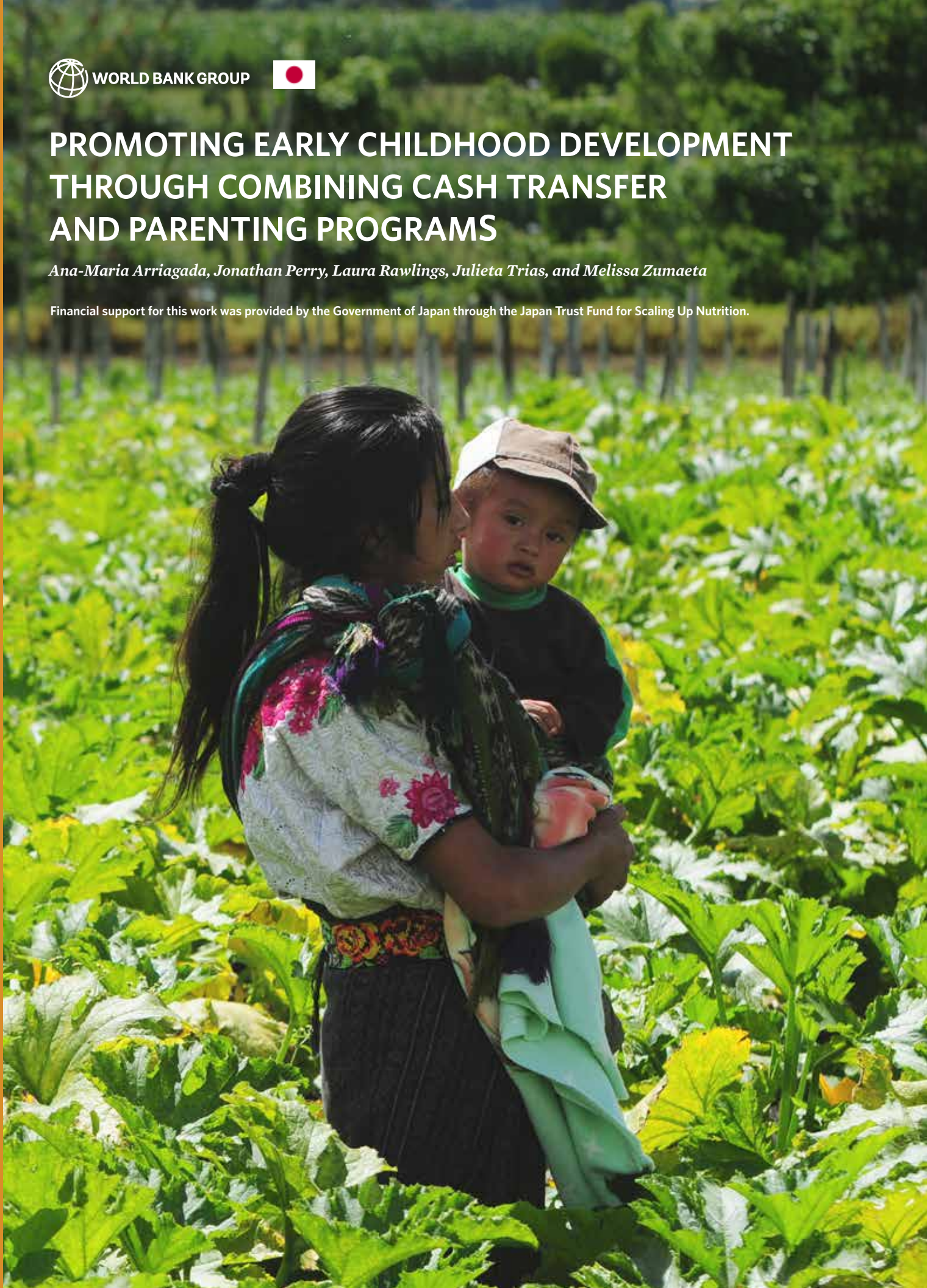


PROMOTING EARLY CHILDHOOD DEVELOPMENT THROUGH COMBINING CASH TRANSFER AND PARENTING PROGRAMS

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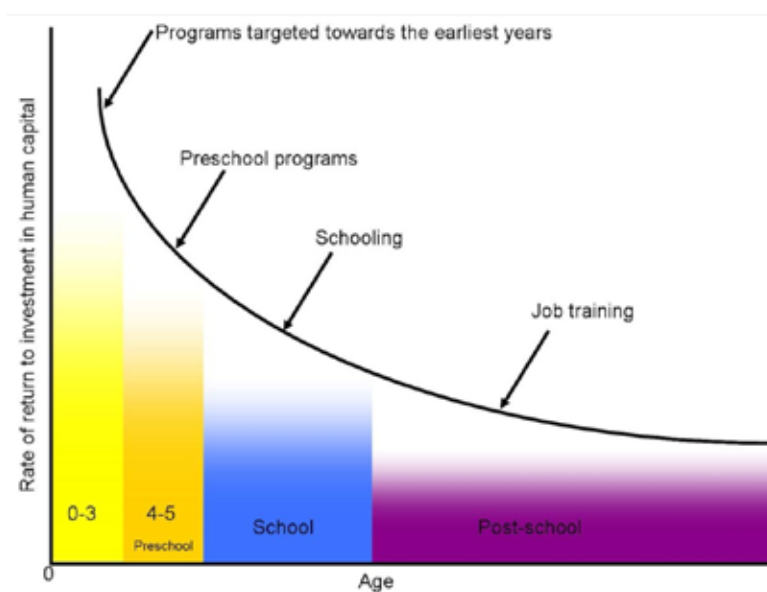


Why promote early childhood development?

The first 1,000 days of a child's life are a window of opportunity to lay a strong foundation for later achievements. This timeframe is a period of enormous change characterized by a high degree of plasticity in the child's neurological development. An early disadvantage can permanently and profoundly impact a child's development, making remediation more costly and difficult later in life, whereas early investments have been shown to have very high rates of return (figure 1). Investments in the early years of life are the foundation of human capital, and human capital is a key driver of economic development in the 21st century globalized economy.

The Lancet Series estimates that over 250 million children under 5 years old in the developing world risk not reaching their full potential (Britto et al. 2017) because of deficient investments in nutrition, early stimulation, early learning, and nurturing care, as well as due to exposure to stress. Investing in young children can be a cost-effective strategy not only to promote a healthier and more productive population, but also as powerful promoter of opportunity for disadvantaged children.

FIGURE 1: Rate of Return to Human Capital Investments: Return to an extra dollar at various ages



Source: Heckman, J. (2008). "School, Skills, and Synapses" *Economic Inquiry*. 43(3): 289-324.

Do cash transfer programs promote child development?

This note and the accompanying full technical paper examine the existing evidence and the potential for bringing together cash transfer programs and parenting interventions to improve child development outcomes, notably cognitive performance. This work builds on an established body of literature that examines the nexus between cash transfer programs and nutrition and health outcomes (Black et al. 2015, Galasso et al. 2016, Leroy et al. 2009, Bastagli et al. 2016) as well as on existing operational guidance on how to combine cash transfers with nutrition interventions (World Bank, 2013).

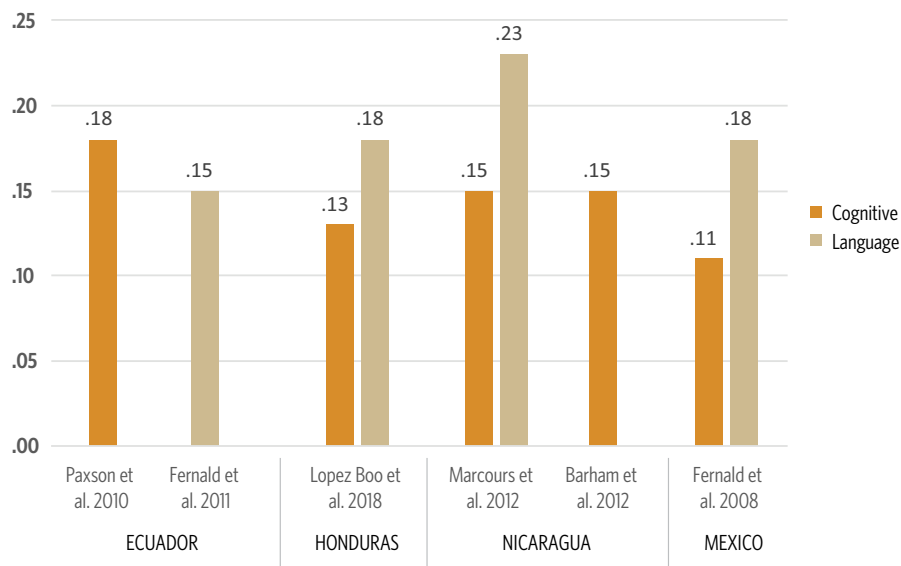
Cash transfer programs are in a privileged position among public sector programs in that they are targeted to the poorest and most vulnerable families where deprivations such as chronic malnutrition and other indicators of poor child development are concentrated. They also benefit from a rich legacy of focusing on behavioral practices, particularly concerning parents' investments in children.

Cash transfer programs can protect households against chronic poverty and financial risks, while also providing a way to leverage critical human capital investments, notably in young children. Poverty and human capital deficits are strongly correlated. Pro-poor cash transfer programs can help to mitigate the detrimental and long-lasting effects that poverty and its associated risks have on child development, supporting human capital accumulation and reducing inequality from early in life.

Evidence from cash transfer programs reveal a range of early years impacts showing that these programs can (Bastagli et al. 2016, de Walque et al. 2017):

- Reduce **poverty**
- Mitigate negative impacts of **early life shocks** (Adhvaryu et al. 2017)
- Improve **food consumption** and, in some cases, **nutritional outcomes** (stunting, wasting)
- Improve children’s **cognitive and language skills** (see Figure 2)
- Increase the use of **health services** by pregnant women and young children
- Reduce **morbidity** and, in some cases, **infant mortality**
- Reduce maternal **depression and stress**, enhancing household environment for child development

FIGURE 2: Impact of Cash Transfers During Early Years on Cognitive and Language Skills



Source: Arriagada, Ana-Maria et al. 2018. Note: Size effects measured in standard deviations.

Cash transfer programs are often specifically designed to address not only present poverty, but also the intergenerational transmission of poverty by fostering human capital investments in children. This is done by attaching “accompanying measures” to the cash transfer. Traditionally, these have taken the form of “conditions” or “co-responsibilities” expected from households as recipients of the cash transfer. The most common of these “co-responsibilities” are related to building the human capital of the children by requiring parents to attend and take their babies to health clinics for pre- and post-natal care and growth promotion sessions, and to ensure that their children go to school regularly. These requirements are an essential element of conditional cash transfer programs. Increasingly, cash transfer programs are also encouraging or requiring parents and caregivers to participate in **parenting programs** (see Figure 3).

FIGURE 3: Parenting Programs



WHAT IS A PARENTING PROGRAM?

Interventions or services aimed at enhancing parent-child interactions, parenting knowledge, beliefs, attitudes, behaviors and parenting practices through training, support, and coaching

WHAT TOPICS DOES IT COVER?

- Nutrition
- Health
- Hygiene
- Child stimulation
- Positive parenting

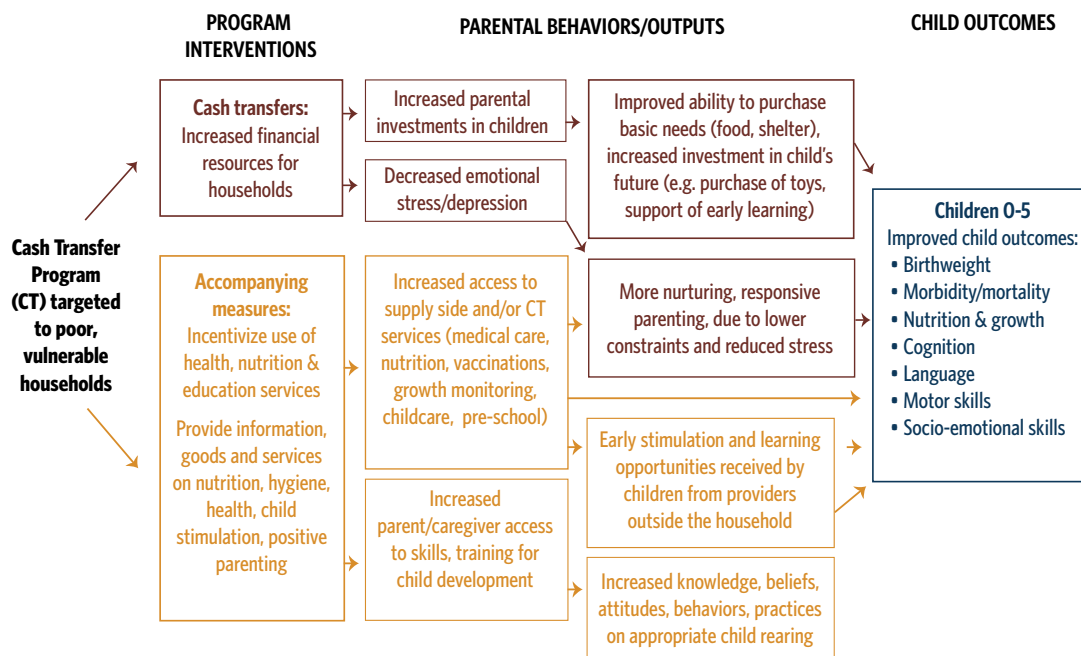
HOW IS IT DELIVERED?

- Home visits
- Community-based group meetings
- Primary health care facility or health care center
- Combination

How can cash transfer and parenting programs work together to promote child development?

Parents and caregivers are the architects of their children’s development. They are crucial to the healthy development of infants, acting as agents responsible for investments in their nutrition, health and safety. They shape the environment in which the child develops and help ensure a safe supportive home as well as access to key services. Beyond this, parents also actively shape children’s skills and socio-emotional development by talking to them, playing with them, reading or telling stories to them and interactively responding to their cues.

FIGURE 4: Cash Transfers and Accompanying Measures for Child Development



Source: Arriagada, Ana-Maria et al. 2018.

The combination of the cash transfer and the accompanying measures designed to improve parents’ own practices and support to children can be a powerful tool to improve child development during the early years. The theoretical framework for combining cash transfers with parenting interventions is presented in Figure 4, where the top half displays

the income effect of cash transfers on children’s outcomes. The bottom half (in orange) displays the information, goods and services that parents access through cash transfer programs’ accompanying measures, with results on access to services and changes in young children’s physical health, cognitive and socio-emotional development. This model illustrates the following:

- Cash transfer programs operate at the household level, enabling poor parents to relax their household’s budget constraints and thus improve their home environment, spend more time engaging with their children and invest in their children’s health, nutrition and education.
- Cash transfers improve the psychological well-being of household members by reducing the effects of financial strain and deprivation. In turn, this allows parents to engage more positively with their children to promote child development.
- Accompanying measures can directly provide child focused goods and services as well as encourage parents to access available services, to acquire knowledge and adopt behaviors that promote their young children’s physical health and their cognitive and non-cognitive skills, and to provide them with a safe and stimulating environment for early learning and development.

What are some possible models of cash transfer programs combined with parenting interventions?

We identify four main models for combining cash transfer and parenting programs: **integrated, convergence, alignment and piggy-backing**. The full technical report reviews 10 cash transfer programs in lower- and middle-income countries that included accompanying measures aimed at promoting positive parenting behaviors for child development in the early years. Country cases include Bangladesh, Colombia, Indonesia, Madagascar, Mexico, Niger, Peru, Rwanda, Senegal, and Burkina Faso, while recognizing that other interesting cases exist such as Brazil’s Crianza Feliz program. The report includes detailed information for the cash transfer program and the parenting intervention related to the design, financing, human resources, and monitoring and evaluation. Typologies for the institutional architecture of combined programs are defined based on the way in which the cash transfer and the parenting interventions are arranged and delivered, see Table 1.

TABLE 1: Institutional Architecture Typology for Combining Cash Transfer and Parenting Programs

INSTITUTIONAL ARCHITECTURE	DESCRIPTION
Integrated	<i>The parenting intervention is managed by the cash transfer program.</i> Examples: Jawtno (Bangladesh), Familias en Acción (Colombia), Burkin-Na-ong-Sa ya (Burkina Faso), and Niger Safety Nets (Niger).
Convergence	<i>Different agencies explicitly combine efforts to bring the separate cash transfer and parenting programs to the same populations.</i> Examples: Program Keluarga Harapan (PKH) (Indonesia), Prospera and Educación Inicial (Mexico), Human Development Cash Transfer program (Madagascar), and Family Strengthening Intervention (Rwanda).
Alignment	<i>The cash transfer and the parenting programs do not explicitly coordinate with one another but deliver interventions to similar if not the same populations.</i> Example: Juntos and Cuna Más (Peru).
Piggybacking	<i>The cash transfer is delivered through a separate established platform such as the primary health care network that is already delivering a parenting program.</i> Example: Rapid response child-focused social cash transfer (Senegal).

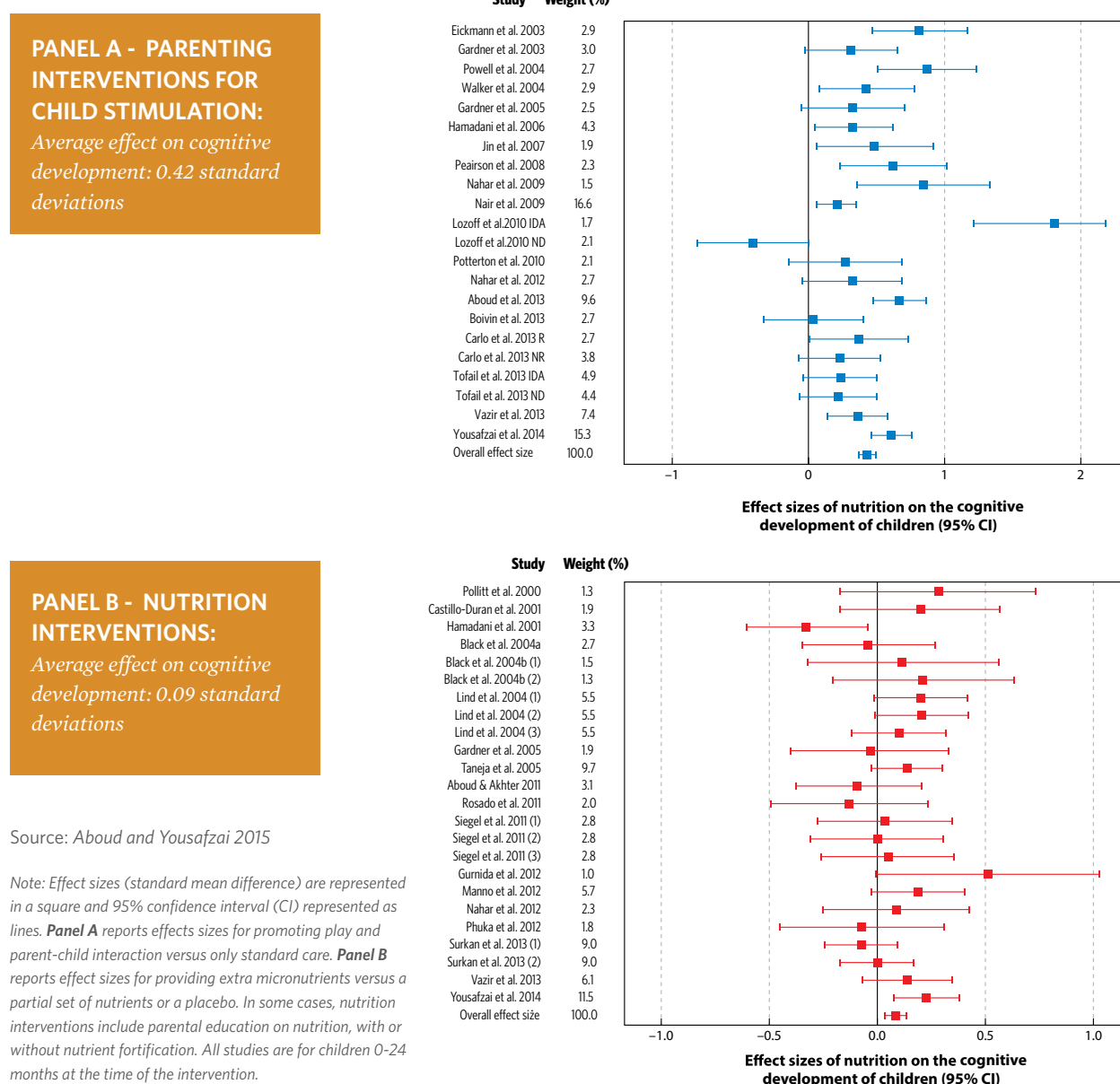
Source: Arriagada, Ana-Maria et al. 2018. Note: See the full technical report for details on each program

Do parenting interventions improve child development outcomes?

While the evidence from developing and developed countries is mixed, many evaluations find that parenting interventions can improve child development outcomes, notably cognition and language. However, the studies were mostly small efficacy studies of home visiting programs. Therefore, it is an open question as to whether large-scale interventions would produce similar effects. In the USA, evidence-based large-scale evaluations of parenting interventions such as the Nurse Family Partnership Program have found that these programs had a positive impact on children's development.

Another aspect to consider is that parenting interventions seem to be more effective in improving child cognitive development than nutrition interventions and conversely, that parenting interventions are less effective in improving nutritional outcomes. A recent review of 21 parenting interventions in developing countries aimed at enhancing early child development found medium-sized effects from parenting interventions on cognitive and language development while the 18 nutrition interventions were less effective in these domains (see Figure 5).

FIGURE 5: Impact of parenting and nutrition interventions on child cognitive development



What is the evidence on adding parenting interventions to cash transfer programs?

The existing evidence on combined cash transfer and parenting interventions is scarce, but promising. We identified four impact evaluations using rigorous methodologies (randomized control trials or regression discontinuity) carried out in Colombia, Mexico, Niger, and Peru. Colombia adapted the successful Jamaican “Reach Up” home visiting program developed by Grantham McGregor and colleagues, introducing it as part of the “Familias en Acción” cash transfer program. Mother leaders elected within their communities by fellow cash transfer recipients were trained to conduct weekly home visits to cash transfer beneficiaries to promote mother-child interactions by engaging families in play activities centered on children’s daily routines. In Niger, the parenting intervention was integrated into the cash transfer program, targeting 5 regions with the highest concentration of poverty. The parenting intervention was developed in the country based on the UNICEF “essential family practices” package and delivered by local NGOs as a combination of monthly home visits and group meetings. Peru also adapted the Jamaican “Reach Up” home visiting program to the Peruvian context with trained community members, conducting weekly home visits and fortnightly group meetings for child stimulation. The parenting program “Cuna Más” was implemented in communities where the cash transfer program “Juntos” was operating but was not targeted exclusively to cash transfer beneficiaries. Finally, in Mexico the cash transfer program PROGRESA coordinated with the National Council for Education Development (CONAFE, which designs implements and evaluates new educational programs targeted to marginalized communities such as indigenous populations) to offer cash transfer beneficiaries the parenting program “Educación Inicial”. The parenting program operated on weekly basis in rural areas, where access to early learning programs was very limited.

These four interventions from Colombia, Mexico, Niger and Peru had short-term impacts on several measures of child development as well as on changes in parental behavior (Table 2). These programs were implemented at large scale (e.g. Niger) or using a scalable structure (e.g. Colombia). More research is needed to understand the impacts at large scale and whether the effects can be sustained in the long term.

TABLE 2: Impact of adding parenting interventions to cash transfer programs

	COLOMBIA	MEXICO	NIGER	PERU
Safety net platform*	CCT	CCT	UCT	CCT
Delivery modality	home visits	group meetings	home visits and group meetings	home visits and group meetings
Parenting curriculum	Adapted from “Reach Up”	Educación Inicial	Adapted from UNICEF “Essential Family Practices Package”	Adapted from “Reach Up”
Impact on parental practices and behavior	Improved parental practices (play activities and play material) in the short term	Not measured	Improved nutrition and stimulation practices and reduced harsh discipline	Improved parental practices: increased play activities and play material, and reduced harsh discipline
Impact on child wasting and stunting	None	Not reported	None	Not reported
Impacts on cognitive and non-cognitive outcomes	Improved cognition and language skills but impacts were not sustained in the medium term. No impact on socio-emotional skills	Positive impact on cognition and language only when the program included enhanced promotion of the parenting intervention	Improved socio-emotional skills but no impact on other child development domains	Positive impact on child development, especially cognition and language

Source: Arriagada, Ana-Maria et al. 2018, based on impact evaluations reports from Colombia (Attanasio et al. 2014 and Andrew et al. 2018), Mexico (Fernald et al. 2017), Niger (Barry et al. 2017 and Premand et al. 2016), and Peru (Araujo et al. 2016).

* CCT = Conditional Cash Transfer, UCT= Unconditional Cash Transfer

Note: Reported impacts are based on the comparison of cash transfer plus parenting intervention versus cash transfer alone.

What are the lessons learned from implementing cash transfer and parenting programs?

While combining cash transfer programs with parenting interventions holds the promise of improving early childhood outcomes, evidence remains limited and there are a wide range of practices. In the 10 cases studied, the “integrated model” presented in Table 1, in which the parenting intervention is managed within the cash transfer program, was the most common, but the choice of model needs to be fitted to the program and country context.

The implementation of parenting programs both in the developing and developed world has revealed a range of good practices which makes it difficult to develop general lessons. Content and learning approaches based on successful experiences; attention to service delivery with respect to program protocols, incentive structures, the intensity and duration of the parenting intervention, and the soundness of the delivery modality; and ensuring the quality of the workforce, including the employer of field staff, the profile of front-line staff and the use of quality assurance mechanisms. Table 3 discusses some of the good practices associated with each of these domains.

When considering the incorporation of a parenting intervention into a cash transfer program, policymakers should review available options in light of institutional capacity to manage, coordinate, or align with the cash transfer program. Policymakers need to carefully consider which organization could serve as the most appropriate implementer for the parenting program and align the duration and frequency of the supervision to the intensity of the program intervention and to the qualifications of its front-line workers. In the spirit of continued learning and improvement, monitoring and assessment of program implementation is essential, as well as rigorous evaluation of results, to effectively manage the programs and to draw lessons about program design, institutional arrangements and impacts.

TABLE 3: Lessons learned from combining parenting and cash transfer programs

CONTENT	DELIVERY	WORKFORCE	BASIC BUILDING BLOCKS
<ul style="list-style-type: none"> • Tailor content to child’s developmental stage • Take into account cultural relevance and situations of conflict/disaster • Content of parenting intervention should target both parents (mother and father) and other caregivers • Include demonstrations with children and opportunities to practice and receive feedback during the training sessions 	<ul style="list-style-type: none"> • Invest in strong program protocols and materials to ensure fidelity • Strengthen social support among participating parents • Build on existing delivery platforms that the target population is already using 	<ul style="list-style-type: none"> • Ensure adequate workforce training with access to necessary material • Take into account the pros and cons of paid vs. voluntary work • Consider financial and non-financial incentives • Take into account pros and cons of using professional vs. paraprofessional workers • Establish a frequent and supportive supervision scheme including on-the-job training and coaching for field staff 	<ul style="list-style-type: none"> • Design the intervention with a solid “logical framework” • Invest in a monitoring and evaluation system for quality assurance and to identify most effective modalities • Manage performance against clear standards of quality

Source: Arriagada, Ana-Maria et al. 2018

What are the key issues looking forward?

- From an operational standpoint, parenting interventions require significant effort to monitor and supervise. It is crucial to track not only process quality but also structural quality (notably front line staff, often community workers interacting with parents), a core aspect of delivering high quality interventions. The operational question of the optimal “dose and response” is also critical and requires more research. Although more frequent interactions can increase the size of the impacts, evidence shows that more contact does not necessary translate into better child outcomes.
- The sparse evidence from the small number of programs combining cash transfers and parenting – coupled with the heterogeneity in program design -- makes it difficult to make comparisons across programs and to reach any definitive conclusions about how best to couple these two interventions. However, the four cases that we explored (Colombia, Mexico, Niger, and Peru) did improve parental practices and child development outcomes, with stronger results in certain domains.
- Looking forward, process evaluations are required to understand the fidelity of implementation and the quality of the program, particularly the quality of the interaction between community workers and caregivers, the role of contexts and complementary programs, and changes in implementation over time and across partners engaged in service delivery.
- Longer term research is also needed on the impact of taking parenting interventions to scale, on dose-response impacts, on the cost-effectiveness of using alternative delivery modalities, and on the sustainability of results. The heterogeneity in the impacts of parenting interventions to date likely reflects the heterogeneity in program design, implementation, what results are measured and how they are measured. Policy design would benefit from structured research across programs, examining a common set of practical questions on how to best combine cash transfer and parenting programs.

References

- Aboud, Frances, E. Aisha, and K. Yousafzai. 2015. "Global Health and Development in Early Childhood" *Annual Review of Psychology* 66:1, 433-457.
- Adhvaryu, Achyuta, Teresa Molina, Anant Nyshadham, and Jorge Tamayo. 2018. "Helping Children Catch Up: Early Life Shocks and the PROGRESA Experiment", University of Michigan, Mimeo. Retrieved on June 2018: https://www.dropbox.com/s/5vgczi8b0rtrbjf/AMNT_Progresa_Apr2018.pdf?dl=0
- Andrew, Alison, Orazio Attanasio, Emla Fitzsimons, Sally Grantham-McGregor, Costas Meghir, and Marta Rubio-Codina. 2018. "Impacts 2 Years after a Scalable Early Childhood Development Intervention to Increase Psychosocial Stimulation in the Home: A Follow-up of a Cluster Randomised Controlled Trial in Colombia." *PLOS Medicine* 15 (4): e1002556.
- Araujo, Maria Caridad, Marta Rubio Codina, 2016, "Resultados de la evaluación de impacto del Servicio de Acompañamiento a Familias del Programa Nacional Cuna Más". Mimeo. Available at: https://www.mef.gob.pe/contenidos/presu_publ/ppr/eval_indep/informe_resultados_cuna_mas.pdf
- Arriagada, Ana-Maria, Jonathan Perry, Laura Rawlings, Julieta Trias, and Melissa Zumaeta. 2018. "Promoting early childhood development by strengthening linkages between cash transfers and parenting behaviors". World Bank, Mimeo.
- Attanasio, O., C. Fernández, E. Fitzsimons, S. Grantham-McGregor, C. Meghir, and M. Rubio-Codina. 2014. "Using the Infrastructure of a Conditional Cash Transfer Program to Deliver a Scalable Integrated Early Child Development Program in Colombia: Cluster Randomized Controlled Trial." *BMJ* 349 (September): g5785.
- Barham, Tania, Karen Macours, and John A. Maluccio. 2013. "Boys' Cognitive Skill Formation and Physical Growth: Long-Term Experimental Evidence on Critical Ages for Early Childhood Interventions." *American Economic Review* 103 (3): 467-71.
- Barry, Oumar, Cheikh Anta Diop, Ali Mory Maïdoka, and Patrick Premand. 2017, "Promoting positive parenting practices in Niger through a cash transfer programme" *Early Childhood Matters*, Bernard Van Leer Foundation.
- Bastagli, F., J. Hagen-Zanker, L. Harman, V. Barca, G. Sturge, and T. Schmidt. 2016. *Cash transfers: What does the evidence say? A rigorous review of programme impact and the role of design and implementation features*. London: Overseas Development Institute.
- Black, Maureen M, Rafael Pérez-Escamilla, and Sylvia Fernandez Rao. 2015. "Integrating Nutrition and Child Development Interventions: Scientific Basis, Evidence of Impact, and Implementation Considerations 123." *Advances in Nutrition* 6 (6): 852-59.
- Britto, Pia R., Stephen J. Lye, Kerrie Proulx, Aisha K. Yousafzai, Stephen G. Matthews, Tyler Vaivada, Rafael Perez-Escamilla, et al. 2017. "Nurturing Care: Promoting Early Childhood Development." *The Lancet* 389 (10064): 91-102.
- de Walque, Damien, Lia Fernald, Paul Gertler, and Melissa Hidrobo. 2017. "Cash Transfers and Child and Adolescent Development" in D.A.P. Bundy, N. de Silva, S. Horton, D.T. Jamison, and G.C. Patton (eds), *Disease Control Priorities: Volume 8, Child and Adolescent Health and Development, Third Edition*, 325-41. World Bank, Washington DC. <http://dcp-3.org/chapter/2472/cash-transfers-and-child-and-adolescent-development>.
- Galasso, Emanuela, Adam Wagstaff, Sophie Naudeau and Meera Shekar. 2016. "The Economic Cost of Stunting and How to Reduce Them". Policy Research Note. The World Bank Group. Retrieved on June 2018: <http://pubdocs.worldbank.org/en/536661487971403516/PRN05-March2017-Economic-Costs-of-Stunting.pdf>

Fernald, Lia C. H., and Melissa Hidrobo. 2011. "Effect of Ecuador's Cash Transfer Program (*Bono de Desarrollo Humano*) on Child Development in Infants and Toddlers: A Randomized Effectiveness Trial." *Social Science & Medicine* 72 (9): 1437–46.

Fernald, Lia C. H., Rose M.C. Kagawa, Heather A. Knauer, and Lourdes Schnaas. 2017. "Promoting Child Development through Group-Based Parent Support within a Cash Transfer Program: Experimental Effects on Children's Outcomes." *Developmental Psychology* 53 (2).

Fernald, Lia C.H., Paul J. Gertler, and Lynnette M. Neufeld. 2008. "Role of Cash in Conditional Cash Transfer Programmes for Child Health, Growth, and Development: An Analysis of Mexico's Oportunidades." *The Lancet* 371 (9615): 828–37.

Leroy, J. L., Ruel, M., & Verhofstadt, E. 2009. "The impact of conditional cash transfer programmes on child nutrition: a review of evidence using a programme theory framework". *Journal of Development Effectiveness*, 1(2), 103-129.

Lopez Boo, Florencia and John Creamer. 2018. Do young children benefit from a Cash Transfer directed at their older siblings? Experimental Evidence from Honduras, Inter-American Development Bank. Mimeo.

Macours, Karen, Norbert Schady, and Renos Vakis. 2012. "Cash Transfers, Behavioral Changes, and Cognitive Development in Early Childhood: Evidence from a Randomized Experiment." *American Economic Journal: Applied Economics* 4 (2): 247–73.

Premand, Patrick, Oumar Barry, and Marc-Francois Smitz. 2016. "Cash transfers, Behavioral Accompanying Measures and Child Development in Niger". SIEF Endline Report. World Bank Group, Mimeo. Published version available in French at <http://documents.worldbank.org/curated/en/122221467609922455/Transferts-monétaires-valeur-ajoutée-de-mesures-daccompagnement-comportemental-et-développement-de-la-petite-enfance-au-Niger-Rapport-de-l'évaluation-d'impact-à-court-terme-du-Projet-Filets>

World Bank, "Improving Nutrition Through Multisectoral Approaches". 2013. The World Bank Group. <http://documents.worldbank.org/curated/en/625661468329649726/pdf/75102-REVISED-PUBLIC-MultisectoralApproachestoNutrition.pdf>

