

Behavioural Science and The Early Years

Bernard van Leer  FOUNDATION

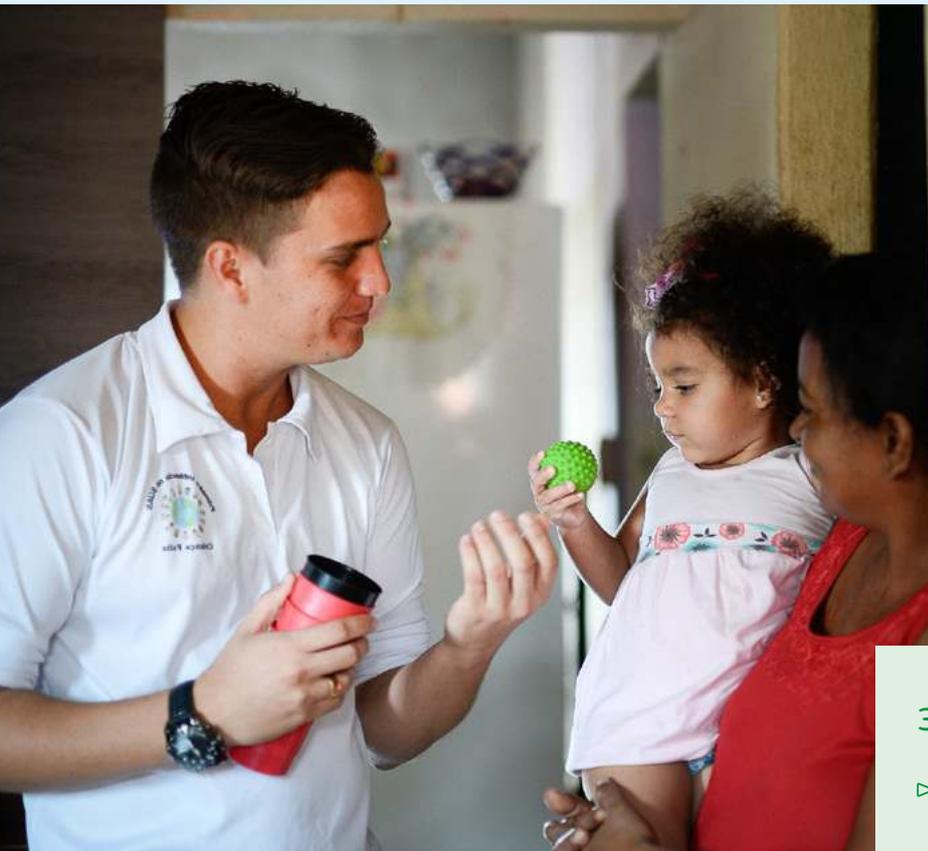


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▶ In brief

Many early childhood programmes target parents, caregivers, and service providers to promote specific behaviours which benefit babies and toddlers. However, they sometimes fail to sustainably change caregiver behaviours and their use of services designed for them. More systematic application of behavioural science — across the entire programme cycle of diagnosis, design, implementation, and evaluation — has the potential to significantly increase programme impact and sustainability.

3 THINGS TO REMEMBER

- ▶ Behavioural change should be incorporated into standard programme design to ensure early year interventions address the most significant barriers
- ▶ Interventions and messages aimed at fostering better behaviours should be pre-tested to work effectively with different target audiences
- ▶ Validated methods exist to more accurately measure self-reported behaviours, directly observed behaviours, and behavioural determinants

▷ What do we know?

Specific behaviours of parents, caregivers, and service providers are known to be directly beneficial to babies and toddlers. These range from caregiving behaviours related to health, nutrition, hygiene, sleep and exercise, to activities designed specifically to stimulate children's cognitive and psycho-social growth like play, affection, storytelling and reading.

The behaviours of service providers, meanwhile, can support children's parents and caregivers, such as by improving customer orientation, enhancing practices around maternal mental health, or promoting a more engaged and non-violent role for fathers.

Many early childhood programmes designed to improve these behaviours are having positive impacts on young children. Several schools of behavioural science provide frameworks, methods, tools, and solutions that can be applied to further enhance programme impact.

One programme, for example, demonstrated that the use of **reminders, social norm-setting, and goal-setting** more than doubled the amount of time parents spent reading to their young children.¹

Another used **identity priming, delay of gratification, and reduced cognitive load** to increase the amount of time and number of words parents used with toddlers.² A similar behaviourally-informed parenting programme, meanwhile, resulted in significant improvements in school readiness of 3-4 year old children.³

And by changing the default from **opting-in to opt-out**, an early learning and language programme increased enrolment by 87%⁴ while a number of behavioural nudges significantly reduced drop-out in a parenting programme.⁵

KEY ISSUES

- ▷ Maternal mental health
- ▷ Parent coaching
- ▷ Programme design
- ▷ Service delivery



▷ Where interventions can go wrong

The impact of programmes may be limited by their failure to incorporate behavioural principles.

During the design stage, for example, many behavioural intervention programmes:

- ▷ Wrongly assume lack of *information* is the main barrier to improved behaviours
- ▷ Use messages and interventions that have not been validated and tested
- ▷ Focus on measuring changes in caregiver *knowledge* instead of behaviours
- ▷ Emphasise improving access to services for caregivers and children rather than ensuring their use

Then during implementation, there are other pitfalls that programmes can fall into, often linked to poor design. Many:

- ▷ Only change the behaviour of a small set of caregivers, or only achieve incremental changes
- ▷ Succeed in changing behaviours but that change may not be sustainable over time
- ▷ Fail to reach, or have lower effectiveness among marginalised or vulnerable groups, whose infants and toddlers could most benefit

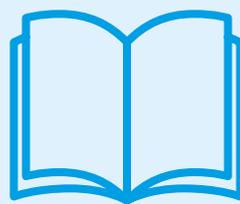


▷ In numbers



87%

increase in mothers' attendance by changing a program from opt-in to opt-out⁶



2x more

time spent reading to children by targeting behavioural, not information, barriers⁷



12.8 vs 1.78

additional immunised people from behavioural nudge vs financial incentive, spending \$100⁸

▷ What can policymakers do?

The first thing is to ask yourself: are you trying to change specific parent or service provider behaviours? Do you have strong data on what is impeding the adoption of positive behaviours, or do you have an informed opinion that could be validated with better evidence?

If your answer to the above questions is 'yes', it will be important to ensure that your institution has access to expertise in behavioural science. This could range from having one or more full-time staff to having a contract with a firm specialised in providing behavioural expertise. Building your institutional expertise in this area will be important to enhancing your effectiveness.

The most critical step policymakers can take is to assess if and how behavioural science has been integrated into their work cycle, and identify areas for improvement:

▷ Initiatives that aim to improve the behaviours of caregivers or service providers of children 0-5 should be grounded in **RIGOROUS FORMATIVE RESEARCH** that challenges experts' hypotheses, and captures the real barriers, levers, and perceived benefits of behaviour change.

This research should be grounded in a relevant behavioural theory, and should result in a prioritised list of behavioural barriers and levers for each specific behaviour targeted. As appropriate, it should also consider differences between targeted demographic sub-segments of the population, including influencers at the household, community, health services and policy/structural levels.

▷ Potential **MESSAGING, COMMUNICATIONS** channels and other behavioural interventions should be designed based on well-established common behavioural barriers and levers, as well as incorporating the population-specific factors identified in the formative research.



Examples from published research of **non-knowledge barriers** that impede adoption of positive parenting practices include *present bias* (excessive discounting of future benefits), low *self-efficacy* as a parent; *optimism bias* (poor planning resulting in reduced time for play); and *cognitive load* (difficulty in remembering a raft of recommended parenting behaviours).

These should be **PRE-TESTED** to identify which intervention is most effective with different target audiences. Testing more than one option is strongly encouraged to identify the optimal solution.

▷ **MONITORING AND EVALUATION** should focus on the desired behaviour change, not merely on shifting knowledge or attitudes. In some cases, behaviours can be directly and objectively observed or measured; in other cases, measurement of behavioural determinants (i.e. factors that have been empirically shown to be closely correlated with the desired behaviour) or an appropriate and validated method of self-reporting may be required. The evaluation system should be designed with inputs of a behavioural science expert to avoid unintentional introduction of bias.



While measuring the impact of changes in caregiver behaviours on child development outcomes may take time, many successful programmes have been able to detect changes in caregiver behaviours within a period of only several months.

This behavioural perspective can be introduced for new programmes or initiatives, or integrated into existing initiatives. Even programmes or policies which are already successful can benefit from a more rigorous application of behavioural methods, to further enhance their impact and ensure that the results reported are methodologically sound.

By helping us understand how and why humans actually behave – rather than how we'd like them to behave – **behavioural science guides us to more effective programme design and evaluation.** From sectors as diverse as retirement savings, immunisation, and energy conservation, there are numerous examples demonstrating how behaviourally-informed interventions are more cost-effective than 'traditional' programmes.⁹

The time is ripe for more systematic application of these methods to early years programmes, to ensure that investments in babies, young children, and their families yield their intended results of better societal health and wellbeing.



Photo: Jon Spaul/Bernard van Leer Foundation



Madagascar's Cash Transfer Programme

▷ TESTING THREE BEHAVIOURAL SCIENCE ENHANCEMENTS

Cash transfers are designed to improve early childhood outcomes for children from households living in poverty. In Madagascar – where three-quarters of the population live in extreme poverty¹⁰ – a cash transfer programme targets 39,000 low-income households with children under 12.

Working with the Madagascar government and the World Bank, the non-profit Ideas42 have been testing whether adding behavioural science interventions would improve the programme's impact on young children.¹¹

In a randomised trial in 309 villages, they tested three activities to enhance the cash transfer programme – compared to simple cash transfers.

All three groups included “Mother Leaders”, a group of elected mothers trained in essential early childhood activities, and supported to conduct home visits and group activities with receiving mothers. For the second and third groups, they also included an additional different behavioural intervention, taking approximately 15 to 30 minutes, immediately after mothers received their cash transfer.

GROUP 1:

“**Mother Leaders**” elected in their village to a one-year term, given training to provide support at the community level.



GROUP 2:

“**Mother Leaders**” + A “**plan-making**” activity, where mothers planned how to use the funds, including setting concrete goals and intermediary steps. This aimed to help mothers overcome behavioural barriers creating a **gap between intention and action**.

GROUP 3:

“**Mother Leaders**” + A “**self-affirmation**” nudge, whereby mothers define what they want, make decisions about family wellbeing, and strengthen their identity as guardians. This aimed to build confidence and self-efficacy, defeating **negative mindsets** which limited uptake of better behaviours.

After 20 months receiving the cash transfers and the behavioural interventions, the research indicated that, compared to those only receiving cash:

- ▷ Parents in all three behavioural groups scored 23-32% higher on an index of preparing diverse meals for their children.
- ▷ The “Mother Leaders” (Group 1) and “self-affirmation” (Group 3) groups scored 27% higher on a test of interaction with children.

- ▷ The behavioural groups did not lead to significantly higher overall socio-cognitive development than just receiving cash, but did lead to greater fine motor skills and social skills.

The enhancements led to significantly improved outcomes relating to child development compared to cash alone. This demonstrates how the addition of a fairly low-cost behavioural intervention to an existing large-scale social programme can deliver significantly greater impact.

[READ MORE](#)

BEHAVIOURAL SCIENCE IN GENERAL

“Thinking Fast and Slow”, Daniel Kahneman (2011). This book outlines the research that is at the foundation of Behavioural Economics (BE), providing numerous examples of cognitive biases that shape human behaviour and decision making.

“Social and Behaviour Change Spotlights”, Breakthrough Action. A series of case studies from around the world illustrating how Social and Behaviour Change Communication (SBCC) has been used to improve health outcomes via improved caregiver and service provider behaviours.

“Social and Behaviour Change How To Guides”, Health Communication Capacity Collaborative (HC3). This list of technical resources guides practitioners through the various steps of designing, implementing, and evaluating an evidence-based SBCC campaign.

“The Power of Positive Deviance”, Pascale, Sternin & Sternin (2010). This book provides a number of case studies involving the use of participatory methods to drive behaviour change of parents and service providers on a range of health and nutrition topics.

“The Field Guide to Human-Centered Design”, IDEO.org. This guide provides step-by-step guidance on using design thinking to enhance behaviour change programming and devise innovative solutions.

BEHAVIOURAL SCIENCE AND EARLY CHILDHOOD

“Behavioral Insights to Support Early Childhood Investments”, Lisa A. Gennetian (2017). Describes common behavioural weaknesses in early childhood programming and proposes behaviourally-informed solutions.

“Combining Behavioral Economics and Field Experiments to Reimagine Early Childhood Education”, List, Samek & Suskind (2017). Provides examples of how to incorporate behavioural insights into parenting programmes.

“Using Behavioral Economics to Encourage Parent Behavior Change: Opportunities to Improve Clinical Effectiveness”, Janssen, Buittenheim & Fiks (2019). Discusses how behavioural science can inform health workers’ efforts to enhance parents’ behaviours.

“Using Behavioural Economics to Create Playable Cities”, Kaboom! and Ideas42. Highlights a number of non-infrastructure barriers to child play in urban areas with suggested behavioural solutions.

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- 2 Suskind, D. L. et al. (2016) A parent-directed language intervention for children of low socioeconomic status: a randomized controlled pilot study. *Journal of Child Language*, 43(2):366–406. Available at: <https://www.cambridge.org/core/journals/journal-of-child-language/article/parent-directed-language-intervention-for-children-of-low-socioeconomic-status-a-randomized-controlled-pilot-study/C6707146A62899FA2834C85D77997418>.
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- 4 beELL: NYC. Available at: http://beell.org/beell_nyc.php (accessed November 2019).
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- 11 Datta, S. et al. (2019) Do Behavioral Interventions Enhance the Effects of Cash on Early Childhood Development and Its Determinants? Evidence from a Cluster-Randomized Trial in Madagascar. *Unpublished manuscript*.