workforce behaviour are you trying to encourage?

Our aim is to get healthcare professionals to see themselves as parent coaches. This means moving away from telling parents what they should do and towards prompting parents with questions such as: "How are you? How's your child doing? What questions do you have? How can we help?"

We want to try to better match caregivers' needs and contribute to a more equal partnership between professionals and parents. One healthcare professional expressed the approach we are aiming for so well by saying to parents: "You are the expert on your child. I know a lot about children in general. Let's see how we can connect to get the best for your situation."

How is the pilot study going?

We plan to test the training in three rounds in three different healthcare organisations. The first training took place in May 2022, and the project will end in January 2024. We are curious about the first experiences: how feasible is the project in daily practice? One of the challenges is that healthcare professionals have time constraints, with visits lasting around 20 minutes and a lot of ground to cover.

After each pilot round, we will carry out evaluations with professionals and caregivers as input to improve the training for the next round. We provide the professionals with a checklist they can use to remind themselves of this way of working, and we tell them that after three months we're going to evaluate whether it worked or not. We ask: "What did you change? What was the effect on the interaction with caregivers? If you didn't change anything, why was that? Did you feel you needed more support, or better information, or anything else?"

We will also ask parents if they noticed a difference in approach, and if they liked it.

If the pilot goes well, do you see this methodology as being more widely applicable?

Yes – elements of this training are really applicable for all healthcare professionals: in pregnancy care, or for paediatricians, and not even only for child-related activities but for everyone. The fundamental aim is to really make professionals conscious of their own way of interacting and operating, and of what can be improved. We try to put them in different situations and ask them to look at themselves, at their ideas, and at the effects that this may have on the message that they're delivering.

Through the training, healthcare professionals become more aware of how they communicate and at the end they evaluate their changes. You are your own judge.

We are aware that right now we are working on pilots with a group that is really eager to work with this new methodology, and is open to reflection and change. Of course, the challenge will be to implement this successfully in locations where people are less eager to change. We are already talking with training facilities to include it in the basic education of healthcare professionals. The potential for scaling this project is very great.

↗ **Find this article online at earlychildhoodmatters.online/2022-17**

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Nudging paediatricians to help parents

A behavioural experiment encourages conversation within clinics in Jordan

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When it comes to early childhood in Jordan, healthcare facilities are the main space to reach people from all socioeconomic backgrounds. Public and private healthcare facilities together cover 20% of children. This is why the Royal Health Awareness Society (RHAS), a Jordanian non-profit that implements preventive public health and safety programmes[1], targeted healthcare facilities when we designed an intervention to create more and better connections between caregivers and their infants.

By working with paediatricians and nurses, we hoped to encourage more communication between them and caregivers. We saw the potential to transform routine appointments for vaccinations and other health checkups into counselling opportunities at which caregivers could learn how to better support their children. The behaviour we wanted to encourage was paediatricians and other healthcare providers initiating conversations with parents about how to stimulate children, while offering counselling and information and inviting questions.

We began by interviewing paediatricians, nurses and parents to understand the behavioural barriers that currently hinder the provision of counselling within the clinics. The main barrier for the healthcare providers was lack of time, given the high number of patients they have to see on a daily basis. Paediatricians also tended to see their role as confined to looking after a child's physical health. The counselling of parents only becomes necessary if a child has significant developmental delays – an issue that still comes with a lot of stigma in Jordan.

We heard from parents that they like the idea of spending more time in the clinic talking to their child's healthcare provider about early childhood development, but they do not have a clear idea of what the subject entails. Parents tend to trust that family members with previous experience in child rearing can sufficiently support them with guidance. This reflects how Jordan's close-knit social fabric centres on the family.

Leaflets and stickers prompt conversations

While the overall aim of the project is to support caregivers in taking better care of children overall, during the initial pilot we decided to focus more narrowly on the 12- to 24-month age group and two specific behaviours: making eye contact while talking to the child, and finding ways to avoid screen time. We created and tested simple "prescription" leaflets, sharing evidence-based information about each behaviour, that paediatricians could give to and discuss with parents.

1 For more information about the work of the Royal Health Awareness Society, visit https://rhas.org.jo

We created colour-coded stickers for each prescription. When a caregiver shows up at a health centre with a child, the nurse – while screening the child's health more generally – asks questions to see whether it would be helpful for that family to be advised on either of the two specific behaviours. If so, the nurse applies a sticker to the child's file, which alerts the paediatrician to share the appropriate leaflet and start a conversation with the family, giving tips and asking questions. The family also leaves with a leaflet, designed to be visually appealing to the child and parents, as a reminder to practise the behaviour at home.

The design of the stickers – and posters, which we also created to display in the clinic – intentionally includes images which show fathers interacting with their children, in an attempt to send indirect messages to tackle the lack of male engagement in parenting in Jordan.

We tested our prototype at a health centre in Amman, working with one paediatrician and two nurses. The intervention was well received by parents, with some mentioning that it was the first time they had received advice on parenting behaviours at the clinic. One mother asked if she could be part of the team and volunteer to deliver the messages. However, the barrier of lack of time on the side of healthcare providers proved hard to overcome in this instance. The health centre was very crowded and understaffed, which led to the paediatrician being unable to spend much time in conversation with the caregivers.

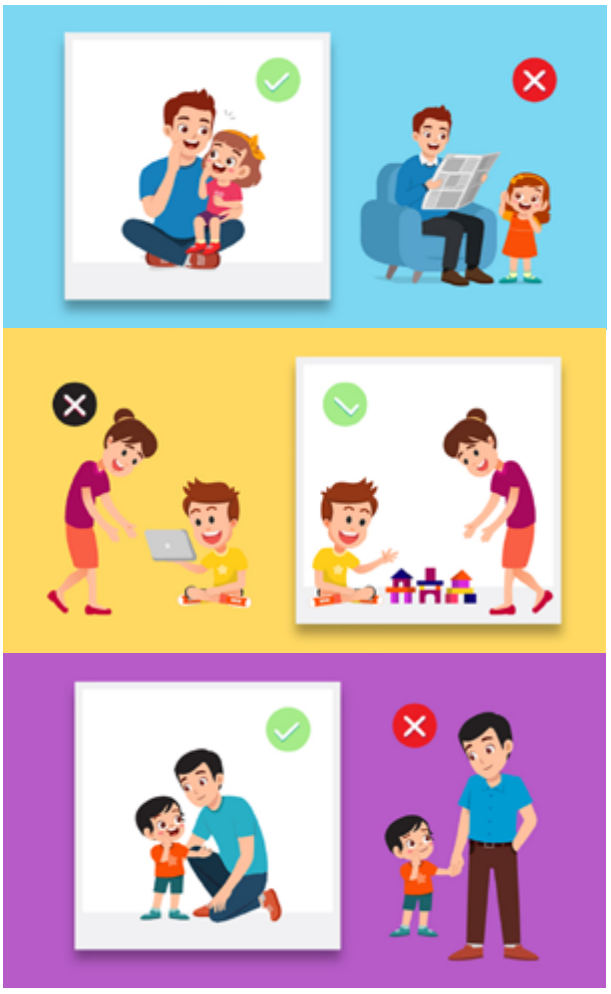

Illustration: Courtesy of Royal Health Awareness Society

↑ The blue sticker focuses on eye contact, the yellow sticker focuses on screen time, and the purple sticker is a reminder to be physically at the child's level (eye level) when talking to them

Evaluation for impact

Starting in November 2022, we will embark on a larger-scale pilot. This will involve training 20 paediatricians from public and private clinics in the city of Amman and in the north of Jordan. The pilot, which will last for seven months, will assess whether doctors are able to provide more information and whether families will implement the advice they receive. Doctors will receive training on early childhood development and how to address it with families. Screens will also be used to make caregivers aware of the intervention as they wait in the clinic for their appointment.

We hope the intervention will succeed in creating a more fluid relationship between caregivers and paediatricians by opening more spaces for conversations around early childhood development. This could create new opportunities for parents to seek support for their children, ultimately leading to more tailored and individualised care.

↗ **Find this article online at earlychildhoodmatters.online/2022-18**

interview with
Étienne Bressoud and
Loïc Sadoulet

“Changing people, it’s a process”

An executive education programme builds behavioural science capacity for early childhood initiatives

In 2021 an executive education programme was launched to help early childhood development (ECD) leaders learn how to apply behavioural science principles to their initiatives. The programme was developed by global business school INSEAD together with BVA Nudge Consulting, a global consulting firm, and Save the Children and its behavioural science unit CUBIC (see pp. 40–43) with support from the Bernard van Leer Foundation and the Conrad N. Hilton Foundation.

Journalist Irene Caselli spoke with Étienne Bressoud, chief behavioural officer at BVA Nudge Consulting, and Loïc Sadoulet, affiliate professor of economics at INSEAD, to understand how the course was designed and how it is supporting ECD professionals to rethink their programmes through a behavioural science lens.

What is the ABC for the ECD executive education programme?

Bressoud: It is an intensive one-week course in person, followed up by four months of remote coaching, with a session every two weeks. On the first two days of the course, we start by equipping everyone with some initial concepts about behavioural science, mainly through the work of BVA Nudge Consulting and INSEAD. From the second to the fourth day, we go on to the methodology, and show participants how Save the Children use the concepts and the methodology, sharing different case studies from CUBIC. We explain how participants can define and achieve similar objectives in their own initiatives focused on early childhood development. We dedicate the final day to finalising and sharing the action plan, which will be the starting point of the coaching sessions.

How did you design the curriculum to connect behavioural science knowledge to the challenges of early childhood development?

Sadoulet: We really tried to leverage the strength of all the units. At INSEAD, we have very good conceptual tools – all the theory and scientific testing and verifying. BVA Nudge Consulting has strong experience in consulting and transforming concepts into operations. We were ping-ponging back and forth with BVA Nudge Consulting on how we put these tools in practice.

Bressoud: That's right. We ended up with the structure after a lot of discussions about how to base the course on participants' challenges first, and case studies second.

Sadoulet: With Save the Children, who have amazing applications of behavioural science to early childhood development, we discussed how to apply these theories to emerging markets, or what I would prefer to call "frontier" markets, with lower resources and unstable institutions. Creating a recipe together and making sure that there was the right quantity of every ingredient was how we created the programme together: it felt like a kitchen!

> "We wanted to avoid having people come to the course and then simply saying goodbye and good luck. We know that this is not the way people change their behaviour."

What was the thinking behind following up the course with four months of coaching?

Bressoud: We wanted to avoid having people come to the course and then simply saying goodbye and good luck. We know that this is not the way people change their behaviour and how they work. So we were very excited by doing some coaching sessions and having people work on their projects when they were back in their country. This is a key aspect of the programme because changing people is not an event, it's a process.

How many people have been involved so far and what projects have been carried out?

Sadoulet: We had three cohorts in 2022 with 40 people within each cohort, working in teams. We influenced almost 30 projects on different topics – about breastfeeding, playing with children, reading to children, turning paediatricians into counsellors, how to avoid violent discipline, and more.

Bressoud: Thanks to the coaching sessions, a lot of the initial ideas for projects were actually redesigned. I remember that one team from Brazil kept being told by their coach to go and observe the people they were trying to design an intervention for. And they said yes, yes, we are going to go there. Finally, after three coaching sessions, they did – and they realised their initial idea was not quite right. They wanted to encourage families to go to a park on Sunday, but what they hadn't factored in was that Sunday is a day when families come together with neighbours and friends. So they came to understand that they had to turn it into a neighbourhood activity, a collective one, rather than targeting individual families.

You work a lot with the private sector, but this course is designed for people in the social sector. Are there more similarities or differences when working with these two groups?

Bressoud: I would say there are two big points in common. First, after you have explained to them what behavioural science is, how it works, and why it is important to focus on behaviour, people keep going back to their old habits and ways of doing things. That's why it is very important to take the time to coach them to do something different from what they're used to doing. Second, participants from both the private and social sectors are very concerned about the ethics of behavioural science – they don't want to feel that they are manipulating people's behaviour. We tend to address that concern by asking: Why do we do it? Is it for the good of an NGO or a brand, or for a bigger cause?

Has anything surprised you about the participants on this course?

Sadoulet: I've been struck by their willingness to experiment. What we're asking them to do is so far removed from the way they normally do stuff. I expected a lot more resistance. When we were preparing the course, people said: You don't understand how it works, the social sector does things in a certain way and it is hard to change. But when we showed them that you can apply behavioural science cheaply and quickly, they are willing to experiment because they see the potential for impact.

> "(Participants) are willing to experiment because they see the potential for impact."

Bressoud: What I found in particular was how open the participants were to sharing information, which is not always the case for private companies or public organisations. To me, that was something very interesting and insightful: all those people working on the same topic, and wanting to be connected for a common cause.

↗ **Find this article online at earlychildhoodmatters.online/2022-19**

Building-in behaviour change when designing public spaces

Pune shows why infrastructure projects need behavioural insights to succeed

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Three-year-old Neha lives with her mother Vedica in a compact and congested high-rise building in Kondhwa, Pune, India's seventh-largest city. Vedica is primarily responsible for Neha's daily care, including taking her to play in the nearby park. Neha's father engages with her briefly in the evening after returning from work, then spends the rest of his time watching television or on his phone.

Vedica understands the value of outdoor play and sensory stimulation, and its connection to young children's cognitive development. However, she is worried about the safety and quality of local outdoor play spaces. During the Covid-19 pandemic she felt compelled to keep Neha at home, and got into the habit of handing her a digital device to keep her engaged while she does domestic chores.

Vedica and Neha's situation is typical of many families in Pune, according to behavioural research we carried out in 2022. Children up to 6 years old account for one in nine of Pune's population of over three million – and, in this sprawling city, many are deprived of the healthy stimulation of outdoor, nature and sensory-based play, something that helps children to interact and socialise with others.

This is not a new problem: an earlier round of research in 2018, as part of a baseline assessment when Pune joined the Urban95 initiative, also pointed to the need for more outdoor play opportunities for young children. Among its findings was that only 8% of children play in public spaces such as parks, with 32% playing on the streets and the remainder playing only in enclosed spaces in the building where they live.

These findings led the Urban95 team in Pune to implement a temporary intervention of installing sensory play elements in a local park. However, because the research was limited to identifying infrastructure needs rather than also understanding behavioural factors, the intervention was not as successful as it could have been.

↑ Pre-intervention play space in Lonkar Garden

The limits of infrastructural change

The temporary sensory play space did have a small positive impact: observations showed that the proportion of park users aged 5 and younger on a typical weekday increased from 14% at baseline to 16% after completion of the intervention. The project also illustrated the risks of focusing only on infrastructural change, without understanding wider factors.

To begin with, the sensory play space faced resistance from other park users. Senior citizens in particular felt that encouraging young children to use this part of the park would interfere with their own enjoyment of the space for yoga and breathing exercises. In part this reflected a failure to intentionally understand how other stakeholders routinely use the park, and to communicate with them to remove misconceptions and alleviate their concerns.

Park maintenance staff also resisted the intervention – again, because their expectations about park usage had not been investigated and managed. They assumed their role involved confining children to areas of the park with designated play equipment, rather than allowing them to play all around the park, as the sensory play space was designed to encourage. Along with members of the local residents' welfare association, the staff were concerned that young children would cause damage to grass and flowers.

Ultimately, while usage of the park by young children did increase, it was by a disappointingly small amount. The 2022 research, which focused on behavioural factors, found reasons that help

to explain this. For example, we heard from many parents that they do not want their children to play in public parks because the parks are open to everyone, and they dislike the idea of their children interacting with peers from other socioeconomic strata.

From this experience, the team understood the limits of focusing exclusively on hardware solutions. They decided to focus future interventions more on understanding and addressing existing behavioural barriers and enablers.

Informing a more holistic approach

With support from the Johns Hopkins Center for Communication Programs and the Center for Communication and Change – India, the second phase of the programme began with a behavioural insights mapping exercise in March–April 2022[1]. The idea was to generate insights into the enablers and barriers faced by caregivers using early childhood services near them, and service providers' experience of operating, maintaining and providing early childhood services at different destinations.

> "The idea was to generate insights into the enablers and barriers faced by caregivers using early childhood services near them."

The team used focus group discussions with mothers and fathers of children under 6 years of age, in-depth interviews with facility-based service providers and caregivers who do not attend the facility, and social mapping to gain an in-depth understanding of social and physical infrastructure from caregivers. Much was learned about various practical factors that discourage caregivers from

1 More about the work of the Johns Hopkins Center for Communication Programs and the Center for Communication and Change – India can be found at https://www.ccci.org.in

↓ Children playing with a musical instrument with a caregiver

Photo: Urban95 Pune

taking their children to the park, from unclean toilet facilities to safety fears concerning stray animals.

This exercise also gained valuable insights into social norms – for example, the idea that taking children to the park on weekdays is seen as a mother's responsibility rather than something that a father or grandparents can also routinely do. This means, if the mother is busy with work or chores, the child does not get to go to the park. As with Vedica and Neha, we heard how screens have become a routine way for mothers to distract children while they do the household chores.

At the time of writing, these insights are feeding into the development of a broader and more holistic approach that uses the social ecological model to change behaviour around caregiving in general, and outdoor play in particular. This model highlights an individual's interaction with and influence by his or her immediate environment: family, peer groups, community, society and policy at large.

It is anticipated that this approach will focus on shifting attitudes and perceptions among caregivers and other stakeholders. This could include, for example, public communications campaigns on the dangers of excessive screen time and the benefits for young children of interacting with a wider range of family members and with peers from different socioeconomic groups; and capacity-strengthening workshops with park staff to help bring them on board for future interventions.

"If you build it, they will come" is an often-quoted line from a movie which points to the importance of building infrastructure. But our experience in Pune shows that building infrastructure alone is not enough – you need to understand barriers and enablers around the use of infrastructure, and that requires a behavioural insights approach.

"You need to understand barriers and enablers around the use of infrastructure, and that requires a behavioural insights approach."

Photo: Urban95 Pune

← Young child playing on colourful pathway with a caregiver

↑ Children enjoying a moment of sensory play in the garden in Pune

↗ **Find this article online at earlychildhoodmatters.online/2022-20**

visual story

“Magic happens when children and caregivers create memories”

Pé de Infância finds ways to remind parents of their own childhood joys

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The Pé de Infância project supports municipalities to promote positive interactions – playing, singing and telling stories – between caregivers and children.[1] The project works in vulnerable neighbourhoods of Jundiaí, Niterói, Crato, Pelotas, Fortaleza, Caruaru, Brasiléia and Campinas in Brazil. Most often the children in these areas are cared for primarily by their mothers or grandmothers, who are under stress from having to meet their family's basic needs. Pressed for time, they often turn to screens to keep their children occupied.

In our research for Pé de Infância interventions, we talked to nearly a hundred parents – from cities and the countryside – about their memories of their own childhood. In group discussions, we heard personal accounts of deep suffering: sexual, psychological or physical abuse, mothers abandoned by their partners. People told us that, after these experiences, they considered the most crucial thing in raising their own children is to make them strong and resilient to face whatever may be ahead.

1 Pé de Infância and its resources supporting caregivers can be accessed at: https://pedeinfancia123.com.br (in Portuguese).

Photo: Raylanderson Frota/Urban95 Brazil

We also noticed that everyone, when recalling their childhood, could think of someone who gave them joy – and that remembering these people awakened a feeling of joy even now. Regardless of how difficult the childhood, there was always someone – mother, father, a grandparent, a teacher, a neighbour, a godmother – who sang them a song, played a game with them, told them a tale, or in some other way created a meaningful experience.

Photo: Photo: Bruno Rodrigues dos Santos, São Paulo

↓ Translation of the white text: "How about playing count how many trees you see until you arrive at your destination?"

Photo: Ciéber Almeida - Pedro Amora - Dane Dalastra - Bruno Enrique

T, 31 years old and father of João Vítor (age 2), says he was born again when he became a father. He says he had a tough childhood as the son of an alcoholic father and witnessed many episodes of domestic violence. But he speaks fondly of a teacher and remembers especially one of her lines, a joke she often told. When mentioning that, his face changes: he describes everything with a smile, taking great pleasure in explaining the joke.

B, Lorena's mother, tells us she grew up with nine siblings in the hinterland of the State of Bahia. When the children were young, B's mother ran off to a relative's house to get away from her husband. They lived a precarious childhood marked by violence, but when B talks about singing songs with her mother, she speaks enthusiastically. She tells the group how singing songs to her daughter that come from her ancestral repertoire reminds her of her mother.

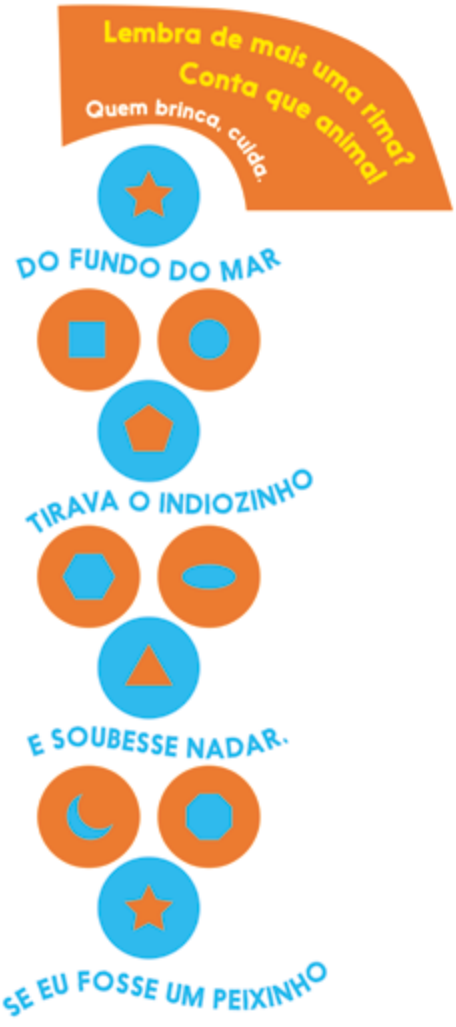
We realised that by bringing these memories of childhood joy to the surface of urban spaces, we could develop new behaviours. We looked for ways to remind parents of the joys of their own childhood, and inspire them to create joyful memories with their own children.

Photos and illustrations: Cléber Almeida - Pedro Amora - Dane Dalastra - Bruno Enrique

During our conversations, we mapped the caregivers' daily and weekly schedules. They don't always have the time or the money to take children to places designed for play. So we looked at the places they pass routinely – alleys, walls, bus stops, stairways – and asked ourselves how we could inspire new behaviours as parents pass by with their children. We painted traditional tongue twisters, stories, games and suggestions for spontaneous play. Could you go up these stairs without singing along? "One, two, beans and rice ..."

"I follow my regular route, but now my path has games that we are familiar with, and they remind me to interact with my son, spending time in a fun and positive way for him," says Ingrid, 24 years old.

We are already seeing many of the municipalities extending the physical interventions to new neighbourhoods: they are simple and low cost, requiring only a brush and paint, and as well as inspiring behaviour change among caregivers they also serve to make public spaces feel friendlier for everyone.



Physical activities can be supported by digital reminders

In our research conversations we realised it is necessary not to romanticise caregiving, but rather to recognise that caring for children is demanding and tiring – unpaid work that is often invisible and done alone. We created a "WhatsApp Challenge" after we found that even the most vulnerable caregivers in Brazil usually have WhatsApp. The challenge comprises 21 daily messages of inspiration, empowerment and encouragement for caregivers, using easily understood language and images. We wrote the messages ourselves, with inspiration from Theory U[2] and the work of Deepak Chopra.

Each day caregivers receive an audio message, a text, or an image with a mission – for example, at your child's bath time, tell them a story you loved to hear as a child; or think about something you wish your parents had done with you, and do that with your own child. These missions aim to acknowledge the traumas of the parent's own childhood and give them new meaning. They strengthen the caregiver's self-image as someone unique and essential who can break the cycle of trauma and build new ways of doing things.

Going forward, we see potential for more daycare centres and social assistance services to distribute the WhatsApp Challenge to groups of their parents. While we conceived of the physical interventions and WhatsApp messages as complementary, some municipalities have already had a positive experience with implementing only one.

↗ **Find this article online at earlychildhoodmatters.online/2022-21**

2 Theory U is a change management method and the title of a book by Otto Scharmer: https://en.wikipedia.org/wiki/Theory_U

Giving caregivers the confidence to cycle

Behaviour-focused initiatives help overcome barriers so more families can cycle together

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Cycling has many potential benefits for infants, toddlers and caregivers. It can be a low-cost, flexible and efficient way of making routine trips to local facilities such as daycare, shops and clinics (Sánchez de Madarlaga, 2018). It provides opportunities for caregiver–child communication that can develop children's social-emotional skills (BYCS & Bernard van Leer Foundation, 2020). It can lead to more interactions with others in the community, and a deeper connection with the built and natural environment. Cycling has been shown to improve children's and caregivers' physical and mental health (Bigard, 2021).

Yet in many contexts, it is disproportionately difficult for caregivers to cycle. Why? In 2022–2023, BYCS, an Amsterdam-based, international NGO supporting community-led urban change through cycling, is undertaking a global survey and engaging with focus groups to better understand the nuanced and culturally specific challenges that discourage caregivers from taking up cycling. This work includes understanding the behaviour-based barriers and how they can be addressed through behavioural science.

Some common barriers and explicit concerns are already known, and these may also vary depending on the age of the child a caregiver is travelling with. In some contexts, riding a bicycle is incompatible with caregivers' identities or social aspirations: it may be seen as a recreational activity for the rich or, conversely, as something done only by the poor who cannot afford alternative modes of transport.

Another set of barriers relate to caregivers' self-efficacy, as they often fear that carrying a child and other items, such as groceries, on a bicycle will be too physically difficult or uncomfortable, especially when dealing with hills, poor roads or extreme weather.

The most-mentioned challenge is the perception that cycling is unsafe, due to a lack of infrastructure and – in some cases, for women – cultural norms (Ramboll, 2021). This means that those most likely to be the primary caregivers for young children face the greatest barriers to accessing the benefits of cycling.

People are often correct in their perceptions of biking as unsafe or uncomfortable, especially in cities that have not invested in the correct cycling infrastructure. Some of these challenges can be tackled by creating protected, wide and connected infrastructure that makes it much safer for parents

to use a bike – especially alongside providing more inclusive bike-share systems that include baby seats and baskets to carry goods, as is happening in Fortaleza, Brazil and Bogotá, Colombia.

But even if a city provides such infrastructure and services, perceptions of risk or of discomfort can be exaggerated beyond what is empirically correct. This is where a behavioural approach can make a difference. Deeper understanding of the experiences and perceptions that caregivers have about cycling can bring to light ways to make uptake of cycling seem possible and beneficial for their daily lives.

Building skills and community spirit

Only a small number of studies have so far attempted to understand how to address these barriers, and change mobility behaviours. One approach is to build skills. Some of the fears caregivers have about cycling are related to their lack of knowledge and experience. Providing an opportunity for caregivers to try different kinds of bicycles and develop their skills in safe environments can overcome this barrier by building confidence in their own competencies.

> "Deeper understanding of the experiences and perceptions that caregivers have about cycling can bring to light ways to make uptake of cycling seem possible."

In the Miguel Hidalgo neighbourhood of Mexico City, for example, the NGO Bicitekas has held workshops entitled "Mamás Pedaleando Sin Miedo" (Mothers pedalling without fear), where its members, accompanied by instructors from the local cycle school, supported a group of mothers to acquire

the right skills to ride with their children around the city. They shared their knowledge, provided the opportunity to try different cycles and equipment suited for care trips, assessed their skills both off- and on-road, and gave useful tips for safely navigating traffic with children.

When groups of caregivers develop skills together, they can mutually reinforce each other's growing confidence. As workshop leader Mariana put it: "It is gratifying that something we have learned to do out of necessity (the need to transport ourselves) and pleasure (the pleasure of riding a bike) can now make more moms feel confident to ride a bike with their babies. It was a workshop that sought to generate confidence and empathy, as a tribe of women who support and guide each other" (Sánchez Chamakleta, 2021). Bicitekas continues to develop programmes that support women caregivers to cycle.

"When groups of caregivers develop skills together, they can mutually reinforce each other's growing confidence."

In Barcelona, Spain, another initiative focuses on this element of community spirit. A group of five families started the Bicibús initiative when they realised that none of them felt it was safe to cycle to school with their children alone, but they would be happy to do so as part of a larger group. They organised themselves into the cycling equivalent of a school bus, taking the same route to school at the same time each day and – like a regular school bus – making scheduled stops along the way for others to join. Many more caregivers and children soon joined the daily Bicibús. This not only creates a feeling of safety in numbers and an opportunity to socialise, it also helps people feel that what they are doing is acceptable and popular (Shivaram, 2021). It contributes to changing cultural norms about cycling, by making the children and caregivers more visible in public space as rightful users of the street.

The Bicibús initiative gained media attention, spurring other communities around the world to form their own versions of the "bicycle bus" (Blanchar & Battista, 2021). As one news report said of a parent: "with the Bicibús, she feels a sense of relief when her son bikes to school on Fridays because she knows he'll be safe" (Shivaram, 2021).

Developing a toolkit of good practices

The success of these programmes points to further potential for approaches informed by behavioural insights to scale-up change in caregivers' mobility choices. Very little research to date has provided a detailed account of people's experiences completing care trips with young children by bicycle (Ravensbergen et al., 2020). More empirical research is needed from different contexts, in order to understand their specific needs.

BYCS will use the results of its research to compile a toolkit of good practices that can help local governments and advocacy groups to understand what specific interventions might work most effectively to address the most important barriers in their contexts[1], and build a coalition of stakeholders to unlock the benefits of cycling for families with young children and help to create more healthy, caring and sustainable urban environments.

1 For more information, visit BYCS at: https://bycs.org/increasing-access-to-cycling-mobilities-of-care/

↗ **Find this article online at earlychildhoodmatters.online/2022-22**

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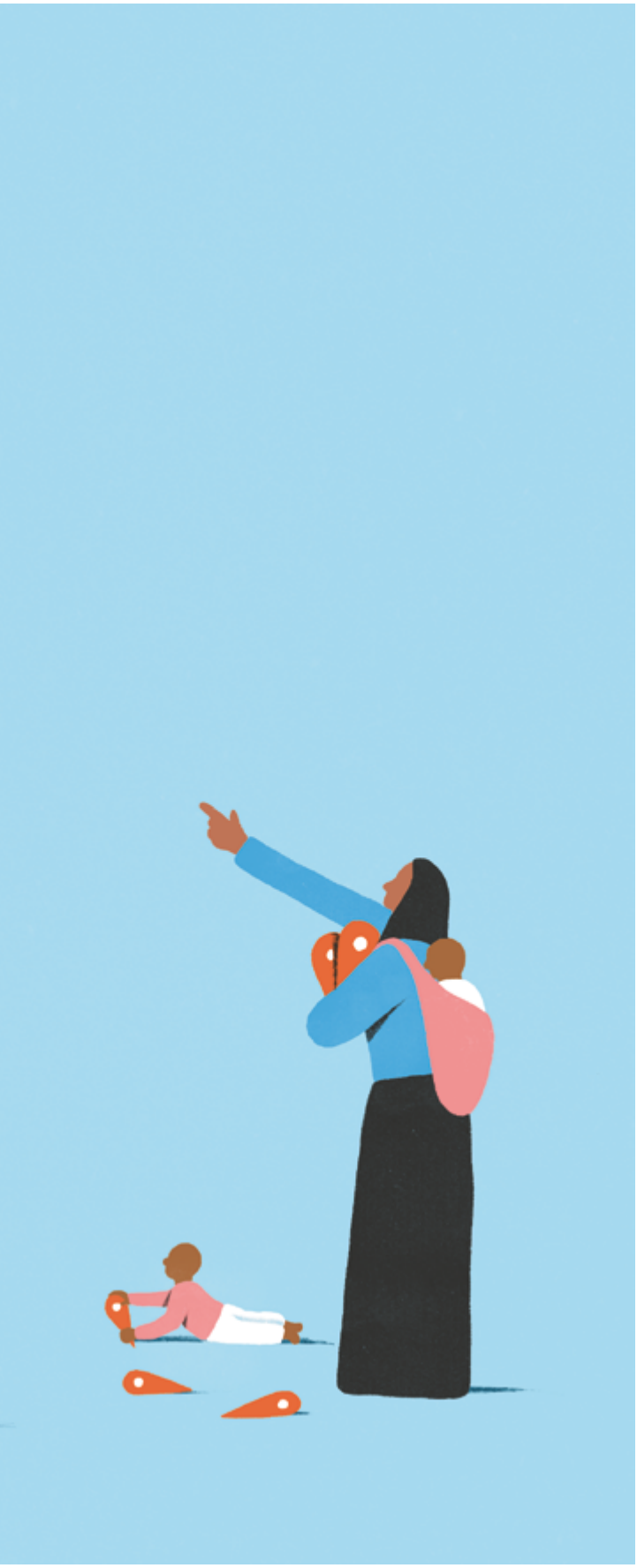
↓ Caregivers and children cycle with the Bicibús Initiative In Barcelona

Photo: Courtesy of Calvox & Periche



Behavioural science in action

Behavioural solutions at scale that increase positive outcomes for young children and caregivers

Playful Learning Landscapes for children and caregivers

Behaviour change in everyday spaces that stimulates STEM, literacy and 21st-century skills

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In discussions about how to close educational gaps, most of the emphasis is on schools. However, over the course of their childhood children spend only 20% of their waking hours in school. Playful Learning Landscapes (PLL) is a culturally adaptable and sustainable way to augment learning opportunities in the time that children spend outside school, with their families and communities.

Research shows that PLL promotes caregiver–child communication in ways that support behavioural outcomes for both caregiver and child – for example, it enhances language learning and relationship building, encouraging children's talk about numbers and letters and their spatial skills (Bustamante et al., 2019; Hassinger-Das et al., 2021). Such behaviour changes in young children have been shown to improve outcomes in school and beyond (Gunderson & Levine, 2011; Pruden et al., 2011; Sheridan et al., 2011).

PLL uses a three-part equation to embed playful learning principles and design elements in everyday spaces such as bus stops, parks and supermarkets – transforming them into enriching, social spaces for families.

Part 1 Engaging communities in placemaking and playful learning

PLL captures the voice, values and culture of each community through human-centred co-design, drawing on community-based participatory action research (CBPR). The use of a CBPR framework builds on a community's funds of knowledge and ensures that any design is welcoming to caregivers and children (Collins et al., 2018). When a community has ownership of a place, its members are more likely to participate in activities in that place with children and neighbours. Behaviour is more likely to change.

Urban Thinkscape, for example, transformed an abandoned lot next to a bus stop in West Philadelphia. Behavioural scientists and community members worked together to design and install puzzle benches and modified hopscotch games at a bus stop that stood on the site where Martin Luther King once gave a Freedom March speech.

In Santa Ana, California, researchers partnered with Latine caregivers originally from Mexico to create community spaces that represent their cultural values and practices (Bermudez et al., forthcoming). They co-designed a giant abacus at a bus stop to prompt caregivers and children to count and talk about numbers while waiting for the bus. The concept was selected by caregivers who had learned maths with an abacus. Feedback from community members was solicited throughout the design process, including the creation of prototypes for families to play-test.

Part 2 Playful learning principles

The second part of the PLL equation captures *how* children learn. PLL is built on the scientific basis of "playful learning", a theory fusing play – in particular, guided play – and learning. Playful learning is currently gaining wider momentum, with other initiatives including the LEGO Foundation's Build a World of Play Challenge, KABOOM! and Urban95. It offers a set of characteristics that, when woven into playful structures, encourages intentional and thoughtful behaviours and interactions that build social and academic capital.

Guided play sits at the middle of a spectrum anchored by free play (directed and initiated by children) and direct instruction (directed and initiated by adults). Guided play is inspired by adults but led by children as they work towards a learning goal – which could be in vocabulary, science, technology, engineering or maths. Adults curate opportunities for children with a learning goal in mind. Community members easily learn the characteristics that support guided play, and work with the team to create builds that weave science into the design.

Part 3 The Six Cs

The third part of the PLL equation captures *what* children need to learn in order to thrive in an ever-changing world. PLL focuses on six characteristics that directly relate to behaviour changes in child outcomes. The Six Cs – collaboration, communication, content, critical thinking, creative innovation, and confidence – are rooted in the science of learning and are also highlighted by business executives as important for career development in later life (Golinkoff & Hirsh-Pasek, 2016; Hirsh-Pasek et al., 2022).

Taken together, these characteristics embedded in PLL installations spark quality caregiver–child interactions that are engaging, meaningful, socially interactive, iterative and joyful (Hirsh-Pasek et al., 2015; Zosh et al., 2018). Our research demonstrates conclusively that intentional design *can* change behaviour in ways known to foster positive outcomes for children.

For example, in "Jumping Feet" – an activity included in the Urban Thinkscape intervention – designs on a series of stones show either one shoe print or two, and signage encourages the child to put one foot where they see two and vice versa. This twist on hopscotch is based on a task used by

↓ Urban Thinkscape in Philadelphia, Pennsylvania: the game "Jumping Feet" is a variation of hopscotch that develops children's memory and attention

Photo: Sahar Coston-Hardy

developmental researchers to gauge children's memory and attention. It targets executive function skills, such as focus and impulse control, which are better predictors of reading and maths outcomes than IQ scores (Zelazo et al., 2016). Jumping Feet also prompts caregiver behaviour such as working together to solve problems and targeted question asking (Gaudreau et al., 2021), another key way to enhance child outcomes.

To date, communities have been enthusiastic about PLL and the reach is now at more than 50 cities around the globe. Showing examples of what can achieve behaviour change inspires communities to embrace the PLL movement and come up with their own ideas for altering neighbourhood spaces in educationally rich ways.

Measuring behaviour change and impact: the evidence

The Brookings Institution and the Playful Learning Landscapes Action Network developed the "Playful Learning Landscapes metrics framework" to evaluate the impact of pilot projects on behavioural interaction and community cohesion, and to guide iteration, scaling and adaptation to future sites (Hadani et al., 2021). PLL works with members of the communities to evaluate projects: in Urban Thinkscape, Hassinger-Das et al. (2020) recruited, trained and paid neighbourhood members to collect data.

Our research found that Urban Thinkscape led to a significant increase in quality caregiver–child interactions, including conversations around language, literacy and STEM. The proportion of caregivers using language relating to numbers, colours and letters, for example, rose from 2% before the intervention to 36% after. The installation was also found to have heightened the community's sense of pride and civic engagement, which discourages undesirable behaviours. Since installation, this site has been free from graffiti and maintained by the community (Hassinger-Das et al., 2020).

Photos: South Africa Partners

"Our research demonstrates conclusively that intentional design can change behaviour in ways known to foster positive outcomes for children."

← Supermarket Speak turned grocery stores in low-income neighbourhoods in Johannesburg, South Africa into playful learning spaces using colourful signs to promote caregiver–child conversation

Such results offer proof-of-concept that using the science of learning to design public spaces in low-income neighbourhoods can have a transformative impact on how caregivers and children engage (Hassinger-Das et al., 2021). An increasing number of children are growing up in communities that are under-resourced and socially, economically and racially stratified. In such communities, PLL is a promising way to engage families and build community cohesion while promoting behaviour changes in everyday spaces, stimulating STEM, literacy and 21st-century skills.

"The science of learning to design public spaces in low-income neighbourhoods can have a transformative impact on how caregivers and children engage."

↗ **Find this article online at earlychildhoodmatters.online/2022-23**

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interview with
Alona Abt

“We know what it means to be parents today, it is not easy”

Hop! Media helps caregivers fill daily routines with pleasure not pressure

Doing groceries, going home after a doctor's visit, preparing dinner: there are so many times during the day in which parents have to do dreary chores, and having their children with them can feel like more of a burden than a joy. It doesn't need to be that way: parents can take advantage of everyday routines to create memorable moments of bonding with their child while boosting the child's brain development.

This is the message of the Magic Moments and Beautiful Moments campaigns, respectively in Hebrew and Arabic, developed by Hop! Media Group, who own Israel's leading television channels for preschoolers. Hop! designed the behaviour change campaigns with a team of child psychologists, behavioural scientists and digital marketing experts, with input from a national survey of parents and focus groups of parents and children.

The campaigns share practical suggestions for simple activities that parents can do with their children. They started with television programmes and social media content, and expanded through a range of partners. They are now seen everywhere, from QR codes in playgrounds to posters at train stations, signs in supermarkets and messages on milk cartons. An evaluation found that 58% of parents reached by the campaign said they better appreciated everyday moments with their children, while 44% had put some of the ideas into practice (Baruch et al., 2021).

In conversation with Irene Caselli, Alona Abt – founder, co-owner and CEO of Hop! Media Group – talks about the experience of incorporating a behavioural lens in a multi-channel campaign.

Why did you want to develop a campaign focused on parent–child interaction?

As a child, I was very fortunate. I grew up with a very smart and creative mum who knew how to turn everyday things into something special. After 20 years as Israel's leading preschool television channel, Hop! knew how to captivate preschoolers. I felt that we could take our work to the next level by talking more directly to the parents to create an impact on family life.

What were your main aims?

We had three main aims. First, to raise parents' awareness of ways they can impact their children's development in the shared time they have. Second, to give parents practical, evidence-based ideas for simple daily activities. And third, to encourage parents to adopt new behaviours that can benefit their children's development.

How did you decide what behaviours to try to change?

We started by looking at the practical side. When do parents have most time with their children: in the morning, on the way to school, at bedtime? What are the pain points of each of these times? What do parents find stressful rather than pleasurable? These are potentially the times when parents could be contributing more to their child's development. Then we wanted to understand what are the differences between mums and dads and different income groups.

> "Only one kind of stimulus, one kind of messaging, or one kind of exposure is not enough to create an impact on behaviour."

Finally we started to think creatively about what suggestions we could make to parents. We realised that we could not deal with all the pain points. For example, many parents told us that they find the morning time to be especially stressful – and realistically we felt it is too stressful a time for us to suggest games they could play.

How did you manage to collaborate with many partners to be present in such diverse aspects of Israeli family life?

We just wanted to reach parents. One of our first collaborations was with a leading newspaper, to get the phrase "Magic Moments" out there and make parents curious. Then we started looking for places where the average parent spends time – such as supermarkets and doctors' waiting rooms – and created partnerships based on that.

Photo: Courtesy of Nimrod Glickman

We got government ministries on board, national community centres, daycares, health clinics, and the private sector. Some experiments worked and some didn't. Most initiatives with the private sector were very successful because the private sector is quick to make decisions and execute them.

Creating a network of different partners is key. Only one kind of stimulus, one kind of messaging, or one kind of exposure is not enough to create an impact on behaviour. People need to find the same messages from different places over a sufficient length of time.

Magic Moments launched in Hebrew in 2019, and Beautiful Moments in Arabic the following year. What are their similarities and differences?
The goals were the same, but we had to design Beautiful Moments specifically for the routines and cultural concepts of Arabic-speaking parents. We researched the differences within the Arab community to understand what kinds of family we needed to portray – for example, a very religious family, a family that lives in a village, a family that lives in the city. There was a special challenge in reaching fathers, who are traditionally less involved.

It made us think about how we might approach expanding beyond Israel. One possibility is an animated version showing everyday moments with short suggestions, which could be a basis for adding local expertise – it's important that people don't feel as if some expert is coming from a different country telling them what to do.

What concerned you most about attempting a behaviour change campaign as a media company?
Television is a one-direction medium of communication – you just broadcast, you don't know how children understand what they are seeing. With digital media you can collect a lot of data, but you still don't know whether it really affects people's lives. With this campaign we knew we would be working with a research team that would evaluate whether we're actually making a difference in real life.

And that's frightening. It's brave to say "I want to change how people behave" – you're putting your neck out and taking a risk. You know you'll be judged on how well you succeed, and you have to be mentally prepared for the possibility that you may not.

What is your main behavioural insight from these campaigns?

Parents are overloaded with stress, with guilt, with the feeling that they are not adequate, that they're not doing enough. It is very important that we don't use a preaching tone, but instead have an attitude of "Hey, we know what it means to be parents today, it is not easy. We have a good idea for you."

The campaigns prove that, with the right approach, we really can make a difference.

"It's brave to say "I want to change how people behave" – you're putting your neck out and taking a risk."

↗ **Find this article online at earlychildhoodmatters.online/2022-24**

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interview with
Sumita Ghosh

“A child’s development needs continuous engagement”

A national behaviour change campaign in India sets out to foster more nurturing care

A new government initiative in India focuses on the first 1,000 days of a child's life and includes a behaviour change campaign. It is called PAALAN 1000 and its main aim is to foster a more nurturing approach among caregivers in early childhood.[1] Dr Sumita Ghosh, Additional Commissioner In-charge for Child Health at India's Ministry of Health and Family Welfare, tells Irene Caselli why the Indian government decided to include a behavioural approach in its child-focused policies.

What is PAALAN 1000?

Paalan is a Hindi word, which translates as "rearing" or "nurturing". PAALAN is also an acronym**: Parenting Advocacy And Learning for Advancing Nurturing care in the first 1000 days**. The number 1,000 refers to the first 1,000 days of life. We launched the programme in August 2022 with the support of the Bernard van Leer Foundation, centred on elements of the Ministry of Health's services to families that promote nurturing care and cognitive development, such as creating a stimulating environment for the child.

India is a big, fast-moving country, so we need a mass campaign to bring these components of nurturing care and responsive parenting to the fore. PAALAN 1000 combines campaign messages – disseminated through radio and television commercials, posters and social media – with on-the-ground support for pregnant women, parents, other caregivers and health workers. We have developed a parenting app to share knowledge on age-appropriate development, including activities for engaging with children. The app is bilingual, in Hindi and English.

Where did the idea of PAALAN 1000 come from?

It is part of the Ministry's national programme, Rashtriya Bal Swasthya Karyakram, which involves screening children from birth to 18 years for the "4 Ds": defects at birth, diseases, deficiencies and development delays. Early childhood was already a big part of this programme, for example with field visits by health workers to check on immunisation, child rearing and nutrition. But we felt there was still a need to raise caregivers' awareness of the importance of early childhood development, because health workers can't cover all the ground.

We wanted to involve and empower parents and caregivers because a child's development needs continuous engagement from families. We wanted to orient the community on which kinds of behaviour promote positive outcomes, learning from some of the good and not-so-good practices that are out there.

Which behaviours do you want to influence through your campaign?

We want to encourage behaviours that promote cognitive development, emotional bonding and psycho-social wellbeing. We want caregivers and families to strengthen their relationship with their young child by spending more time engaging with them. That can be in quality activities such as storytelling, or finding ways to turn daily routines and chores into opportunities for enjoyable interaction.

We developed the campaign around six messages:

- maximising love
- engaging with the child (through active conversation, singing, etc.)
- play (including more physical activities)
- telling stories (important for the development of language and imagination)
- stress avoidance for adults, during pregnancy and the early years
- eye-to-eye contact and engaging with the child while breastfeeding.

How has behavioural science been embedded into the initiative and campaign?

We took inspiration for the six messages from international campaigns informed by behavioural science, such as Boston Basics.[2] To adapt them to the Indian context we piloted them in the field, asking about content, language, aesthetics, social acceptance and cultural appropriateness. We then adapted the campaign based on this testing and feedback.

1 Further information about PAALAN 1000 and the forthcoming PAALAN 1000 app will be made available in due course on the National Health Mission website https://nhm.gov.in/

2 The Basics Principles are described at https://thebasics.org/

Is your aim to influence the behaviour of caregivers only through the campaign, or also of healthcare workers?

We have about 1 million ASHA workers, trained volunteers from the community, who are the first point of contact between citizens and the health services.[3] They go to visit newborns six or seven times during the first 42 days, but their major focus was often on immunisation and nutrition. We have developed kits that they can use in their home visits, showing mothers how to engage actively with their child in age-appropriate ways. Many states are now translating these materials into their own languages.

Which behaviours would you most like to see changed in the Indian context?

There is a lot of diversity in Indian society when it comes to child rearing. One of our biggest challenges is reaching families where both parents are working and they have nowhere to leave their children. But in many Indian families grandmothers, grandfathers, uncles and aunts play a big role. They often have some biases or misconceptions, so we have included them in our messaging.

> "We wanted to orient the community on which kinds of behaviour promote positive outcomes."

In many contexts, for example, it's seen as a taboo for fathers and other male family members to be involved in housework or child rearing. That creates stress on pregnant women and mothers, which is not beneficial at all for the developing foetus or the child. So we made it part of our messaging that fathers should take part in household work and play with their children. It would be great if we can make progress in changing mindsets on issues such as this.

3 One of the key components of India's Health Mission is to provide every village in the country with a trained female community health activist (ASHA: Accredited Social Health Activist). Find out more at: https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=150&lid=226

↗ **Find this article online at earlychildhoodmatters.online/2022-25**

Removing sludge from early years services

The power of simplification

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Much of the behavioural science literature focuses on how individuals behave. But what about the behaviour of the systems those individuals interact with? We don't have to look too far for examples of laborious government systems, from arranging routine health check appointments (Madrian, 2014) to signing up for childcare subsidies (Wood, 2021).

Of course checks are necessary to maintain the integrity of policies – to ensure that those who are not eligible don't gain access ahead of those who are. But when those checks become over-burdensome so that some eligible individuals give up, then perhaps it is time to rethink the system. In this article, we explore how systems impact families. We argue that simplifying systems for parents is necessary to ensure their children get the best start in life.

"Sludge", put simply, means excessive friction (Sunstein, 2018).[1] It is often compounded by common behavioural biases like present bias – we like to receive rewards sooner rather than later (O'Donoghue & Rabin, 1999); inertia – we tend to stick with the status quo (Sautua, 2017); choice overload – when faced with too many options, we become indecisive (Scheibehenne et al., 2010); and optimism bias – we overestimate the likelihood of positive events occurring (Sharot, 2011). Successful corporations are very good at eliminating sludge from their systems: they know that when actions are easy, we're more likely to do them, and repeat them (Thaler, 2019). This basic premise is well illustrated by the fact that you can purchase a baby monitor on Amazon with one click.

> "More than at any other time in their lives, parents of young children are less likely to be able to deal with sludge."

More than at any other time in their lives, parents of young children are less likely to be able to deal with sludge. They are often sleep deprived, juggling work and household responsibilities and dealing with everything that goes with having a young child, from stomach bugs to temper tantrums. This can mean that they have less "cognitive bandwidth" or mental energy to handle lengthy or complicated processes.

1 Cass Sunstein explains the meaning of sludge in a short online video https://www.youtube.com/watch?v=eBUsmxM5r0I


Photo: ShutterStock

And for parents facing economic or social hardship, cognitive bandwidth may be further stretched by the more immediate pressures they face day to day: ensuring they have enough food to eat, managing debt arrears, or an unstable housing situation (Mullainathan & Shafir, 2013). Such immediate demands rightly mean that other, less urgent matters are postponed. Recent research suggests that parents facing "scarcity" – whether financial instability or a scarcity of social connections, resulting in loneliness – were more likely to miss information sent to them by their child's school during the pandemic, for example about online learning (Kalil et al., 2022). This was not because they weren't interested in their child's education, but because they were focused on what they needed to do to get by each day.

Aside from the time and financial costs of sludge, there may also be implications for our mental health. We've all experienced the frustration of not being able to complete a process because we didn't have the right information to hand, we didn't understand the form, or we simply didn't have enough time. This may be particularly draining for the most vulnerable parents in our society.

Simplifying processes to reduce sludge

What can be done to address sludge in systems that parents engage with? We often mistakenly think that giving parents more information will help, when in fact the opposite is almost always true. Simplifying processes from start to finish can go a long way in supporting families. For example:

- reducing navigation time and the number of clicks required to complete an online action (like locating the child benefit claim form on a website)
- ensuring processes can be completed in one go (not requiring parents to wait for confirmation before they can proceed to the next step), and
- always using clear and concise language.

Many local and national governments are already making strides to simplify their systems. Some examples from the UK include:

- **Pre-allocating appointments** Nesta, in collaboration with City of York Council, redesigned how appointments are scheduled for routine health and development reviews offered to parents when their child turns 2 years old. Previously, parents would call up and book an appointment after receiving an invitation letter. In one area of York city, officials piloted pre-allocating appointments so that parents only called up if they wished to change or cancel their appointment. Initial results suggest that most children given a pre-allocated appointment were seen in the month following their invitation, whereas children whose parents were required to call up were not seen for 1–2 months. This may be down to parents not booking promptly when they receive the invitation letter due to the many other pressures they face.
- **Using checklists** In partnership with HM Revenue & Customs, the UK's national tax authority, the Behavioural Insights Team (aka "the Nudge Unit") tested whether including a checklist of requirements to apply online for "Tax-Free Childcare" in the letter sent to eligible parents improved application rates above those obtained from a letter providing general information about the scheme. Findings show that the checklist boosted the number of completed applications by 10% (HM Revenue & Customs, 2018).

These examples illustrate how smart design that considers existing demands on parents' bandwidth can translate into tangible benefits, such as more children getting timely healthcare and more families receiving the funding they are entitled to. Going a step further by requiring government agencies to conduct "sludge audits" to quantify and catalogue the cost of friction in administrative processes could help to highlight just how much time parents spend trying to navigate systems – time that could otherwise be spent with their child (Sunstein, 2018).

> "Simplifying processes from start to finish can go a long way in supporting families."

The changes we're suggesting are relatively minor and should be implementable at minimum cost. We urge all government agencies to identify what small changes they can make in their existing processes to reduce sludge for the benefit of children and families.

↗ **Find this article online at earlychildhoodmatters.online/2022-26**

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Cash+: an opening for behavioural interventions

Parenting groups in Madagascar enhanced the impact of cash transfers on child development

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Cash transfer programmes have emerged in recent decades as a key instrument in the global fight against poverty, for example by increasing consumption, food expenditure and savings (Bastagli et al., 2016). There is also considerable excitement about their potential to contribute to early childhood development, as recent evidence reveals positive impacts on areas including nutritional diversity (Attanasio et al., 2005; Behrman et al., 2008), use of health services (de Walque et al., 2017) and cognitive development (Macours et al., 2012).

Much of this evidence comes from conditional cash transfers – the first generation of cash transfer programmes, in which receipt of the cash is conditional on certain actions such as visiting health clinics or sending children to school. This is beginning to change. The use of "hard" conditionality has reduced as cash transfers expanded beyond their initial foothold in Latin America (Beegle et al., 2016). Monitoring compliance is relatively more costly in lower-resourced regions, such as sub-Saharan Africa, among other issues (Benderly, 2011). Many programmes now use "Cash+" approaches that combine income support with interventions designed to support a broader range of human capital investments, including health, nutrition, and cognitive outcomes (Matin, 2022; Premand & Barry, 2020).

Growing evidence suggests that combining cash transfers with parenting programmes may be an effective way to optimise their impacts on children (Arriagada et al., 2018). Many factors that support healthy development – such as nutritious feeding and stimulating interactions – depend on parents' practices. These are often influenced by behavioural factors, and go beyond access to services such as clinics and schools. Behavioural science can play an important role in advancing this work.

Behaviourally informed interventions layered onto cash transfer programmes have been shown, for example, to make it more likely that parents will give birth in a high-quality clinic (Cohen et al., 2017); send their children to school (Benhassine et al., 2015); and provide for their basic needs (Awkii et al., 2018). Group-based interventions to establish norms and commitments have improved children's cognitive and language development more cost-effectively than traditional home visits (Grantham-McGregor et al., 2020). Such interventions often add only minimal extra costs to the cash transfers.

Behaviours are shaped – and cognitive biases may be triggered – by the context in which people make decisions, such as chronic scarcity of resources (Datta & Mullainathan, 2012; Mullainathan and Shafir, 2013). People living in poverty may be especially influenced by "present bias" – that is, a focus on getting through the immediate future, rather than thinking about payoffs in the longer term – or "limited attention", difficulty in processing new information when there are multiple other things to focus on. Even when parents fully intend to engage in the kind of parenting behaviours that will support their children's development, present bias and limited self-control can make it difficult.

With an understanding of biases, practitioners can design interventions to help to mitigate them. Cash transfers create a moment in which resource scarcity is alleviated, opening up the possibility of longer-term planning for children's development (Mani et al., 2013; Kansikas et al., forthcoming). Practitioners should take advantage of this moment to support parents and caregivers in making deliberate decisions and following through.

Improving early childhood development in Madagascar

In Madagascar, almost 80% of the population lives in poverty (World Bank, 2020a). The Human Capital Index is just .39, which means a child born in Madagascar today will grow up to be 39% as productive as she could have been with complete education and full health (World Bank, 2020b). In 2016, the government began the Human Development Cash Transfer (HDCT) programme, which provided unconditional bi-monthly payments to mothers and caregivers of children from birth to 5 years old. ideas42 worked with the World Bank and the Government of Madagascar to develop behavioural interventions to layer on top of the transfer.

"Parents' practices are often influenced by behavioural factors, and go beyond access to services such as clinics and schools."

Photo: Courtesy of ideas42

Women in Madagascar at a Mother leader group →

Based on in-depth research into the context in which mothers and caregivers were making decisions, we identified three related interventions to enhance impact:

1. **Mother leader groups**, in which women elected by their peers facilitate support groups. Such groups leverage social norms, peer influence and community dynamics to impact caregiving behaviours. These groups provide mutual support to reinforce mothers' decisions to invest in young children's health, nutrition and cognitive stimulation.
2. **Plan-making prompts** layered onto the mother leader groups, involving games with cards and stones, and drawing activities. Mothers are asked to visualise the longer-term goals regarding their child's development that they wish to achieve with the cash, and think of a step-by-step plan to help them achieve them and safeguard against negative outcomes. Behavioural science shows that breaking large, complex goals down into manageable steps can help participants to focus. Group meetings followed up on mothers' adherence to these plans.
3. **Self-affirmation activities**, also layered onto the mother leader groups and involving cards, stones, and drawing. Mothers are prompted to consider their values and how their actions embody those values. This helps to tackle mindsets of stagnation and lack of control that are often formed by the experience of their families having always lived in poverty. Activities reinforce caregivers' identity as guardians of their children who have the power to make decisions that will improve their family's wellbeing.

The plan-making and self-affirmation interventions were delivered on payment day to take advantage of the moment of alleviated scarcity that is optimal for more deliberate, longer-term planning.

We conducted a randomised controlled trial to assess the effectiveness of the interventions after about 18 months. We found positive impacts including increased interactions with children, increased food diversity and decreased food insecurity. Strikingly, we also found improvements in children's socio-cognitive development – particularly for language learning and social skills – as measured through a standardised development assessment test. We had expected that it might take more time to realise such impacts.

The magnitude of these improvements was almost as large as the effect of providing cash. At costs of USD 7–14, we estimate that the interventions improved outcomes more effectively than providing additional cash would have done. (Datta et al., 2021). Longer-term studies are now needed to assess their durability. Directions for future research also include assessing which of the components is most effective, as this study was able to compare each against cash only but not against each other.

The interventions have now been integrated into Madagascar's HDCT and introduced in other programmes, including a cash-for-work programme with a childcare component.

Policy implications and the future

With growing evidence that they can cost-effectively improve the outcomes of cash transfers on early childhood development, behavioural interventions are becoming more widely recognised – for example, in the Africa Human Capital Plan (World Bank, 2019) and Covid-19 social protection response plan (World Bank, 2020c). Next steps on the path to scale include generating further evidence of impact on longer-term child development outcomes, improving approaches to costing and cost-effectiveness, and tackling challenges such as political buy-in, especially in countries with low political stability.

Where possible, "Cash+" programmes with parenting elements should both involve key stakeholders and incorporate insights from behavioural science from the outset of the design phase. Governments and donors should coordinate to ensure that implementing agencies receive the technical assistance they need from behavioural science to ensure they have the bandwidth and resources necessary to successfully undertake behaviourally informed add-on interventions.

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interview with
Iván Budassi

“Government is paying attention to this issue”

How Argentina’s behavioural science unit influences policy

In July 2021 the government of Argentina launched its new Behavioural Science and Public Policy Unit. It initially worked under the Secretariat of Strategic Affairs, which reports directly to the presidency – a rarity in Latin America, where such experiments are not usually run at government level. At the unit's launch, President Alberto Fernández said: "We want to help people make better decisions for themselves and for the country. We want to design public policies that are tailored to the needs of human beings."

Iván Budassi was actively involved in Argentinian politics when he was recruited to head the unit. He also has a strong academic record: a university professor and lawyer in Administrative Law, he studied Behavioural Analysis of Law at Harvard Law School where he met Cass Sunstein, the US legal scholar whose co-authored book *Nudge* is considered the most influential in behavioural science (Thaler & Sunstein, 2008). Here Budassi talks with Irene Caselli about how behavioural science can improve public policies for families, and the challenges of running such a high-profile unit in a volatile political context.

Why did the Government of Argentina decide to set up an in-house nudge unit?

Former Secretary of Strategic Affairs of Argentina Gustavo Beliz had seen first hand during his tenure at the Inter-American Development Bank (IDB) how behavioural science could help design better public policies. He was the key actor who convinced President Alberto Fernández to establish the unit, showing the importance that "champions" can have in setting up innovative policies.

President Fernández, like me, has an academic background in law – in his case, criminal law. He understands how people's behaviour is not only shaped by education, economic incentives and the threat of punishment. He was able to appreciate how valuable it could be to find other ways to influence people's decisions that are effective and low-cost.

Was it important to locate the unit in a part of government directly under the presidency?

It is symbolically important to send a message that the government is paying attention to this issue. In countries with weak institutional frameworks, as is common in Latin America, it is especially important to have the backing of a strong figure in the executive branch. Sending a message that the president is directly behind a policy can translate into greater effectiveness.

Other countries that have started applying behavioural science tools in public policy were also very careful to send that message, including the UK's Behavioural Insights Team, the world's first and still most prestigious governmental organisation working on applying behavioural science to public policies. Barack Obama and Cass Sunstein also set up a nudge unit in the White House.

But here in Latin America, until now there have been very few examples of inserting behavioural science at the government level.

What challenges have you faced in establishing the unit?

You have to be comfortable operating in three worlds – not only public administration and academia, but also politics. You need to know the political environment well enough to be at least given the opportunity to work. This is not only about support from central political actors, in our case President Fernández and then-Secretary Beliz. It is also about convincing politicians and bureaucrats at local, municipal and provincial levels.

We set up the unit with support from the IDB, and we have had to fight the prejudice that exists in Latin America against such international organisations. We have to show we are not trying to apply some magic recipe from Canada or the United States in villages with very different realities. Yes, there is a central core of how we make decisions that is common to all people, but it is all about testing how it works in the local context.

Fortunately, it is possible to apply behavioural tools surgically and produce evidence at very low cost that tells us whether an intervention works in a local context and should be scaled up. This makes behavioural science an easier sell. With the IDB's support, we started by identifying over 100 projects that could potentially be enhanced by behavioural

science. From them, we selected ten projects and we are currently working on finalising agreements. The unit is also directly managing another 15 separate projects.

One of the ten projects is about breastfeeding. What does that involve?

We know that breastfeeding has clear public health benefits over formula milk. Argentina follows international rules that seek to prevent formula milk companies from advertising aggressively, but they try to find covert ways to influence people to consume more. The municipality of Almirante Brown, with almost a million inhabitants, in the province of Buenos Aires, noticed that in some of their health centres – many in situations of social vulnerability – the doctors were prescribing more formula milk than expected.

We are currently going into health centres across the municipality to try to understand what is going on. A mother arrives at the centre with her baby, who has some kind of health problem, and she leaves with a prescription for formula milk from the doctor. How does that happen? What biases are involved in the decision making?

One hypothesis is action bias: when you go to the doctor, you want to come out of it with a prescription for a medicine or to do some tests. Say the baby has had diarrhoea for five days. If the doctor says continue breastfeeding, because this is the best thing to do, people don't want to hear that. They want to be told to do something different. And they think that giving formula will do no harm – but it can, if it leads the baby to abandon breastfeeding.

One can form hypotheses, but they have to be tested. And this is the magic and the attraction of behavioural science, where you can have many ideas at a theoretical level, but you have to investigate them and see how they work in the field. We are in that initial evaluation stage now, to see what biases are involved in the decision making of mothers and health personnel. Then within a year we aim to design intervention tools and be able to test them, and measure and build solid data.

Local authorities are committed to this project because they clearly see a potential impact on the health and development of infants, but they also see a potential impact on their budgets, because formula milk is expensive.

With Secretary Beliz no longer in place and presidential elections due in 2023, what does the unit have to do to ensure continuity across administrations?

In Argentina, institutional continuity is clearly the exception rather than the rule. With this challenge in mind, we are trying to convince the whole political spectrum that behavioural science is useful – the main political actors in the ruling party, and the main opposition party.

We have set up the Argentine Network of Behavioural Science, to train people and disseminate information. It brings together academics who are dedicated to behavioural science and people who are only just discovering it, including mid-level civil servants. This network is headed by an academic, Joaquín Navajas, and it is not tinged with political partisanship. Finally, we have endured our first setback: despite Beliz's recent resignation in early August, the unit survived this cabinet crisis and it is still alive and kicking although, as of October 2022, it is no longer part of the presidency and it has been transferred under the Ministry of Economy.

In order to demonstrate the value of a behavioural approach, we know that with projects such as promoting breastfeeding in Almirante Brown, we can't just develop an experiment and publish a paper. We have to build a policy that we can scale up and that changes people's lives.

↗ **Find this article online at earlychildhoodmatters.online/2022-28**

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Behavioural economics offer a low-cost tool to improve early childhood programmes

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Many parenting decisions can be affected by biases, especially in disadvantaged contexts. This results in parents' decisions being inconsistent with their real intentions. Understanding how biases affect caregiving decisions is a crucial step in designing strategies to overcome them. Insights from behavioural science demonstrate potential to increase the effectiveness of more traditional early childhood interventions.

For example, the literature increasingly shows that messaging is a useful tool to implement nudges. Simple interventions using low-cost communication tools such as SMS can be very powerful if they are properly designed.

I was thrilled to be invited to be part of this issue, which sheds more light on how behavioural economics can improve early childhood programmes and policies. In the articles I reviewed, authors emphasise the biases that potentially affect caregivers – from present bias to limited attention and information processing capabilities – and show how interventions such as low-cost communication strategies can take these biases into account. Several authors show how cost-effective these types of interventions can be in very different contexts, while also being very open and reflective about the limitations of the behavioural toolbox.

Behavioural science is not only about the tools but about the mindset of the people using them

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One often hears innovation compared to a "toolbox". You open it and find implements of different shapes and sizes, each with a different job to do. Learn which tool to use in which situation, and the rest is simply down to practice.

But innovation – especially behavioural innovation – doesn't always work like that. You find that one tool, so useful in your own basement, becomes useless in the neighbours'. The tools themselves are constantly changing, as is the shape of the toolbox itself!

Here's a better metaphor: parenting. Kids eat broccoli at a friend's house, but at home it's only pizza or pasta. They listen well to teachers at school – at home, it's a different story. Kids change as they grow. As a parent, how can you ever know for sure "what works"?

You can't. You do your best to integrate new techniques when you hear about them – perhaps even by reading this journal! But deep down every parent knows that the best way to change their kids' behaviour is to change their own, for which no easy fix will suffice. The only proven technique is to always look critically at your own assumptions, challenging yourself to do better, while recognising that it's a journey with no easy shortcuts.

The tools matter. But so does the mentality of the person – parent or programme designer – who wields them. Having had the privilege of reviewing several articles in this issue, what I believe its writers and editors have done exceptionally well is to capture not just some new intervention concepts or even the broad lesson that "context matters", but the mindset of humility, reflective adaptation and inquisitiveness that is so critical to behavioural science.

More than nudges: behavioural insights are a foundation for guiding investments in children's early development

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I welcomed my intellectual collision with the discipline of behavioural economics over ten years ago. As an applied economist whose research focused on the social problem of poverty and children's development, this new set of ideas and tools – beyond household time and money resources – was revolutionary for me.

My research gave me a wildly new perspective on caregivers and parents. While well-intended and well-informed, they are also – as we all are – flawed humans, subject to biases and norms that respond to context and circumstances. I no longer see it as possible to assess parenting by looking narrowly at skills or the quality of time or interactions with a child. Rather we need to understand it as encompassing hundreds of daily decisions, from small to big, all made in the moment and requiring economic, social and mental resources including humour, patience and resilience.

I realised that broader economic, policy and political ecosystems do not always prioritise the role of caregiving and parents in the family system. These realisations have subsequently infused almost all of my research focused on child poverty, income supports and early intervention.

The design of a monthly unconditional cash transfer, for example, intended to reduce poverty among US families of infants and toddlers, was informed by insights into how financial instability and scarcity drain people's attention. A study found that automatically enrolling caregivers of newborns into an early literacy programme, with the choice to opt out, led to more caregivers acting on the information provided. Another study found that eliciting pride in parenting reduced the judgement and stigma that some parenting support programmes can unintentionally evoke.

I was delighted to be invited to be part of creating this volume. The content showcases how insights from behavioural science offer more than a nudge – they provide a human-centred perspective that is foundational for guiding and shaping social investment in early childhood development.

Investing in behavioural science that puts ideas into action

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The Bernard van Leer Foundation began focusing on behavioural science seven years ago. While many early years programmes aimed to inform or educate caregivers, what parents really needed was help to move from good intentions to action.

Behavioural methods have long been used in fields such as child nutrition, HIV prevention and hygiene, but much of the early years community is still not familiar with these approaches. Many continue to use information, education and communication methods pioneered in the 1980s, without accounting for the revolution in fields including behavioural economics and human-centred design, the explosion in social media, or new types of participatory methods.

Together with our partners we have begun to adopt new approaches and measure changes in behaviours, rather than knowledge. This edition of *Early Childhood Matters* brings together the fruit of these efforts with stories that demonstrate how to expand our understanding of how behavioural sciences and early childhood development intersect. It is inspiring to see the creativity, rigour and determination of actors around the world who are pushing the boundaries and challenging rigid, paternalistic views of what parents need.

The Bernard van Leer Foundation is committed to investing in behavioural science for the early years. Ongoing initiatives include the INSEAD course for early years leaders, the development of toolkits and guides such as the forthcoming *Little Parenting Book*, partnering with the Inter-American Development Bank to generate better evidence through applied operational research with governments and academics in multiple countries, and an upcoming landscape study on the use of technology to influence behaviours of early years professionals and caregivers.

We look forward to continuing to deepen and broaden these partnerships, to enable early years professionals to better empower parents to be the caregivers they aspire to be.

↗ **Find all statements online at earlychildhoodmatters.online/2022-29**

get inspired

New and scalable ideas to support babies, toddlers and the people who care for them

Early Childhood Matters is the Bernard van Leer Foundation's annual round-up of the most important advances, innovations and best practices in early childhood, around the world.

It's for the policymakers, practitioners, researchers and funders working to improve the health and wellbeing of young children and their caregivers.

First published in 1998 and available free of charge, *Early Childhood Matters* is published annually in English and in Spanish as *Espacio para la Infancia*.

Available online

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Bernard van Leer FOUNDATION