Supporting Parents in Early Childhood Development



Photo Credit: CASITA

Here's how innovators are working to expand parental and caregiver support in low- and middle- income countries.

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ABOUT THIS BRIEF

This policy brief is part of a series **exploring practical lessons** from ongoing Saving Brains Transition to Scale projects. **Saving Brains**, a collaboration of **Grand Challenges Canada** and its partner organizations, supports innovations for early childhood development in low- and middle-income countries. Saving Brains seeks bold ideas to enhance three key areas of healthy development that are essential to every child: health and nutrition, enrichment and nurturing, and protection against maltreatment. Saving Brains values effectively integrating solutions for these areas and sustainably delivering them to the highest number of children possible. Accordingly, in addition to funding small "Proof of Concept" pilots, Saving Brains supports larger "Transition to Scale" projects, where the challenge of sustainable scaling takes center stage.

This briefing series reviews how Saving Brains innovators currently in the "Transition to Scale" phase are confronting this challenge. The present brief highlights three examples of innovations delivering one important kind of early childhod development (ECD) intervention: *psychosocial stimulation.*

Summary

- Psychosocial stimulation has been proven to benefit child development in low- to middle- income countries. The *Reach Up and Learn* program, described in this brief, is a prime example.
- Scaling up programs requiring this level of interaction with families is challenging and has rarely been achieved at population levels in the decades since the program was developed.
- Three recent cases in Brazil, Peru, and Bangladesh demonstrate practical ways to scale up psychosocial innovation through: (1) experimental adaptation and (2) strategic partnerships.
- This policy brief explains how these two key strategies can underpin the effective scaling of psychosocial stimulation in ECD programs.
- The three innovations described are "cases in progress" in the Saving Brains portfolio. Each innovation has previously demonstrated effectiveness at smaller scale and is now working to expand.



Photo Credit: University of São Paulo Medical School

INTRODUCTION

Supporting early childhood development (ECD) in low- and middle- income countries is a global priority. We also know that psychosocial stimulation can help achieve this goal.

The UN Sustainable Development Goals (SDG) reflect an international consensus on early childhood, with Target 4.2 calling for universal access to quality ECD services by 2030. In 2018, building on the SDGs, the World Health Organization (WHO), UNICEF, the World Bank and other partners developed the Nurturing Care Framework to shape international action. The Framework emphasizes that responsive interactions with caregivers play a crucial role in helping young children develop to their full potential.

Psychosocial stimulation is a strategy for promoting such responsive interactions. Evidence going back decades, based on work at the University of West Indies with what has evolved into the *Reach Up and Learn* program, has demonstrated that psychosocial stimulation is an effective strategy for the cognitive, social, and emotional development and success in school and the workplace. *Reach Up and Learn* is a proven curriculum for psychosocial stimulation, delivered to parents and their children via home visits by community-based workers.

Although there's a demonstrated commitment to tackle this issue, and strong pilot projects, we aren't seeing enough of these projects take off at scale.

Psychosocial stimulation is more complex to deliver than a single product or vaccination. It involves interactive sessions with each client family over an extended period and depends on high quality relationships between the frontline worker and the family. Delivering such service to large numbers of families with high quality and sustainable cost, across different populations and cultures, is a major challenge that has not been comprehensively tackled.

So, the question is – how can we make progress against the huge challenge of scaling the impact of these programs, a challenge requiring every bit as much innovation as, say, designing a new health product? **This policy brief will look to the stories of three projects who are bringing a spirit of innovation to the scaling challenge, with promising early results.** They are successfully applying experimental adaptation and productive partnerships to build impact as they scale.



Photo Credit: Dr. Jena Hamadani and Ms. Syeda Fardina Mehrin



Photo Credit: University Of São Paulo Medical School

Case Study | Psychosocial Stimulation: Reach Up and Learn - Jamaica

www.reachupandlearn.com

Reach Up and Learn, initially known as the Jamaica Home Visiting (JHV) program, was first developed at the University of the West Indies in the 1970s. The program works with parents to promote their children's development using **psychosocial stimulation – playing and interacting with children in ways that benefit learning behaviours.** Program staff visit parents once a week and teach them new activities and skills to practice with their children. Following a carefully structured learning curriculum, they bring easy-to-produce materials such as puzzles, books and toys and emphasize responsive and supportive interactions. This way, rather than learning from an educator once a week, the kids would learn from their parents all the time.

An extensive research base has established the program's effectiveness. In a long-term study*, for example, program participants completed more schooling, had greater earnings, and showed better cognitive and social skills. Nearer term, *Reach Up* also improved parent-child interactions.

Not only is the program successful, it is also adaptable since it can be replicated at a low cost. *Reach Up* has since been implemented in other countries, including Bangladesh, Brazil, Peru, and Zimbabwe.

* Paul Gertler, James Heckman, Rodrigo Pinto, Arianna Zanolini, Christel Vermeersch, Susan Walker, Susan M. Chang, Sally Grantham-McGregor. "Labor market returns to an early childhood stimulation intervention in Jamaica." *Science* 30 May 2014: Vol. 344, Issue 6187, pp. 998-1001.

SAVING BRAINS INNOVATORS (1/3)

Survive and Thrive: Boa Vista, Brazil

Innovator: Fundação Faculdade de Medicina (FFM), Universidade de São Paulo

Brazil has made ECD a national priority, but efforts to make service broadly available are still in the early stages. Inspired by *Reach Up*, *Survive and Thrive* aims to build on the favourable national policy environment by making effective psychosocial stimulation widely available to families in need. The project includes an adaptation of *Reach Up* for Brazilian families, plus a newly designed curriculum to extend the program through the prenatal period. After successfully piloting the *Reach Up* adaptation in São Paulo, *Survive and Thrive* is currently implementing an expanded program in the city of Boa Vista, as a step to national uptake. The team expects 4,800 children under 3 to be enrolled in Boa Vista each year.

- Parents and children receive home or group-based visits from Child Development Agents (CDAS). CDAs are exclusively focused on early childhood development.
- Visits take place bi-weekly until the child reaches the age of three.
- CDAs go through a complete curriculum (an adaptation of Reach Up) with guidance and activities for the parent and child.



Photo Credit: University Of São Paulo Medical School

Scope of Transition-to-Scale Phase

(with Saving Brains funding | as of August 2019)

- 8,550 families are expected to receive the full intervention package.
- 69 CDAs are expected to be trained to deliver the intervention.
- So far, SAT has delivered 8,947 home visits and performed 90 group meetings.

Proof of Concept Results

(with Saving Brains funding)

0.24

average effect size in standard deviations

(p = 0.049)

significant improvement in child development outcomes for 203 kids shown in pilot of the CDA delivery model.

SAVING BRAINS INNOVATORS (2/3)

CASITA: Carabayllo, Peru

Innovator: Socios En Salud

Carabayllo is one of the oldest and most impoverished districts of Lima, Peru. While neurodevelopmental delays (NDDs) are prevalent in the region, children with such delays are often excluded from educational activities or not diagnosed at all. Socios en Salud is addressing this urgent need through a psychosocial stimulation program called CASITA. The project team trains community health workers to provide skill-building sessions with parents and their children in group centres. The aim of CASITA is two-fold: to achieve improved outcomes in children with NDDs aged 6-24 months, and to increase the confidence of their parents. CASITA is working to significantly reduce NDDs in Carabayllo, with plans to scale further across the wider area of metropolitan Lima (population 12 million).

- Group sessions in community centres are led by trained Community Health Workers (CHWs).
- CHWs first discuss child observation and general child development. They then facilitate social interaction activities between parents and children.
- Support and encouragement are given to the parents throughout the process.
- CHWs also provide social assistance and address broader parental and child health.



Photo Credit: CASITA

Scope of Transition-to-Scale Phase

(with Saving Brains funding | May 2016 - April 2019)

- 7,500 children will be screened for developmental delay.
- The intervention will be provided to 3,000 children, and 1,000 children will be referred to primary care services.

Proof of Concept Results

(with Saving Brains funding)

60
children participated in the CASITA pilot

0.96
effect size in standard deviations for improvement in overall child development

0.85
effect size in standard deviations for improvement in famlies' home environments

SAVING BRAINS INNOVATORS (3/3)

Saving Bangladesh's Babies' Brains (SB3): Dhaka, Bangladesh

Innovator: International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b)

Millions of Bangladeshi children are at risk for underdevelopment due to undernutrition and poverty. Through an adaptation of *Reach Up*, icddr,b has shown that psychosocial stimulation can protect the cognitive development of malnourished children. At earlier stages, icddr,b worked out successful delivery – with impressive results – through existing community health workers in selected locations. Now, with approval and funding from the national government, icddr,b is building a "training cascade" model to expand their program to 550 community centres, reaching approximately 22,000 children in the current scaling phase. The program will ultimately expand to cover health workers in all 13,000 of the country's community clinics. Icddr,b estimates that 40 malnourished children will be treated in each community clinic, resulting in approximately 520,000 children reached annually when the program reaches full scale.

- Community clinics are attended twice a month by 4-5 mothers at a time along with their children.
- Community Health Care Providers (CHCPs), Family Welfare Assistants (FWAs), and Health Assistants (HAs) in clinics are trained to provide sessions of psychosocial stimulation using picture books, puzzles, and other play materials for mothers and their children in a developmentally appropriate way.
- A "training cascade" will underpin the scaled-up program.



Photo Credit: Dr. Jena Hamadani and Ms. Syeda Fardina Mehrin

Expected Results during Transition-to-Scale Phase

(with Saving Brains funding I April 2019 - December 2020)

- 15,400 child beneficiaries are expected to receive the full intervention package.
- Approximately 1,500 Community Health Care Providers (CHCPs), Family Welfare Assistants (FWAs) and Health Assistants (HAs) are expected to receive training.

Proof of Concept Results

(with Saving Brains funding)

859 children enrolled in the pilot of the program experienced improvements in:

Cognitive Skills | **1.3 standard deviations**
Language Skills | **1.1 standard deviations**
Motor Skills | **1.2 standard deviations**

KEY SCALING STRATEGIES

Psychosocial stimulation programs require sustained, productive relationships between frontline workers and families. It's not enough to pilot such a program, gather data about whether it works, and hope that it will then succeed at scale. Scaling requires a strategy to deal with implementation and cultural challenges that inevitably arise in the transition from small to large. Resource allocation, population disparities, and quality of service delivery can all become obstacles when translating a program to a larger scale. The three innovators described here tackled these challenges through **(1) adaptation through experimentation** and **(2) developing strategic partnerships**. Innovators systematically used experience to adapt program content to new contexts and make larger-scale delivery feasible. To implement their programs, they developed diverse partnerships both at national and community levels.

(1) ADAPTATION THROUGH EXPERIMENTATION

Our innovators used information gained in the scaling process to adapt their programs through two kinds of experimentation:

A. "Comparative Trials" – This involves a process of rigorous scientific experimentation, where researchers test different approaches by randomly assigning clients to each alternative and comparing outcomes. For example, *Survive and Thrive* delivered its program to one group using existing government workers, while a second group received the program from a cohort newly hired by the project team. Significantly better outcomes were seen in the second group, so Survive and Thrive expanded using this delivery strategy.

B. "Fast Prototyping" – This refers to applying qualitative feedback from the experience delivering the program. For example, in early delivery of *Survive and Thrive*, feedback from mothers showed that the existing *Reach Up* toys didn't fit the local culture. As a result, the team developed new toys that were much more engaging for Brazilian families.

(Adaptation Through Experimentation, Cont.)

Adaptations can be made to a program's human resources management, delivery style, and content. Different teams can explore different variations or solutions, depending on the context. For example, the Brazil policy environment made both of the delivery options tested by *Survive and Thrive* feasible, but in Bangladesh funding at scale was only available for delivery with existing community health workers. Moreover, the time those workers had available to deliver the program wasn't sufficient to reach the full population of malnourished children under the original, individual home visiting model. So the Bangladesh team experimented with alternative methods of delivery through community health workers. Through comparative trials they discovered a way of working with families in pairs or larger groups that could achieve impressive impact at scale. In short, experimentation can be an effective way to adapt a proven and viable program to for scale-up within a specific cultural, policy, and resource context.

On the next page are some ways that the three innovators have adapted their programs based on what they've learned throughout the process.



Photo Credit: University Of São Paulo Medical School

	Survive and Thrive (SAT) I Brazil	CASITA I Peru	icddr,b I Bangladesh
Human Resources	• SAT conducted a comparative trial which found that hiring their own cohort of Child Development Agents (CDAs) yielded better outcomes than using existing government workers, who already had a large workload. • Because group delivery is more cost-feasible, SAT is currently testing whether a group model has a similar or greater impact compared to individual visits.	Existing Community Health Workers (CHWs) from Carabayllo lacked prior training in ECD. As a result, the innovators: • Delivered theoretical and practical training sessions on ECD to recruited CHWs. • Held weekly meetings to ensure fidelity to training. • Carefully monitored CHWs to make sure no one was overburdened.	To ensure high quality of training staff, icddr,b: • Honed its approach to government partnership through a formative trial after the successful pilot. • Selected a "training cascade" model for scaling, where Master Trainers train District Trainers, who then train Community Health Care Providers (CHCPs) and other healthcare workers in community clinics. • Will support the Ministry of Health to assure quality delivery in community clinics. • Aims to enhance feedback, learning and accountability through a central digitalized reporting system for CHCPs.
Delivery Style	• SAT reached vulnerable households by targeting beneficiaries of Brazil's cash transfer program. • Because a comparative trial showed that CDAs were effective with bi-weekly rather than weekly visits, the program was adapted to reflect this.	• In a comparative trial, the team found no differences between home and group settings, so they used the more cost-effective model, the group setting, for scale-up. • CASITA will operate as a "Center of Excellence" accumulating experience and learnings, to support wider implementation efforts.	• There were too few CHCPs for individual home visits to reach the children to be served, so a comparative trial was used to arrive at an effective clinic-based model. • The team found that mothers didn't have time to attend weekly meetings, so they adjusted the program to be delivered twice a month. • Alternative strategies are being considered for children who live far from clinics.
Content	• A new module on pre- and post-natal care was added to respond to the high rates of neonatal mortality in Brazil and meet eligibility criteria for federal funding. • Toys used in Jamaica's *Reach Up* program did not fit Brazil's context, so they created new, more colourful toys that were more appealing to Brazilian families.	• CASITA focused their curriculum on children with neurodevelopmental delays, a prevalent concern in Carabayllo. • The results of the pilot showed no improvements in terms of caregiver well-being and social support. So CASITA added a new component: addressing caregiver mental health and threats of domestic violence. This included focus on fathers' participation and gender equality. • CASITA added a focus on anemia to respond to local health priorities.	icddr,b adapted the contents of *Reach Up* by: • Redrawing books and pictures to reflect the Bangladeshi context. • Using local versions of games and songs. • Incorporating maternal mental health into their program.


Photo Credit: CASITA

(2) STRATEGIC PARTNERSHIPS

None of the organizations who developed the innovations described have capacity to directly deliver services nationwide. At the same time, simply handing a "recipe" to a large system is unlikely to work, for example because of the adaptations and learning that must be built in, including at the local level, to assure success at scale. So, the scaling work requires partnering with large systems – for these innovations, generally governments – as well as local communities, community organizations, and local and national civil society – with the innovator team continuing to support training, monitoring and evaluation, and adaptation.

For instance, *Survive and Thrive* gained critical support from the mayor of Boa Vista and the municipal government generally, and is also working with a national foundation and the federal government to assure that the curriculum meets requirements for national funding. Each of the three innovators similarly benefitted from their respective partners, the details of which are outlined in the next section.

Survive and Thrive (SAT) | Brazil

What has been done?

SAT developed close ties with the Reach Up and Learn project team in adapting their curriculum.

What was the result?

- Reach Up researchers from Jamaica traveled to Brazil to deliver training to Child Development Agents (CDAs) and the SAT project team.
- SAT leveraged *Reach Up*'s knowledge and expertise when developing the new prenatal curriculum.
- Reach Up also worked with SAT on adapting the program from home visits to centre-based visits to test, through a comparative trial, whether those would be effective in Brazil.

The SAT team succeeded in achieving investment at the local and national level. The Mayor of Boa Vista endorsed the project as part of her larger commitment to early childhood development. SAT also has partnerships with the Municipality of São Paulo and the Municipal Health Secretariat (MHS). At the national level, SAT works with the Ministry of Social Development.

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Fundação Maria Cecilia Souto Vidigal (FMCSV), a Brazilian foundation focused on early childhood development, is a funding and strategic partner of SAT. FMCSV has been a catalyst to SAT's success since the inception of the program.

- FMCSV was essential in connecting SAT with the City of Boa Vista, where the mayor had participated in FMCSV programming.
- FMCSV has also linked SAT with the federal government, including the Criança Feliz program.
- FMCSV is collaborating with SAT on scaling strategy, including, for example, developing relevant video materials.

CASITA | Peru

What has been done?

Due to the decentralization of health services, delivery responsibility went to the municipalities. As such, the former Mayor of Carabayllo was able to prioritize ECD services like CASITA.

What was the result?

- The Mayor's support linked the knowledge and experience of CASITA with the resources and connections of the municipality.
- The partnership ensured CASITA had the support of the community.
- The municipality also offered CASITA the use of community spaces for its sessions.

The CASITA team benefitted from the skills and resources of key stakeholders. The Municipal Committee for the Rights of Children and Adolescents (COMUDENA) and Casa Amiga are among these partners. Casa Amiga is a social program supporting women experiencing domestic violence. CASITA also developed connections with the national government.

- By teaming up with Casa Amiga, CASITA was able to include caregiver mental health evaluations in the program as well as domestic violence screening – priorities identified from the pilot phase.
- CASITA has shared their methodology with Cuna Más, Peru's national child development program.



Photo Credit: by CASITA

icddr,b | Bangladesh

What has been done?

icddr,b developed its partnership with the national government to implement the program at population scale. Relevant agencies include the Ministry of Health and Family Planning, and the Ministry of Women and Children's Affairs.

What was the result?

- The government has committed to fund and implement national scaling of the program through its network of community clinics.
- A "training cascade" model has been set up, with icddr,b working with the "Master Trainers," to embed the program in the existing system.
- A formative study, conducted after the success of the main pilot, focused on how training and supervision could be taken on by the government system, with promising results.

The Reach Up team assisted with adapting the intervention to the Bangladeshi context.

- Reach Up's expertise helped integrate icddr,b's intervention into Bangladesh. They provided guidance on how to rework the program to fit a group context, and they helped create toys appropriate for the local culture.

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icddr,b has many previously-established international partners.

- icddr,b has had roots in the community for over 60 years. The pilots that have now positioned the program for national impact grew from these roots.



Photo Credit: Dr. Jena Hamadani and Ms. Syeda Fardina Mehrin

To learn more about these projects and more, visit the Grand Challenges Canada website

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icddr,b
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PROYECTO CASITA

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