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**EARLY CHILDHOOD DEVELOPMENT
SECTOR FRAMEWORK DOCUMENT**

SOCIAL SECTOR

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This document was prepared by the team consisting of: Ferdinando Regalia (SCL/SPH), Division Chief; Emiliana Vegas (SCL/EDU), Division Chief; M. Caridad Araujo (SCL/SPH); Florencia López-Boo (SCL/SPH); Marta Rubio-Codina (SCL/SPH); Marta Dormal (SCL/SPH); María de la Paz Ferro (SCL/SPH); Claudia Quintero (SCL/SPH); Sheyla Silveira (SCL/SPH); María Mercedes Mateo-Berganza (SCL/EDU); Diana Hincapié (SCL/EDU); Diana Paredes (SCL/EDU); Monserrat Bustelo (SCL/GDI); Verónica Alaimo (SCL/LMK); Norbert Schady (SCL/SCL); Nicolás Fuertes (SCL/SCL); Daniela Zuluaga (SCL/SCL); Carolina Aclan (KIC/KLD); and Bertha Briceño (KIC/KLD). The authors are grateful to the following staff members for their contributions: Alvaro Altamirano (SCL/LMK); Oliver Azuara (SCL/LMK); Judith Morrison (SCL/GDI); Marco Rojas (SCL/GDI); Jennelle Thompson (SCL/EDU); Adriana Viteri (SCL/EDU); Pablo Zoido (SCL/EDU); María Cecilia Acevedo (DSP/DCO); Paula Castillo (DSP/DCO); and Patricia Yáñez (DSP/DBF), as well as other contributions to the document by the SCL/SCL team. The authors also gratefully acknowledge the comments provided by Bank colleagues and three external reviewers.

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ABBREVIATIONS

CTP	Cash transfer program
ECD	Early childhood development
FCI	Family care indicators
FSP	Family support program
ILO	International Labor Organization
IPS	Inquiry and problem solving
LAC	Latin America and the Caribbean
MOOC	Massive open online course
PPVT	Peabody picture vocabulary test
SDQ	Strengths and difficulties questionnaire
SFD	Sector framework document
UNICEF	United Nations Children's Fund
WHO	World Health Organization

EXECUTIVE SUMMARY

The area of early childhood development (ECD) encompasses programs and policies targeting children aged 0-5 years and their families with the objective of promoting cognitive, language, motor, and socioemotional development. The ECD sector framework document guides the IDB Group's operational, dialogue, and knowledge generation activities with countries and governments in this sector.

The human brain grows more and is more malleable in the first five years of life than at any other time. For this reason, sound development in early childhood is a determining factor for education, employment, and health outcomes for the rest of a person's life. Families' investments in their children in early childhood affect the environment in which those children develop and their opportunities for learning. Effective public policy design requires an understanding of how families make these decisions and what actions ensure sound development for all children, particularly the poor and vulnerable.

Unlike other areas of the social sector, such as education or health, there are no regular population indicators in the area of ECD that are comparable across countries for documenting trends in child development. There is also no systematically documented data on providers and the quality of their service offerings. In the absence of such information, public policy design is hit or miss, so its gains cannot be tracked. This jeopardizes the sustainability of the political and budgetary commitments. Some countries in the region have produced rigorous evaluations and studies in recent years, several of which have been pioneering at the international level. These have been highly influential for the design and implementation of public policies.

The available data show that in Latin America and the Caribbean (LAC) gaps in ECD levels emerge at a very early age between children growing up in more privileged households and their peers in more disadvantaged households. These gaps persist and widen with age, resulting in significant developmental differences in areas such as language by the time children enter school, which limit the ability of some children to learn and develop to their full potential. The same gaps observed in ECD appear in the quality of the home environment where more privileged and more disadvantaged children grow up. Children in poor households have access to fewer play materials and activities that promote learning and are frequently exposed to violent disciplinary practices from a very early age. It is imperative that public policies seek mechanisms to eliminate these gaps or prevent their emergence, to ensure equal opportunities for all children to develop and learn. The critical element for the effectiveness of ECD programs is their ability to offer quality environments with frequent adult-child interactions that are receptive, sensitive to the child's needs, and rich in language.

This document focuses on services aimed at strengthening ECD, targeting the population aged 0-5 years and their families. Specifically, this encompasses: (i) center-based services (daycare for children under three years of age, preschool services); (ii) family support programs that promote investment in human capital (programs to improve child-rearing practices and stimulation in the home, cash transfer programs); and (iii) crosscutting themes (ECD services that take diversity into account, child protection services, the institutional structure for ECD, the ECD labor force, and population measures of ECD and service quality).

ECD programs have considerable room for growth in LAC, but the greatest challenge will be to ensure that attention is paid to quality as part of this process. All available evidence indicates that quality levels in ECD services in the region are so low that they may even be harmful to the development of the children using them. One area of opportunity in LAC for scaling up ECD programs involves strengthening coordination between these and other sectors, for example, health or social protection services. A persistent challenge in the region is working with ECD services to ensure that they take diversity into account while also strengthening approaches to caring for neglected and abandoned children.

ECD programs rely on the personnel serving families and children, who frequently work as volunteers or for very low pay and have few prospects for professional growth and little or no training and support. The expansion of coverage with quality can only be achieved by transforming certain aspects of the approach to human resources, including the processes for selection, hiring, and remuneration of personnel, as well as their opportunities for professional development. To achieve quality services, ECD program personnel require not only technical knowledge but soft skills enabling them to interact in an effective, respectful, warm, and sensitive manner with the families and children in their care. Developing these types of skills will require rethinking and strengthening the processes for training and support of ECD personnel.

Several countries of the region have taken an integrated approach to ECD, which requires actions to be coordinated across sectors and levels of government. ECD governance structures have been created to support this coordination. Beyond their political mandate, however, these structures display significant technical weaknesses. For example, the ECD policy coordination structures lack the management tools and capabilities for them to be accountable for the results of their work or facilitate coordinated, synchronized action among the different sectors and levels of government.

This SFD proposes that the IDB Group's work in ECD focus on ensuring that all children, and particularly those in poor and vulnerable households, have the opportunity to develop their potential from the first years of life through significant experiences that are rich in quality interactions at home, in daycare, and in preschool. For this to occur, the adults responsible for children in these environments need to have the resources, knowledge, skills, and behaviors necessary to promote ECD. Three lines of action are proposed, to be contextualized to the reality of each country: (i) promote efficient management and well-informed public policy; (ii) implement ECD services with quality at scale; and (iii) strengthen the quality of the labor force and improve their working conditions.

I. THE EARLY CHILDHOOD DEVELOPMENT SFD IN THE CONTEXT OF EXISTING REGULATIONS AND THE INSTITUTIONAL STRATEGY

- 1.1 The Early Childhood Development SFD guides the IDB Group’s operational, dialogue, and knowledge generation activities with countries and governments in the area of early childhood development (ECD).** This sector framework document (SFD) is the first for this area, which in previous years was addressed under the SFDs for Education and Early Childhood Development (document GN-2708-5) and Social Protection and Poverty (document GN-2784-7). This SFD replaces the two previous documents in the area of ECD. The structure and content of this SFD follows the guidelines set in document GN-2670-5, “Strategies, Policies, Sector Frameworks, and Guidelines at the IDB.” The SFD is consistent with the “Update to the Institutional Strategy: Development Solutions that Reignite Growth and Improve Lives” (document GN-2933-3), which acknowledges social exclusion, inequality, and low productivity as structural challenges for the region’s development. This SFD is also related to the Strategy on Social Policy for Equity and Productivity (document GN-2588-4).
- 1.2 This SFD defines ECD as cognitive, language, motor, and socioemotional development during the first five years of life. It defines the area of ECD as the array of programs and policies that target children and families with the aim of promoting ECD.** The first five years of life are the most important in terms of human capital formation and the development of socioemotional skills such as emotion regulation, the ability to plan, empathy, and others. Investing in ECD reduces inequality and strengthens the productivity of the future labor force. The human brain is more malleable in the first few years of life than at any other time. The early development of skills facilitates future learning.
- 1.3 Achieving the Sustainable Development Goals (SDGs) will require investment in ECD.** The first and tenth goals—no poverty and reduced inequalities—are aimed at ensuring that all people are given the opportunity to fully develop their potential. The foundations for this are laid in the first years of life. The fourth objective—lifelong learning opportunities—makes explicit reference for the first time to access to quality ECD services and promoting learning from early childhood. The fifth objective—gender equality—requires a shift in the distribution of care responsibilities between men and women, as well as education from an early age in social norms consistent with equality. Lastly, the eighth objective—relating to work and economic growth—requires a well-trained labor force.
- 1.4 Full development in early childhood requires multiple aspects of the child—such as health, nutrition, emotional support, and stimulation—to be addressed simultaneously.** It is also necessary to ensure that the environment provides appropriate conditions of safety and protection both in the home and in the community. For this reason, ECD depends on coordinated action across several sectors and thus requires a crosscutting approach. The Early Childhood Development SFD is one of 22 SFDs to be prepared by the IDB Group under the umbrella of document GN-2670-5, “Strategies, Policies, Sector Frameworks, and Guidelines in the IDB,” with the objective of providing a holistic view of development challenges in the region. Given the nature of its subject-matter, this

SFD is interrelated with several others. In the area of health and nutrition, it ties in to the Health and Nutrition SFD (document GN-2735-7), which addresses such issues as the quality of mother/child health services and the interaction between nutrition and ECD. Given the need for labor policies that protect the rights of working parents and allow them to participate actively in rearing their children, it is linked to the Labor SFD (document GN-2741-7). It is also complementary with the Education and Early Childhood Development SFD (document GN-2708-5) in terms of the importance of ECD for learning and school performance; the Social Protection and Poverty SFD (document GN-2784-7) in terms of coordination between ECD programs and other actions targeting poor and vulnerable families with young children; and the Gender and Diversity SFD (document GN-2800-8) in terms of the gender dimensions and cultural relevance of services, as well as issues of domestic violence and the sharing of care responsibilities. Admittedly, many different factors come into play in ensuring health and well-being in early childhood, such as access to water and sanitation services, safe housing, and a pollution-free environment. These issues are not addressed in this SFD as they are covered by the SFDs for Water and Sanitation (document GN-2781-8), Urban Development and Housing (document GN-2732-6), and Environment and Biodiversity (document GN-2827-8).

- 1.5 **The rest of the document is organized as follows.** Section II describes the state of ECD in the region and identifies key challenges. Section III reviews the evidence regarding the effectiveness of ECD programs. Section IV discusses lessons learned from the IDB Group's experiences, and Section V proposes a set of strategic lines of action to guide the IDB Group's operational, analytical, and dialogue activities in this area.

II. KEY CHALLENGES FOR THE REGION IN ECD

A. The importance of early childhood

- 2.1 **Experiences in the first few years of life—when the human brain grows faster and is more malleable than at any other time—determine outcomes in childhood and adulthood such as school performance, physical and mental health, employment, and criminal behavior** (Shonkoff and Phillips 2000; Berlinski and Schady 2015). The life path taken by each person and their ability to reach their potential are affected by the interaction between their genetic endowment and experiences in their environment, particularly those occurring in childhood (Manski 2011; Barth, Papageorge, and Thom 2018).¹
- 2.2 **Investments by families in their children during the early years determine the environment in which those children develop and may also offset or intensify the effects of exposure to external experiences.** Such investments depend on a family's preferences, knowledge, and skills, as well as on their time and resources (Attanasio 2015). Families invest in their children in many ways:

¹ An exhaustive review of this literature (Almond, Currie, and Duque 2018) focuses on the long-term impact of various types of early childhood experiences: changes in nutrition, nutritional supplements, exposure to stress, infectious diseases, environmental pollution, climate phenomena, or alcohol and tobacco consumption.

- (i) time (and quality time) with their children; (ii) resources in their environment and the dwelling where they live; (iii) goods and services that foster development; and (iv) childcare arrangements during the times when parents are unable to be with their children. Families also set rules for their members to live together, and these determine the emotional environment in the home. Effective public policy design requires an understanding of how families decide on these investments in their children. Public policies that improve the quality of the home environment and foster investments in human capital from the first years of life can enhance the productivity of society as a whole while also improving equality of opportunity (Heckman 2011).
- 2.3 **Public policies affect early childhood investments by families and society in several different ways.** Some policies target parents, families, and communities. This is the case of resource transfers to poor families with young children, or access to public services, spaces for play, and safe housing. A second approach consists of family and labor market policies that expand the time available for parents to care for their children. A third type of instrument involves policies that improve parents' ability to offer their children quality interactions, opportunities for psychosocial development, and strategies for positive discipline, or that provide parents with information about the importance of the early childhood years. A fourth group of policies targeting parents involves promoting demand for daycare or preschool services. Lastly, parental education—particularly the mother's education—is a key determinant of early childhood development (ECD). Another group of ECD policies focuses primarily on children. This group includes daycare centers for children aged 0-3 years, preschool services for children aged 4-5 years, and child protection services for abused or abandoned children (Carneiro, Meghir, and Parey 2013; Currie and Moretti 2003).
- 2.4 **The remainder of this section documents the challenges faced by the countries of Latin America and the Caribbean (LAC) in the area of early childhood development, describing gaps in outcomes and service quality and access.** Firstly, the socioeconomic gaps observed from an early age are described, along with trends in these gaps throughout childhood, showing the predictive power of early childhood development for future learning. Secondly, this section systematically documents information on access to early childhood development programs and their quality, as well as the quality of the home environment for children in this age group. Thirdly, it offers a diagnostic assessment of crosscutting aspects of this issue.
- B. The state of ECD in Latin America and the Caribbean**
- 2.5 **Unlike other dimensions of human capital such as nutrition, health, or school learning, ECD historically has not been measured regularly in population surveys, not even in population surveys representative of children aged 0-5 years.** Although there has been some progress in recent years, the scientific community has not reached consensus on tools for measuring ECD that are both internationally comparable and feasible to administer at scale. Adding to this is the inherent complexity of measuring development precisely in very young children, and doing so at a reasonable cost in the context of population-representative surveys. These factors explain why, in contrast to other areas of social policy, the field of ECD lacks indicators for

monitoring progress over time that can be compared across countries and different subgroups in a single country. Nonetheless, LAC has conducted studies that have been pioneering at the international level in terms of the empirical evidence yielded, which has informed the public policy agenda surrounding ECD. The studies have included measurements of ECD, access to ECD services, service quality and targeting, and the characteristics of the providers responsible for operating the services. Based on existing information, this section offers a diagnostic assessment of the state of ECD in LAC.

- 2.6 **A lack of comparable ECD measures means that the situation of children in LAC cannot be contrasted with other parts of the world.** The most comprehensive survey-based measurements of ECD have taken tools developed for high-income countries and translated and adapted them to the local cultural context. For this reason, it is methodologically incorrect to compare scores across different populations or to extrapolate the cutoff points that define a satisfactory level of development. Accordingly, it is impossible to provide a comparison of ECD levels of children in LAC with respect to those in other regions, as occurs with indicators in the education, health, and nutrition sectors. At a scientific level, the discipline is working to develop indicators to enable such comparability at the international level, and the IDB Group is contributing to this effort.²
- 2.7 **Available data in LAC point to significant gaps in ECD levels that emerge at a very early age between households of mothers of higher or lower levels of education and between children belonging to poorer or less poor households.** Figures 1 and 2³ compare cognitive and language development levels for children under 42 months in the case of mothers with higher or lower education levels in Colombia, Peru, and Mexico. The data reveal significant differences between these children, even in the first year of life. These gaps persist as the children grow⁴ and even widen with age. (This can be seen from Figures 1 and 2 for Colombia and Mexico, and Figure 3 for rural areas in Chile, Ecuador, and Nicaragua.) By the time the children go to school, the magnitude of these differences in ECD levels is substantial. For example, at six years of age, children from the poorest households have the language development of a 4-year-old in Ecuador, Nicaragua, and Peru, while in Colombia the figure is 4.5 years (Figure 4). As illustrated in Figure 5, similar gaps have been documented in other LAC countries that measure child development, such as Costa Rica, Nicaragua, and Paraguay.⁵

² Multiple indicator cluster surveys (MICSs) administered in middle- and low-income countries construct a development index for children aged 3 and 4 years based on 10 questions. An analysis of MICS data in 35 countries, including three in LAC (Barbados, Belize, and Honduras), shows that the percentage of 3- and 4-year-olds with low ECD scores in the three LAC countries is 18.7%, comparable to the Middle East and North Africa region and lower than the average of 32.9% for all countries analyzed (McCoy, Peet, et al. 2016).

³ All figures referenced in this SFD can be found in Annex I.

⁴ Figure 3 focuses on language development in children aged 36 to 72 months in Chile, Colombia, Mexico, Nicaragua, and Peru.

⁵ Socioeconomic gaps in the language domain have been widely documented in LAC. An exception is a recent study in Bolivia focusing on children under 3 years of age (Celhay, Martinez, and Vidal 2018).

- 2.8 **Gaps in ECD are also observed in other areas, such as the quality of the home environment.** The quality of the home environment involves such factors as access to activities and materials that encourage play and learning, but also the emotional environment and rules for coexistence. Children with greater access to play materials and activities in their homes exhibit higher levels of ECD than those without such access. This is illustrated in Figures 1 and 2, which compare cognitive and language development levels in children under 42 months in higher- and lower-quality home environments in Colombia, Peru, and Mexico.⁶ Within the same country, comparisons between rural and urban areas also reveal clear differences in ECD levels. Table 1⁷ shows the differences in ECD between urban and rural areas in children aged 36-72 months in Chile, Colombia, Ecuador, Nicaragua, and Peru. ECD levels are consistently lower among children in rural areas.
- 2.9 **In LAC, socioeconomic gaps in ECD are seen primarily in the areas of cognitive and linguistic development.** Although there is less evidence surrounding motor and socioemotional development, these do not show the same differences (or the differences are less pronounced) when comparing the children of mothers with higher or lower education levels. This can be seen in Figure 4 for Colombia, and Figure 6 for Costa Rica, Nicaragua, Paraguay, and Peru.⁸ In the case of socioemotional development, this may be due in part to the greater difficulty of measuring the variable for this age group.⁹ Nonetheless, pronounced gaps do exist in socioemotional development based on the quality of the home environment; in other words, development is greater in children with access to play materials and activities than in children without such access. For example, Figure 6 shows differences in socioemotional development levels between children aged 24-59 months from lower- and higher-quality home environments in Costa Rica, Nicaragua, Paraguay, and Peru.
- 2.10 **As children grow, cognitive development gaps widen compared to expected levels for their age.** This pattern is particularly evident in lower-income countries and in rural areas¹⁰ and is consistent with reported trends at the international level (Grantham-McGregor et al. 2007). The observed pattern is different for motor development: children are at the expected levels for their age on average, and even slightly above them as they grow and throughout the first years of life.¹¹
- 2.11 **In some countries, gaps in ECD levels beginning in the first few years of life are also seen between indigenous and nonindigenous children.** Figure 7 compares ECD in indigenous and nonindigenous children in Nicaragua, Paraguay

⁶ Other studies have documented these gaps by mother's education and household income or wealth in the region and beyond (Fernald et al. 2011; Galasso, Weber, and Fernald 2017; Hamadani et al. 2014; Fernald et al. 2012; S. Reynolds et al. 2017; Rubio-Codina et al. 2015; Schady et al. 2015).

⁷ All tables referenced in this SFD can be found in Annex II.

⁸ Rubio-Codina et al. (2015) documents this for Colombia. Gaps in the risk of motor development delays have been documented for Bolivia by Celhay, Martinez, and Vidal (2018).

⁹ In Colombia, gaps in the risk of socioemotional development delays have been documented in the children of mothers with higher or lower education levels (Berniell et al. 2016).

¹⁰ Tables 2 and 3 show the decline in the average level of ECD in the cognitive domain (compared to a reference population) as age increases, in children under 42 months.

¹¹ Table 2 provides information on motor development in children under 42 months in Colombia.

(24-60 months), and Peru (1-54 months), where the data can be disaggregated for these groups. Gaps can be seen from the first year of life in Peru and from the second year in Paraguay; in Nicaragua, however, no gaps are observed. These gaps are due, in part, to lower levels of education and wealth among indigenous families.

- 2.12 **No significant ECD differences are seen between girls and boys.** Tables 4 and 5 disaggregate the ECD data provided above by sex. Girls appear to have a slight advantage in the cognitive and linguistic areas at a very early age, but this disappears quickly.¹²
- 2.13 **ECD levels predict future development and learning.** Longitudinal data from Bogota (Rubio-Codina et al. 2016) and Ecuador (Araujo, Rubio-Codina, and Schady 2019) show that vocabulary levels and the quality of the home environment (considered a protective factor for ECD) have a predictive power in relation to IQ and academic performance that is comparable to diagnostic testing and significantly higher than the predictive power of chronic malnutrition (frequently used as a proxy for ECD levels) (Grantham-McGregor et al. 2007). The predictive power of these variables persists even after considering other factors associated with ECD levels, such as the mother's education.^{13,14}

C. Services to promote childhood development

- 2.14 **This sector framework document (SFD) focuses on services aimed at strengthening early childhood development, targeting the population aged 0-5 years and their families.** These fall into two large groups. Firstly, center-based daycare services. This group includes daycare centers that offer childcare, feeding, and stimulation services outside the home to children aged 0-3 years who do not yet attend preschool. These services have traditionally been promoted with the dual objective of facilitating parents' employment and strengthening ECD. Purpose-built spaces exist in some countries, while in others the services operate out of community spaces or even family homes. The other type of service provided through centers is preschool, which offers education services and represents the first experience of group learning and socialization for most children in LAC. In some countries, these services are mandatory after a certain age. The second type of ECD services addressed in this SFD are programs that target families with a view to promoting investment in their children's human capital. This group encompasses programs to improve the child-rearing and stimulation practices of the child's parents and primary caregivers in the home (grandparents and other relatives and nonrelatives), as well as cash transfer

¹² Although the relevant tables are not included for reasons of space, these patterns are also observed in the other data analyzed in this document.

¹³ Precise measurement of early childhood development is complex. As a result, it should be noted that the predictive power of ECD is greater after 19 months of age. Even highly detailed and sophisticated diagnostic assessments have little predictive power when administered before this age (Rubio-Codina et al. 2016). After 19 months, predictive power increases for both diagnostic assessments and shorter, less detailed tests that measure a single aspect of ECD or factors associated with it.

¹⁴ The predictive power of ECD in relation to future learning has also been documented in high-income countries such as the United Kingdom and the United States (Bernal and Keane 2011).

programs that use income transfers and incentives or conditionalities to foster investment in children's human capital.

- 2.15 **The quality of ECD services is of great importance, and experts differentiate between two dimensions: structural quality and process quality.** Program structural quality refers to variables that are easy to measure and regulate, such as the educational level of the staff serving the children or families, their wages, safety aspects of the services, the characteristics of physical infrastructure, or the number of children or families for which each adult is responsible (known as the care ratio). Measuring process quality is more complex and costly, as it focuses on the frequency and quality of interactions between the children themselves, between children and the adults responsible for them, and between parents and educators, caregivers, or home visitors. To measure process quality, services need to be observed, and protocols applied that allow interactions to be assessed in a reliable manner (Lopez-Boo, Araujo, and Tomé 2016). Structural and process quality are interrelated. In environments with high care ratios, for example, it is less feasible to give frequent, individualized responses to children's verbalizations. Learning and stimulation activities are curtailed if age-appropriate pedagogical materials are unavailable. Other variables, such as staff salaries or specific staff training and skills related to working with children, are also correlated with process quality. (NICHD 2000a, 2000b; Pianta et al. 2017; Vandell and Wolfe 2000; Whitebook et al. 2001).

1. Center-based ECD services: daycare and preschool programs

- 2.16 **Access to daycare and preschool has expanded considerably in recent years.**¹⁵ The use of center-based services increases with age and is very high at five years of age, when preschool attendance is mandatory in some countries. Figure 8 illustrates the change in the percentage of children using daycare and preschool services in 11 countries from 2010 onward. Although demand for care services outside the home has historically been lower for the youngest children, a significant percentage of families in Brazil, Chile, Colombia, Ecuador, and Uruguay begin using these services during the first few years of the child's life.
- 2.17 **Urban and rural areas exhibit differences in access to center-based ECD services.** Figure 9 looks exclusively at enrolment at three and five years of age and compares levels in rural and urban areas. Enrolment in these services at three years of age is higher in urban than in rural areas in most of the countries studied. These differences in enrolment are substantially smaller by five years of age, suggesting that these gaps in access are wider at younger ages. Although there are public and private center-based ECD services, public providers account for a substantial proportion of overall offerings, as described in Figure 10. Publicly provided services are relatively higher for preschool (ages 4-5) than for daycare (ages 0-3).

¹⁵ This SFD defines daycare and preschool services as center-based ECD services. The term "daycare" (*jardin de cuidado infantil*) is used to refer to services for children aged 0-3 years, also known in the region as "estancias" [childcare centers], "cunas" and "nidos" [nurseries], or "centros de desarrollo infantil" [child development centers]. The term "preschool" is used to refer to services for children aged 3, 4, and 5 years, depending on the country, and represents the first level of formal education.

- 2.18 **The expansion of preschool coverage has helped to reduce many of the gaps in access experienced by 5-year-old children belonging to different ethnic groups in several LAC countries.** Table 6 compares the percentage of Afro-descendant and indigenous 5-year-olds or 5-year-olds identified as having both ethnicities that have completed at least one year of preschool. This data is available for nine LAC countries and in most cases is drawn from the census. Access to ECD services for children under five years of age cannot be disaggregated according to ethnicity due to a lack of information. There are gaps in preschool access among indigenous and nonindigenous 5-year-olds, and between Afro-descendant 5-year-olds and the rest, and these gaps are modest.
- 2.19 **The use of center-based ECD services varies considerably by family socioeconomic status.** Figure 11 illustrates trends in the access of the poorest of the poor to center-based ECD services. The bars in the figure show the difference in the use of these services between the highest and lowest income quintiles. In most cases, access among households belonging to the wealthiest quintile is 20 percentage points higher than for those in the poorest quintile. In Brazil and Mexico, there are two different trends in services for children aged 0-3 years and 4-5 years. Whereas the gap in access between wealthy and poor families has grown in the first category, it has narrowed in the second. The gap has also narrowed for children aged 4-5 years in Chile, Honduras, and Peru, and for the full age range in Colombia and Uruguay. Similar patterns are seen when comparing trends in access to these services based on the mother's education level (Figure 12). In conclusion, although there have been significant increases in access to center-based ECD services, levels have remained lower among the children of poorer households.
- 2.20 **Center-based ECD services for which information on aspects of structural and process quality has been systematically documented reflect very mixed performance with significant room for improvement.** A compilation of structural quality parameters for center-based ECD programs in six LAC countries (Table 7) shows great variability in all of the dimensions analyzed: coverage, staff years of schooling and wages, care ratios, and cost per child served.¹⁶ Few studies have assessed structural and process quality in services in LAC. Available data for the region (Tables 8 and 9) show that quality is generally medium or low with significant room for improvement. The lowest quality levels are seen in the area of support for learning motivation (or pedagogical support), which is the variable most strongly associated with children's performance once they enter the formal education system. In all of these areas, the quality levels observed in LAC are consistently lower than those seen in similar research for Organization for Economic Cooperation and Development (OECD) countries and China (OECD 2018), which have used the same measurement tools.
- 2.21 **There is great potential for growth in women's labor participation in LAC, so there is an opportunity to expand the supply of center-based ECD services.** Women's labor participation, which is addressed in the Labor SFD (document GN-2741-7), increased rapidly from 1990 to 2010, but the rate of growth has slowed since then (Busso and Fonseca 2015). The gap between men's and

¹⁶ This is also observed for a larger sample of countries in Araujo, Lopez-Boo, and Puyana (2013).

women's labor participation is high in LAC, surpassed only by the Middle East, North Africa, and South Asia regions (Marchionni 2018). However, the gap varies considerably from country to country between 16 and 55 percentage points (with Uruguay and Guatemala, respectively, at the extremes). Table 10 reports labor participation rates for men and women in 17 LAC countries, comparing three groups: (i) individuals in households without children under 18 years of age; (ii) individuals in households where the youngest child is 0-5 years of age; and (iii) individuals in households where the youngest child is 6-18 years of age. In all countries, labor participation rates among women belonging to households where the youngest child is 0-5 years of age is lower than the rates for women in households without children or with older children. Among men, there is no correlation between labor participation and the presence of young children. The expansion of center-based ECD services could therefore facilitate women's integration into the workforce.

2. Programs targeting families to promote investment in human capital

- 2.22 **The home is where children live for most of their first five years, yet this environment does not always offer all of the stimulation and learning opportunities required for healthy development (resources, time, quality interactions).** This is most frequently the case in poor households exposed to conditions of risk, stress, or violence, or in which the parents have low education levels. In LAC, the immediate and extended families and the community all participate in caring for the smallest children. As a result, family-centered programs have commonly been implemented in close coordination with the community.
- 2.23 **In the home, women are responsible for a larger share of childcare responsibilities and interaction with children aged 0-5 years.** As illustrated in Figure 13, between 20% and 40% of children aged 0-5 years in LAC are growing up in single-parent households, primarily headed by women. Data from 17 LAC countries on the proportion of time spent on unremunerated household chores and care show an unequal distribution of this work between men and women.¹⁷ In all countries, the proportion of time that women report spending on these tasks is twice as high as reported by men (or more), and up to four times higher in countries such as Brazil, Ecuador, and Honduras. Responsibility for direct interaction with children aged 0-5 years falls disproportionately on the children's mothers. Figure 14 shows how much more frequently children engage in play activities with their mothers than with their fathers. For all activities studied—reading, telling stories, singing, taking walks, playing, and naming objects—mothers engage in twice as many (or more) activities with their children as their fathers. Although the frequency of interaction with children increases with the mother's and father's education levels, this increase does not appear to be any higher in relative terms for more educated fathers than for more educated mothers (Figure 15).

¹⁷ Information compiled by the Economic Commission for Latin America and the Caribbean (ECLAC 2018).

2.24 **One public policy that allows parents to spend time caring for and raising their children in the first few months of life is parental leave.**¹⁸ The first months of life are a period when the time of the father and mother is more difficult to replace and is essential for the welfare and development of children. Maternity, paternity, and parental leave provisions vary widely in LAC, as shown in Table 11. In the region only formal sector workers—who are not the majority¹⁹—are entitled to this type of leave. The impact that changes in the length of leaves may have on labor markets and their characteristics is an example of how this SFD is coordinated with the Labor SFD (document GN-2741-7).

2.25 **The documented socioeconomic gaps in ECD are also present in the quality of LAC children's home environment from their earliest years.** The quality of the home environment is quantified using variables such as access to play materials and children's books, the frequency with which children and the adults around them participate together in play activities, and the prevalence of violent disciplinary practices. Figures 16, 17, and 18 illustrate the following: (i) the availability of books; (ii) the frequency with which children aged 0-5 years engage in activities such as reading, telling stories, singing, taking walks, playing, and naming objects with their mothers; and (iii) the prevalence of violent disciplinary practices. The focus in all cases is on children under five years of age, and the variables are compared by wealth quintile and the mother's education. Children in less wealthy households, or whose mothers have lower education levels, consistently experience less stimulating surroundings with fewer activities, fewer children's books, and more disciplinary practices that are violent and poor for their development.

a. Cash transfer programs

2.26 **In LAC, families with children aged 0-5 years are overrepresented among the poorest of the poor.** Figure 19 illustrates the distribution of under-fives by household income quintile for 10 countries of the region. The percentage of families with children aged 0-5 years is two to three times higher in the lowest income quintile than in the highest one. This difference is particularly marked in Brazil and Uruguay.

2.27 **Cash transfer programs (CTPs) have the most extensive coverage of poor families in LAC; they promote investment in the human capital of children by providing incentives for the use of health and education services and represent an important tool for combating child poverty.** Transfer payments under some CTPs in LAC are contingent on meeting certain requirements that are monitored on a regular basis. Others establish coresponsibilities but do not verify them. Table 12 summarizes the conditions established in CTPs for families with children under five years of age in LAC. These focus mainly on maternal and child nutrition and attendance at health checkups. Given that CTPs transfer resources to

¹⁸ Mothers and fathers are entitled to maternity leave and paternity leave, respectively. In contrast, parental leave allows a couple to decide which parent will make use of it.

¹⁹ According IDB data, informal employment accounts for 58.3% of total employment (circa 2017; Labor Markets and Social Security Information System (SIMS), retrieved March 2019, <https://www.iadb.org/en/sector/social-investment/sims/home>).

the poorest households, it might be expected that they would help to eliminate socioeconomic gaps in development. However, the observed correlation between higher incomes and improved ECD cannot be interpreted as a causal relationship. It may be that parents in poorer families have lower education levels, and that this is the main mechanism that fosters ECD. If this is the case, income transfers would not improve ECD.

- 2.28 **CTP coverage of families with children aged 0-5 years has remained relatively stable over the last decade in most LAC countries.** Figure 20 shows trends in the percentage of children belonging to households that benefit from CTPs in 10 of the region's countries over the last decade, based on the age of the child. With the exception of Colombia, Uruguay, and Ecuador, which have seen declines in overall coverage for these types of programs (due to a drop in poverty levels in the case of Uruguay and alterations in poverty scores and eligibility criteria in the cases of Colombia and Ecuador), coverage rates in the other countries remained constant or even increased. For the most recent year, the proportion of households with children aged 0-5 years receiving cash transfers was between 10% and 20% in Chile, Ecuador, Honduras, Mexico, and Peru and between 40% and 60% in Brazil, Colombia, Jamaica, Suriname, and Uruguay. In addition to CTPs, other LAC countries such as Barbados and The Bahamas have child-based subsidies or tax exemptions.²⁰

b. Family support programs

- 2.29 **Family support programs (FSPs) aim to improve families' child-rearing practices and increase the frequency and quality of stimulation and interaction that children receive in their homes.**²¹ These interventions seek to alter the behavior of parents and caregivers,²² focusing on play and psychosocial stimulation while also frequently addressing issues such as discipline, safety, hygiene, and feeding. FSPs promote attachment through play and improved interaction in the home.²³ The programs have traditionally been implemented through individual home visits (Grantham-McGregor et al. 1991; Attanasio et al. 2014; Araujo et al. 2019), although an increasing number are being implemented using group sessions (Peairson et al. 2008; Singla, Kumbakumba, and Aboud 2015; Fernald et al. 2017) or a combination of visits and groups (Yousafzai and Aboud 2014; Hamadani et al. 2006; Eickmann et al. 2003). These interventions typically operate in vulnerable rural areas that are scattered and remote (where building centers is therefore less efficient) and serve pregnant women and families

²⁰ Online research, February 2019. For Barbados: <https://bra.gov.bb/About/Tax-Types/Income-Tax/Individuals.aspx>; for The Bahamas, <https://goo.gl/xnoVRv> and <http://nib-bahamas.com/Benefits>.

²¹ There are family support services aimed—additionally or exclusively—at promoting improvements in care, health, and nutrition practices (e.g., breast-feeding and nutritional supplements). Home visits under Chile Crece Contigo [Chile Grows With You] (Torres et al. 2018) and the Amor para los Más Chiquitos [Love For The Littlest Ones] program in Nicaragua are examples of this type of strategy in the region.

²² These programs have focused their work on mothers as the principal caregivers in the home. However, it is acknowledged that care arrangements in the region are diverse, and for many children the primary caregiver may be another family member (such as their grandparents) or non-family members.

²³ The approach used in FSPs is consistent with the Nurturing Care for Early Childhood Development framework promoted by the World Health Organization (WHO), UNICEF, and the World Bank (WHO, UNICEF, and World Bank Group 2018).

with children aged 0-3 years. In middle- and low-income countries, paraprofessional staff or community members are responsible for implementing these types of programs, whereas in high-income countries they are implemented by nurses or social workers. To support their scalability, implementation has sometimes been linked to the operation of other social services (Attanasio et al. 2014; Fernald et al. 2017) or health services (Powell et al. 2004; Nahar et al. 2012; Yousafzai and Aboud 2014; Chang et al. 2015). There is little population data on FSP coverage and targeting. The main FSPs operating at scale in LAC are diverse in terms of the frequency of meetings and the approaches. Table 13 describes the general features of these programs. In addition to addressing ECD-related issues, some FSPs provide food and offer health and nutrition counseling.

D. Crosscutting themes

1. ECD services that take diversity into account

- 2.30 **Strengthening approaches that take LAC's diversity into account will require adjustments the design and implementation of ECD services.** LAC possesses immense cultural, natural, and ethnic diversity. The continent has an indigenous population of between 40 million and 50 million with more than 400 culturally and linguistically distinct peoples. In countries such as Brazil, Ecuador, and Peru, between 30% and 40% of heads of household self-identify as Afro-descendants.²⁴ In ECD services, there is still a need to recognize this diversity, taken in a broad sense to include the children of migrant families, and to strengthen children's development with identity from the first years of life. Among other things, this requires relevant materials and content, as well as close collaboration with families and communities.
- 2.31 **ECD services that take diversity into account also facilitate the participation of children with disabilities and their families, offering support to providers that allows these children to develop their potential on an equal footing with the rest.** For accessibility, physical and structural barriers need to be eliminated. This includes offering a variety of learning practices and formats. It also requires adjustments to physical spaces, routines, and activities so that these meet the children's needs. In addition to access and participation, ECD services that take an inclusive approach should ensure that families, providers, and professional staff have the support, knowledge, skills, and resources needed to implement best practices. This may include specialized therapies and services (NAEYC and DEC 2009).
- 2.32 **Through their coordination with the health and education sectors, ECD programs serve as a bridge to facilitate the screening, early detection, and timely treatment of developmental delays.** Worldwide, it is estimated that more than 2% of children under six years of age may suffer from disorders that affect their development, so early detection and intervention programs are needed (WHO 2015).²⁵ If left untreated, such cases may lead to disability (Huete 2018). ECD programs in LAC do not currently have the tools or capabilities for timely identification and referral of children at risk, nor are health services well-equipped

²⁴ IDB data retrieved from <https://www.iadb.org/es/gender-and-diversity/genero-y-diversidad>.

²⁵ No similar statistics are available for LAC.

to assess and treat them. An inclusive approach to ECD requires changes on both fronts. Data on the frequency of neonatal screening in the LAC health sector reveal great variations from country to country, not only in terms of the percentage of children covered (99% in Chile and Uruguay, 20% in Bolivia and Peru, and 1% in Guatemala and the Dominican Republic), but also in the health conditions that are screened for (Bradford et al. 2015; Borrajo 2007).

- 2.33 **The task of quantifying the prevalence of disability in LAC is not free from methodological difficulty.** Surveys and registries use different definitions of disability, and there is little ability to value and recognize disability (Aranco et al. 2018). International best practices indicate that in order to measure the disabled population, the intensity of the functional difficulties that people experience in six areas should be ascertained: sight, hearing, mobility, cognition, self-care, and communication (UNICEF 2017). Based on data from 23 countries of the region, the prevalence of disability among children under 4 years of age in LAC is estimated at 0.2% to 8.8%, with considerable variation between countries (ECLAC and UNICEF 2013). Among children under 14 years of age, 12.4% are estimated to have a disability in LAC, compared to a range of 5% to 10% worldwide (ECLAC and UNICEF 2013). The most frequent causes are cognitive and visual. The prevalence of disability increases with age, as it is more commonly the result of accidents or exposure to risks or diseases rather than congenital factors, thus underlining the importance of prevention (Huete 2018). Even so, the prevalence of disability in the first few years of life is likely underestimated, either because detection is complex or because parents do not understand the benchmarks their children should be meeting for their age or have not accepted the reality of a disability. Experts do not consider surveys to be an appropriate means of measuring disability before two years of age (UNICEF 2017). In general, the prevalence of disability is higher among boys than among girls due to a greater frequency of learning, language, and behavioral difficulties. Higher rates have also been documented among Afro-descendant children than children of other ethnic groups, including indigenous groups (ECLAC and UNICEF 2013; Pardo and Llorente 2018). In LAC, the family is the main care and support network for children with disabilities, and—as with other tasks—women are more frequently the ones who assume these responsibilities (Huete 2011).

2. Child protection services

- 2.34 **Child protection services focus on caring for children who have been victims of abuse, abandonment, or neglect, or who lack a family environment capable of ensuring their protection.** The care provided through these services includes children who are wards of the state: orphans, children whose parents are incarcerated, or child victims of domestic violence who have been separated from their family. The data regarding the frequency of use of these services in LAC is scant, and there is a recognition that existing figures are approximations (Berens and Nelson 2015). A recent study compiled the available data for 142 countries with a view to estimating how many minors (aged 0-17 years) live in institutions or foster care (Petrowski, Cappa, and Gross 2017). The study does not provide disaggregated data that would allow the problem to be quantified for the 0-5 age group. According to these calculations, approximately 189,000 children in LAC are institutionalized, i.e., living in residential centers of varying size with adults hired to supervise and care for them in continuous shifts. This figure represents

approximately 97 children per 100,000. This proportion is lower than in other regions: for example, it is estimated that 192 children per 100,000 are institutionalized in the industrialized nations, and 153 per 100,000 in East Asia and the Pacific. According to the authors, these differences are partly attributable to historical and cultural legacies that have led to different norms concerning the role of the State, the extended family, and the community in caring for children. With respect to children in foster care—a less common modality in the region—the study acknowledges that insufficient data are available in LAC. Foster care offers care in a family environment in the absence of any family relationship with the child. Families participating in foster care services are selected, trained, and supervised and often receive cash transfers to cover living expenses for the child. There are government and nongovernmental foster care programs of varying scale in several LAC countries (Argentina, Colombia, Chile, Guatemala, El Salvador, Paraguay, Peru, and the Dominican Republic) but there is no information regarding their scale or coverage (Palummo 2012).

3. Institutional structure

- 2.35 **The cross-sectoral nature of ECD means that actions need to be coordinated across different sectors, as well as between levels of government when service delivery is decentralized.** From a political economy perspective, this aspect of ECD differentiates it from other areas in the social sector, e.g., health or education, where ministries are the main agents for sector policy, budgeting, service delivery, planning, and accountability. As a result, the political economy of ECD is more complex, since coordination is required between the actions of different sectors and/or levels of government. Adding to this is another challenge, related to the timescales involved. Closely tied to the lack of population indicators for assessing gains in ECD, many investments in this area yield returns over the long term. For example, the benefits of preschool attendance are evident from assessments of learning at the primary level. The political cycle frequently has a short-term horizon. Thus, a second political economy challenge faced in the area of ECD is the misalignment between the time horizons of government administrations and the length of time to see returns on investment in the early years of life. This can affect the prioritization of budgetary funding for ECD.
- 2.36 **Acknowledging that ECD requires the actions of the programs and services of different ministries, levels of government, and nongovernmental providers to be well-timed and synchronized, an institutional structure needs to be established to guide coordination among them.** Table 14 summarizes the features of institutional structures for ECD in a number of LAC countries. This institutional structure may include aspects of governance, financing decisions, stewardship and quality assurance systems, issues of pedagogy and transition between programs, and other functions. Over the last decade, several LAC countries have taken significant steps to create institutional structures responsible for ECD policies (Yoshikawa et al. 2018; Britto et al. 2014). In some cases, the plan is to create a coordination mechanism (in Colombia, a Commission), while in others that role is delegated to an entity (in Chile, to the Ministry of Social Development). In other cases, there is a government program or policy in the area of child development and welfare that implicitly fulfills this role (as in Brazil and Uruguay). The scope and nature of the coordinating entity's functions also vary, ranging from more general (such as policy formulation and the management of

agreements between sectors and levels of government) to more specific (such as service delivery and quality management). The sector composition of the coordinating bodies also varies from country to country: some focus on sectors directly related to ECD services (such as health, social development, or education in Argentina, Chile, Ecuador, Jamaica, and Uruguay), whereas others include a broad group of sectors (such as finance, planning, or international relations in Colombia, Mexico, and Panama). The involvement of the agencies responsible for allocating fiscal resources, such as planning and finance, is important. With regard to management of the coordination itself, Chile has probably made most progress in creating and using information technology to establish a registry for monitoring each child, triggering actions in the different sectors. For the concept of comprehensive ECD to be translated from theory into practice, interoperable registries with real-time information that can trigger immediate actions from sector offerings will be essential.

- 2.37 **Private sector organizations, both for-profit and not-for-profit, have played an important role in ECD service delivery.** Countries such as Colombia, Mexico, and Ecuador, for example, have achieved a significant expansion in coverage of their center-based services by means of contracts with outside parties that provide services following technical guidelines set by the contracting public entity. There are also ECD services in LAC that are privately delivered and financed through direct payments by the families using them.
- 2.38 **ECD services are human resource intensive, and their quality depends mainly on the people providing them. For this reason, the training, motivation, retention, and care of providers are at the heart of the discussion surrounding quality, and there is much room for improvement in this respect.** It is internationally recognized that the working conditions²⁶ of ECD providers are not the best. In LAC, it has been documented that even within a single sector such as education, preschool teachers have lower requirements for qualifications and are paid less than teachers at the primary level (Berlinski and Schady 2015). A number of recent studies offer more detailed diagnostic assessment of the human resources challenges for ECD services (Bonetti 2018, 2019; Guerrero, Josephson, and Coddington 2017; ILO 2014; OECD 2018; Roby 2016). These include lower wages than other employees with similar qualifications and experience, long days and heavy workloads, frequent transfers, very short contract terms, and lack of recognition.
- 2.39 **Little data is available on the ECD workforce in LAC, and there is recognition that working conditions span a wide range from formal to precarious.** The ECD workforce includes both preschool teachers and caregivers working on a voluntary basis in daycares operating out of community spaces or their own homes. Like the rest of the world, in LAC the majority of the ECD workforce are women, and engaging more men in this area of work remains a challenge. Using employment surveys, we were able to compile data on the ECD workforce in three LAC countries. These data are laid out in Table 15. In these countries—Brazil, Ecuador, and Mexico—more than 95% of ECD service providers are women. Their

²⁶ We define working conditions as everything related to the ability to perform effectively in the workplace, motivation, and the type of activities performed.

average age is around 35. Those working in the education sector have better working conditions than other groups of ECD providers. For example, early childhood teachers have between 15 and 16 years of education on average and earn between 1.8 and 3.5 times the minimum wage. Teacher's aides have between 11 and 13 years of education and earn between 1.5 and 2.4 times the minimum wage. Caregivers,²⁷ on the other hand, fare worse on the spectrum of employment quality.

- 2.40 **The work of caregivers is performed in a variety of environments (homes, centers), in the formal and informal economies, and may be paid or unpaid.** International studies reveal that care workers are low-paid and work under worse conditions than other workers (Razavi and Staab 2010). Caregivers' working conditions have repercussions for the quality of care of those receiving it. Improving the quality of ECD services therefore requires caring for the caregivers (ILO 2014). Caregivers have between 9 and 10 years of education on average. Their wages are also lower, representing between 0.8 and 1.0 times the minimum wage. ECD services personnel work under even more precarious conditions in terms of employment quality in countries where they operate on a voluntary basis. This means that they have no formal employment relationship. As a result of these working conditions, there is frequent turnover among ECD services personnel, and programs continually lose the investment made in their training. In Peru—one of the few countries that have quantified this problem—turnover among the staff of the national Cuna Más program was found to be around 50% (Guerrero, Josephson, and Coddington 2017). Working conditions for ECD services personnel and the resulting high levels of turnover are structural obstacles to strengthening quality.

4. Measuring ECD and service quality

- 2.41 **National surveys in LAC have failed to institutionalize population measures of ECD and the generation of regular statistics covering service access and quality.** Without indicators that are comparable across countries and within groups in a single country, it is very difficult to assess gains in ECD policy or institute sufficiently evidence-based reforms. Table 16 summarizes a number of pioneering initiatives in the region concerning national surveys that have included measurements of ECD. Sustainable Development Goal 4.2 includes two ECD-related indicators: (i) the percentage of children receiving at least one year of a quality preprimary education program; and (ii) the level of ECD. If trends in these indicators are to be monitored, measurement of ECD and service access needs to be incorporated into national surveys, and systematic information needs to be produced regarding the quality of programs offered. National surveys in LAC have begun to include some of these indicators more systematically (e.g., in the most recent national health and nutrition surveys in Mexico and Ecuador), and several countries have strengthened the monitoring systems associated with their ECD services, given the security and confidentiality considerations associated with

²⁷ Given the way occupational categories are defined in the surveys, this group encompasses daycare workers and those providing direct childcare services to families (nannies, etc.). Those caring for the elderly and disabled could not be separated out from the group.

this type of information. Table 17 summarizes a number of initiatives in countries that have introduced information systems for their ECD services.

- 2.42 **In summary, children born into disadvantaged households in LAC show development gaps from a very early age that will affect their learning, productivity, and well-being in adulthood.** Programs promoting ECD in the region have limited coverage, do not always target the poorest groups, and, above all, exhibit significant deficiencies in quality. Poor-quality ECD programs do not only fail to benefit children but can actually harm them. LAC therefore urgently needs to refocus its investments in ECD on improving quality, with greater emphasis on the quality of adult-child interaction as the most important factor for promoting early childhood development.

III. EVIDENCE ON THE EFFECTIVENESS OF ECD POLICIES AND PROGRAMS

- 3.1 **In recent years, as neuroscience has advanced our understanding of the importance of early childhood for human capital development, the evidence has grown on effective policy interventions for promoting early childhood development (ECD).** Policy interventions can influence different variables that are mediating factors for ECD, including the quality of the home environment, parental education, child nutritional status, and child daycare or preschool attendance. A recent comparison of the contribution of each of these elements highlights the importance of the quality of the home environment throughout childhood in promoting ECD, as compared to other variables (Rubio-Codina and Grantham-McGregor 2019). This section reviews the literature concerning the impact of ECD services. Firstly, it focuses on center-based childcare services. Secondly, it reviews services that target families. Thirdly, it examines crosscutting themes in ECD policy. Lastly, in a fourth section, it discusses the main knowledge gaps in the field.

A. Center-based care

1. The impact of daycare on early childhood development

- 3.2 **Literature from the developed countries suggests that daycare offers sustained benefits for ECD where users are children belonging to disadvantaged households and where the quality of the centers is high** (Duncan and Magnuson 2013; Almond, Currie, and Duque 2018; Elango et al. 2016). This evidence stems mainly from small-scale pilot programs with vulnerable target populations, and from high-quality interventions such as the Perry Preschool Program and the Abecedarian Project in the United States.²⁸ These two programs even had long-term positive impacts on health lasting into adulthood (Conti, Heckman, and Pinto 2015).
- 3.3 **The evidence from small-scale pilot programs contrasts with the impact of daycare programs implemented at scale, which is mixed.** The Head Start program in the United States (Carneiro and Ginja 2014; Kline and Walters 2016) and a German government program (Felfe and Lalive 2018) have shown positive

²⁸ The programs have been subject to extensive evaluation (Heckman, Pinto, and Savelyev 2013; Heckman et al. 2010; Schweinhart, Barnes, and Weikart 1993; Schweinhart et al. 2005).

outcomes. However, other studies of daycare programs operating at scale have showed no impact—or even a negative impact—on cognitive and language development and mathematics learning (Carta and Rizzica 2018). Evaluations in the United States have found a negative impact on cognitive development and increased behavioral difficulties (Herbst and Tekin 2010). Results from Canada have shown greater anxiety and aggression, as well as negative impacts on motor skills and health (Baker, Gruber, and Milligan 2008, 2015; Kottelenberg and Lehrer 2017); negative effects on socioemotional development have also been found in Denmark (Datta, Gupta and Simonsen 2010).

- 3.4 **The evidence on daycare programs implemented at scale points to the difficulty of offering a quality environment for the youngest children in the context of low care ratios at an age when individualized attention in learning and care routines is required.** At the same time, these results indicate the importance of the quality of the care alternatives that the child would have had access to had they not attended daycare (also known as the counterfactual, which might be care from parents, family members, neighbors or, occasionally, other minors). It is likely that negative impacts are more frequent where service beneficiaries could have received higher-quality counterfactual care, such as the care that nonpoor families are able to offer.
- 3.5 **In LAC, there have been studies in recent years of the impact of daycare programs (most of which are implemented at scale) on ECD, also with mixed results.** In Bolivia and Colombia, it was found that daycare attendance had a positive impact on cognitive and social emotional development but not on nutritional status (Behrman, Cheng, and Todd 2004; Bernal and Fernández 2013). In contrast, negative effects on ECD were found in Chile and Ecuador (Noboa-Hidalgo and Urzúa 2012; Rosero and Oosterbeek 2011).²⁹ In Nicaragua, it was found that the impact of daycare attendance on language and socioemotional development is positive but of modest magnitude (Hojman and Lopez-Boo 2018). Another study in Colombia found that eight months of attendance at a high-quality service yielded impacts on language and cognitive development that were higher for girls than for boys (Nores, Bernal, and Barnett 2018). Positive effects were also found in Colombia on the nutritional status of children aged 2-6 years (Attanasio, Maro, and Vera-Hernández 2013). A further study, also from Colombia, found that an expansion of access to daycare using an integrated approach for children under 5 years of age had short- and medium-term effects on language development, and also (albeit less robustly) on nutritional status (Bernal and Ramirez 2019).

2. The impact of preschool services on ECD

- 3.6 **In the case of preschool programs for older children, the available evidence is more conclusive regarding the positive impact of attendance on cognitive and socioemotional development.** Studies in the United States show that, after attending a quality preschool for even just one year, children had greater cognitive and social emotional skills and were better prepared to begin primary school (Schweinhart and Weikart 1989; Hustedt et al. 2007; Manship et al. 2017;

²⁹ The study conducted in Chile focuses on socioemotional development and adult-child interactions, whereas the Ecuadorean study focuses on memory and language skills, also reporting a negative impact on the nutritional status of the children.

Peisner-Feinberg et al. 2014; Frede et al. 2007; Hustedt et al. 2010; Peisner-Feinberg and Schaaf 2011; Gormley, Phillips, and Gayer 2008; Wong et al. 2008). Preschool access also had positive medium- and long-term effects on academic progress and achievement during childhood and adolescence, as well as on productivity in adulthood. Students that attended preschool showed higher rates of school retention and better academic performance over the course of primary and secondary school (Schweinhart and Weikart 1989; Jung et al. 2013; Cascio and Schanzenbach 2013; Barnett et al. 2013; Dodge et al. 2017). In LAC, the expansion of preschool offerings has also had a positive impact on students' educational attainment (Berlinski, Galiani, and Gertler 2009), academic progress (Bastos, Bottan, and Cristia 2016), and cumulative years of schooling (Berlinski, Galiani, and Manacorda 2008), as well as on the likelihood of attaining a higher level of education, finding employment, and having a higher income (Schweinhart et al. 2005; A. Reynolds, Ou, and Temple 2018; Rossin-Slater and Wüst 2016).

- 3.7 **Preschool attendance also has a greater impact on children from more disadvantaged households and generates long-term social benefits.** Several studies highlight the mixed impact of preschool programs, with greater benefits for children belonging to disadvantaged households (Bitler, Hoynes and Domina 2014; Deming 2009; Kline and Walters 2016; Havnes and Mogstad 2015; Cornelissen et al. 2018). Preschool access has demonstrated other social benefits, such as a reduction in disciplinary problems in schools, a drop in crime rates, greater participation in civic duties (Figlio and Roth 2009; Garces, Thomas, and Currie 2002; Schweinhart et al. 2005), and increased life expectancy (Rossin-Slater and Wüst 2016).

3. The importance of quality

- 3.8 **The quality of daycare and preschool programs is key, if these programs are to have a positive impact.** In the United States, a number of studies that found that preschool services implemented at scale had short-term effects on learning also found that these dissipated in the medium term, over the course of primary school (Lipsey, Farran, and Durkin 2018; Deming 2009; Bitler, Hoynes, and Domina 2014). A possible explanation for these mixed results may be found in the low quality of the programs (Meloy, Gardner, and Darling-Hammond 2019; Cascio and Schanzenbach 2013; Barnett et al. 2017). At the same time, it is possible that the dissipation of the short-term effect of programs such as these is a natural process not necessarily associated with quality. In developing countries, low-quality services have not led to improvements in ECD, and have even had negative impacts on cognitive development, as demonstrated in Cambodia (Bouguen et al. 2018), Colombia (Bernal et al. 2019), and Ecuador (Rosero and Oosterbeek 2011).
- 3.9 **Process quality in daycare and preschool programs is more important than structural quality in terms of achieving positive impacts on children.** The quality of adult-child interaction is key for promoting ECD (Mashburn et al. 2008; Burchinal et al. 2008; Leyva et al. 2015; Araujo et al. 2016).³⁰ In the United States,

³⁰ It should be noted that structural quality variables such as the care ratio and group size are important for achieving good process quality (Pessanha et al. 2017).

it has been demonstrated that specific aspects of process quality bear greater relation to certain areas of development. For example, emotional support is associated with greater social skills and fewer behavioral difficulties, whereas pedagogical support is correlated with academic and language outcomes (Mashburn et al. 2008; Burchinal et al. 2008). In LAC, higher-quality adult-child interaction is correlated with improved language, executive function, and mathematics outcomes (Bassi, Meghir, and Reynoso 2016; Araujo et al. 2016; Leyva et al. 2015; Araujo, Dormal, and Schady 2017). It has also been documented in LAC that, in the absence of sufficient attention to process quality, costly investments in infrastructure and equipment for ECD services do not translate into improved ECD outcomes (Bernal and Fernández 2013; Bernal et al. 2019). In summary, although structural quality is a necessary condition for child welfare and safety, it does not guarantee that services will have an impact on ECD.

- 3.10 **Some programs aim to improve process quality by disseminating classroom good practices and providing support to teachers.** In the United States, a number of interventions have been evaluated that offer support and mentoring to preschool teachers. Several of these were successful in improving the quality of adult-child interaction (Brown et al. 2010; Bierman et al. 2008; Pianta et al. 2012; Raver et al. 2008). In some cases, they translated into improvements in socioemotional development, language, and early literacy (Bierman et al. 2008). In other cases, improved outcomes have only been observed for some subgroups of children (Downer et al. 2011)³¹ or in certain domains of ECD (Pianta et al. 2017). Programs implemented in Peru and Chile incorporated classroom-based support for preschool teachers, with positive effects on adult-child interactions (Leyva et al. 2015; Yoshikawa et al. 2015) and teachers' use of time (Alfonso and Zoido 2018). In Peru, a correlation was found with improved language outcomes in kindergarten and with test performance in the second grade of primary school (Alfonso and Zoido 2018). In Colombia, evaluations of interventions to train and support caregivers also suggest positive outcomes for children's well-being and development (Bernal 2015; Andrew et al. 2019).
- 3.11 **Some of the pedagogical models that have proven most effective at the preschool level promote social interaction with other children and adults** (Vygotskiĭ and Cole 1978). Learning through Inquiry and Problem Solving (IPS) allows children to learn through collaborative problem solving (Hmelo-Silver, Duncan, and Chinn 2007). Experimental evaluations in Paraguay and Peru revealed that learning in mathematics improved among preschool students when their teachers were trained in IPS (Bando, Näslund-Hadley, and Gertler 2018; Gallego, Näslund-Hadley, and Alfonso 2018). In Paraguay, IPS also fostered the development of scientific and language skills (IPA 2018). Although IPS is student-centered, teachers play a central role as they facilitate the learning process and provide explicit instruction with explanations and modeling (Hmelo-Silver 2004; Edelson 2001). This can be difficult to achieve in contexts involving community and paraprofessional staff. The American Academy of Pediatrics (Chassiakos et al. 2016) does not recommend exposure to audiovisual

³¹ The evaluation of a professional development program for preschool teachers found a positive effect on children's language and reading, but only in classrooms where English was the main language spoken by teachers and students (Downer et al. 2011).

media before two years of age, concluding that there is no evidence that it supports learning. More evidence has been found on how, after three years of age, certain videos and educational material, delivered through technological devices, promote learning. Both the design and content of the material, as well as the mediating role of the adult in the use of technology, are critical elements for it to promote learning.

- 3.12 **An aspect of ECD service quality that has received less attention in the region is transition.** This involves thinking about the continuity of care received by children and about the consistency of pedagogical approaches among daycare, preschool, and primary education. During the transition, some services are occasionally interrupted. In Colombia, for example, children receive less nutritional support when they move from daycare to preschool. Changes in quality standards between different early childhood programs can have a negative impact on children (Bernal et al. 2019). The preschool day is also shorter than that of daycare, which can encourage parents to delay preschool entry (Berlinski and Schady 2015). To ensure continuity in child development, standards for services and results should remain consistent across the different programs. For example, Trinidad and Tobago has implemented a guide that promotes smooth transitions between programs, although the impact has not been evaluated (Berlinski and Schady 2015).
- 3.13 **Understanding the benefits and costs of ECD programs is crucial for determining which programs generate a greater impact for each dollar invested.** A comparison of benefit-cost ratios for family support programs (FSPs), daycares, and preschools shows that preschools have the highest ratios, with benefits equivalent to between 3.4 and 5.1 times the cost of investment (Berlinski and Schady 2015). FSPs show benefit-cost ratios that are close to those of preschool (between 2.6 and 3.6), whereas those of daycare are lower (between 1.1 and 1.5). Calculations of the costs of inaction (defined as the loss in ECD resulting from a failure to expand daycare and preschool coverage as a percentage of GDP) suggests that these range from 0.3% in Chile to 4.1% of GDP in Nicaragua. The costs of inaction rise in countries with a low supply of preschool services, such as Guatemala and Nicaragua, where only 35% and 40% of children attend preschool, respectively (Richter et al. 2017).

4. Impact of center-based services on household decisions and income

- 3.14 **Childcare decisions have implications not only for children's welfare, but also for households' use of time, labor participation, and incomes.** Given that childcare tasks in the home fall primarily on mothers, access to center-based care services can affect their educational, fertility, and labor participation decisions (Blau and Winkler 2017; UNFPA 2017). These decisions have economic consequences for the household and for society. In Europe and the United States, it has been documented that the birth of a first child marks the beginning of a gap in labor income between men and women that persists over time (Kleven, Landais, and Sogaard). Public policies—particularly some of those that affect ECD, such as access to center-based care—can improve this aspect of household welfare (Olivetti and Petrongolo 2017). The impact of maternity leave and (more recently)

paternity leave (Farré and González 2019) on ECD and employment has been studied in high-income countries with predominantly formal labor markets.³² In Norway, it was found that an increase in maternity leave increased the amount of time dedicated to child-rearing and had positive long-term effects on children's education and incomes (Carneiro, Løken, and Salvanes 2015). Other studies concluded that the impact of maternity leave on ECD is high in the first few months, but that the additional contribution of leave in excess of six months is less clear (Almond, Currie, and Duque 2018). At the same time, changes in the duration of leave have mixed effects on employment and income (Olivetti and Petrongolo 2017; Carneiro, Løken, and Salvanes 2015) that have been recorded in studies in predominantly formal employment contexts, which are different from those of LAC.

- 3.15 **Daycare access has been shown to have positive effects on women's labor participation.** A review of studies in LAC (Mateo Díaz and Rodríguez-Chamussy 2016; Busso and Fonseca 2015) shows that access to these services increased the probability that a mother would be employed, as well as the number of hours worked.³³ Findings regarding the effects on income are mixed. Evidence from Rio de Janeiro indicates that the positive short-term effects on the labor participation and incomes of grandmothers living in the home were detectable four years afterwards (Attanasio et al. 2017). In contrast, an analysis in Chile showed that mandating large employers to provide and finance daycare raised the cost of hiring women and lowered their wages (Prada, Rucci, and Urzúa 2015). These studies illustrate the relationship between access to childcare services and women's labor participation, but this is a broader topic addressed in the Labor SFD (document GN-2741-7).

B. Cash transfer programs

- 3.16 **A number of impact evaluations of FSPs in LAC have concentrated on their effects on ECD,**³⁴ yielding three lessons learned. Firstly, these programs have helped to improve ECD levels in the short term, particularly where they have reached the poorest households. This is consistent with evidence from income transfer programs in the United States (Almond, Currie, and Duque 2018). The

³² All LAC countries offer maternity leave to formal sector employees. Leave is longest in Chile and Venezuela (18 weeks), while the shortest is in Honduras (10 weeks). Paternity leave exists in 8 out of 15 countries studied, and the longest leave entitlement is 14 days. The asymmetry between paternity and maternity leave creates different costs for employers that hire women, even where these benefits are financed by taxes or social security (Busso and Fonseca 2015).

³³ A recent review focused mainly on high-income countries (Carta and Rizzica 2018) reported that access to daycare had mixed impact on women's labor participation. Several studies in the United States and Europe have concluded that these services support changes at the margin (more hours worked or substitution of the type of childcare arrangements), and that the increase in labor participation is observed primarily among mothers in single-parent homes. The number of such homes has increased significantly in LAC (Liu, Esteve, and Treviño 2017).

³⁴ FSPs with evaluations that have examined ECD impacts are the Bono de Desarrollo Humano program in Ecuador (Fernald and Hidrobo 2011; Paxson and Schady 2010) (Araujo, Bosch, and Schady 2019), Atención a Crisis and Red de Protección Social in Nicaragua (Barham, Macours, and Maluccio 2013; Macours, Schady, and Vakis 2012; Fernald and Hidrobo 2011), Bono 10,000 in Honduras (Lopez-Boo and Creamer 2019), Comunidades Solidarias Rurales in El Salvador (Sanchez Chico et al. 2018), and Familias en Acción in Colombia (García et al. 2012).

effects on ECD of the identified FSPs in LAC are of a similar magnitude to other interventions that have been evaluated—within a range of 0.10 and 0.15 standard deviations.³⁵ Secondly, the impacts of greatest magnitude have been observed not in the motor and socioemotional domains, but in the domains where socioeconomic gaps are largest: cognitive and language development. Thirdly, where it has been possible to study the persistence of impacts over the medium term, the results have been mixed in terms of the sustainability of those effects found in the short term. These are maintained in the cases of Colombia (Garcia et al. 2012), Nicaragua (Macours, Schady, and Vakis 2012; Barham, Macours, and Maluccio 2013), and El Salvador (Sanchez Chico et al. 2018), but not in the case of Ecuador (Araujo, Bosch, and Schady 2019).

- 3.17 **The evidence from evaluations of the effects of cash transfer programs (CTPs) in LAC appears more conclusive with regard to the short-term impacts on ECD; the evidence regarding the medium- and long-term sustainability of these impacts is more mixed.** There appear to be design aspects of FSPs that go beyond income transfers that can boost the impact of these programs on ECD. In the case of the Nicaraguan program, a campaign emphasizing messaging about the purpose of the transfers (for investment in children) seems to explain part of its impact on ECD, which cannot be exclusively attributed to the income effect (Macours, Schady, and Vakis 2012). In the case of Honduras, conditionalities in the area of health are associated with a greater impact on ECD (Lopez-Boo and Creamer 2019). In El Salvador, education conditionalities beginning at five years of age appear to be associated with higher preschool enrollment rates, timely school entry, and improved education outcomes (Sanchez Chico et al. 2018). Although this area requires further research, it seems that the impact of FSPs on ECD could be bolstered by combining them with incentives or complementary interventions designed to alter family behavior.

C. Family support programs promoting ECD

- 3.18 The existing evidence regarding FSPs that promote ECD comes mainly from home visit models and demonstrates positive short-term impacts, primarily on cognition and language.³⁶ Few studies have examined medium- or long-term effects, and their results have been mixed. In the United States, the most notable programs have been Early Head Start,³⁷ which operates nationally but in a decentralized manner, offering home visits combined with center-based services, and the Nurse-

³⁵ Standard deviations are frequently used as a unit of measurement in the analysis of ECD—for example, to compare the impact of different interventions or outcomes in two distinct populations. Standard deviations measure how dispersed data values are in a distribution with respect to the mean.

³⁶ Some studies report an impact on behavior and socioemotional development, though impacts in these domains have been much less studied. Other studies summarize the evidence from middle- and low-income countries, mostly from pilot randomized experiments (Baker-Henningham and Lopez-Boo 2010; Engle et al. 2011; Grantham-McGregor et al. 2014; Aboud and Yousafzai 2015; Grantham-McGregor and Smith 2016; Britto et al. 2017).

³⁷ Under Early Head Start, providers may be local governments, nongovernmental organizations, private groups, educational networks, or others. Each provider uses its own curriculum and teaching model. The service had more than 250,000 beneficiaries in 2017.

Family Partnership, which is aimed at vulnerable first-time mothers.³⁸ Evaluations of both programs (Love et al. 2013; Olds 2010) have shown modest short-term impacts on ECD that do not always last until school age.³⁹ One program that has been implemented in several middle- and low-income countries has been Reach Up and Learn, which was developed in Jamaica and has been adapted and evaluated both in LAC and beyond with different target populations and on different scales. This program has shown a consistent impact on cognitive and language development (Grantham-McGregor and Smith 2016). Its best known evaluation is that of Jamaica, which involved 129 chronically malnourished children; its initial impact of approximately one standard deviation (Grantham-McGregor et al. 1991) has translated into improved academic attainment, reduced depression, less violent behavior, and earnings that were around 25% higher 20 years later (Gertler et al. 2014; Walker et al. 2011). Under another pilot Reach Up and Learn experience in Jamaica, cognitive and behavioral impacts at two years were maintained four years later (Walker et al. 2010). However, in one attempt to implement this model in a scalable manner (in a vulnerable population in Colombia, linking the FSP to that country's cash transfer program), the initial effects were not maintained two years after the intervention was completed (Andrew et al. 2018). This contrasts with the results of a study in Pakistan involving a different FSP (based on the Care for Development model) that combined individual and group sessions with home visits. The initial effects of this program were sustained two years later (Yousafzai et al. 2016), although technical aspects of the evaluation have been questioned. Though evidence is limited regarding the mixed impact of FSPs in relation to beneficiary characteristics, more vulnerable families appear to benefit to a greater degree (Bann et al. 2016; Baker-Henningham and Lopez-Boo 2010).

- 3.19 **The mechanisms through which FSPs lead to improvements in ECD have been less studied.** Some evaluations have shown impacts on intermediate indicators considered to be possible mediating factors (for example, improved parenting practices, interactions, and access to play materials in the home) (Powell et al. 2004; Walker et al. 2004; Tofail et al. 2013; Hamadani et al. 2014; Fernald et al. 2017) and, occasionally, increased maternal knowledge regarding development (Powell et al. 2004; Hamadani et al. 2006; Rahman et al. 2009; Chang et al. 2015) or reduced maternal depressive symptoms (Baker-Henningham et al. 2005; Cooper et al. 2009).⁴⁰ The increase in ECD may be the result of greater household investment in children (materials and time) rather than greater productivity on the part of the caregiver (Attanasio et al. 2018). Other possible mechanisms are changes in caregivers' aspirations and beliefs (Rubio-Codina et al. 2015),

³⁸ The Nurse-Family Partnership currently operates in other high-income countries such as Germany, Australia, England, and Holland.

³⁹ These programs, and the Nurse-Family Partnership in particular, address issues of maternal and child health, reductions in abandonment and maltreatment, and improvements in the home environment, including from a socioeconomic perspective. They have had a positive impact in these areas. Although there is a consensus surrounding the potential for FSPs to reduce maltreatment and violent disciplinary practices or abuse, these indicators have been little studied in low- and middle-income countries (Knerr, Gardner, and Cluver 2013; Mikton and Butchart 2009).

⁴⁰ Recent research is beginning to include specific aspects of caregivers' mental health as part of strategies for supporting families (Nahar et al. 2015; Singla, Kumbakumba, and Aboud 2015).

occasionally due to the influence of (or interaction with) other members of the community (Macours and Vakis 2019).

- 3.20 **Process quality plays an important role in FSP effectiveness.** Although the evidence is scant and descriptive in nature, there is consensus that success in these programs depends on a few key factors: (i) channeling efforts through a child's main caregiver, generally the mother, with whom it is essential to develop a relationship of respect and confidence (Grantham-McGregor and Walker 2015); (ii) meeting the needs of the caregiver and the child and involving them sufficiently in visit activities (Araujo, Dormal, and Rubio-Codina 2018; Roggman et al. 2016; Vogel et al. 2015); (iii) working by demonstrating activities and interactions based on a structured play curriculum that is rich in materials (Aboud and Yousafzai 2015; Attanasio et al. 2018); (iv) planning frequent encounters (Powell and Grantham-McGregor 2011); and (v) giving staff prior training and ongoing support (Attanasio et al. 2018; Yousafzai et al. 2014; Yousafzai and Aboud 2014) that involves thoughtful mentoring rather than punitive supervision (Grantham-McGregor and Smith 2016). The evaluation of the Peruvian Cuna Más program, implemented at scale, finds that the effects of this FSP on ECD are only significant where the quality of visits is high, e.g., where staff have been adequately trained and are successful in achieving receptive, warm, and positive interactions with caregivers and children (Araujo et al. 2019).
- 3.21 **Despite the prevalence of violence in the home, there is little evidence in LAC regarding the effectiveness of FSPs in preventing this.** Intimate partner violence and child maltreatment in the family are intimately related: both tend to coexist in the same home, and exposure to maltreatment in childhood is a predictor of violence in adulthood. There is little evidence on effective strategies to prevent both forms of violence in the home (Asghar, Rubenstein, and Stark 2017; Bacchus et al. 2017) or on the feasibility of including these in FSPs. The evidence suggests that FSPs that include strategies to reduce child maltreatment can reduce or prevent physical abuse and neglect, although the few existing studies face design limitations and are focused on high-income countries (Altafim and Linhares 2016; Chen and Chan 2016; Bacchus et al. 2017; Asghar, Rubenstein, and Stark 2017).
- 3.22 **FSPs and programs to prevent maltreatment have tended to focus on mothers, who are the main caregivers for children.** It may be, however, that involving fathers in FSPs would have positive effects on the quality of the home environment (Daly et al. 2015; Asghar, Rubenstein, and Stark 2017). Active fathering programs seek to transform the social norms that feed gender violence, and to create awareness of the role of mothers and fathers in children's safety and well-being. The literature indicates that, when fathers provide affection and are involved in the lives of their children and their care, this has positive repercussions for children's development (Levtov et al. 2015; Panter-Brick et al. 2014). The evaluation of an active fathering program in Rwanda showed a reduction in the prevalence of violence and an increase in men's participation in caregiving (Doyle et al. 2018). There is no similar evidence for LAC.

- 3.23 The implementation of ECD programs at scale raises both operational and monitoring and evaluation challenges.** Several LAC countries operate FSPs on a national scale, with differences in scope, targeting criteria, and coverage.⁴¹ A majority of these programs lack impact evaluations. Two recent exceptions are: (i) an evaluation of the early childhood education program of the National Council for Educational Development (PEI-CONAFE) in Mexico, which found that weekly group sessions had effects on cognition, language, and memory in children under age 4 also benefiting from the cash transfer program, particularly in the case of the indigenous population (Fernald et al. 2017); and (ii) an evaluation of the Cuna Más daycare program in Peru, which identified impacts on cognition and language in rural populations living in poverty after 24 months of weekly home visits (Araujo et al. 2019). Challenges to implementing FSPs at scale include: (i) the difficulty of mobilizing the commitment and leadership of local actors; (ii) the lower frequency and duration of contact with families; (iii) work with content that has not been evaluated; (iv) less time for training and support; and (v) low motivation and high turnover among staff (Grantham-McGregor and Smith 2016). Careful consideration should also be given to the viability of using the operational infrastructure of FSPs to address other areas in addition to ECD without overstressing providers' capacity, particularly in contexts where there is no effective supply of other services or coordination among them. In the case of both FSPs and center-based care programs, there is a need to address the natural tension between expanding coverage and strengthening service quality through additional training and support.⁴²

D. Crosscutting themes

1. Child development services that take diversity into account

- 3.24 The transition to an inclusive model is a challenge for ECD programs.** ECD programs commonly operate with limited financial resources, community or paraprofessional staff, care ratios that exceed recommendations, and minimal infrastructure and equipment. Available information on the quality of ECD services shows that there is substantial room for improvement. Adopting an inclusive approach will require additional funding and specialized human resources. Cultural adaptation demands collaborative work between child development specialists, professional staff with knowledge of communities and cultures, language experts, and the communities themselves. Although many indigenous children grow up in bilingual environments, little or nothing has been done under ECD programs to value this multilingualism and build on the advantages that it creates for ECD (Rodríguez and Harris-Van Keuren 2013). For the care of children of migrant families, it is necessary to acknowledge the conditions and circumstances faced both by children who migrate with their families and need ECD services in their place of destination, and by the children of migrant parents who remain in the care of grandparents or other relatives in their country of origin. With respect to the inclusion of children with disabilities, the health system's diagnosis, treatment, and rehabilitation of developmental delays could be coordinated with ECD programs,

⁴¹ This is documented in Table 13.

⁴² The marginal cost of investing in process quality is lower than that of establishing the service (Berlinski and Schady 2015; Attanasio et al. 2018).

for example, offering advice and training to families or mobilizing specialized technical support in the home or community. It is essential that ECD services personnel be trained to speak with families about detecting developmental delays with a view to avoiding stigma or discrimination around the issue both in and outside the home. The difficulty of implementing the universal early detection and treatment of developmental delays in early childhood has been documented in high-income countries, particularly in the case of children from poor homes and in rural, isolated areas (Oberklaid 2014).

- 3.25 **The region still has few initiatives aimed at transforming ECD services into inclusive services, and there are no evaluations of their effectiveness.** Uruguay's services provide the option of coordinating additional support from specialized professional staff and teachers with a view to providing assistance to children in need of closer monitoring. Chile guarantees specialized support for children with developmental delays, including the development of individualized interventions, access to center- or home-based stimulation services, specialized support, and workshops for parents. There are no evaluations of the effectiveness of these interventions.

2. Child protection services

- 3.26 **International evidence confirms that growing up in an institution in the early years of life is detrimental to one's health, physical growth, cognitive development, attachment, and socioemotional development** (Berens and Nelson 2015). In LAC, institutionalization is the most frequent strategy for providing care to children who are in need of special protection. Some of the features of institutionalization that create an unfavorable environment for satisfactory development concern the absence of personalized interactions between children and their caregivers, isolation from the external world, and greater risk of abuse. In addition, many countries lack an oversight function for these services that can monitor compliance with minimum safety and welfare conditions. Services in the region vary in scale, and public providers coexist with both private and informal providers, as well as nongovernmental organizations (Palummo 2012).
- 3.27 **Abandonment, abuse, or neglect are the main reasons why children end up receiving special protection services.** Disabled children frequently face a higher likelihood of abandonment, particularly in environments where there are no other services to support families in caring for them (Berens and Nelson 2015). A highly influential experimental study launched in Romania in 2000 has demonstrated that abandoned children placed in foster care (instead of an institutionalized care environment) by the special protection services experienced a recovery in several developmental domains (Nelson, Fox, and Zeanah 2014). Transferring children from institutions to family environments is not a simple task, and it requires careful work in the political and regulatory areas and with communities; however, it is a priority issue within the agenda for child protection services in LAC.

3. Institutional structure

- 3.28 **Comparative studies of ECD institutional structures worldwide have concluded that there is no single institutional roadmap for ensuring high-quality ECD service offerings.** A recent analysis focusing on high-income countries regarded as leaders for their educational system performance and the

quality of their ECD services (Kagan 2019)⁴³ concludes that the following factors are important to the successful performance of ECD policies and programs: (i) strong government policies, i.e., supported by a stable and functional political, institutional, and economic context; (ii) adequately funded services with a governance structure that allows their coordination; (iii) trained human resources with the necessary support; (iv) evidence-based teaching models; and (v) ongoing improvement efforts supported by data and evidence. These findings are consistent with those of comparative research conducted in the region (Berlinski and Schady 2015; Kagan, Araujo, Jaimovich, and Cruz-Aguayo 2016).

- 3.29 **Government-funded ECD services need to improve their definition of the target population and strengthen the mechanisms used to identify that population and determine its eligibility.** Over the last two decades, social protection systems in LAC have made substantial progress in creating beneficiary profiles for identifying poor and vulnerable families (for example, adolescent mothers). Although public ECD services in some countries already use national systems for targeting (either at the family level, such as in Colombia, or for geographic targeting, such as in Peru), this is not a generalized practice. In some countries, ECD programs use their own targeting tools to determine family eligibility. ECD programs should expand and improve their use of national targeting systems, as well as generate regular statistics on the frequency of use of their services. It is important for ECD services to target poor families for two reasons. The first is equity, as scarce public resources should be focused on those who are unable to pay for these services. The second is efficiency, as poor households are more likely to offer lower-quality environments for children and will therefore stand to benefit most from ECD services.
- 3.30 **There is very little systematic information regarding the supply of ECD services by private operators in LAC, even though a significant share of the expansion in coverage (including that financed fully or partially with public funds) has been subcontracted to private sector operators.** One of the few exceptions is a study focusing on São Paulo (Bastos and Cristia 2012). The authors found considerable variations in the quality of private provision. They also found a positive correlation between the quality of services and income levels in the districts where they are located, as well as more frequent failures to comply with minimum standards in low-income districts.
- 3.31 **Government oversight is essential for ensuring minimum quality levels in public and private service provision.** In order for provision to operate efficiently and produce quality services, technical and operational capabilities need to be strengthened in both the public and private sectors, for example, through a robust regulatory framework and an effective quality assurance system. This includes establishing standards for child progress, the skills and knowledge of the adults responsible for them, and the characteristics of spaces and materials (Berlinski and Schady 2015; Kagan, Araujo, Jaimovich, and Cruz Aguayo 2016). In cases where the services are subcontracted by the government, there is also a need to develop the latter's ability to design, monitor, and swiftly process the contracts that it signs with third parties without suspending services for children, as currently

⁴³ The countries and territories studied are Finland, Hong Kong, England, Korea, and Singapore.

happens in more than one LAC country. Lastly, for partnerships to function effectively, the public sector must have the capacity to identify its partners through transparent, competitive processes (Gustafsson-Wright, Gardiner, and Smith 2017).

- 3.32 **Although the issue of working conditions for service providers has been studied to a lesser extent, the available evidence suggests that these conditions need to be improved, and some aspects of provider profiles reconsidered, to ensure the availability of good-quality ECD services that produce better ECD outcomes.** This evidence is based principally on correlations rather than causal relationships. A study focusing on services for children under two years of age in the United States found no correlation between the quality of the FSP and the education level of providers, although it did matter whether the latter had obtained technical qualifications in ECD. Quality was also positively correlated with a lower risk of depression among providers (Hamre and Pianta 2004) and with a low level of program vacancies. The evidence regarding the link between depression in educators, process quality, and outcomes for children is consistent with that documented for teachers at higher levels of the education system (Hoglund, Klinge, and Hosan 2015; McLean and Connor 2015; Clarke-Stewart et al. 2002). Frequent staff turnover and the workload that this imposes on a team are correlated with lower-quality services (Vogel et al. 2015). The OECD (2018) reviewed the literature focusing on center-based providers. In general, the variables most consistently correlated with quality child-adult interactions were the prior qualifications of providers (for the 0-2 age group in particular), ongoing training, improved wages, and a good organizational climate (including opportunities for peer collaboration).⁴⁴ Correlations between quality and the providers' years of experience were mixed. A comparison of performance between voluntary and paid community daycare workers in Malawi and South Africa found better results in children cared for by paid providers (Tomlinson et al. 2017).

4. Measuring ECD and service quality

- 3.33 **International population measures of ECD is a field in constant transformation.** Motivated by the need to address Sustainable Development Goal 4.2, several initiatives are working on creating population-level ECD indicators that will be not only valid and reliable across varying socioeconomic, linguistic, and cultural contexts but also predictive of future performance, easy to administer at scale, and easy to understand and interpret. The Global Scale for Early Development (GSED) group, led by the World Health Organization (WHO) with the involvement of IDB Group specialists, is working to develop indicators for children under three years of age.⁴⁵ In the case of children aged 2-4 years, the United Nations Children's Fund (UNICEF) is spearheading a similar initiative

⁴⁴ These correlations are also present in other analyses of process quality in daycares (Vogel et al. 2015).

⁴⁵ This effort brings together three different initiatives with similar objectives that had previously worked independently: the Caregiver Reported Early Development Instrument (CREDI), the Infant and Young Child Development (IYCD) package, and the D-Score group, which arose out of the Global Child Development Group (McCoy, Black et al. 2016).

(UNICEF 2018). In the medium term, these two initiatives are expected to converge on a single indicator that can be applied to the entire age range.

- 3.34 **Even less developed is the measurement of service quality using global indicators that are representative of the population (such as the ones described above), whether for FSPs, daycare, or preschool programs.** The only tool that currently exists is Measuring Early Learning Quality and Outcomes (MELQO), which combines measurement of the quality of service delivery with student performance. It focuses on preschool services for children aged 4-6 years and has been administered in a number of LAC countries such as Brazil, Colombia, and Peru.

E. Information and knowledge gaps

1. Quality ECD services at scale

- 3.35 **A review of the literature allows knowledge gaps to be identified in LAC that are important for improving the design and effectiveness of ECD services implemented at scale.** From a strategic perspective, there are several such gaps. Firstly, it is not known whether there are critical ages during which different ECD program approaches have greater impact. Secondly, it is also not known what the optimum starting age is, or the minimum duration needed to ensure that the services have a sustainable impact. This type of evidence would help to refine the design and implementation of ECD programs. A third aspect, which is currently the subject of a number of studies, is how to improve the cost-effectiveness of FSPs at scale, e.g. by comparing individual and group approaches.⁴⁶ A fourth knowledge gap relates to the heterogeneous impact of daycare and FSPs based on the quality of the counterfactual care received by children in their homes.⁴⁷ Fifthly, there is no evidence on the cost-effectiveness of expanding the preschool day versus that of expanding daycare coverage for younger children, which could guide the improved allocation of scarce public resources. A sixth theme that has been little studied is the effectiveness of interventions to promote demand for ECD services.

⁴⁶ A study underway in India compares the impact of implementing Reach Up and Learn by means of individual home visits versus group sessions (Attanasio et al. 2019). Similarly, there is evidence regarding the impact of interventions implemented through group sessions (Pearson et al. 2008; Singla, Kumbakumba, and Aboud 2015; Fernald et al. 2017) or a combination of visits and groups (Eickmann et al. 2003; Hamadani et al. 2006; Yousafzai et al. 2014), as well as those seeking integration with other social (Attanasio et al. 2014; Fernald et al. 2017) or health services (Powell et al. 2004; Nahar et al. 2012; Yousafzai et al. 2014; Chang et al. 2015).

⁴⁷ There is evidence to show that more vulnerable families benefit to a greater degree (Bann et al. 2016; Araujo, Dormal, and Rubio-Codina 2018), although the evidence regarding the mixed impacts of these interventions is limited.

- 3.36 **FSPs frequently come under pressure to include other components in addition to promoting ECD.** The reason for this is that FSPs, when successfully implemented, provide a platform with great potential for identifying needs and providing support to vulnerable households. Given that these programs normally rely on staff with low education levels and little training, and in recognition of the fact that families also have limited capacity to absorb messages and alter behaviors, there is a knowledge gap regarding the ability of these programs to adapt and include new content. This is an area in which pilot projects might be designed, implemented, and evaluated to explore synergies between FSPs and other fields, such as: (i) the role of fathers (or other members of the extended family) in promoting ECD, and their active inclusion in FSPs;⁴⁸ (ii) mental health support for caregivers;⁴⁹ (iii) reductions in intimate partner violence and violent disciplinary practices, maltreatment, or abuse of children; and (iv) improvements in the well-being of pregnant women and post-partum depression.⁵⁰

2. Quality of the labor force in the area of ECD

- 3.37 **Staff are key to strengthening the quality of ECD services, yet there is a complete absence of knowledge regarding ECD providers, cost-effective strategies for strengthening their skills, and how to attract and maintain the most capable staff.** The region needs to produce descriptive information that documents who ECD providers are; what their educational characteristics, experience, and employment conditions are; and what level of staff turnover they experience and the reasons for it.⁵¹ This type of information is essential for obtaining a more exact assessment of needs in this area, as well as for reforming human resource strategies.
- 3.38 **There is also a knowledge gap regarding the most cost-effective interventions to strengthen the quality of staff in the services.** A first approach to strengthening staff quality is reviewing selection and hiring processes, as well as arrangements for performance incentives—an area in which there is no evidence in LAC. A second approach to improving provider quality relates to the training and support process. Little is known regarding effective interventions at scale for strengthening prior and ongoing training for ECD staff, with emphasis on process quality. Given the importance of adult-child interactions in ECD, there is a need to continue evaluating interventions to improve classroom teaching practices and the

⁴⁸ In general, the programs work with the main caregiver—generally the mother—and few programs explicitly include fathers, although some do include other family members in visits when they are present (Fernald et al. 2017; Panter-Brick et al. 2014). An exception in the region is the early childhood education program of the National Council for the Promotion of Education (PEI-CONAFE) in Mexico, which has five sessions for fathers.

⁴⁹ Some FSPs have had an impact in terms of reducing depressive symptoms in caregivers (Baker-Henningham et al. 2005; Cooper et al. 2009; Attanasio et al. 2019)—possibly as a result of empowering them in their role as ECD promoters through relationships based on respect and confidence. In addition, some recent initiatives have incorporated specific aspects of this issue in their interventions (Nahar et al. 2015; Singla, Kumbakumba, and Aboud 2015).

⁵⁰ Despite existing evidence regarding the importance of the physical and emotional environment during pregnancy (Almond, Currie, and Duque 2018), the curriculum content of FSPs does not address issues such as stress management, the support roles of partners and families, or violence.

⁵¹ The evidence regarding the labor force in the area of ECD has been compiled for other regions but not in LAC (OECD 2012, 2018).

quality of interactions under FSPs. The impact of changes in employment conditions on staff selection, motivation, and retention in ECD services also needs to be studied.

3. Efficient management and informed public policies

- 3.39 **Although there have been institutional advances in LAC that encourage coordination between sectors and levels of government in order to strengthen integrated ECD actions, there is considerable room for improvement if this approach is to have a concrete impact on the experiences of children and their families.** In some cases, ECD services in LAC have moved towards an approach in which a single provider is responsible for delivering different services (health, stimulation, nutrition, etc.), despite a lack of any evidence regarding the benefits or marginal costs of this approach. An alternative path to achieving an integrated ECD approach is by coordinating the services delivered by different sectors, placing the child, the family, and their needs at the center. Evidence needs to be gathered regarding the effectiveness of the different approaches to organizing service delivery. Another, little-explored area relates to the interactions between programs that target families, and whether program effectiveness is affected by these interactions.⁵² Lastly, a third knowledge gap in the area of coordination concerns how to implement quality transitions between ECD programs to ensure continuity of care.⁵³
- 3.40 **There has been a historical lack of indicators for the design and monitoring of policies to promote ECD in LAC.** In contrast to other fields, such as health and education, few countries have included population measures of ECD in their national surveys. There is also an absence of regular, systematic information on ECD service quality that can be used to inform parental decisions or decisions concerning the investment of public funds. An urgent challenge is to institutionalize the measurement of ECD at scale in population surveys and to generate regular indicators on service access and quality. Another gap in the measurement agenda is identifying which socioemotional abilities can be reliably measured in early childhood and are predictive of future outcomes.
- 3.41 **LAC has gained international prominence due to its development, implementation, and evaluation of ECD programs that have demonstrated short-term results.** Less is known, however, about whether these effects persist in the medium and long term. Accordingly, it is important to ensure continuity in the rigorous evaluation of ECD programs. There is little evidence regarding the returns on investments made in early childhood and how these compare to others made in subsequent age ranges. Internationally, it has been seen that the impacts of some

⁵² Some studies suggest that interaction between the programs affects their effectiveness (Özler et al. 2018; Geyer, Haan and Wrohlich 2015; Rossin-Slater and Wüst 2016). Evidence from Denmark indicates that access to preschool has positive effects on educational, income, and health outcomes, but that combining it with a program of home visits causes a substantial part of the benefits to be lost. This also happens in the case of labor policies for work-family reconciliation, in which structural factors (labor participation, informality, incentives) and the features of ECD services (quality, hours, distance, and price) interact.

⁵³ Evidence from Colombia shows that the quality of the home environment at 6-8 years of age helps to reduce IQ gaps, even after controlling for the quality of the home environment in the first few years of life (Rubio-Codina and Grantham-McGregor 2019).

ECD programs dissipate in childhood and subsequently reappear.⁵⁴ Less is known about the mechanisms that explain this phenomenon or whether it is present in programs in LAC. In the longer term, it is worth studying whether ECD programs have an intergenerational impact.⁵⁵

- 3.42 **In summary, evidence from ECD programs internationally and in LAC agrees on the need to improve process quality—i.e. adult-child interactions in the home, daycare, and preschool.** These interactions depend on the behavior, knowledge, and skills of parents and other adults responsible for caring for children. There is therefore a need to invest in parents and caregivers to strengthen their ability to offer the youngest children warm, sensitive, and receptive interactions that are rich in language. This will involve working directly with families, but also with service providers.

IV. LESSONS LEARNED FROM THE IDB GROUP'S EXPERIENCE IN ECD

- 4.1 **The Knowledge and Learning Division (KIC/KLD), in partnership with the rest of the team responsible for this sector framework document (SFD), has analyzed a sample of IDB Group sovereign-guaranteed and technical cooperation operations in the area of early childhood development (ECD).**⁵⁶

The analysis was based on a review of project documentation and interviews with project team leaders. The IDB Group's work in the area of ECD has focused primarily on public policies and programs, which does not rule out the possibility of expanding activities to include the private sector. The lessons learned are highlighted below, grouped together according to strategic and thematic features.

A. Strategic lessons

- 4.2 **Through its operations and technical assistance, the IDB Group has supported institutional reform processes to strengthen the comprehensive approach to ECD.** Countries such as Argentina, Brazil, Chile, and Colombia have adopted ECD policies using an integrated approach that requires cross-sector actions that converge on the needs of each child and his or her family. Uruguay has adopted this type of approach not only for early childhood, but for all stages of the lifecycle. The IDB Group's operational and technical assistance work in these institutional reform processes has shown that, to avoid fragmentation and ensure coordination among interventions contributing to ECD from different sectors, management issues need to be addressed from the planning stage and throughout the project cycle. For example, a nominal system for monitoring each child is a management tool for translating the holistic approach into coordinated actions with tangible consequences on how the child and the family are served by the different social sectors. The creation and operation of such a system is an organic part of the entire project cycle in terms of implementing a holistic approach to ECD.

⁵⁴ This has been observed, for example, in an evaluation of the Star project in the United States (Chetty et al. 2011) and also in one of the follow-ups of Jamaica's FSP (Grantham-McGregor et al. 1997).

⁵⁵ One of the few studies that explores the intergenerational effects of an FSP in LAC is Walker et al. (2012).

⁵⁶ Annex III provides a list of the operations and technical cooperation agreements in the sample.

4.3 **With a view to approaching ECD holistically and organizing service offerings, several LAC countries have adopted integrated governance arrangements or horizontal coordination mechanisms across sectors and institutions.** The IDB Group has supported the design, implementation, and strengthening of these types of governance arrangements through technical assistance activities. A number of lessons have been learned from these activities about what conditions facilitate horizontal coordination. These include having broad political support and fluid communication channels with the authorities; formalizing ECD program sustainability and financing through legislation; and creating spaces within coordination structures for monitoring results. Specifically, the countries that have made the greatest progress in ECD public policies have had political support at the highest level and horizontal coordination as a result of that mandate. The sustainability of political support and financing has been achieved through legal reforms, which have required working more broadly with other political sectors and civil society in general.

4.4 **The creation of mechanisms for vertical coordination between different levels of government and public and private providers is crucial for managing interventions, particularly in decentralized environments.** An example of this is the “Ruta Integral de Atenciones” continuum of care in Colombia. IDB Group technical assistance activities supported the development of management tools and the creation of a system for local government support and capacity-building, to assist the municipios in identifying and coordinating priorities at the local level. Working in decentralized contexts like this required recognition (and often remediation) of the differences in technical capacity, resources, and needs that are present in subnational entities. The need for management tools was identified, such as operating regulations, realistic planning in terms of the scale of priority lines of activity, and support for local teams with information systems and capacity to carry out management and monitoring actions. A lesson from this technical assistance work in Colombia was how to strengthen vertical coordination in ECD through specific management tools adapted to the local context and capacity.

B. Thematic lessons

4.5 **The IDB Group has financed operations and technical assistance activities in the areas of expansion of coverage, quality enhancement, institution-strengthening, and the evaluation of ECD policies and programs.** Specifically, ECD operations have focused on the following areas and countries: In the areas of coverage expansion and infrastructure improvements, the Group has worked in Argentina, Bolivia, Chile, Nicaragua, Panama, and Uruguay. Notable activities in quality enhancement through the cultural adaptation of curricula and ongoing training of personnel have been concentrated in Chile, Ecuador, Haiti, Panama, Paraguay, and Peru. In the area of institution-strengthening, the IDB Group has financed technical cooperation or other operations in Colombia, Haiti, Panama, and Uruguay. Lastly, technical assistance has been provided for the evaluation of programs and policies in several countries, including Argentina, Brazil, Peru, and Uruguay.

- 4.6 **A common observation from the different experiences of working in the region is that much remains to be done in terms of defining and implementing structural and process quality standards for ECD services.** Operational experience indicates that quality assurance systems require budgets, technical assistance, and competitive employment conditions for human resources in order to be able to attract the best possible staff. In environments where care depends on community staff who are not specialized in ECD, programs work better when there are structured curricula and activity guides.
- 4.7 **The IDB Group has financed innovative interventions in indigenous communities in Colombia, Panama, and Paraguay, aimed at closing the learning gap through intercultural bilingual mathematics lessons.** Work was also done in Paraguay to narrow the gender learning gap in mathematics by modifying biases in classroom interactions between adults and children. The lessons learned from these experiences highlight the importance of working carefully to adapt interventions to the local context.
- 4.8 **Through its operations and technical assistance activities, the IDB Group has accumulated experience in supporting family support programs (FSPs) through both home visits and group sessions.** In Jamaica, Brazil, Panama, Peru, and Uruguay, home visits have offered psychosocial stimulation opportunities to children of highly vulnerable families. The IDB Group's experience indicates that changes in family behaviors and conduct are necessary for FSPs to be effective. This requires building close relationships with families to work with them on changing their day-to-day practices and incorporating more stimulation and learning activities. It also requires exploring the potential of each family and community to develop materials tailored to the local context, as well as homemade toys. Experience illustrates the challenges of finding formulas for coordinating cash transfer programs (CTPs) and FSPs that ensure the operational feasibility of the FSPs without overburdening the community personnel working on CTPs. The importance of strengthening arrangements for supervising and supporting FPS personnel is a lesson common to all experiences of implementing these programs.
- 4.9 **IDB Group operations and technical assistance activities in recent years have supported efforts to design tools for the regular measurement of ECD, for integration into representative national population surveys.** The main lesson learned from the analytical work led by the IDB in this field is that indicators of the language and quality of the home environment are highly predictive of future outcomes and relatively easy to measure with precision, and should therefore be included in population surveys until such time as the scientific community reaches a consensus on more global measures.
- 4.10 **The IDB Group has also promoted knowledge and dissemination activities in line with its operational portfolio.** In 2015, the book *The Early Years* was published as part of the annual Development in the Americas series to bridge a knowledge gap among policy-makers, as the first-ever systematic compilation of evidence on ECD in the region. Two online courses have been developed with the objective of strengthening the technical capabilities of both implementers of public policy and providers. Over 43,000 people have enrolled in five sessions of the massive open online course (MOOC) "Effective Policies for Child Development." The small private online course (SPOC) "Leaders in Education: How to Identify

and Implement Effective Education Policies,” which contains a module on ECD, has certified 350 policy-makers and 60 journalists and members of civil society, and over 5,000 people are enrolled in its MOOC version. The blog “Primeros Pasos” [First Steps] was created in 2012 to raise awareness among a wider audience on the strategic importance of ECD policies. Since then, it has stayed in the top five most visited IDB Group blogs, posting new material on a weekly basis. In 2018 alone, the blog was visited more than 390,000 times. The main lesson learned from these initiatives is that the IDB Group plays a strategic role in regional knowledge management, and demand is strong for spaces to engage in evidence-based policy dialogue, analysis, and discussion in the field of ECD.

V. LINES OF ACTION FOR THE IDB GROUP’S WORK IN ECD

- 5.1 **This sector framework document (SFD) proposes that the IDB Group’s work in early childhood development (ECD) focus on ensuring that all children, and particularly those in poor and vulnerable households, have the opportunity to develop their potential from the first years of life through significant experiences that are rich in quality interactions at home, in daycare, and in preschool.** For this to occur, the adults responsible for children in these environments need to have the resources, knowledge, skills, and behaviors necessary to promote ECD. Based on the diagnostic assessment presented in Section II, the literature review in Section III, and the lessons learned documented in Section IV, three lines of action are proposed as a guide for the IDB Group’s work, to be subsequently contextualized to the reality of each country.
- 1. Line of action 1: Promote efficient management and well-informed public policy**
- 5.2 **Structures for coordinating ECD policies require management tools and technical capabilities that allow them to account for the results of their work.** Healthy development in early childhood requires synchronized coordination of actions by different sectors and levels of government (national and subnational). For coordination to translate into tangible actions, the IDB Group’s operational work will promote investment in management tools and technical capacity-building for their use in coordination structures. The IDB Group’s operational work and policy dialogue will also promote efficient private sector participation in the financing or delivery of ECD services.
- 5.3 **A historical deficit in the area of ECD is the lack of regular population indicators on child development, service providers, and the quality of services offered.** In the absence of such information, public policy design is hit or miss, so its gains cannot be tracked. This jeopardizes the sustainability of the political and budgetary commitments that have enabled an expansion in the coverage of ECD services. The IDB Group will strengthen national initiatives that seek to incorporate ECD measurement into regular population surveys representative of children aged 0-5 years, as well as initiatives to measure structural and process aspects of service quality. This work will also help to improve the selection and comparability of indicators for monitoring the results of IDB Group operations and research initiatives.

- 5.4 **LAC has produced rigorous evaluations of ECD programs that have informed the design and improvement of government policies, several of which are pioneering in the regional and international contexts.** The IDB Group has provided significant financing and technical support for this regional evaluation agenda. Through its operations, nonreimbursable technical assistance, and analytical work, the IDB Group will continue to strengthen impact and process evaluations for ECD programs.

2. Line of action 2: Implement ECD services with quality at scale

- 5.5 **There is considerable room for expanding the coverage of daycare, preschool, and family support programs (FSPs) in LAC, but the greatest challenge will be to ensure that attention is paid to quality as part of this process.** From an operational standpoint, the IDB Group will support the countries' investments in infrastructure, equipment, and materials and in innovative approaches to expanding the necessary foundation of qualified human resources to facilitate this expansion with quality. In tandem with these efforts, there is also a need to improve the targeting of services to poor and vulnerable populations such as adolescent mothers.
- 5.6 **One area of opportunity in LAC for scaling up ECD programs involves strengthening coordination between these and other sectors.** For example, CTP conditionalities for families with children under five years of age have focused exclusively on health and nutrition. However, these can be coordinated with other interventions aimed at improving interactions with children, promoting psychosocial stimulation in the home, and encouraging preschool attendance. There is also room to improve coordination between health services with ECD services. Through its operations and policy dialogue, the IDB Group will support efforts to develop components that promote ECD in health services, cash transfer programs, and other social services.
- 5.7 **There is considerable room for improving the quality of daycare and preschool services and FSPs, particularly in the area of processes.** Although significant deficits have been documented in LAC in the quality of adult-child interactions, investments have frequently focused on infrastructure and equipment due to a lack of understanding of what quality in these services means, even among policy-makers, providers, and families. Work needs to be done with providers and families to arrive at a shared understanding of the critical aspects of such quality, to build trust between the users and providers of services. For this reason, the IDB Group will strengthen the policy dialogue and knowledge dissemination surrounding the need to target investment to improvements in process quality.
- 5.8 **There is still much to be done before diversity becomes an integral part of ECD services in LAC.** As part of the IDB Group's work to strengthen the quality of ECD services, support will be provided to adapt the design and content of services to make them relevant to the conditions and circumstances of the children of migrant families and of indigenous peoples and Afro-descendants and strengthen the development of their cultural identity from the first few years of life. As part of the expansion of ECD services with quality, the IDB Group will provide support through its operations and policy dialogue for efforts to include children with various types of disabilities in ECD services, recognizing that these children

require: (i) a rethinking of some aspects of their design and implementation; (ii) additional funding; (iii) investment in training and support personnel working with children and families; and (iv) very close coordination with other sectors, especially the health sector in relation to early screening, which is necessary to strengthen the areas described in points (i) to (iii).

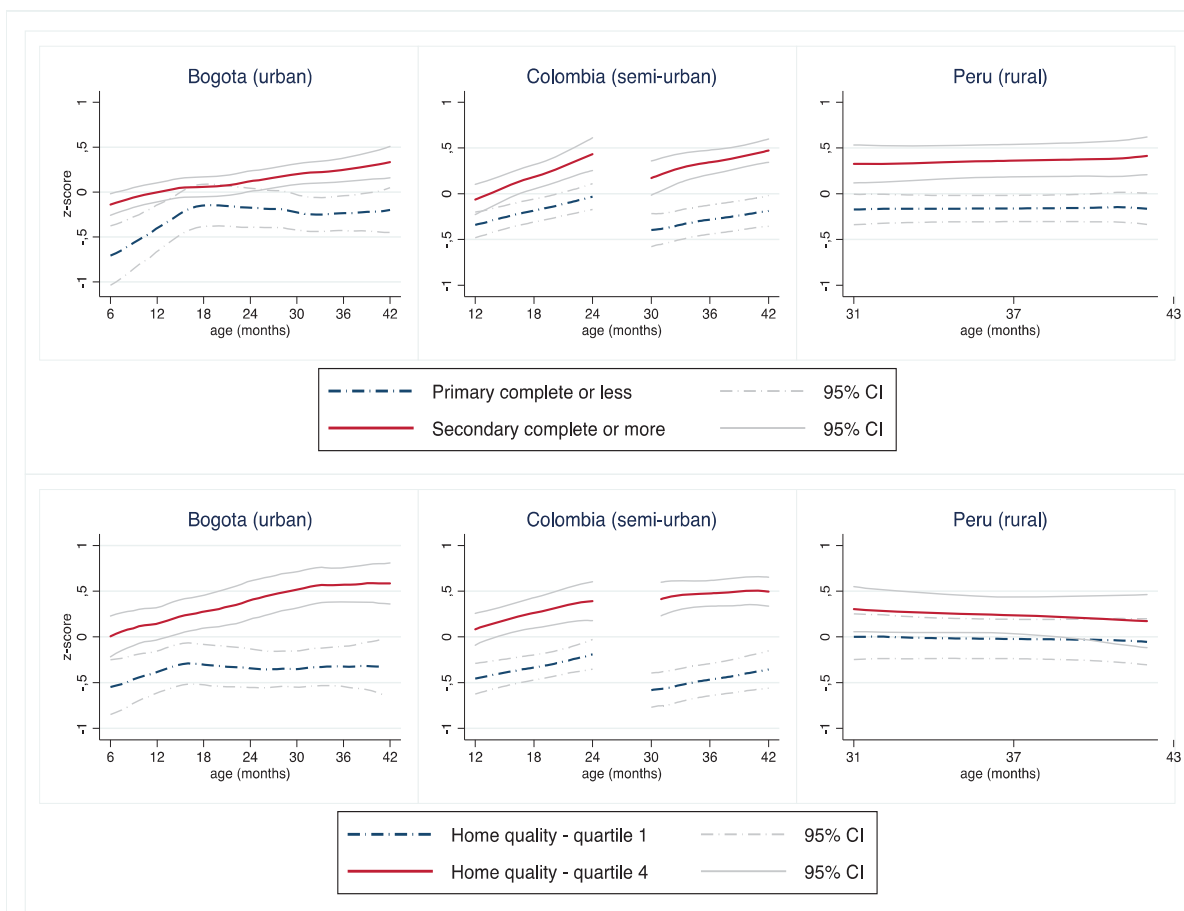
- 5.9 **Children who have been neglected or abandoned constitute an extremely vulnerable population, and in LAC the main approach to caring for them has been institutionalization.** This group includes orphans, victims of violence, or those separated from the family environment due to some other circumstance or risk. Acknowledging the evidence of international best practices, the IDB Group will use its policy dialogue and analytical and operational work to explore ways of expanding the supply of foster care as a preferred option for the sound development and safety of this group. Support will also be provided for efforts to systematically compile information on neglected and abandoned children and the quality of the services that they receive.

3. Line of action 3: Strengthen the quality of the labor force and improve their working conditions

- 5.10 **ECD programs rely on the personnel serving families and children, and an expansion of coverage with quality can only be achieved by transforming certain aspects of the approach to human resources.** There is very little systematic information in the region on those responsible for serving children and families under ECD programs, i.e., their sociodemographic characteristics, educational profile, and experience, how they are selected, and the nature of their employment conditions. The IDB Group will strengthen policy dialogue and knowledge generation in this area, which has not traditionally been a priority for policy-makers.
- 5.11 **To achieve quality services, ECD program personnel at centers and in the home require not only core technical knowledge but also significant soft skills enabling them to interact in an effective, respectful, warm, and sensitive manner with the families and children in their care.** These types of skills, also known as twenty-first century skills, are irreplaceable in ECD services, which are human-interaction intensive. Preschool teachers, daycare staff, and home visitors all need to be competent in areas as varied as communication, giving and receiving feedback, observation, problem-solving, and time management. All of these are necessary for them to do their work effectively. The IDB Group's work will strengthen investment and technical support for strategies to train the personnel working with the children and families using ECD services, incorporating innovations in teaching methods and technology tools into personnel training and support programs.

FIGURES

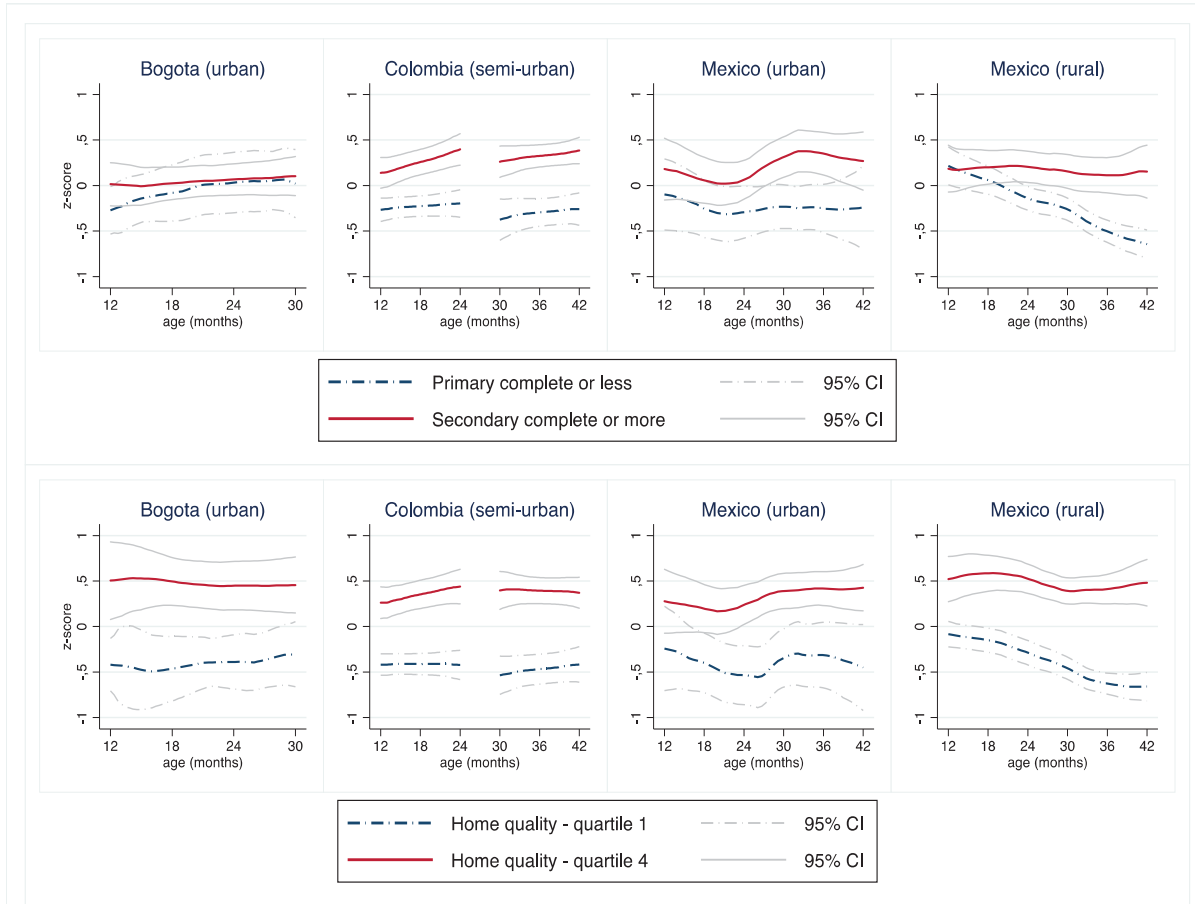
Figure 1. Cognitive and language development gradients by mother's education and quality of the home environment (Bayley-III scores)



Source: Authors' calculations based on data from the Rubio-Codina et al. study (2015) and Rubio-Codina et al. (2016) for Bogota; an impact evaluation of a home visit pilot program (Attanasio et al. 2014) for Colombia; and monitoring indicators from the impact evaluation for the Servicio de Acompañamiento a Familias [Family Support Service] (2015) for Peru. These databases are not nationally representative.

Note: The figure compares development in children with mothers that have completed primary education or lower versus those with mothers that have completed secondary education or higher, and in children belonging to homes in the first (lowest) quartile of the distribution of the quality of the home environment versus those in the fourth (highest) quartile of the distribution. The quality of the home environment was measured using indicators of the availability of play materials and play activities included in the Family Care Indicators (FCI) scale. The horizontal axis shows the child's age in months, while the vertical axis shows the child's z-score in development tests. Scores on the cognitive development, expressive communication, and receptive communication scales of Bayley-III assessments were used to measure child development. Raw scores were internally standardized using the age-specific mean and standard deviation for the sample (calculated using nonparametric methods) and were expressed as z-scores. In the cases of Colombia and Peru, only children in the control group were included. In the case of Bogota, the children of mothers with incomplete secondary education or lower were included instead of those with completed primary education or below.

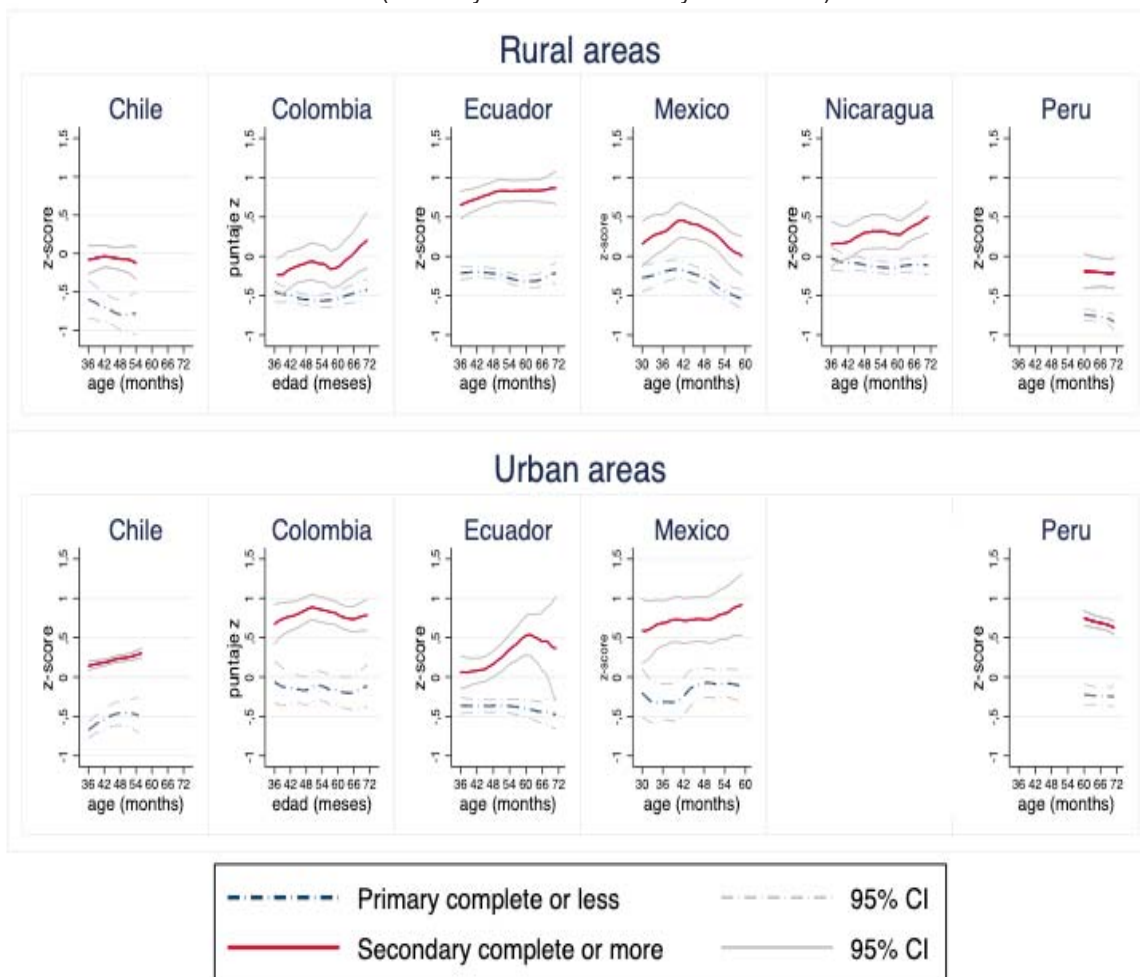
Figure 2. Language gradients by mother's education and quality of the home environment (MacArthur scores)



Source: Authors' calculations based on data from the Rubio-Codina et al. study (2015) and Rubio-Codina et al. (2016) for Bogota; an impact evaluation of a home visit pilot program (Attanasio et al. 2014) for Colombia; and the Prospera Health and Nutrition Survey (ENSANUT-Prospera) for Mexico (2018). The Mexican survey is the only nationally representative one.

Note: The figures compare development in the children of mothers with completed primary education or lower versus those with completed secondary education or higher, and in children belonging to homes in the first (lowest) quartile of the distribution of the quality of the home environment versus those in the fourth (highest) quartile of the distribution. The quality of the home environment was measured using indicators of the availability of play materials and play activities included in the Family Care Indicators scale. The horizontal axis shows the child's age in months, while the vertical axis shows the child's z-score in development tests. The MacArthur Communicative Development Inventories were used to measure child development. Raw scores were internally standardized using the age-specific mean and standard deviation for the sample (calculated using nonparametric methods) and were expressed as z-scores. In the case of Colombia, only children in the control group were included. In the case of Bogota, the children of mothers with incomplete secondary education or lower were included instead of those with completed primary education or lower.

Figure 3. Language gradients by mother's education
(Peabody Picture Vocabulary Test scores)

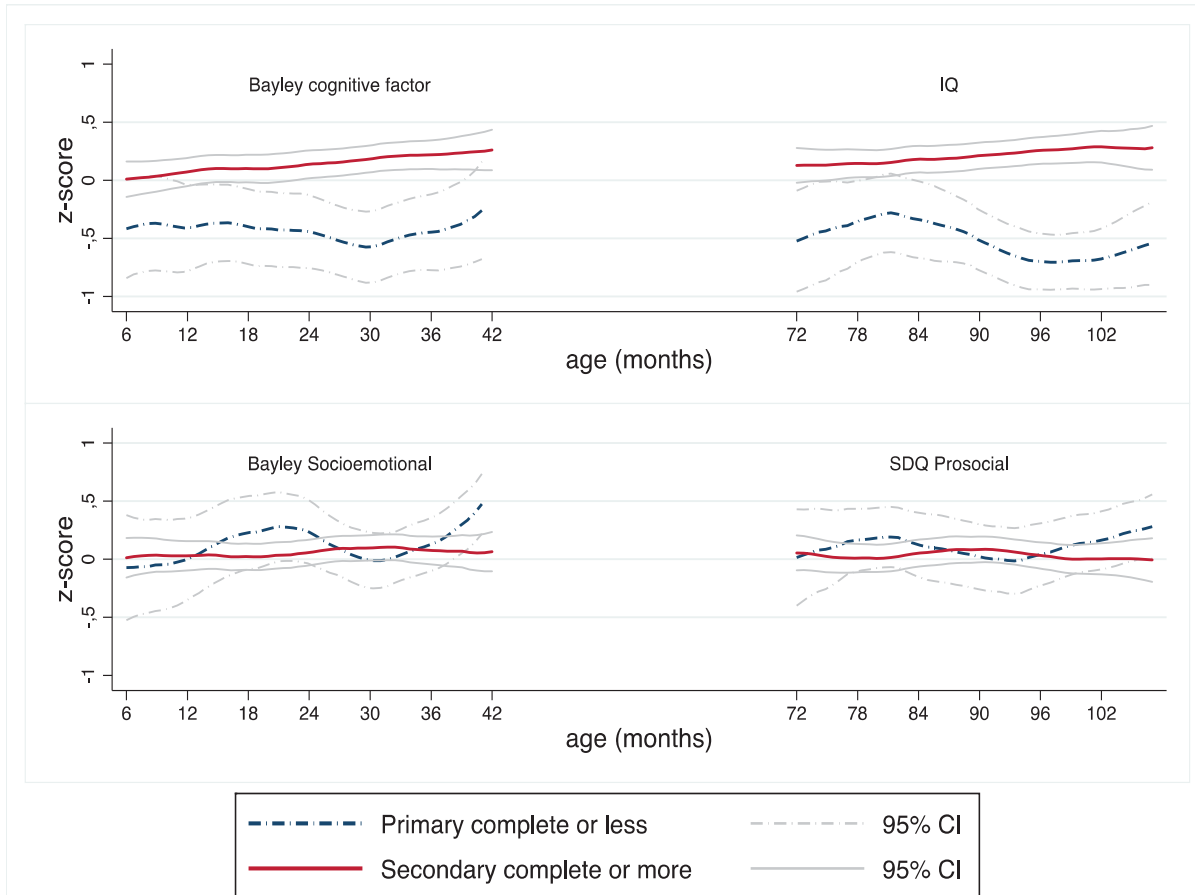


Source: Authors' calculations based on data from the Early Childhood Longitudinal study (ELPI) for Chile (2010); the Universidad de los Andes' Colombian Longitudinal Survey (ECLA) for Colombia (2010); the Ecuador Longitudinal Survey of Child Health and Development (ELSCHD) for Ecuador (2003-2004); the Prospera Health and Nutrition Survey (ENSANUT-Prospera) for Mexico (2018); the Atención a Crisis [Crisis Assistance] database for Nicaragua (2005); and Young Lives for Peru (2006-2007). The Chilean survey is nationally representative for households with children aged five years or less. In the case of the Colombian survey, the urban sample is representative of the whole population except for the richest 10%, while the rural sample is representative for four geographic subregions. In the case of Ecuador, the survey is representative of families that are eligible or almost eligible for the Bono de Desarrollo Humano [Human Development Payment] cash transfer program. The data for Nicaragua are representative of households in six rural municipios included in the Atención a Crisis cash transfer program, while the Peruvian data are representative of all of the country's districts except the top 5% in income terms.

Note: The figure compares development in the children of mothers that have completed primary education or lower versus those with completed secondary education or higher. The horizontal axis shows the child's age in months, while the vertical axis shows the child's z-score in development tests. Scores on the Peabody Picture Vocabulary Test (PPVT) were used to measure language development in children. Raw scores were internally standardized using the age-specific mean and standard deviation for the sample (calculated using nonparametric methods) and were expressed as z-scores. In the case of Nicaragua, the children of mothers with completed primary education or higher were included instead of those with completed secondary education or higher.

These gaps are around one standard deviation in children aged six years (Ecuador and Peru). Standard deviations are frequently used as a unit of measurement in the analysis of ECD—for example, to compare the impact of different interventions or outcomes in two distinct populations. Standard deviations measure the dispersal of data values in a distribution with respect to the mean.

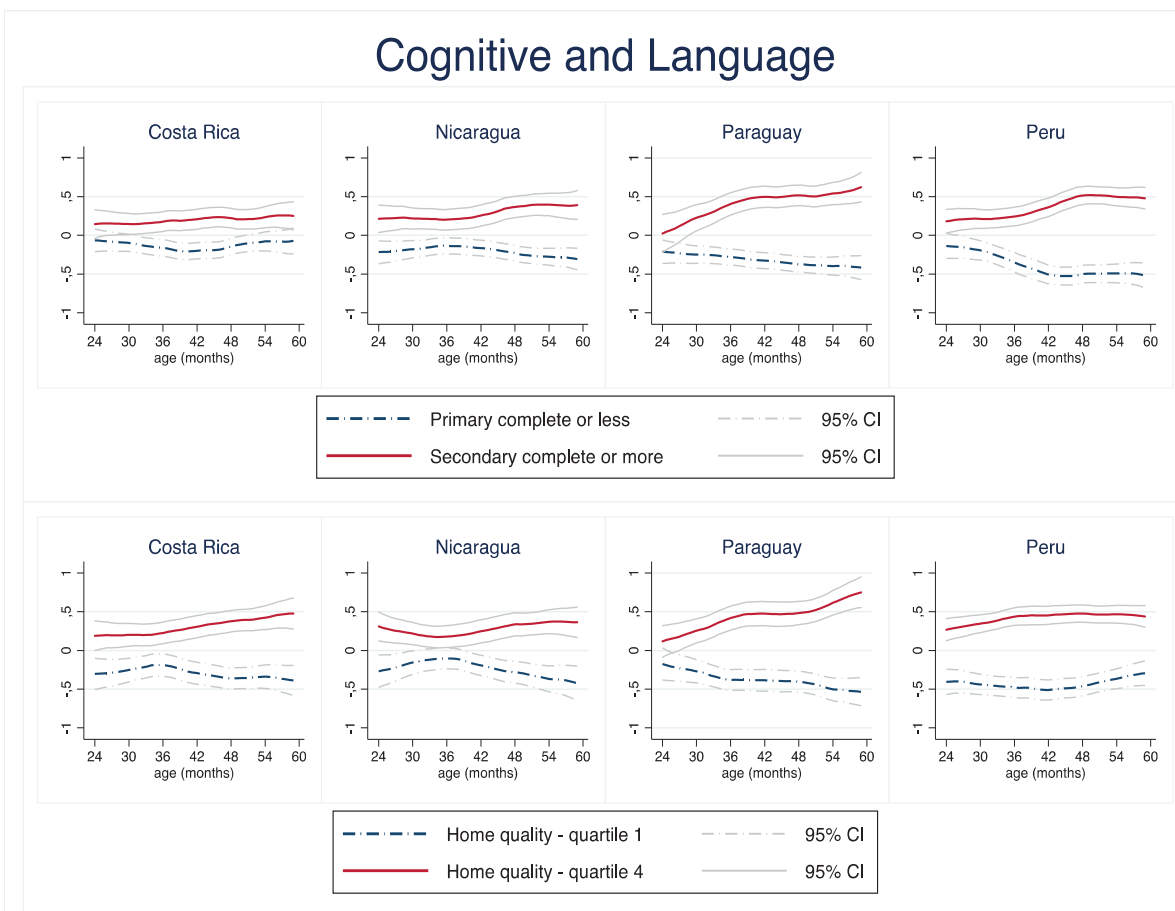
Figure 4. Cognitive, language, and socioemotional/prosocial development gradients by mother's education



Source: Authors' calculations based on data from the Rubio-Codina et al. study (2015) and Rubio-Codina et al. (2016) for Bogota. These databases are not nationally representative.

Note: The figure compares development in the children of mothers with incomplete secondary education or lower versus those with completed secondary education or higher. The upper panel in the figure shows the scores for a cognitive factor that combines the Bayley-III dimensions of cognitive development, receptive communication, and expressive communication. IQ was measured using the Wechsler Intelligence Scale for Children (WISC-V). The lower panel in the figure shows the scores for the Bayley-III socioemotional development dimension and the prosocial development dimension of the Strengths and Difficulties Questionnaire (SDQ). Raw scores were internally standardized using the age-specific mean and standard deviation for the sample (calculated using nonparametric methods) and were expressed as z-scores. These gaps represent more than one standard deviation in IQ at 6 to 8 years of age.

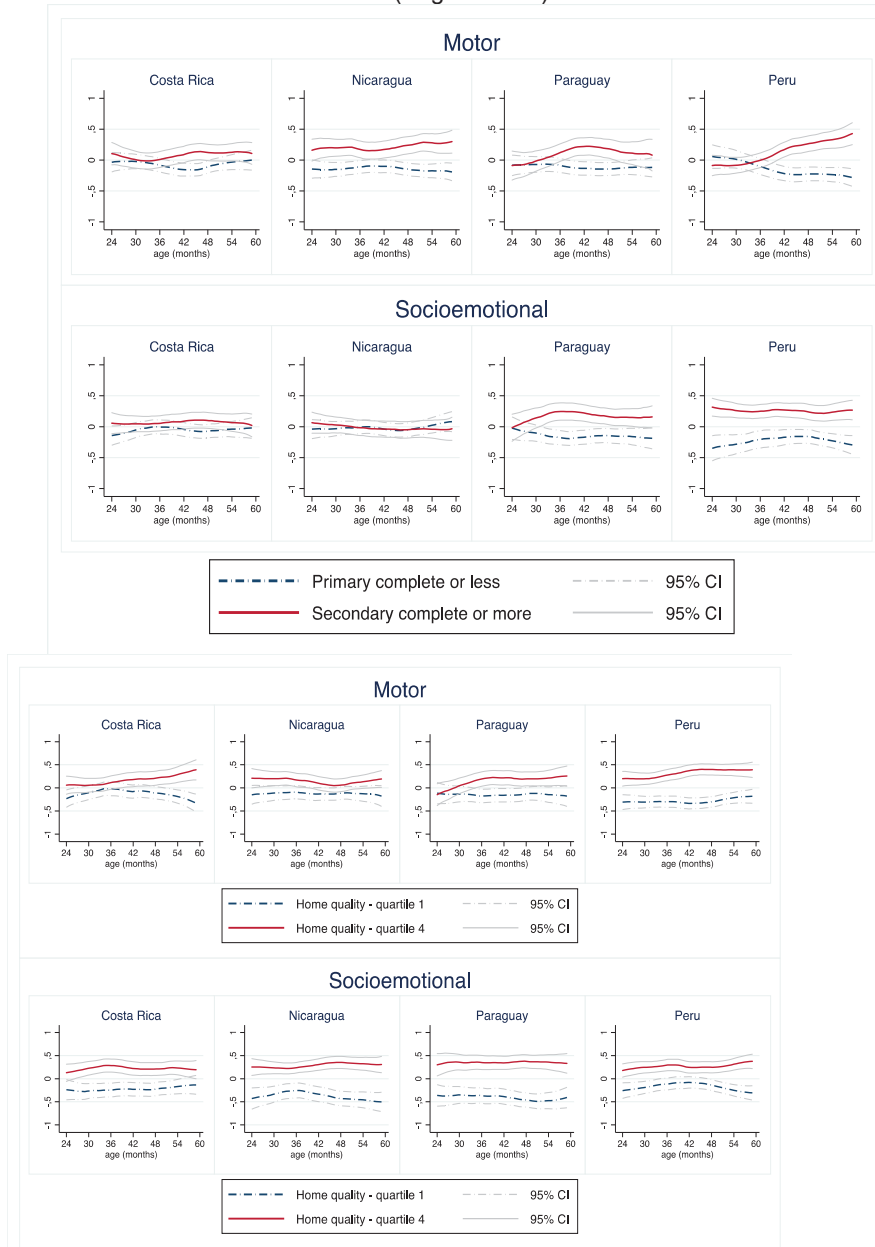
Figure 5. Cognitive and language development gradients by mother's education and quality of the home environment
(Engle scores)



Source: Authors' calculations based on data from the Regional Project on Child Development Indicators (PRIDI, 2012), an IDB Group initiative that has generated comparable ECD indicators in the cognitive, language, socioemotional, and motor development domains in children aged 24 to 59 months (Verdisco et al. 2014). The data are nationally representative.

Note: The figures compare development in the children of mothers that have completed primary education or lower versus those with completed secondary education or higher, and in children belonging to homes in the first (lowest) quartile of the distribution of the quality of the home environment versus those in the fourth (highest) quartile of the distribution. The quality of the home environment was measured using indicators regarding the number of children's books in the home, the number of adults that interact with the child (playing, singing, drawing, telling stories), the frequency of adult-child interactions, and the child's hygiene routines and practices. The horizontal axis shows the child's age in months, while the vertical axis shows the child's z-score in development tests. The cognitive and language development dimensions of the Engle scale were used to measure child development. Raw scores were internally standardized using the age-specific mean and standard deviation for the sample (calculated using nonparametric methods) and were expressed as z-scores.

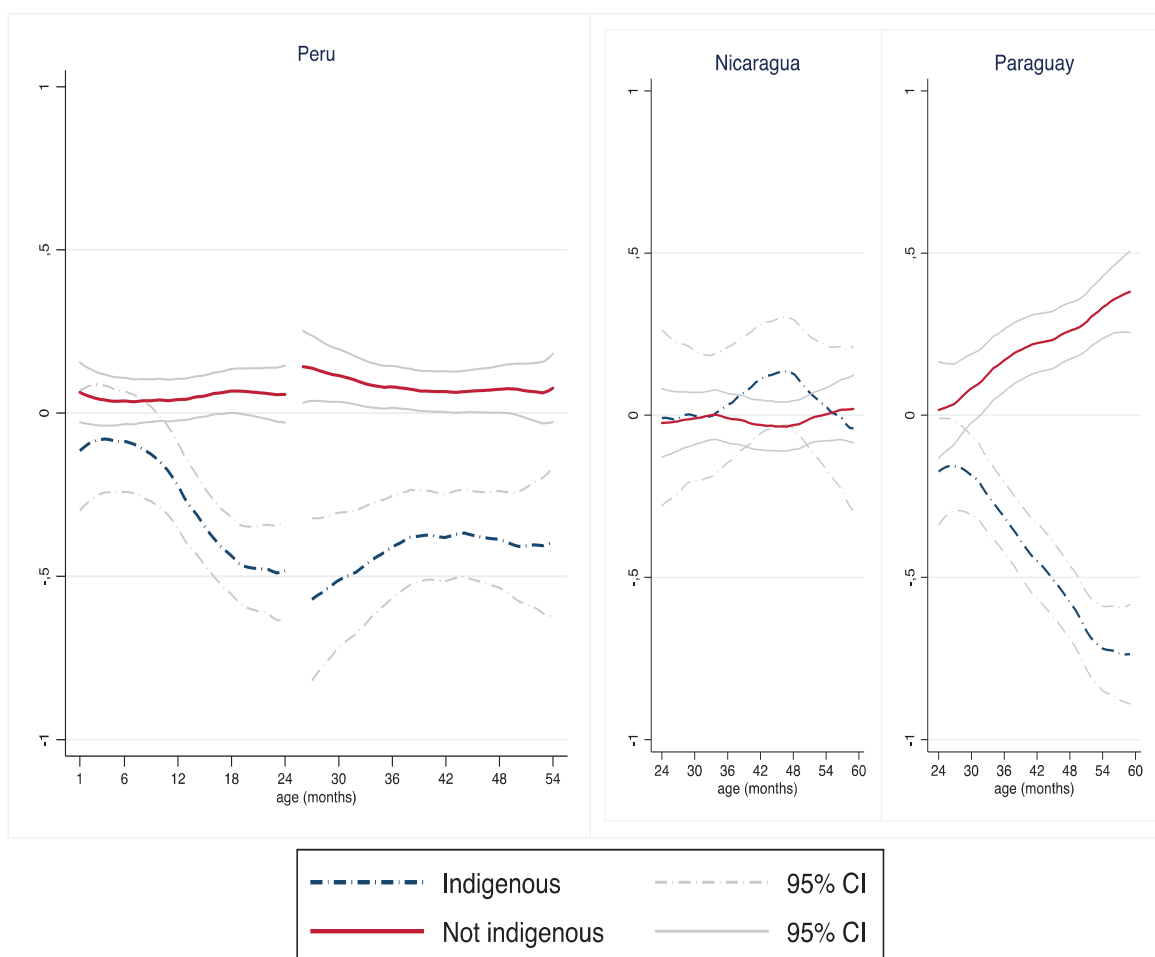
Figure 6. Motor and socioemotional development gradients by mother's education and quality of the home environment (Engle scores)



Source: Authors' calculations using data from the Regional Project on Child Development Indicators (PRIDI, 2012). The data are nationally representative.

Note: The figures compare development in the children of mothers that have completed primary education or lower versus those with completed secondary education or higher, and children belonging to homes in the first (lowest) quartile of the distribution of the quality of the home environment versus those in the fourth (highest) quartile of the distribution. The quality of the home environment was measured using indicators relating to the number of children's books in the home, the number of adults that interact with the child (playing, singing, drawing, telling stories), the frequency of adult-child interactions, and the child's hygiene routines and practices. The horizontal axis shows the child's age in months, while the vertical axis shows the child's z-score in development tests. The motor and socioemotional development dimensions of the Engle scale were used to measure child development. Raw scores were internally standardized using the age-specific mean and standard deviation for the sample (calculated using nonparametric methods) and were expressed as z-scores.

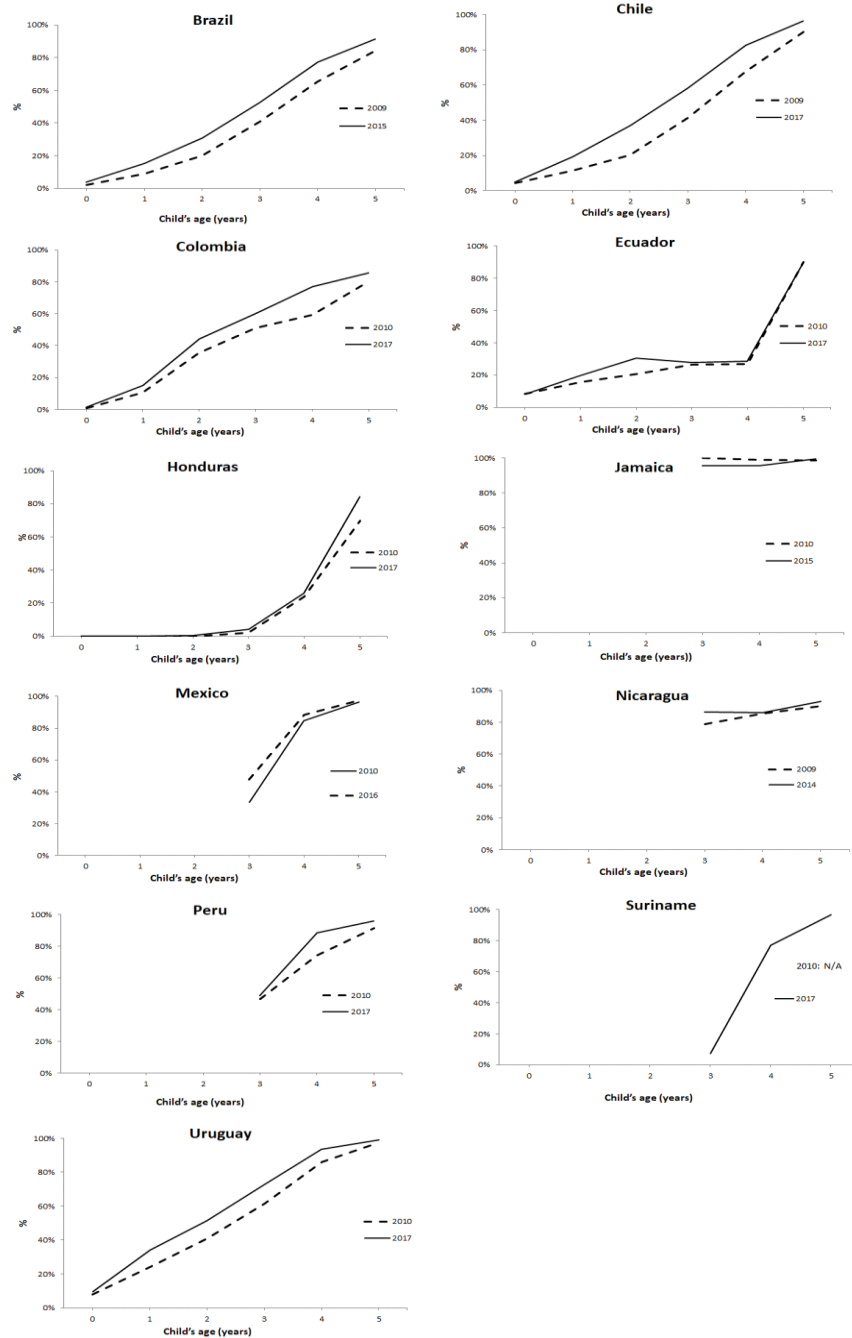
Figure 7. Cognitive and language development gradients, indigenous and nonindigenous



Source: Authors' calculations using data from the impact evaluation for the Servicio de Acompañamiento a Familias [Family Support Service] (2015) for Peru, and from the Regional Project on Child Development Indicators (PRIDI, 2012) for Nicaragua and Paraguay. The data are nationally representative.

Note: The figure compares development in indigenous children versus nonindigenous children. The indicator used to identify indigenous children in the Peruvian data was whether or not the child's mother answered the household survey in an indigenous language. In the cases of Nicaragua and Paraguay, the indicator was whether or not the development assessment was administered in an indigenous language. The horizontal axis shows the child's age in months, while the vertical axis shows the child's z-score in development tests. Scores for the problem-solving and communication areas of the Ages & Stages Questionnaires (ASQ-3) were used to measure child development in Peru, while the cognitive and language development dimensions of the Engle scale were used for Nicaragua and Paraguay. Raw scores were internally standardized using the age-specific mean and standard deviation for the sample (calculated using nonparametric methods) and were expressed as z-scores. In the case of Peru, only children in the control group were included in the baseline and monitoring indicators. The proportions of indigenous children included in the samples were 16% in Peru, 21% in Nicaragua, and 33% in Paraguay.

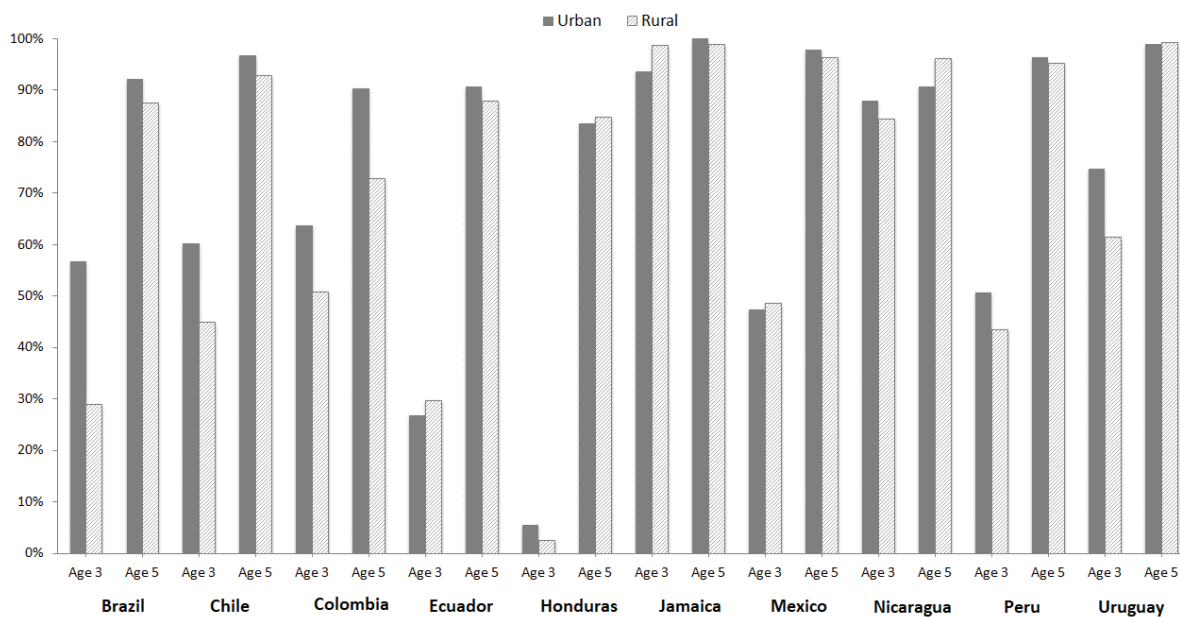
Figure 8. Daycare and preschool attendance by age



Source: Authors' calculations based on the National Household Sample Survey (PNAD) for Brazil; the National Socioeconomic Characterization Survey (CASEN) for Chile; the National Quality of Life Survey (ENCV) for Colombia; the National Employment, Unemployment, and Underemployment Survey (ENEMDU) for Ecuador; the Permanent Multipurpose Household Survey (EPHIM) for Honduras; the Survey of Living Conditions (SLC) for Jamaica; the National Survey of Household Earnings and Expenditure (ENIGH) for Mexico; the National Survey for the Measurement of Household Living Standards (EMNV) for Nicaragua; the National Household Survey (ENAH) for Peru; the Survey of Living Conditions (SLC) for Suriname; and the Continuous Household Survey (ECH) for Uruguay. The data are nationally representative.

Note: The horizontal axis shows the child's age in years, while the vertical axis shows the percentage of children attending daycare or preschool. In Mexico and Suriname, the question on participation was only included after three years of age. In the case of Suriname, only one year of information was available. In Peru, children aged 0-2 years were not included because the survey question is not comparable to those in other countries (it focused on participation in a single program). Children under 2 years of age were not included for Jamaica and Nicaragua due to the very small sample size.

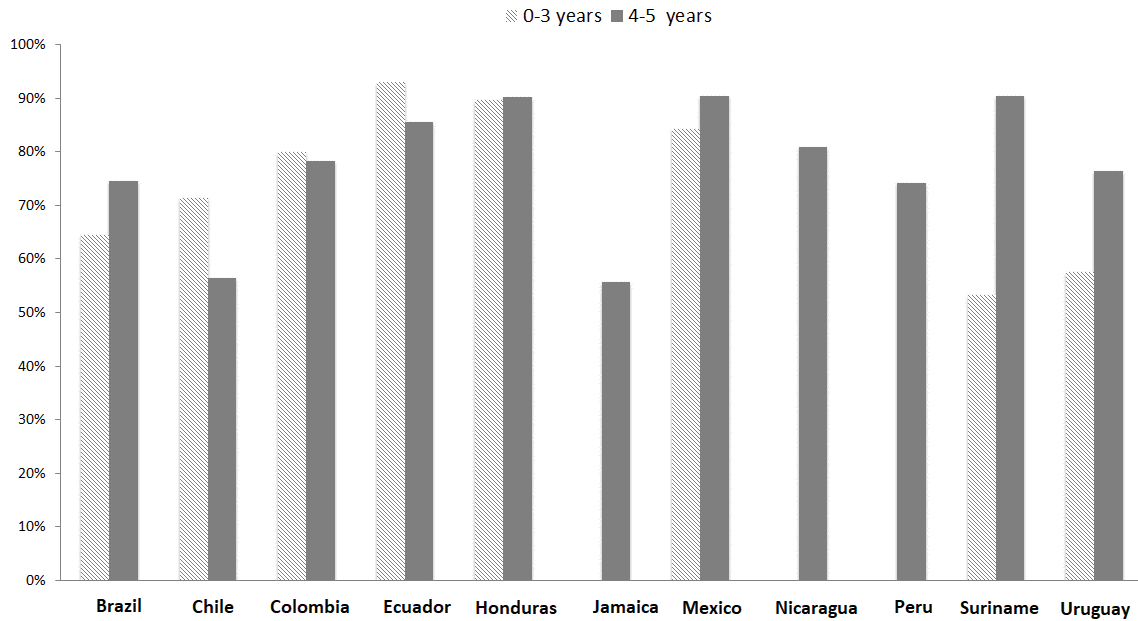
Figure 9. Daycare and preschool attendance among 3- and 5-year-olds, by area



Source: Authors' calculations based on the National Household Sample Survey (PNAD) for Brazil (2015); the National Socioeconomic Characterization Survey (CASEN) for Chile (2017); the National Quality of Life Survey (ENCV) for Colombia (2017); the National Employment, Unemployment, and Underemployment Survey (ENEMDU) for Ecuador (2017); the Permanent Multipurpose Household Survey (EPHPM) for Honduras (2017); the Survey of Living Conditions (SLC) for Jamaica (2015); the National Survey of Household Earnings and Expenditure (ENIGH) for Mexico (2016); the National Survey for the Measurement of Household Living Standards (EMNV) for Nicaragua (2014); the National Household Survey (ENAH) for Peru (2017); and the Continuous Household Survey (ECH) for Uruguay (2017). The data are nationally representative.

Note: The figure shows the percentage of children aged 3 and 5 years attending daycare or preschool by area (urban or rural). This information is not available for Suriname.

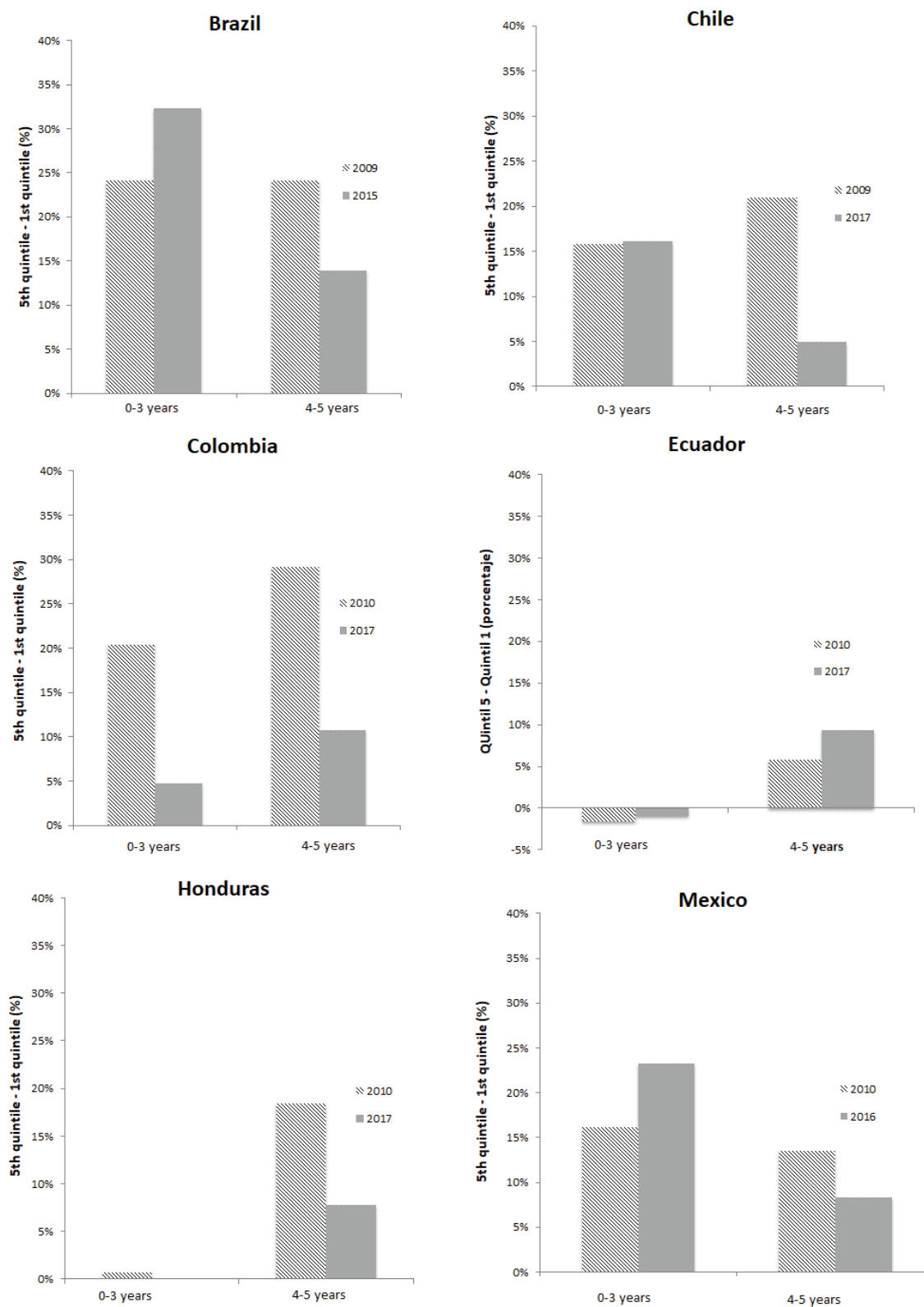
Figure 10. Public daycare and preschool attendance

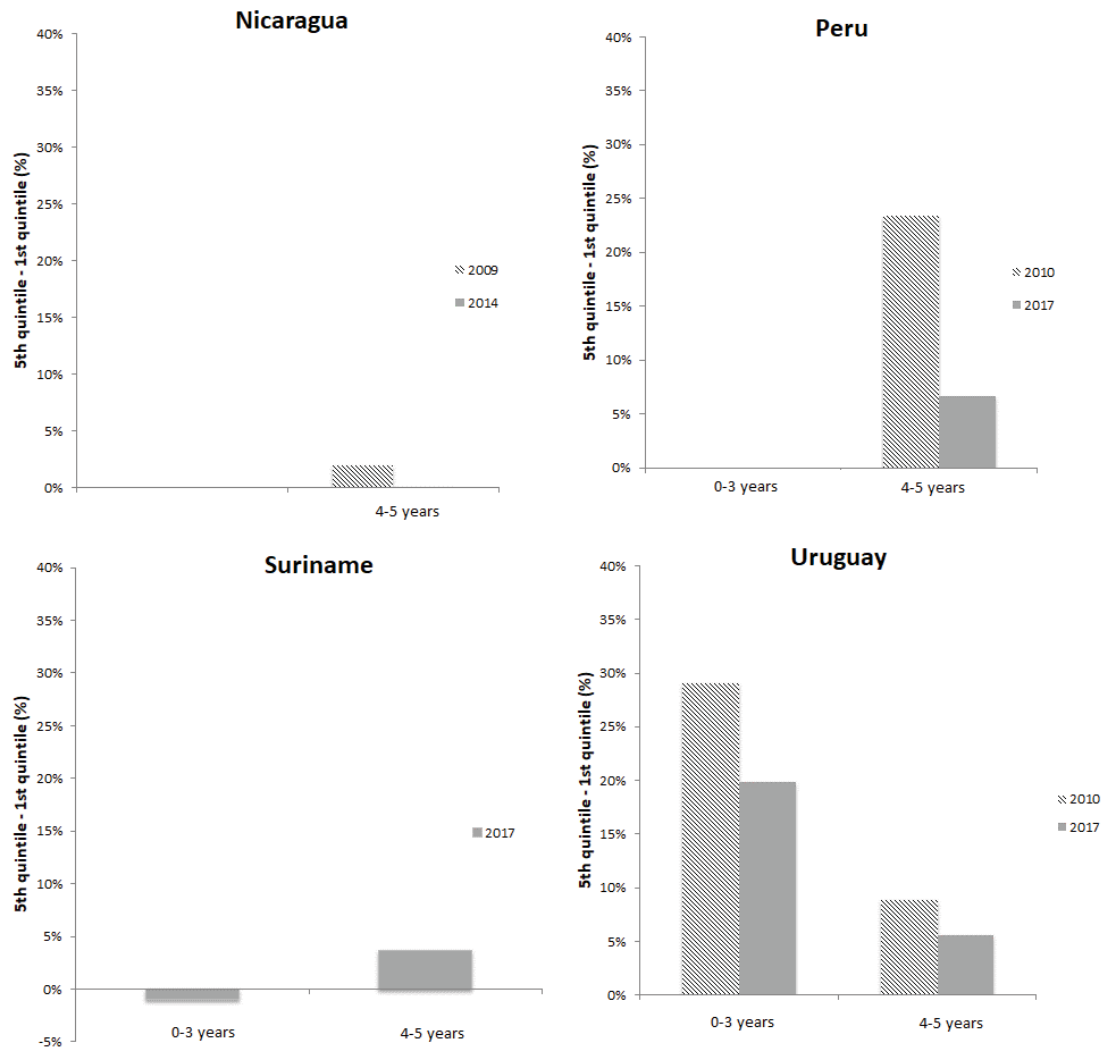


Source: Authors' calculations based on the National Household Sample Survey (PNAD) for Brazil (2015); the National Socioeconomic Characterization Survey (CASEN) for Chile (2017); the National Quality of Life Survey (ENCV) for Colombia (2017); the National Employment, Unemployment, and Underemployment Survey (ENEMDU) for Ecuador (2017); the Permanent Multipurpose Household Survey (EPHPM) for Honduras (2017); the Survey of Living Conditions (SLC) for Jamaica (2015); the National Survey of Household Earnings and Expenditure (ENIGH) for Mexico (2016); the National Survey for the Measurement of Household Living Standards (EMNV) for Nicaragua (2014); the National Household Survey (ENAHO) for Peru (2017); the Survey of Living Conditions for Suriname (2017); and the Continuous Household Survey (ECH) for Uruguay (2017). The data are nationally representative.

Note: The figure shows the percentage of children attending a public daycare or preschool in two age groups: 0-3 years and 4-5 years. Children aged 0-3 years were not included in the case of Peru because the question is not comparable to those in other countries. Children under 2 years of age were not included for Jamaica and Nicaragua due to the very small sample size.

Figure 11. Difference in daycare and preschool attendance between the wealthiest and poorest quintiles

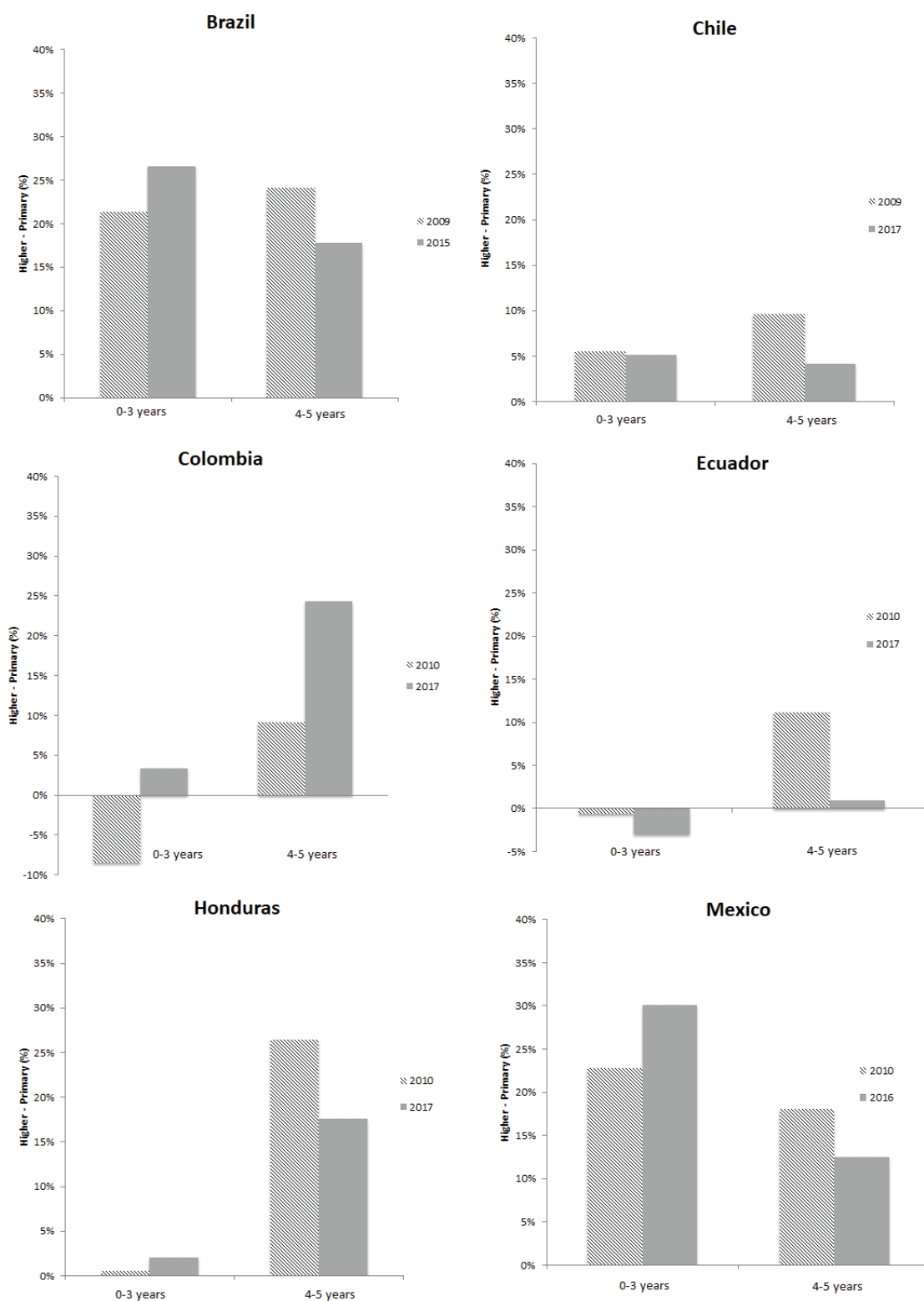


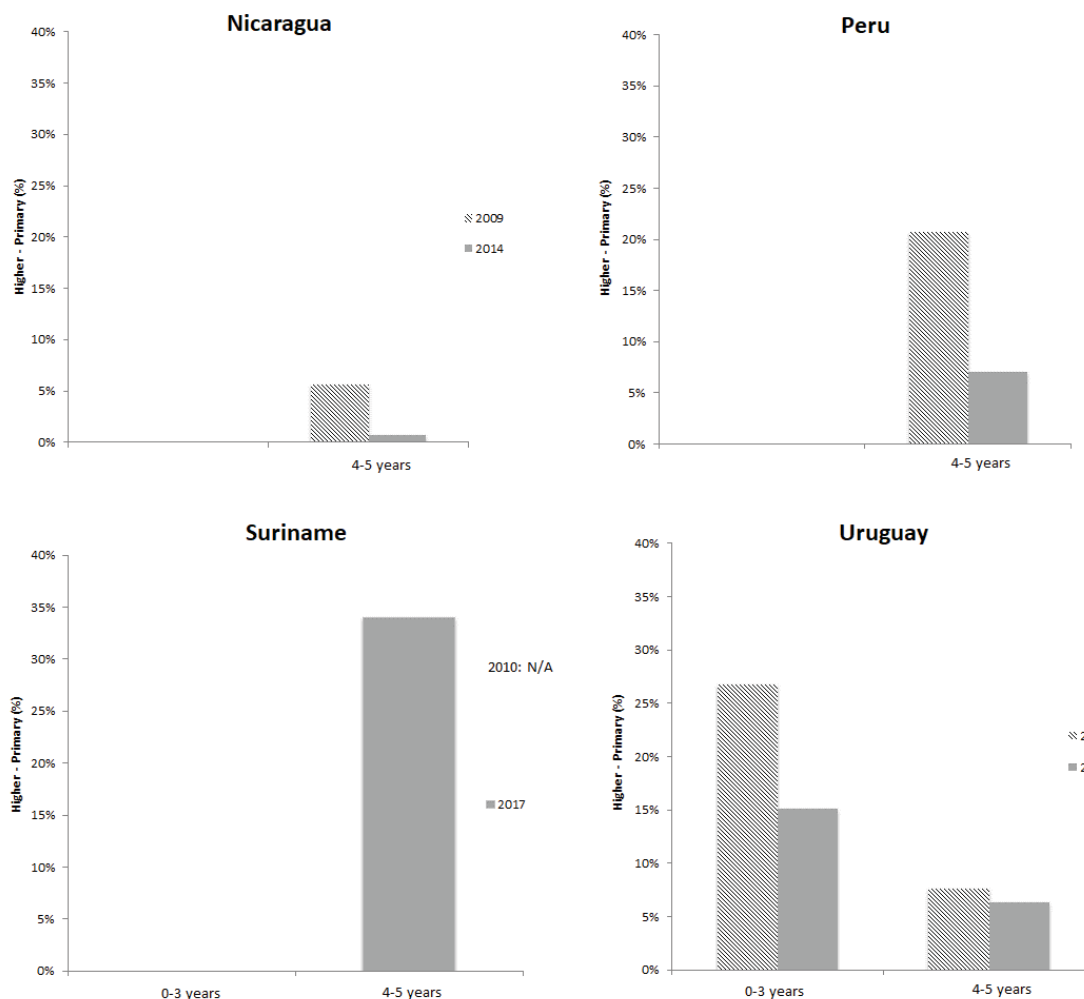


Source: Authors' calculations based on the National Household Sample Survey (PNAD) for Brazil; the National Socioeconomic Characterization Survey (CASEN) for Chile; the National Quality of Life Survey (ENCV) for Colombia; the National Employment, Unemployment, and Underemployment Survey (ENEMDU) for Ecuador; the Permanent Multipurpose Household Survey (EPHPM) for Honduras; the National Survey of Household Earnings and Expenditure (ENIGH) for Mexico; the National Survey for the Measurement of Household Living Standards (EMNV) for Nicaragua; the National Household Survey (ENAHO) for Peru; the Survey of Living Conditions (SLC) for Suriname; and the Continuous Household Survey (ECH) for Uruguay. The data are nationally representative.

Note: The figure shows the difference between the fifth (wealthiest) income quintile and the first (poorest) quintile with respect to the percentage of children attending daycare or preschool, for two age groups: 0-3 years and 4-5 years. The variable was calculated for all countries as follows: (i) the sample was divided into income quintiles; (ii) the average percentage attending daycare or preschool was calculated for the two groups; and (iii) the difference in this percentage between the fifth and first quintiles was calculated for the two age groups. In the case of Suriname, only one year of information was available. Jamaica could not be included due to a lack of income data. Children aged 0-3 years were not included in the case of Peru because the question is not comparable to those in other countries. Children under 2 years of age were not included for Nicaragua due to the very small sample size.

Figure 12. Difference in daycare and preschool attendance among children of mothers with higher education versus those with primary education

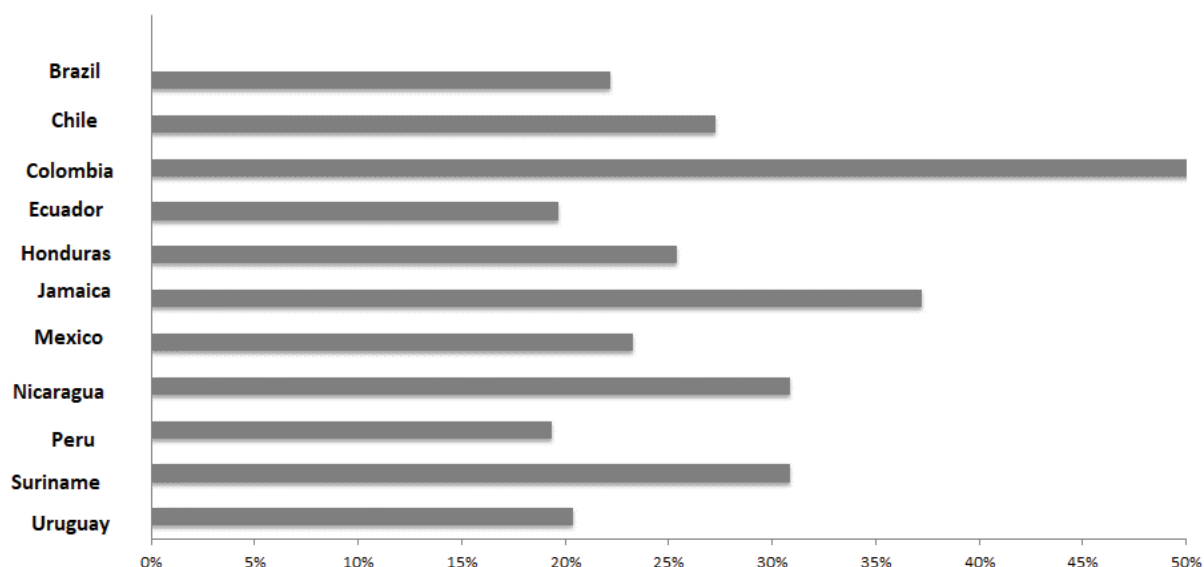




Source: Authors' calculations based on the National Household Sample Survey (PNAD) for Brazil; the National Socioeconomic Characterization Survey (CASEN) for Chile; the National Quality of Life Survey (ENCV) for Colombia; the National Employment, Unemployment, and Underemployment Survey (ENEMDU) for Ecuador; the Permanent Multipurpose Household Survey (EPHPM) for Honduras; the National Survey of Household Earnings and Expenditure (ENIGH) for Mexico; the National Survey for the Measurement of Household Living Standards (EMNV) for Nicaragua; the National Household Survey (ENAH) for Peru; the Survey of Living Conditions (SLC) for Suriname; and the Continuous Household Survey (ECH) for Uruguay. The data are nationally representative.

Note: The figure shows the difference between the children of mothers with higher education and those of mothers with primary education with respect to the percentage of children attending daycare or preschool, for two age groups: 0-3 years and 4-5 years. The variable was calculated for all countries as follows: (i) the average percentage of children attending daycare or preschool was calculated for the two groups; and (ii) the difference was calculated between the percentage for the children of mothers with higher education and that for mothers with primary education. In the case of Suriname, only one year of information was available. Children aged 0-3 years were not included in the case of Peru because the question is not comparable to those in other countries. For Chile, Ecuador, Peru, Nicaragua, and Uruguay, the head of household's education is used where that head is a woman. Where the head of household is a man, the education of his spouse is used as the mother of the child cannot be identified. In the case of Jamaica, attendance was 100% among both groups of children at 4-5 years of age. Children under 2 years of age were not included for Nicaragua due to the very small sample size.

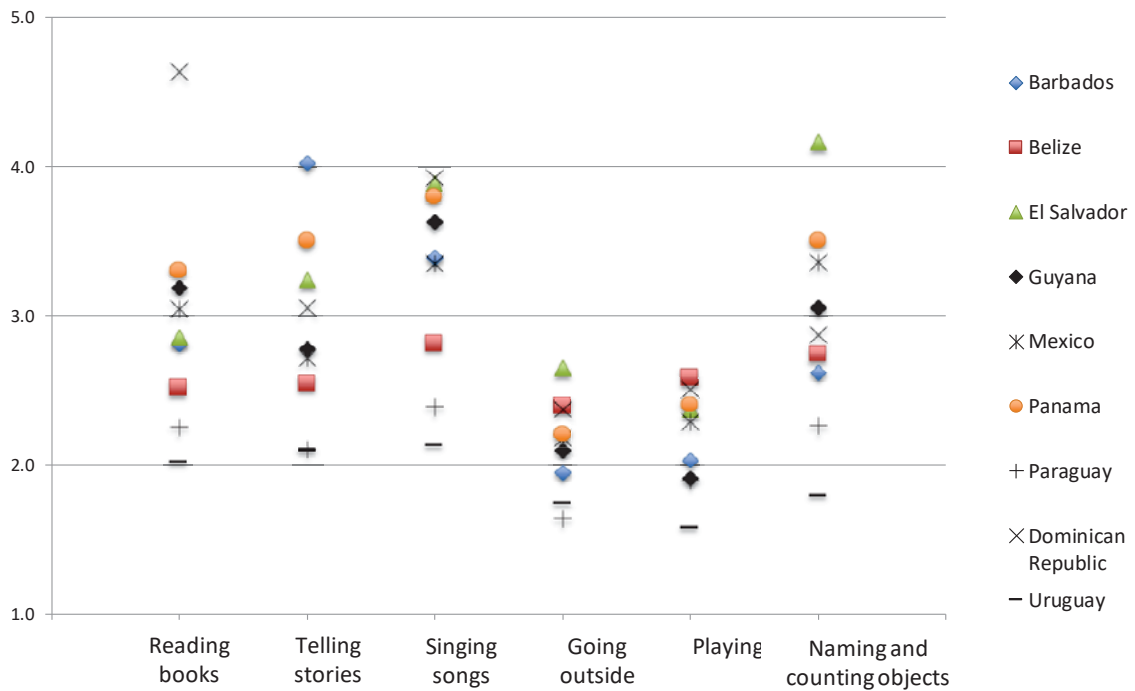
Figure 13. Percentage of children aged 0-5 years living in single-parent households



Source: Authors' calculations based on the National Household Sample Survey (PNAD) for Brazil (2015); the National Socioeconomic Characterization Survey (CASEN) for Chile (2017); the National Quality of Life Survey (ENCV) for Colombia (2017); the National Employment, Unemployment, and Underemployment Survey (ENEMDU) for Ecuador (2017); the Permanent Multipurpose Household Survey (EPHPM) for Honduras (2017); the Survey of Living Conditions (SLC) for Jamaica (2015); the National Survey of Household Earnings and Expenditure (ENIGH) for Mexico (2016); the National Survey for the Measurement of Household Living Standards (EMNV) for Nicaragua (2014); the National Household Survey (ENAHU) for Peru (2017); the Survey of Living Conditions for Suriname (2017); and the Continuous Household Survey (ECH) for Uruguay (2017). The data are nationally representative.

Note: In the cases of Brazil, Chile, Ecuador, Honduras, Peru, Nicaragua, and Uruguay, it was not possible to identify both of the child's parents; as a result, the head of household and his/her spouse were used.

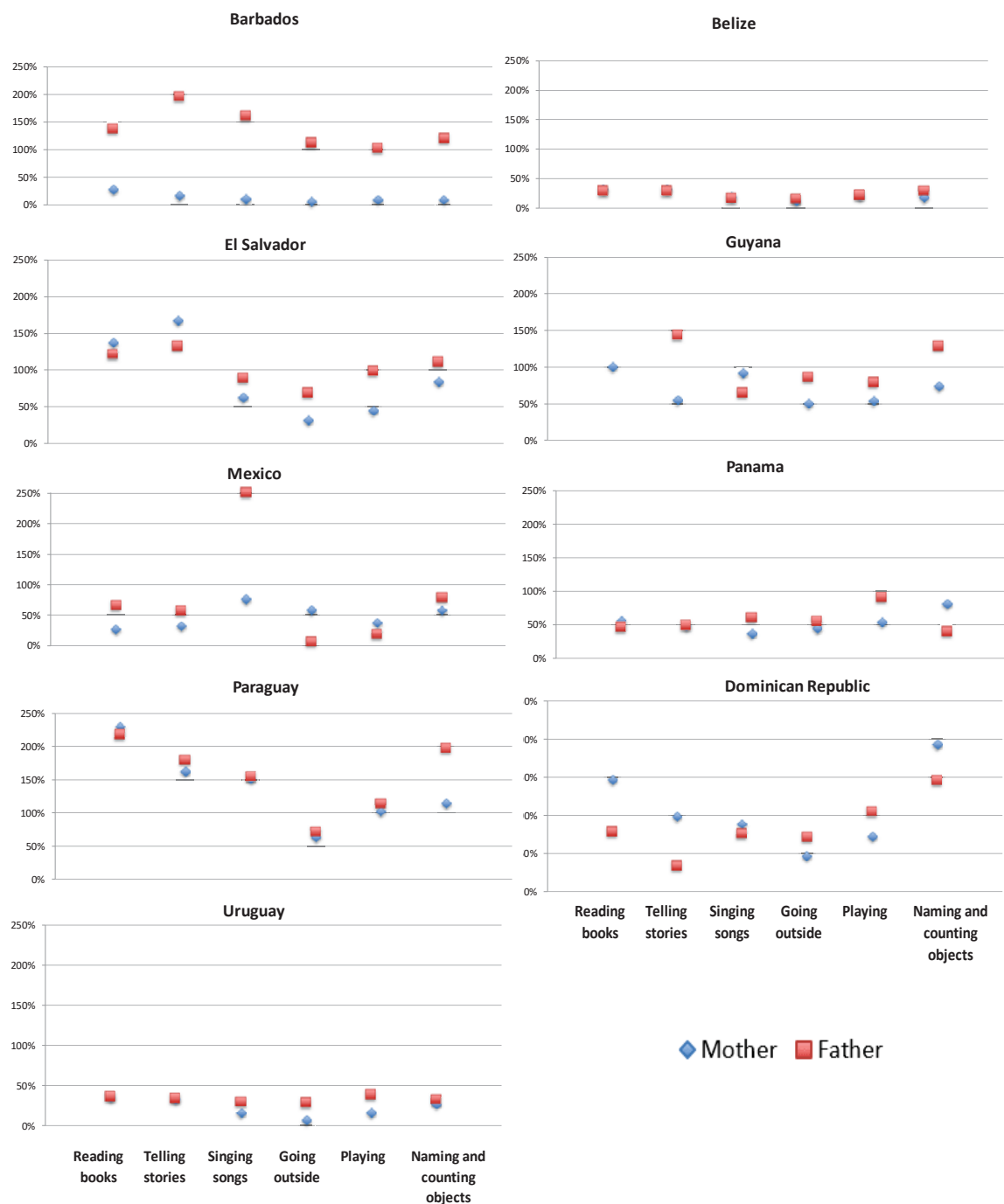
Figure 14. Difference in the number of times mothers and fathers report engaging in play activities with their children



Source: Authors' calculations based on data from nationally representative Multiple Indicator Cluster Surveys: Barbados (2012); Belize (2015-2016); El Salvador (2014); Guyana (2014); Mexico (2015); Panama (2013); Paraguay (2016); the Dominican Republic (2014); and Uruguay (2013).

Note: The figure shows the difference between mothers and fathers with respect to the number of times they reported engaging in a series of activities with the child in the three days prior to the survey. The variable was calculated for all countries by dividing the percentage of mothers that reported engaging in the activity by the percentage of fathers that reported engaging in the same activity.

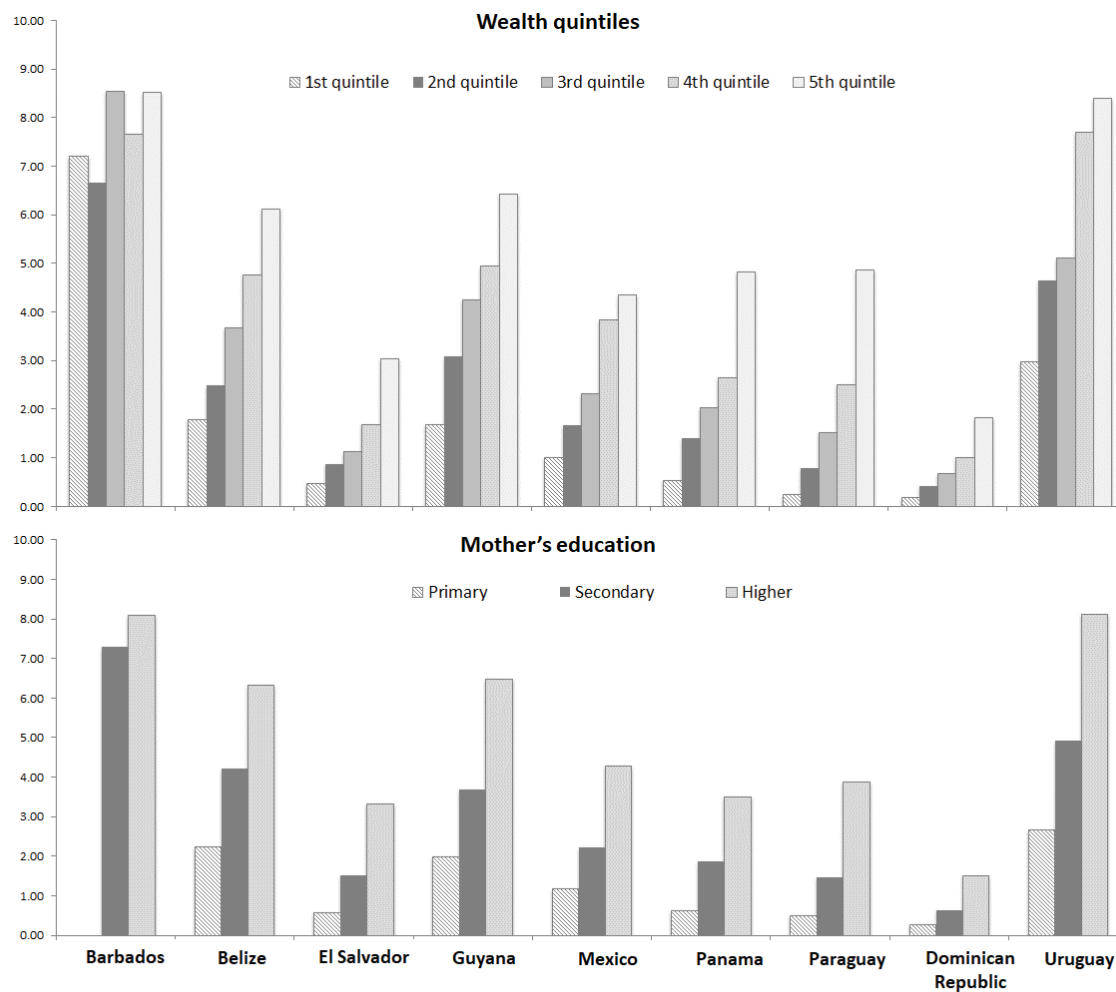
Figure 15. Percentage increase in the number of times parents with higher education engage in play activities with their children compared to those with primary education



Source: Authors' calculations based on data from nationally representative Multiple Indicator Cluster Surveys: Barbados (2012); Belize (2015-2016); El Salvador (2014); Guyana (2014); Mexico (2015); Panama (2013); Paraguay (2016); the Dominican Republic (2014); and Uruguay (2013).

Note: The figure shows the percentage increase in the number of times parents with higher education engaged in play activity with their children in the three days prior to the survey compared to parents with primary education. The variable was calculated for all countries as follows: (i) by subtracting the percentage of parents with higher education from the percentage of those with primary education that reported engaging in this activity; and (ii) dividing the result by the percentage of parents with primary education that reported engaging in this activity. Due to the small sample size, parents with secondary rather than primary education were used in the case of Barbados.

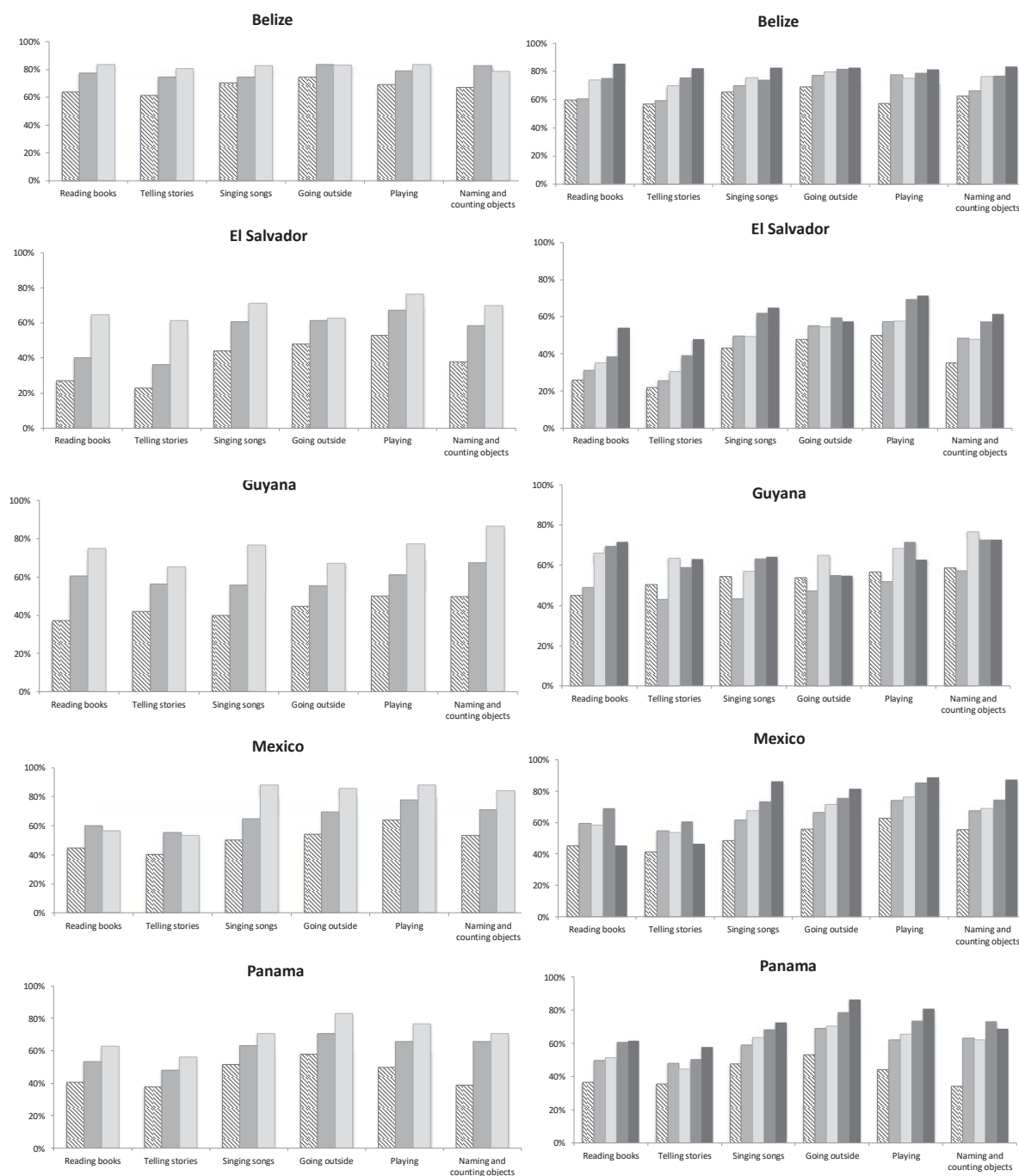
Figure 16. Availability of children's picture books by wealth quintile and mother's education

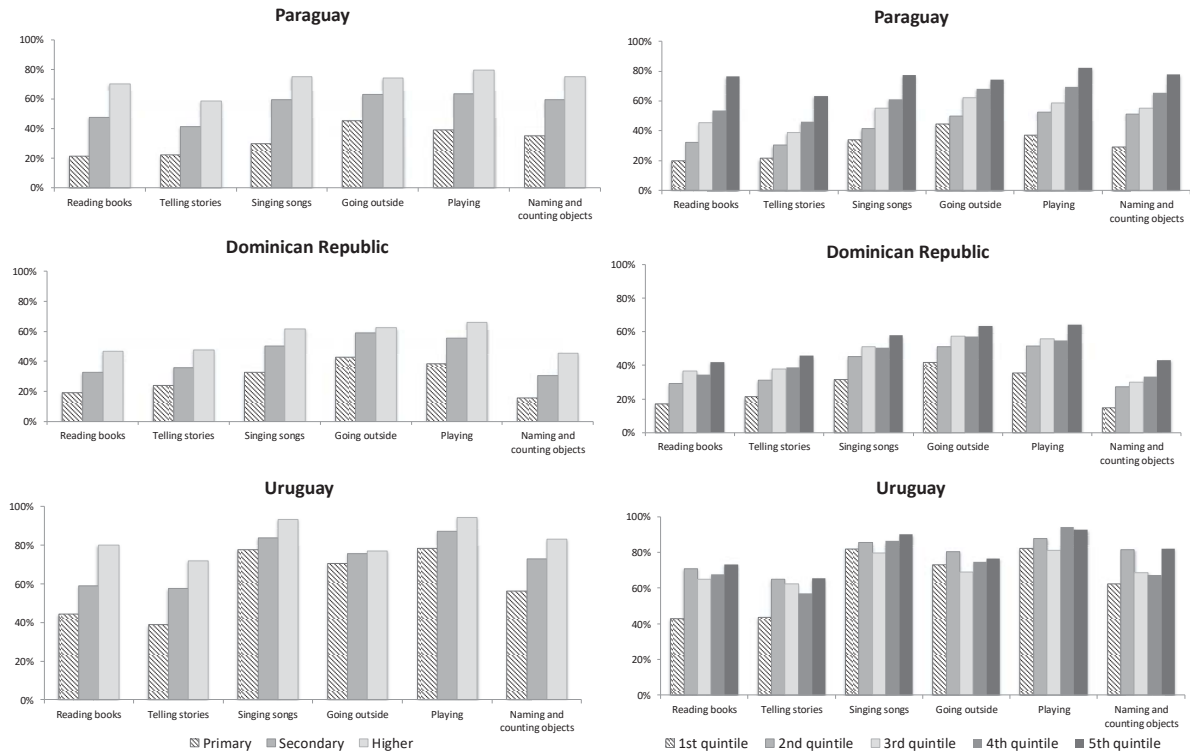


Source: Authors' calculations based on data from nationally representative Multiple Indicator Cluster Surveys: Barbados (2012); Belize (2015-2016); El Salvador (2014); Guyana (2014); Mexico (2015); Panama (2013); Paraguay (2016); the Dominican Republic (2014); and Uruguay (2013).

Note: The figure shows the number of children's books or picture books available in the home by wealth quintile (where the first quintile is the poorest and the fifth is the wealthiest) and for the children of mothers with primary, secondary, and higher education.

Figure 17. Play activities with the mother by mother's education and wealth quintile

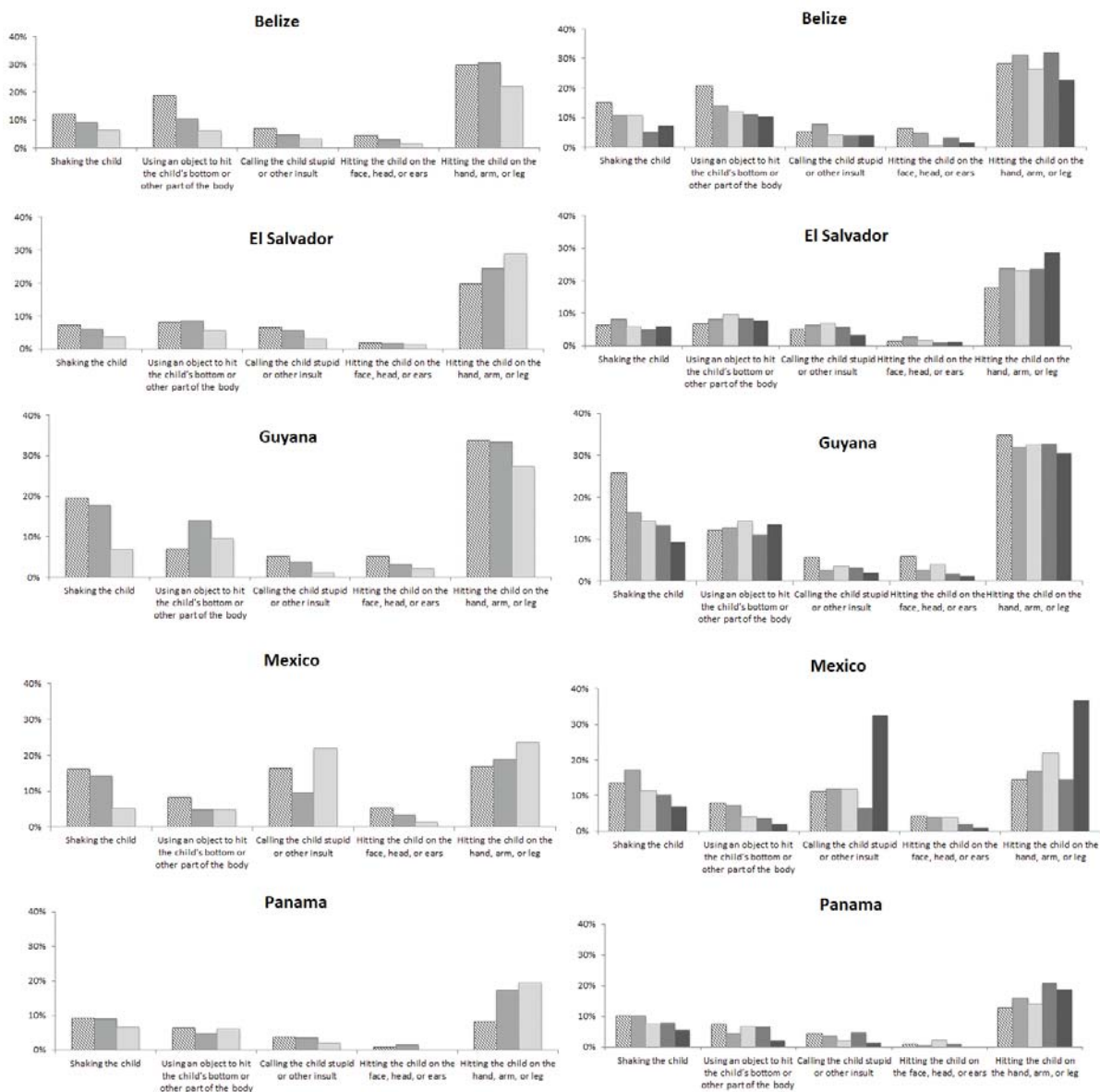


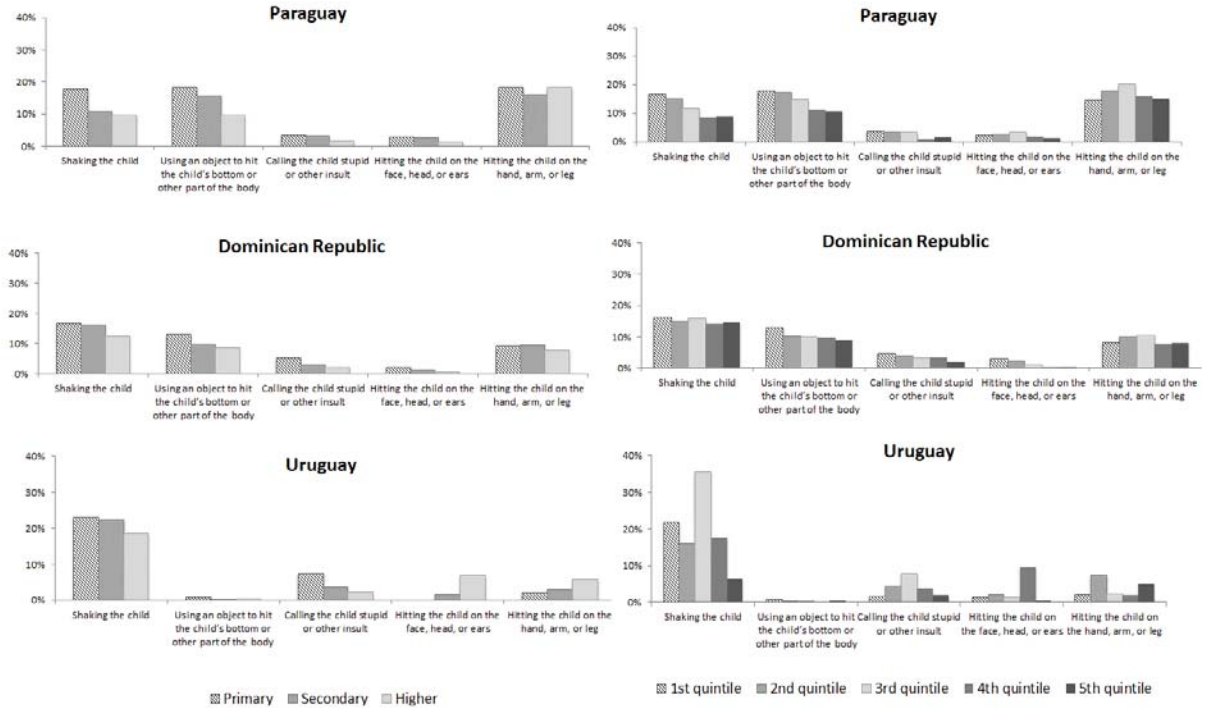


Source: Authors' calculations based on data from nationally representative Multiple Indicator Cluster Surveys: Belize (2015-2016); El Salvador (2014); Guyana (2014); Mexico (2015); Panama (2013); Paraguay (2016); the Dominican Republic (2014); and Uruguay (2013).

Note: The figure shows the percentage of mothers that engaged in a series of activities with the child in the three days prior to the survey. For each country, the left-hand panel shows the percentages according to the mother's education (primary, secondary, and higher), while the right-hand panel shows the percentages by wealth quintile (where the first quintile is the poorest and the fifth is the wealthiest). Barbados was not included due to the small sample size.

Figure 18. Violent disciplinary practices by mother's education and wealth quintile

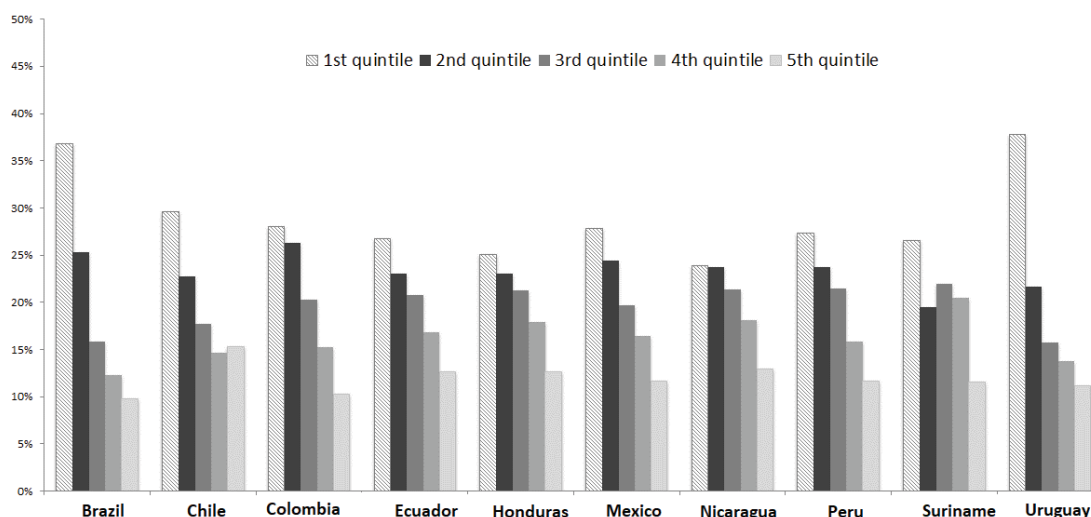




Source: Authors' calculations based on data from nationally representative Multiple Indicator Cluster Surveys: Belize (2015-2016); El Salvador (2014); Guyana (2014); Mexico (2015); Panama (2013); Paraguay (2016); the Dominican Republic (2014); and Uruguay (2013).

Note: The figure shows the percentage of mothers that used a series of harsh disciplinary practices in the month prior to the survey. For each country, the left-hand panel shows the percentages according to the mother's education (primary, secondary, and higher), while the right-hand panel shows the percentages by wealth quintile (where the first quintile is the poorest and the fifth is the wealthiest). Barbados was not included due to the small sample size.

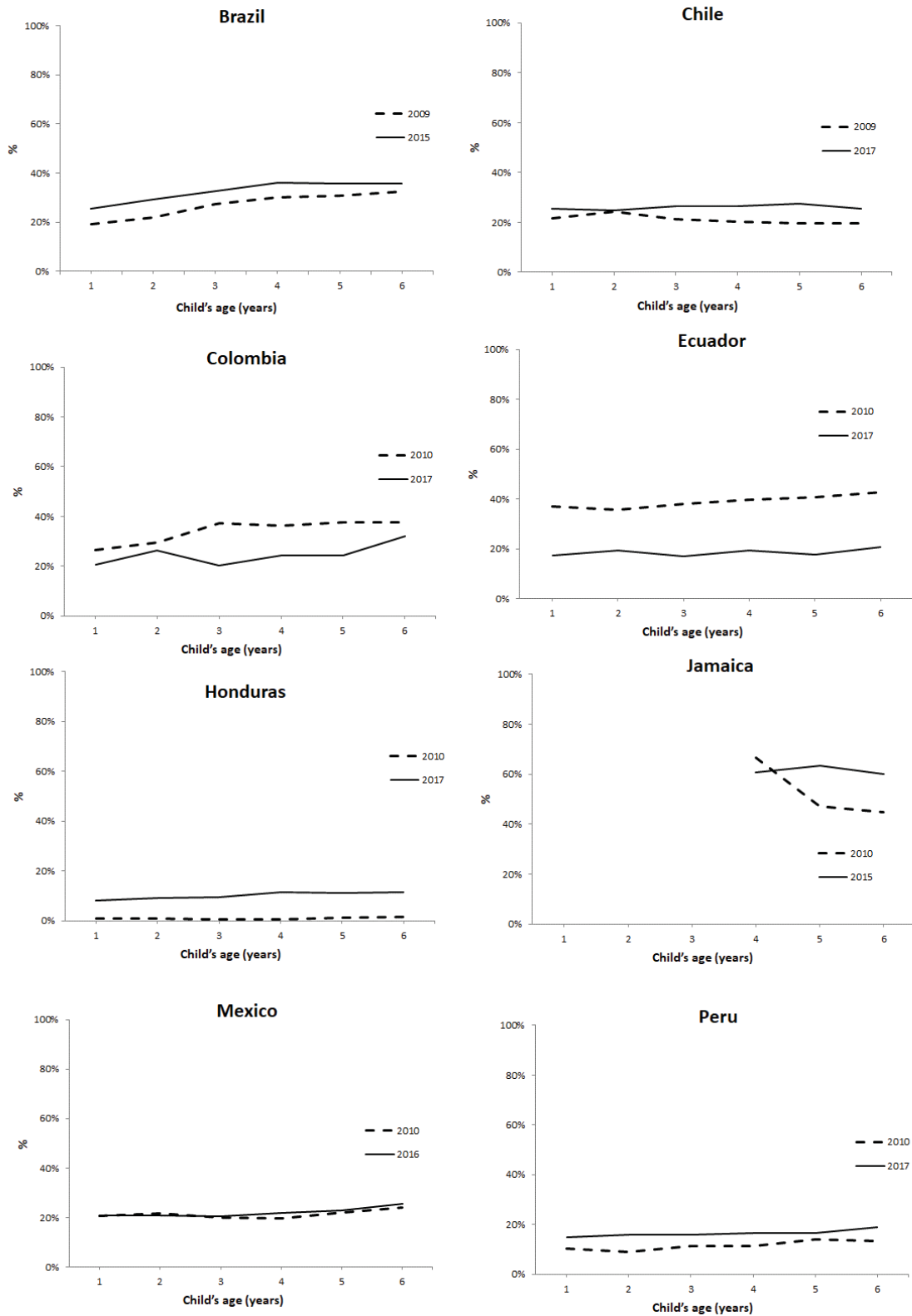
Figure 19. Distribution of children aged 0-5 years by household income quintile

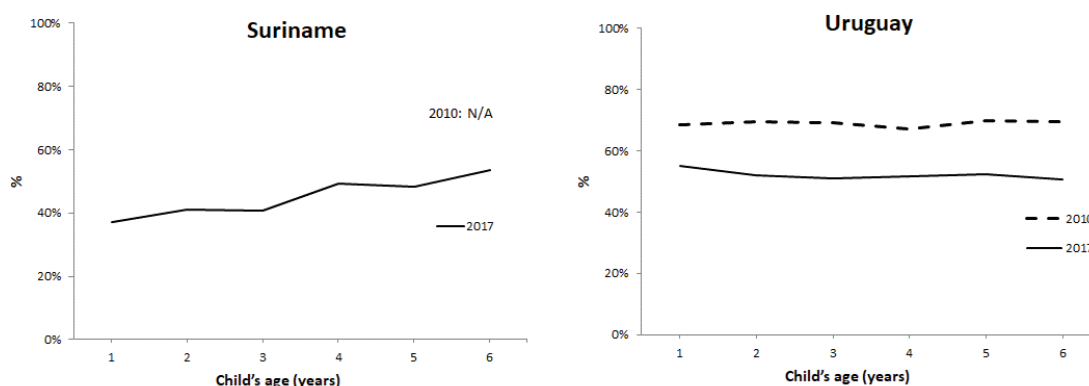


Source: Authors' calculations based on the National Household Sample Survey (PNAD) for Brazil (2015); the National Socioeconomic Characterization Survey (CASEN) for Chile (2017); the National Quality of Life Survey (ENCV) for Colombia (2017); the National Employment, Unemployment, and Underemployment Survey (ENEMDU) for Ecuador (2017); the Permanent Multipurpose Household Survey (EPHPM) for Honduras (2017); the National Survey of Household Earnings and Expenditure (ENIGH) for Mexico (2016); the National Survey for the Measurement of Household Living Standards (EMNV) for Nicaragua (2014); the National Household Survey (ENAH) for Peru (2017); the Survey of Living Conditions for Suriname (2017); and the Continuous Household Survey (ECH) for Uruguay (2017). The data are nationally representative.

Note: The figure shows the distribution of children aged 0-5 years by household income quintile (where the first quintile is the poorest and the fifth is the wealthiest). Jamaica could not be included due to a lack of income data.

Figure 20. Child beneficiaries under cash transfer programs





Source: Authors' calculations based on the National Household Sample Survey (PNAD) for Brazil; the National Socioeconomic Characterization Survey (CASEN) for Chile; the National Quality of Life Survey (ENCV) for Colombia; the National Employment, Unemployment, and Underemployment Survey (ENEMDU) for Ecuador; the Permanent Multipurpose Household Survey (EPHPM) for Honduras; the Survey of Living Conditions (SLC) for Jamaica; the National Survey of Household Earnings and Expenditure (ENIGH) for Mexico; the National Household Survey (ENAH) for Peru; the Survey of Living Conditions (SLC) for Suriname; and the Continuous Household Survey (ECH) for Uruguay. The data are nationally representative.

Note: The horizontal axis shows the child's age in years (0-5), while the vertical axis shows the percentage of children belonging to beneficiary families under the country's cash transfer program. In the case of Suriname, only one year of information was available. Children under 2 years of age were not included for Jamaica due to the very small sample size. The programs are as follows: Bolsa Família (Brazil), Chile Solidario (Chile), Familias en Acción (Colombia), Bono de Desarrollo Humano (Ecuador), Bono Vida Mejor (Honduras), PATH (Jamaica), Oportunidades-Prospera (México), Juntos (Perú), Financial and Child Support (Suriname), and Asignaciones familiares-Plan Equidad (Uruguay). A household is considered to be a beneficiary if any of its members is a beneficiary. Nicaragua does not have a cash transfer program.

TABLES

Table 1. Receptive communication level by age
(PPVT scores using external standardization)

Country	36-41			42-48			49-54			55-60			61-66			67-71		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD
Chile (urban)	1508	104.9	14.2	1890	106.3	16.6	1210	108.4	16.8									
Chile (rural)	177	100.9	13.5	227	100.2	15.6	158	99.9	16.8									
Colombia (urban)	196	100.9	14.8	219	98.2	18.9	228	95.8	19.5	179	97.9	21.0	211	100.9	21.3	152	99.4	20.9
Colombia (rural)	205	90.9	9.7	198	84.4	10.3	258	79.1	13.3	194	80.0	15.9	235	85.8	19.4	180	84.7	20.8
Ecuador (urban)	298	90.1	8.6	304	84.7	10.8	272	80.0	14.8	163	77.8	17.4	89	80.3	22.4	61	75.4	19.8
Ecuador (rural)	584	92.6	10.2	569	88.1	14.4	475	82.9	16.4	446	83.9	21.7	309	88.0	23.6	182	89.2	24.6
Nicaragua (rural)	187	89.3	8.4	236	80.2	7.2	277	72.3	9.1	239	64.6	7.9	316	62.0	9.7	249	60.7	9.0
Peru (urban)													482	98.3	19.5	392	100.6	17.6
Peru (rural)													393	75.6	16.7	70	78.2	18.0

Source: Authors' calculations based on data from the Early Childhood Longitudinal Survey (ELPI) for Chile (2010); the Universidad de los Andes' Colombian Longitudinal Survey (ECLA) for Colombia (2010); the Ecuador Longitudinal Survey of Child Health and Development (ELSCHD) for Ecuador (2003-2004); the Atención a Crisis [Crisis Assistance] database for Nicaragua (2005); and Young Lives for Peru (2006-2007). The Chilean survey is nationally representative for households with children aged five years or less. In the case of the Colombian survey, the urban sample is representative of the whole population except for the richest 10%, while the rural sample is representative for four geographic subregions. In the case of Ecuador, the survey is representative of families that are eligible or almost eligible for the Bono de Desarrollo Humano [Human Development Payment] cash transfer program. The data for Nicaragua are representative of households in six rural municipios included in the Atención a Crisis cash transfer program, while the Peruvian data are representative of all of the country's districts except the top 5% in income terms.

Note: Composite scores on the Peabody Picture Vocabulary Test (PPVT) corresponding to a nonlinear function of the raw scores (average 100 and standard deviation 15).

Table 2. Child development levels by age
(Bayley-III composite scores using external standardization)

Country/Dimension	6-12			13-18			19-24			25-30			31-36			37-42		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD
Bogota (urban)																		
Cognitive	179	104.7	9.5	146	102.4	9.8	186	96.3	8.0	161	95.7	8.9	159	95.3	6.5	145	95.3	6.1
Language	179	102.0	9.9	146	95.7	9.9	186	92.3	10.6	161	94.8	11.0	159	97.3	9.7	145	97.4	7.5
Motor	179	91.0	10.8	146	100.5	12.5	186	99.2	8.3	161	100.0	11.6	159	103.8	10.3	145	102.8	8.0
Socioemotional	179	95.8	12.8	146	93.6	13.3	186	95.1	12.6	161	90.4	12.7	159	90.1	9.3	145	92.1	9.9
Colombia (semi-urban)																		
Cognitive				325	100.2	13.2	307	95.7	11.1				266	92.2	6.2	303	92.4	6.4
Language				325	95.0	15.0	307	93.5	15.0				266	93.9	8.8	303	94.0	7.5
Motor				325	102.0	13.7	307	101.5	14.0				266	103.0	10.0	303	101.9	9.2
Peru (rural)																		
Cognitive													208	87.0	5.9	175	86.9	6.4
Language													208	88.9	6.0	175	88.6	5.1

Source: Authors' calculations based on data from the Rubio-Codina et al. (2015) study and Rubio-Codina et al. (2016) for Bogota; an impact evaluation of a home visit pilot program (Attanasio et al. 2014) for Colombia; and monitoring indicators from the impact evaluation for the Servicio de Acompañamiento a Familias [Family Support Service] (2015) for Peru. These databases are not nationally representative.

Note: Bayley-III composite scores corresponding to a nonlinear function of the raw scores (average 100 and standard deviation 15).

Table 3. Percentage of words used by the child by age
(percentage of correct responses using the MacArthur test)

Country	12-18			19-24			25-30			31-36			37-42		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD
Bogota (urban)	80	0.10	0.09	87	0.41	0.25	91	0.64	0.24						
Colombia (semi-urban)	350	0.09	0.08	288	0.36	0.22	14	0.41	0.28	281	0.49	0.23	317	0.59	0.23
Ecuador (urban)	135	0.10	0.13	144	0.33	0.25	146	0.59	0.29	117	0.78	0.23			
Ecuador (rural)	314	0.11	0.13	276	0.35	0.27	342	0.65	0.30	248	0.78	0.23			
Mexico (urban)	110	0.11	0.14	84	0.31	0.18	93	0.54	0.25	106	0.41	0.23	97	0.45	0.19
Mexico (rural)	315	0.15	0.13	273	0.28	0.22	293	0.54	0.24	290	0.23	0.20	283	0.41	0.24

Source: Authors' calculations based on data from the Rubio-Codina et al. (2015) study and Rubio-Codina et al. (2016) for Bogota; an impact evaluation of a home visit pilot program (Attanasio et al. 2014) for Colombia; the Ecuador Longitudinal Survey of Child Health and Development (ELSCHD) for Ecuador (2003-2004); and the Prospera Health and Nutrition Survey (ENSANUT-Prospera) for Mexico (2018). The Mexican survey is the only nationally representative one.

Note: MacArthur Communicative Development Inventories. Represents the percentage of words that the child was able to say during the test. In Bogota, Colombia, and Mexico, the inventory was changed at 19 and 30 months. In Ecuador, a single inventory was used for the full range of ages. Mexico (urban areas) includes the metropolitan area.

Table 4. Child development levels by age and sex
(Bayley-III composite scores using external standardization)

País/Dimensión	6-12						13-18						19-24						25-30						31-36						37-42					
	Hombre			Mujer			Hombre			Mujer			Hombre			Mujer			Hombre			Mujer			Hombre			Mujer			Hombre			Mujer		
	N	M	DE	N	M	DE	N	M	DE	N	M	DE	N	M	DE	N	M	DE	N	M	DE	N	M	DE	N	M	DE	N	M	DE	N	M	DE			
Bogotá (urbano)	108	103.8	10.0	71	106.1	8.5	73	101.0	9.8	73	103.9	9.7	91	95.4	7.0	95	97.1	8.8	89	95.1	8.8	72	96.5	8.9	87	94.5	5.8	72	98.3	7.1	86	95.2	6.4	79	95.4	5.9
	108	101.2	10.7	71	103.2	8.5	73	94.4	9.1	73	97.0	10.6	91	89.4	9.0	95	95.0	11.4	89	93.5	10.5	72	96.5	11.6	87	95.3	10.0	72	98.6	8.8	86	97.0	7.9	79	97.7	7.2
	108	90.6	10.8	71	91.5	10.9	73	99.6	13.5	73	101.5	11.4	91	98.9	7.6	95	101.4	8.5	89	98.6	10.8	72	101.8	12.4	87	102.3	9.7	72	105.8	10.7	86	102.7	8.1	79	102.9	7.9
	108	95.8	13.3	71	95.8	12.2	73	94.0	11.5	73	93.1	14.9	91	94.5	13.5	95	95.6	11.8	89	90.3	14.3	72	90.6	10.4	87	89.0	8.8	72	91.5	9.7	86	92.0	10.8	79	92.2	9.2
Colombia (semi-urbano)							168	99.0	12.8	157	101.5	13.5	158	95.8	11.3	149	95.6	10.9							139	91.4	6.4	127	93.0	5.9	155	92.2	6.5	148	92.7	6.3
							168	94.1	14.2	157	96.0	15.8	158	91.4	14.8	149	95.6	14.9							139	92.8	9.6	127	95.1	7.6	155	93.1	8.1	148	95.0	6.8
							168	100.8	14.1	157	103.2	13.1	158	101.1	14.9	149	102.1	12.9							139	101.1	9.8	127	105.1	9.9	155	101.9	8.8	148	102.0	9.7
Perú (rural)																									101	87.5	5.6	107	88.4	6.1	80	88.6	6.2	95	87.3	6.6
																									101	89.0	5.5	107	88.8	6.4	80	87.9	4.8	95	89.2	5.2

Source: Authors' calculations based on data from the Rubio-Codina et al. (2015) study and Rubio-Codina et al. (2016) for Bogotá; an impact evaluation of a home visit pilot program (Attanasio et al. 2014) for Colombia; and monitoring indicators from the impact evaluation for the Servicio de Acompañamiento a Familias [Family Support Service] (2015) for Peru. These databases are not nationally representative.

Note: Bayley-III composite scores corresponding to a nonlinear function of the raw scores (average 100 and standard deviation 15).

Table 5. Receptive vocabulary level by age and sex
(PPVT composite scores using external standardization)

País	36-41						42-48						49-54					
	Hombre			Mujer			Hombre			Mujer			Hombre			Mujer		
	N	M	DE	N	M	DE	N	M	DE	N	M	DE	N	M	DE	N	M	DE
Chile (urbano)	756	104.91	14.12	1508	104.94	14.16	937	106.98	16.84	1890	106.32	16.65	617	109.36	16.59	1210	108.39	16.82
Chile (rural)	92	100.68	13.26	85	101.08	13.79	110	100.37	15.83	117	99.96	15.45	87	100.71	16.90	71	98.986	16.83
Colombia (urbano)	96	101.08	13.81	196	100.90	14.84	117	98.77	16.85	219	98.16	18.94	115	96.70	19.71	228	95.803	19.45
Colombia (rural)	109	90.87	9.11	96	90.83	10.47	99	84.43	10.19	99	84.31	10.38	129	80.40	14.69	129	77.822	11.76
Ecuador (urbano)	141	90.04	7.25	298	90.14	8.55	156	85.24	11.78	304	84.69	10.84	143	80.85	14.54	272	80.048	14.83
Ecuador (rural)	310	91.94	9.47	274	93.27	10.94	292	89.47	14.11	277	86.64	14.52	247	83.86	16.57	228	81.89	16.13
Nicaragua (rural)	90	89.11	8.75	97	89.41	8.05	112	79.69	6.88	124	80.67	7.40	151	72.17	8.99	126	72.492	9.28
Perú (urbano)																		
Perú (rural)																		
País	55-60						61-66						67-71					
	Hombre			Mujer			Hombre			Mujer			Hombre			Mujer		
	N	M	DE	N	M	DE	N	M	DE	N	M	DE	N	M	DE	N	M	DE
Chile (urbano)	87	97.53	21.15	179	97.94	20.95	109	102.11	18.66	211	100.92	21.26	80	97.57	20.57	152	99.40	20.94
Chile (rural)	92	78.29	13.55	102	81.56	17.68	112	85.98	20.22	123	85.66	18.68	87	83.39	21.64	93	86.01	20.00
Colombia (urbano)	83	76.55	17.71	163	77.82	17.41	40	82.28	20.26	89	80.26	22.37	34	73.94	20.70	61	75.39	19.78
Colombia (rural)	223	83.26	21.01	223	84.55	22.41	144	88.99	23.12	165	87.04	24.08	79	92.19	24.23	103	86.98	24.71
Ecuador (urbano)	121	65.04	8.68	118	64.22	7.07	159	62.13	10.05	157	61.80	9.42	120	61.50	9.86	129	59.95	8.12
Ecuador (rural)							239	97.67	18.95	482	98.26	19.46	209	100.54	17.84	392	100.61	17.64
Nicaragua (rural)							187	75.80	16.57	206	75.38	16.89	37	77.22	17.59	33	79.36	18.60
Perú (urbano)																		
Perú (rural)																		

Source: Authors' calculations based on data from the Early Childhood Longitudinal Survey (ELPI) for Chile (2010); the Universidad de los Andes' Colombian Longitudinal Survey (ECLA) for Colombia (2010); the Ecuador Longitudinal Survey of Child Health and Development (ELSCHD) for Ecuador (2003-2004); the Atención a Crisis [Crisis Assistance] database for Nicaragua (2005); and Young Lives for Peru (2006-7). The Chilean survey is nationally representative for households with children aged five years or less. In the case of the Colombian survey, the urban sample is representative of the whole population except for the richest 10%, while the rural sample is representative for four geographic subregions. In the case of Ecuador, the survey is representative of families that are eligible or almost eligible for the Bono de Desarrollo Humano [Human Development Payment] cash transfer program. The data for Nicaragua are representative of households in six rural municipalities included in the Atención a Crisis cash transfer program, while the Peruvian data are representative of all of the country's districts except the top 5% in income terms.

Note: Composite scores on the Peabody Picture Vocabulary Test (PPVT) corresponding to a nonlinear function of the raw scores (average 100 and standard deviation 15).

Table 6. Percentage of children aged 5 years in nine countries who have completed some level of preschool, by ethnicity

Country	Afro-descendants	Indigenous	Both	Rest
Bolivia	NA	0.43	NA	0.49
Brazil	0.80	NA	NA	0.84
Chile	NA	0.93	NA	0.92
Colombia	0.83	0.84	NA	0.86
Costa Rica	0.36	0.33	NA	0.37
Mexico	0.89	0.87	0.88	0.88
Panama	0.59	0.38	0.45	0.55
Peru	0.79	0.80	NA	0.81
Uruguay	0.97	0.99	0.99	0.97

Source: Authors' calculations based on the Continuous Household Survey (2017) for Bolivia; the National Household Sample Survey (2017) in Brazil; the 2017 census in Chile; the Quality-Of-Life Survey (2017) in Colombia; the 2011 census in Costa Rica; the Intercensal Survey (2015) for in Mexico; the 2010 census in Panama; the 2017 census in Peru; and the 2011 census in Uruguay. These databases are nationally representative.

Note: The table shows the percentage of children aged five years that have completed at least one year of preschool, by ethnicity. The surveys in Mexico, Panama, and Uruguay allow individuals to identify themselves as having more than one ethnicity. The category "Both" refers to people that identify themselves simultaneously as Afro-descendants and belonging to an indigenous group. In the case of Peru, the head of household's ethnic self-identification was used as this information is not gathered for five-year-olds.

Table 7. Structural quality characteristics of daycare facilities in six countries

Country	Program	Coverage	Teachers/caregivers/aides		Care ratio	Annual cost per capita (US\$)	Year	Description
			Years of education	Earnings (US\$)				
Argentina ¹	Espacios de Primera Infancia	180,000 ^a	13.89	231	15.25	1,612	2017	Centers for children 45 days to 5 years.
Bolivia ²	Crece Bien Para Vivir Bien	1,164 ^f	9.64	n.d.	13.5	n.d.	2018	Centers for children under 4 years of age in Chuquisaca and Potosí.
Colombia	Center-based community homes	36,890	13 ^b	455	n.d.	674	2019	Service for children under 5 years of age. Between 2 and 7 community mothers work out of a single space.
	Traditional community homes	396,031	13 ^b	418	12.25	637	2019	Service for children under 5 years of age in a community mother's home.
Peru ³	Daycare service of the national Cuna Más program	60,695	10.01 ^g	152	4 (6-18 months) 8 (19-36 months)	1,184	2018	Children aged 6-36 months in poor and extremely poor urban areas.
Trinidad and Tobago ⁴	Early Childhood Care and Education Centres	6,560	16 (teachers) 14 (assistants) ^b	1,300 (maestros) 750 (asistentes)	15 ^e	n.d.	2018	Centers for children aged 3-4 years. Attendance is voluntary. Provided by a public-private partnership.
Uruguay ⁵	Public early childhood education (CEIP)	86,588 (2017)	16 (teachers) 12 (assistants) ^b	1,884 ^c	11.5 (3 years) 25.5 (years) 24.9 (years)	2,798	2018	Daycares and schools for children aged 3-5 years. Attendance is mandatory from 4 years of age.

Note: Similar information for earlier years and other countries is included in Araujo, López-Boo, and Puyana (2013). Coverage data is drawn from the programs' administrative databases. Data on the number of years of education are based on provider reports in surveys from Argentina, Bolivia, and Peru, and on the requirements of guidelines in Colombia, Trinidad and Tobago, and Uruguay. Data on salaries and childcare ratios are also drawn from survey reports in the cases of Argentina and Bolivia, while in Peru, Trinidad and Tobago, and Uruguay they reflect the requirements of guidelines. In the case of Colombia, they are drawn from administrative data. Cost data are drawn from communications with the Department for Children, Youth, and Families (SENAF) (February 2019) in the case of Argentina and from administrative databases in the cases of Colombia, Peru, and Uruguay.

^a Data on the number of Espacios de Primera Infancia [Early Childhood Spaces] in 2015, from the National Register of Early Childhood Spaces. 65,000 children in Greater Buenos Aires.

^b Minimum level of education.

^c Simple average of salaries for level 1-6 teachers.

^d Does not include spending on building infrastructure, furnishings, or teaching materials.

^e Maximum childcare ratio according to Ministry of Education regulations.

^f Data for all beneficiary centers under the program (N=79).

^g Information for 2013/2014.

^h Average. Can be between 10 and 14 children per community mother, depending on regional needs.

1. Lopez Boo et al. (in progress); 2. Johannsen et al. (in progress); 3. Araujo, Dormal, and Schady (2018) and communications with the program in 2019; 4. Communications with the Ministry of Education in January 2019 and Ministry of Education (undated); 5. National Public Education Administration (2018) and communications with the Early Childhood and Primary Education Council (CEIP) in January 2019.

Table 8. Structural and process quality in daycare facilities

Instrument	Argentina ¹	Bolivia ²	Bolivia ²	Chile ³	Colombia ⁴	Ecuador ⁵	Peru ⁶
ITERS							
Total	-	1.3	2.2	3.2	1.9	2.1	3.6
Space and furnishings	-	1.2	2.6	3.6	1.9	2.1	3.4
Care routines	-	1.1	1.6	3.2	1.2	1.7	3.2
Listening and talking	3.0	1.3	2.7	3.6	1.9	2.5	3.3
Activities	-	1.2	1.9	2.7	1.5	1.5	2.9
Interaction	3.9	1.4	3.3	4.0	2.2	3.3	5.0
Program structure	-	1.1	2.6	3.4	2.1	2.6	4.0
Parents and staff	-	1.3	1.8	3.0	2.3	2.0	2.8
Observations	95	100	62	63	36	404	602
CLASS (Pre-K)							
Total	4.1	-	-	-	-	2.9	3.1
Emotional and behavioral support	5.1	-	-	-	-	3.6	3.9
Positive climate	5.4	-	-	-	-	3.3	3.4
Negative climate	6.7	-	-	-	-	6.6	6.9
Teacher sensitivity	4.7	-	-	-	-	3.4	3.3
Regard for student perspectives	3.1	-	-	-	-	2.0	3.1
Behavior management	5.7	-	-	-	-	2.9	3.0
Support that motivates learning	2.5	-	-	-	-	1.6	1.8
Facilitation of learning and development	2.5	-	-	-	-	2.1	2.5
Quality of feedback	2.1	-	-	-	-	1.3	1.3
Linguistic modeling	2.9	-	-	-	-	1.6	1.5
Observations	55					404	602
Year	2017	2014	2018	-	2012	2012	2013/2014
Representativeness of sample	Greater Buenos Aires	Chuquisaca and Potosí	Chuquisaca and Potosí	Concepción	National (14 cities)	National	National

Source: Data for Bolivia (2014), Ecuador, and Peru are taken from Berlinski and Schady, 2015. Data for Buenos Aires are taken from López Boo et al (in progress); data for Bolivia (2018) are from Johannsen et al. (in progress); and those for Chile are from Herrera et al. 2005. 1: Espacios de Primera Infancia; 2: Crecer Bien para Vivir Bien; 3: Jardines; 4: Centros de Desarrollo Infantil; 5: Centros Infantiles del Buen Vivir (currently Centros de Desarrollo Infantil); 6: Servicio de Cuidado Diurno del Programa Nacional Cuna Más.

Note: The reported scores are from two scales that measure the quality of center-based services. The Infant/Toddler Environment Rating Scale (ITERS-R) (Harms, Cryer y Clifford 2006) and the Early Childhood Environment Rating Scale (ECERS-R) (Harms, Cryer y Clifford 2005) assess both the quality of interactions and structural quality, or the availability of support resources such as spaces, routines, and materials, etc. The Classroom Assessment Scoring System (CLASS) (La Paro, Hamre y Pianta 2008; La Paro, Hamre y Pianta 2011) focuses exclusively on process quality. The two tools are administered by means of observation and codification of a protocol. Scores are on a scale of 1 to 7. A score of 1-2 is seen as very low quality, 3-5 as mid-level, and 6-7 as good quality.

Table 9. Process quality in preschool programs in LAC

CLASS (Pre-K)	Trinidad and Tobago¹	Jamaica²
Total	3.7	3.5
<i>Emotional support</i>	4.8	4.2
Positive climate	4.9	4.2
Negative climate	6.7	5.5
Teacher sensitivity	4.3	4.4
Regard for student perspectives	3.5	2.8
<i>Classroom organization</i>	4.4	4.8
Behavior management	5.2	4.6
Productivity	4.9	5.4
Instructional learning formats	3.0	4.5
<i>Instructional support</i>	1.4	1.4
Concept development	1.5	1.1
Quality of feedback	1.5	1.3
Linguistic modeling	1.4	1.9
Observations	82	226
Year	2015/2016	2015
Representativeness of sample	National	Kingston and St. Andrew

Source: Data for Trinidad and Tobago are drawn from Cruz-Aguayo and Schodt (2018) and those for Jamaica from Baker-Henningham et al. (2016). 1: Early Childhood Care and Education Centers; 2: Basic School Classrooms.

Note: Reported scores are from the Classroom Assessment Scoring System (CLASS) (La Paro, Hamre y Pianta 2008; La Paro, Hamre y Pianta 2011). CLASS focuses exclusively on process quality and is administered by means of observation and codification of a protocol. Scores are on a scale of 1 to 7. A score of 1-2 is seen as very low quality, 3-5 as mid-level, and 6-7 as good quality.

Table 10. Labor participation by sex and family composition

Country	Women (%)				Men (%)				Difference (men-women, %)			
	Group 1	Group 2	Group 3	Total	Group 1	Group 2	Group 3	Total	Group 1	Group 2	Group 3	Total
Argentina	79.2	60.6	71.6	70.2	94.6	97.8	96.7	96.4	15.4	37.1	25.2	26.2
Bolivia	77.3	63.0	73.0	69.5	98.0	99.1	98.9	98.8	20.7	36.1	25.9	29.3
Brazil	71.5	64.1	71.2	69.4	91.2	95.2	93.5	93.1	19.7	31.0	22.3	23.7
Chile	73.9	62.6	69.0	68.6	95.4	97.9	97.9	97.0	21.5	35.3	28.9	28.4
Colombia	76.5	66.9	74.5	72.4	96.5	98.8	98.2	97.9	20.1	31.9	23.8	25.5
Costa Rica	64.7	50.8	60.4	58.9	94.9	98.5	98.0	97.2	30.3	47.6	37.6	38.3
Dominican Rep.	65.1	61.0	69.1	65.4	92.9	97.6	96.2	95.5	27.8	36.6	27.0	30.1
Ecuador	75.5	62.0	69.8	67.4	96.9	98.8	98.5	98.4	21.5	36.8	28.8	31.0
Guatemala	51.1	38.0	47.5	43.5	97.4	98.9	98.1	98.4	46.3	60.9	50.6	54.9
Honduras	63.6	48.9	58.1	54.2	96.9	99.2	99.1	98.8	33.3	50.3	41.0	44.6
Mexico	66.6	54.0	63.8	61.0	96.6	98.4	98.3	98.0	30.0	44.4	34.5	37.0
Nicaragua	70.5	52.2	64.4	59.6	96.3	98.2	97.0	97.5	25.9	46.1	32.6	38.0
Panama	75.8	62.5	69.8	68.4	97.4	99.6	98.5	98.5	21.6	37.1	28.7	30.2
Peru	82.5	71.8	80.6	77.5	96.5	98.4	98.4	98.0	14.1	26.6	17.9	20.5
Paraguay	74.2	64.3	71.1	68.5	97.4	98.6	98.4	98.3	23.1	34.3	27.3	29.8
El Salvador	61.0	49.0	60.2	56.4	91.8	96.0	95.7	94.9	30.8	47.0	35.5	38.5
Uruguay	84.5	76.8	83.2	81.8	96.2	98.6	97.7	97.4	11.8	21.8	14.5	15.7
Simple average	71.4	59.3	68.1	65.4	95.7	98.2	97.6	97.3	24.3	38.9	29.5	31.9

Source: Authors' calculations based on official household surveys harmonized by the IDB. The household surveys are from 2017, with the exception of Mexico (2016) and Nicaragua (2014). These databases are nationally representative.

Note: Group 1 = households without children under 18 years of age; Group 2 = households in which the younger child is 0-5 years of age; Group 3 = households in which the youngest child is 6-8 years of age; the total includes all households surveyed. Labor participation rates are calculated by dividing the economically active population by the total number of people in the corresponding age bracket. The estimates only include heads of household and their spouses.

Table 11. Maternity and paternity leave and parental leave

Country	Maternity	Paternity	Parental	Source
Argentina	90 days. May be taken as 45 days prenatal and 45 postnatal or 30 days prenatal and 60 postnatal. Leave is longer in several provinces.	2 days. Some provinces have longer leave periods.	No parental leave. There is currently a bill to introduce a 180-day postnatal leave period for fathers or mothers.	Employment Contract Act.
Bahamas	12 weeks.	1 week unpaid.	No parental leave.	Employment Act, 2001.
Barbados	12 weeks.	No paternity leave.	No parental leave.	Employment of Women (Maternity Leave) Act.
Bolivia	15 days prenatal and 45 days postnatal.	3 days.	No parental leave.	General Employment Act, Supreme Decree 1,212.
Brazil	4 months.	5 days. 2 days where the father works for a company that participates in the Empresa Cidadã program.	None	Law 8112/90, Law 11,770/2008 "Programa Empresa Cidadã."
Chile	6 weeks prenatal and 12 weeks postnatal.	5 days.	Once postnatal leave has ended, there is a postnatal parental leave period of 12 weeks full time or 18 weeks part time. The mother may transfer 6 weeks to the father if she opts for full time, or 12 weeks if she opts for part time. The first 6 weeks apply to the mother only.	Labor Code. Law 20,545/2011.
Colombia	18 weeks.	4 days if the father is the sole contributor to the health system; 8 days if both parents contribute.	No parental leave.	Law 1,822, Labor Code.
Costa Rica	1 month prenatal and 3 months postnatal.	No paternity leave.	No parental leave.	Labor Code.
Ecuador	2 weeks prenatal and 10 weeks postnatal.	10 days.	No parental leave.	Labor Code.
El Salvador	6 weeks prenatal and 10 weeks postnatal.	3 days.	No parental leave.	Labor Code, Decree 335.
Guatemala	30 days prenatal and 54 days postnatal.	2 days.	No parental leave.	Labor Code.
Honduras	10 weeks: 4 weeks prenatal, 6 weeks postnatal.	No paternity leave.	No parental leave.	Labor Code.
Jamaica	12 weeks.	No paternity leave.	No parental leave.	Maternity Leave Act, 1979.
Mexico	6 weeks prenatal and 6 weeks postnatal.	5 days.	No parental leave.	Federal Labor Act.
Panama	6 weeks prenatal and 8 weeks postnatal.	3 days.	No parental leave.	Labor Code. Law 27/2017.
Paraguay	2 weeks prenatal and 16 weeks postnatal.	14 days.	No parental leave.	Law 5,508/2015, Decree 7,750.
Peru	49 days prenatal and 49 days postnatal.	10 days.	No parental leave.	Law 30,367, Supreme Decree 006-2016-TR, Law 30,807, General Labor Act.
Dominican Republic	14 weeks.	2 days.	No parental leave.	Labor Code. Resolution 211-14 approving ILO Labor Convention 183.
Uruguay	14 weeks.	13 days.	For a 6-month period following the end of maternity leave, the mother or father may work a half-day schedule (alternating or as desired), receiving a subsidy for care of the child.	Law 19,161.
Venezuela	6 weeks prenatal and 20 weeks postnatal.	14 days.	No parental leave.	Labor and Workers Act.

Table 12. Co-responsibilities for children aged 0-5 and pregnant women under cash transfer programs

Country	Program	Health checkups 0-5	Nutritional supplements 0-5	Preschool attendance	Health checkups during pregnancy
Argentina	Asignaciones Familiares	X		5 years	X
	Programa de Ciudadanía Porteña	X		3-5 years	X
Belize	Creando oportunidades para nuestra transformación social (Building Opportunities for Our Social Transformation, BOOST)	X			X
Bolivia	Bono Madre Niña-Niño Juana Azurduy	X			X
Brazil	Bolsa Familia	X			X
	Programa de Erradicação do Trabalho Infantil (PETI)				
Colombia	Más Familias en Acción	X		5 years	X
Costa Rica	Fondo Nacional de Becas (FONABE)			4-5 years	
Ecuador	Bono de Desarrollo Humano	X			X
El Salvador	Programa de Apoyo a Comunidades Solidarias en El Salvador	X		5-6 years	X
Guatemala	Mi Bono Seguro	X			X
Honduras	Bono Vida Mejor	X	X		X
Jamaica	Programme of Advancement Through Health and Education (PATH)	X			
Mexico	Prospera	X	X		X
Panama	Bonos Familiares para la Compra de Alimentos	X			X
	Red de Oportunidades	X			X
Paraguay	Abrazo	X			
	Tekoporã	X			X
Peru	Juntos	X	X		X
Dominican Republic	Progresando con Solidaridad	X			X
Trinidad and Tobago	Targeted Conditional Cash Transfer Program			3-5 years	
Uruguay	Asignaciones Familiares - Plan Equidad	X		4-5 years	X

Source: Database on noncontributory social protection programs in LAC, Economic Commission for Latin America and the Caribbean; consultations with experts.

Note: Cash transfer programs operating as of December 2018. This table does not include income support programs providing food stamps, which are common in Caribbean countries such as Bahamas and Barbados. It also does not include multisector strategies to support those in extreme poverty.

Table 13. Family support programs in LAC

Country	Program	Start date	Coverage	Target population	Age range	Service type and frequency	Priority service areas
Argentina ¹	Programa Nacional Primeros Años	2006	434,850 families	Vulnerable families, with priority given to remote locations with difficulty in accessing health and education services	0-48 months	Monthly group sessions	Strengthen child-rearing practices
Brazil ²	Criança Feliz	2016	233,000 families	Beneficiary families under the Bolsa Família program and/or the programs encompassed in the strategy	Prenatal-36 months	Weekly home visits; periodicity may vary depending on regional strategy (see footnote)	Strengthen relationships and the role of families in caring for, protecting, and educating children
Chile ³	Nadie es Perfecto	2007	70,000 families	Parents and caregivers receiving support from the health and/or education systems	0-59 months	6 group workshops with parents	Promote child-rearing capabilities: mental development; physical development; self-sufficiency as parents; behavior management; safety and accident prevention
Colombia ⁴	Hogares Comunitarios FAMI	1991	118,772 families	Vulnerable or displaced families, and families belonging to ethnic groups	Prenatal-24 months	Weekly group sessions and monthly home visits	Promote care and child-rearing practices
Colombia ⁵	Desarrollo Infantil en Medio familiar (DIMF)	2012	452,000 families	Vulnerable families in rural, scattered rural, and marginal urban areas	0-59 months	Weekly group sessions, with additional monthly visits for under-2s	Promote care and child-rearing practices
Cuba ⁶	Educa a tu Hijo	1982	463,000 families (more than 70% of children in the country)	Pregnant women Children in the applicable age range that are not attending any child organization	Prenatal-71 months	Pregnant women to 23 months: weekly or twice weekly home visits. 24-71 months: weekly group sessions	Strengthen essential knowledge among families so that they can prepare their children for entry into school (educational approach)
Ecuador ⁷	Creciendo con Nuestros Hijos (CNH)	2006	200,000 families	Poor population and population at risk of social exclusion	Prenatal-36 months	Prenatal-18 months: weekly home visits (monthly for pregnant women) 19-36 months: weekly group sessions	Support child-rearing and child development practices (psychosocial approach)
Mexico ⁸	Programa de Educación Inicial, PEI-Conafe	2002	444,108 families	Vulnerable population in areas without preschool access	Prenatal-48 months	Weekly group sessions	Enrich child-rearing practices to promote integrated child development
Nicaragua ⁹	Amor para los más Chiquitos - Visita Casa a Casa	2012	~ 70,000 families	Families in urban and rural municipios with high poverty levels	0-71 months	0-35 months: fortnightly home visits 36-71 months: home visits every two months	Promote parenting practices and psychosocial support for families
Peru ¹⁰	Servicio de Acompañamiento a Familias de Cuna Más (SAF)	2012	97,837 families	Populations in poor and extremely poor areas with high levels of chronic malnourishment	0-36 months	Weekly home visits	Promote integrated child development (psychosocial approach) Improve care and child-rearing practices Provide nutritional supplementation
Uruguay ¹¹	Uruguay Crece Contigo - Programa de Acompañamiento Familiar y Trabajo de Cercanía	2012	> 38,775 families	Families and pregnant women that are vulnerable or exposed to social/health risks	Prenatal-47 months	Weekly home visits	Promote integrated child development

Source:

- Coverage as of 2011. <http://www.sipi.siteal.iipe.unesco.org/politicas/218/programa-nacional-de-desarrollo-infantil-primeros-anos>; Araujo et al (2013).
- Coverage as of January 2018. Criança Feliz is a national strategy for fostering development that since 2016 has served as an umbrella for several regional programs. The most prominent of these, which have been operating longest, are Primeira Infância Melhor (PIM) in Rio Grande do Sul, Programa Cresça com Seu Filho in Fortaleza, and Família Que Acolhe (FQA) in Boa Vista. <http://mds.gov.br/assuntos/crianca-feliz/crianca-feliz/conheca-o-programa>; Bernad Van Leer Foundation (2018).
- Coverage as of 2016. Nadie es Perfecto is one the services offered by Chile Crece Contigo. <http://www.crececontigo.gob.cl/beneficios/talleres-nadie-es-perfecto/>; World Bank (2018).
- Coverage as of December 2018. Cross Content (2018).
- Coverage as of December 2018. Família, Mujer e Infancia (FAMI) is being replaced by Desarrollo Infantil en Medio Familiar (DIMF) as part of the Cero a Siempre strategy. <http://www.icbf.gov.co/portal/page/portal/PrimerInfancia/ICBF/Servicios/Familiar>
- Coverage as of December 2018. <http://www.icbf.gov.co/portal/page/portal/PrimerInfancia/ICBF/Servicios/Familiar>
- Coverage as of 2016. <https://www.ecured.cu/Educa-a-tu-Hijo>; Cross Content (2018).
- Coverage as of 2013. https://www.dof.gob.mx/nota_detalle.php?codigo=5343879&fecha=08/05/2014; <https://www.gob.mx/conafe/acciones-y-programas/educacion-inicial-del-conafe>; Fernald et al (2016).
- The program operated from September to July 2018, and coverage has been gradually reduced since then. <https://plataformacelac.org/programa/401>
- Coverage as of 2017. <http://www.cunamas.gob.pe/>; <http://www.cunamas.gob.pe/?p=11383>; Cross Content (2018).
- Coverage as of 2018. <https://presidencia.gub.uy/comunicacion/comunicacionnoticias/mides-uruguay-crece-contigo-intervencion-en-localidades-departamentos>; Bernad Van Leer Foundation (2016); Cross Content (2018).

Table 14. Coordinating bodies for early childhood development policies

Country	Institutional structure	Year of creation	Reports to	Functions	Sector composition
Argentina	National Secretariat for Childhood, Adolescence, and the Family (SENAF)	2004	Ministry of Health and Social Development	Coordinating early childhood activities, development plans, and programs with the different technical areas. SENAF has an office in each province responsible for cross-sector coordination of child development services.	Social development, health, education, and justice
Brazil	Cross-Sector Committee for the Criança Feliz program	2017	Ministry of Citizenship, Department of Social Development	Planning and coordinating the components of the Criança Feliz program at the state, federal, and municipal levels.	Social Development, Social Assistance, Education, Health, Culture, and Human Rights
Chile	Chile Crece Contigo Integrated Protection Subsystem	2009	Ministry of Social Development	Determining technical guidelines for the operation and management of the subsystem and network operations; Supervise the operation of coordination mechanisms between public and private entities participating in the subsystem; Financial and technical planning, monitoring, and supervision of the actions and functionalities that make up the subsystem; Design, manage, and maintain a computerized online register with information for monitoring the development of beneficiary children and families in the network.	Health, Education, Social Development, National Daycare Board, Fundación Integra, National Grant and Educational Assistance Board
Colombia	Cross-Sector Committee on Early Childhood	2011	Presidency	Direct implementation of the De Cero a Siempre (DCAS) strategy at the national, departmental, district, and municipal levels; Recommend guidelines for the implementation of a Single Quality System to support integrated early childhood care (AIEP); Adopt the National Action Plan for implementing the DCAS strategy; Coordinate national AIEP policy; Support the formulation of national AIEP policy; Guide and implement sustainable financing arrangements to allow the expansion of AIEP coverage; Create a Single National Information System for the population in early childhood; Structure arrangements for public-private partnerships in the area of early childhood; Promote national and international cooperation mechanisms in areas related to AIEP; Issue guidelines for establishing the regional supply of services and investment projects by central government bodies.	Presidency, Health, Social Protection, Education, Culture, Housing, Planning, Social Prosperity, Colombian Family Welfare Institute, Unit for Comprehensive Victim Support and Reparation, Sports, Food and Nutritional Security
Ecuador	Misión Temura	2018	Cross-Sector Committee for the Plan Toda una Vida program, led by the First Lady	The Misión Temura policy replaces the National Cross-Sector Policy on Early Childhood - a Full Childhood, execution of which has been led since 2012 by the Coordinating Ministry for Social Development. It seeks to promote human well-being in pregnancy and the first five years of life. To achieve this, it plans to coordinate cross-sector actions by the central government, decentralized autonomous governments, society, communities, and families. It encompasses services in four areas: health, food and nutrition, promoting play for early development, and safe and protective environments.	Presidency, Technical Secretariat for Plan Toda una Vida, Health, Education, and Economic and Social Inclusion
Jamaica	Early Childhood Commission	2003	Ministry of Education	Coordinate all activities, development plans, and programs in the child development sector through three departments: regulation and monitoring, support services, and cross-sector coordination.	Education, which has a department responsible for coordinating with other sectors.
Mexico	National System for the Integrated Protection of Children and Adolescents	2015	Ministry of the Interior	Support the National Integrated Protection system in executing and monitoring the agreements and resolutions issued; Conclude coordination and partnership agreements with national and international public and private entities; Administer the National Information System on children and adolescents at the national level; Advise and support the governments of federative entities and those federal authorities that require it in order to fulfill their responsibilities; Coordinate national policies and exchange information with the Executive Secretariats of the Systems of the Federative Entities.	Presidency, Domestic Affairs, Social Development, Finance, Health, Education, External Relations, Labor, National Integrated Family Development System, Sistema Nacional de Desarrollo Integral Familiar, National Prosecutor's Office, Human Rights, Telecommunications
Panama	National Council for Integrated Early Childhood Care	2009	Office of the First Lady	Apex agency responsible for coordinating, supervising, updating, and evaluating implementation of the Integrated Early Childhood Care Roadmap (RAIEP).	Office of the First Lady, Ministries of Health, Education, Social Development, and Economy, Panamanian Institute for Rehabilitative Services, Electoral Tribunal, National Secretariat for Childhood, Adolescence, and the Family, National Women's Institute, Comptroller, General's Office, National Secretariat for the National Food Plan, NGOs, professional associations, business associations, Social Secretariat in the Office of the President.
Dominican Republic	National Institute for Integrated Early Childhood Care (INAPEI)	2014	Decentralized, attached to the Ministry of Education	Managing the delivery of quality integrated care services to under-5s; Working directly with families in vulnerable areas to strengthen child-rearing practices; Ensuring compliance with quality standards; Coordinating partnerships with public and private bodies and NGOs; Promoting the training of human resources and the active participation of families and communities in co-management of the services.	No cross-sector structure. The Institute is in contact with: Ministries of Education, Health, and Women, Attorney General's Office, National Electoral Board, mayors' offices, Coordinating Cabinet for Social Policy, National Council for Childhood and Adolescence.
Uruguay	Uruguay Crece Contigo	2014	Ministry of Social Development	Government policy of national coverage that aims to build an integrated early childhood protection system. To this end, it is proposed that universal and targeted actions be developed that ensure adequate care and protection for pregnant women and the development of children under 4 years of age, from a rights, gender, and generations perspective.	National Institute for Children and Adolescents, Health, Education and Culture, Social Security, Housing, and Plan CAF.

Note: The information in the table is drawn from the following sources - Argentina: Ministry of Health and Social Development website (<https://www.argentina.gob.ar/desarrollosocial>), retrieved January 2019, and consultations with local experts; Brazil: Decree 956 of 22 March 2018 concerning the Criança Feliz program; Chile: Regulations for the Chile Crece Contigo Integrated Childhood Protection Subsystem, Law 20.379 creating the system, and the Chile Crece Contigo website (<http://www.crececontigo.gob.cl/acera-de-cho/ques/>), retrieved January 2019; Colombia: Website of the Cross-Sector Commission on Early Childhood (<http://www.dececosistema.gov.co/QuienesSomos/Paginas/ComisionIntersectorial.aspx>), retrieved January 2019; Presentation on Misión Temura, retrieved January 2019, available at <https://issuu.com/todaunavida/docs/misiontemura2/54>; Jamaica: Early Childhood Commission website (<http://ecc.gov.jm/>), retrieved January 2019; Mexico: Website of the National System for the Comprehensive Protection of Children and Adolescents (SIPINNA) (<https://www.gob.mx/sipinna>), retrieved January 2019; Panama: Decrees 201 (27 November 2009), 108 (6 February 2014), and 213 (10 March 2015), which create and reform the Consejo Nacional de Atención Integral a la Primera Infancia (CONAPI); Dominican Republic: Consultations with the authorities of the National Institute for Comprehensive Early Childhood Care (INAPEI) and the INAPEI website (<https://www.inapei.gob.do/>), retrieved January 2019; Uruguay: Uruguay Crece Contigo website (<http://www.mdes.gub.uy/41937/uruguay-crece-contigo-ucc>), retrieved January 2019.

Table 15. Characteristics of the ECD services personnel

Characteristics	Brazil			Ecuador			Mexico		
	Teachers ^a	Caregivers ^b	Aides ^c	Teachers ^a	Caregivers ^b	Aides ^c	Teachers ^a	Caregivers ^b	Aides ^c
Women	98%	97%	96%	98%	91%	n.d.	92%	97%	77%
Age	37.84	38.41	37.94	37.13	39.15	n.d.	35.53	35.47	34.69
Years of education	15.63	8.49	11.52	16.15	10.59	n.d.	14.99	9.64	13.47
Earnings	1,759	781	1,156	672	313	n.d.	7,824	2,417	5,341
Minimum wage	788			375			2,220		
Observations	979	2,204	274	160	425	7	509	920	156

a: Preschool teachers with higher-level studies in the case of Brazil; preschool teachers in the cases of Ecuador and Mexico. The occupational category in the surveys refers to this level as early childhood education.

b: Nursery aides and elder care workers in the case of Brazil; childcare and personal care workers in the case of Ecuador; and workers caring for children, the disabled, and the elderly in the case of Mexico.

c: Preschool teachers with mid-level studies in the case of Brazil; teachers' aides in the case of Ecuador; and pedagogical aides and technicians in the case of Mexico.

Note: The 2015 National Household Sample Survey (PNAD) was used for Brazil, with these groups accounting for 2.12% of workers reporting an occupation. In the case of Ecuador, the 2017 National Employment, Unemployment, and Underemployment Survey (ENEMDU) was used, with these groups accounting for 1.08% of workers reporting an occupation. The 2016 National Survey of Household Earnings and Expenditure (ENIGH) was used for Mexico, with these groups accounting for 1.32% of workers reporting an occupation. These surveys are nationally representative. Wages are reported in local currency in all cases and refer to incomes for the main occupation. The minimum wage is for the survey year.

Table 16. LAC countries that periodically measure ECD on a nationally representative basis

Country/countries	Survey	Year	Age, ECD module	ECD domains	Responsible institution
Argentina	National Nutrition and Health Survey (ENNyS)	2005, 2019 (design in process)	0-59 months	Cognitive, motor, and language development (PRUNAPE) in 2005	Ministry for Health and the Environment
Chile ¹	Early Childhood Longitudinal Survey (ELPI)	2010, 2012, 2017	0-4 years (2010) 0-6 years (2012) 0-11 years (2017)	Cognitive, motor, and language development (Battelle, TEPSI, TVIP, EEDP) Executive function (several tests - e.g. Pencil Tapping Task) Socioemotional development (ASQ:SE, CBCL) Quality of the home environment	Ministry of Education (2010) Ministry of Labor and Social Security (2012) Ministry of Social Development (2017)
Colombia ²	Colombian Longitudinal Survey (ELCA)	2006, 2010, 2013	3-9 years	Language (TVIP) Socioemotional development (ASQ:SE, 3-6 years)	Center for Economic Development Studies (CEDE), Economics Faculty, Universidad de los Andes
Ecuador ³	National Health and Nutrition Survey (ENSANUT)	2018	0-59 months	Language (MacArthur-Bates, TVIP) Quality of the home environment Motor development milestones (WHO) Emotional maturity	National Institute of Surveys and the Census
Mexico ⁴	National Health and Nutrition Survey (ENSANUT)	2018	0-59 months	Language (MacArthur-Bates, TVIP-II) Quality of the home environment	National Public Health Institute, Federal Health Department, and National Statistics and Geography Institute
Peru ⁵	Demographic and Family Health Survey (ENDES)	2015, 2016, 2017	9-59 months	Motor development Effective verbal communication Symbolic function	National Statistics and Information Institute
Uruguay ⁶	Nutrition, Child Development, and Health Survey (ENDIS)	2013, 2015, 2019 (design in process)	0-47 months (2013) 2-6 years (2015) 6-10 years (2019)	Communication, gross and fine motor skills, problem-solving, socioindividual (ASQ-3) Socioemotional development (ASQ:SE y CBCL) Language (TEPSI) Development quotient (EEDP)	Joint initiative of the Ministry of Social Development, Ministry of Public Health, Ministry of Education and Culture, Uruguayan Institute for Children and Adolescents and the National Statistics Institute; led by Uruguay Crece Contigo.
Argentina, Dominican Republic, El Salvador, Guyana, Honduras, Trinidad and Tobago, Costa Rica, Cuba, Suriname, Turks and Caicos Islands, Paraguay, Belize, Mexico (City), Mexico (ENIM 2015), Panama, Uruguay, Barbados, Saint Lucia, Jamaica ⁷	Multiple Indicator Cluster Surveys (MICS)	MICS 4 - 2009 MICS 5 - 2010 MICS 6 - 2011	36-59 months	10 items in pre-academic abilities, physical development, and socioemotional development (ECDI) Quality of the home environment	UNICEF, with local institutions

Source:

- <http://observatorio.ministeriodesarrollosocial.gob.cl/elpi.php>.
- Urban sample representative of 5 geographical regions and the 4 lowest socioeconomic strata nationally. Rural sample representative of small-scale producers (campesinos) in 4 micro-regions. <https://encuestalongitudinal.uniandes.edu.co/es/>.
- The ENSANUT was introduced in 2012 and is conducted every 6 years. The 2018 ENSANUT was the first to include an ECD module, however. From 1989 to 2004, the ENDEMAIN (Demographic and Maternal and Child Health Survey) was conducted. <https://www.salud.gob.ec/encuesta-nacional-de-salud-y-nutricion-ensanut/>.
- The ENSANUT was introduced in 2000 and is conducted every 5 years approximately. The 2018 ENSANUT was the first to include an ECD module, however. <https://www.insp.mx/avisos/4789-ensanut-2018-marcha.html>.
- The ENDES was introduced in 1986 and is conducted every 5 years approximately. The 2015 ENSANUT was the first to include an ECD module. <https://proyectos.inei.gob.pe/endes/>.
- <http://www.inecub.gub.uy/encuesta-de-nutricion-desarrollo-infantil-y-salud-ends-2018->
- MICS surveys have included an ECD module since MICS 4 (2009), or MICS 6 (2011), depending on the country. <http://mics.unicef.org>.

Note: Longitudinal surveys—i.e. surveys that follow a single cohort—are shaded in gray. Chile's Early Childhood Longitudinal Survey (ELPI) follows a single cohort and also introduces a new refreshment cohort for the 0-5 age group in each new survey. The Universidad de los Andes' Colombian Longitudinal Survey (ELCA) follows households, and thus includes new household members. Uruguay's Nutrition, Child Development, and Health Survey (ENDIS) follows a single cohort and will incorporate a new refreshment cohort in 2019 (survey currently being designed).

Table 17. ECD services with information systems

Country	System	Description	Variables	Website
Argentina	Integrated Digital Educational Information System (SINIDE)	Centralized system for education institutions belonging to the early childhood, primary, secondary, and higher levels. Collects information on institutions and children.	Centers: classrooms, hours worked, etc. Children: basic contact information, grade or classroom location.	https://sinide.educacion.gob.ar/
Brazil	School Census	Main instrument for collecting information from basic education institutions. Collected annually in two stages. In the first, basic information is collected on students, teachers, and institutions. In the second, at the end of the school year, information is collected on the development/performance of the children.	Centers: address, number of groups, infrastructure information. Children: contact information, mode of transport used to center, special needs, etc. Teachers: contact information, special needs, education, experience, etc.	http://portal.inep.gov.br/censo-escolar
Chile	General Student Information System (SIGE) for pre-K	Collects information on the country's education establishments (irrespective of which institution they report to), including enrollment, attendance, teacher qualifications, and student performance. Work is ongoing to incorporate early childhood education establishments (beginning with JUNJI and Integra).	N/A (system under construction)	NA (system under construction)
Colombia	CUENTAME	System of early childhood services offered by the Colombian Family Welfare Institute.	Center: contact information of legal representative, management entity for the service, contractors, infrastructure, equipment. Employees/teachers: education, marital status, experience, etc. Children: date of birth, social program benefit status, nutritional information, parent information, etc.	https://www.icbf.gov.co/programas-y-estrategias/primera-infancia/cuentame
Ecuador	MIES Integrated Information System (SIIMIES)	Collects information on the children attending MIES child development services (Centros de Desarrollo Infantil and Creciendo con Nuestros Hijos). Integrates databases from three institutions: the Civil Registry, the Ministry of Health, and the Vice Ministry of Social Inclusion. It also enters individualized information on program users and their use of services. It is updated continually by operators.	Center: location, type of operator, number of users, etc. Children: age, family socioeconomic variables.	https://siimies.inclusion.gob.ec/SIIMIES/vistas/login/login.jsf
Jamaica	Early Childhood Commission Census	Annual national census of early childhood institutions; collects information on institutions and their employees.	Centers: director, number of employees, number of children enrolled in each age group. Employees: experience, wage, education.	https://ecc.gov.jm/eci-census-2018-19/
Mexico	4-year evaluation	National development and school readiness assessment.	Children: test scores.	
	National Register of Childcare Centers (RENCAL)	National catalogue of childcare centers, irrespective of type or operating entity. The system is expected to have information on centers (modality, capacity, capacity utilization, list of employees) and the user population (by gender and age range).	N/A (system under construction)	http://rencal.dif.gob.mx/rencal/login.html
	Daycare Information and Administration System (SIAG)	Information system for IMSS daycare centers. Collects information on children enrolled, staff working in the centers, and basic information on the centers.	Children: name, special needs, vaccination status, weight and height, list of tutors, attendance, developmental evaluation. Employees/Teachers: education, experience, etc. Center: address, name of director.	http://siag.imss.gob.mx/
Peru	CUNA NET	System for the national Cuna Más program. Has not been fully digitized.	Collects information on three areas: infrastructure, caregiver safety, and child safety.	http://cunanet.cunamas.gob.pe/
Uruguay	Unified Information and Records Management (GURI)	Web-based information system with data on teachers, other staff, and students. Parents can use the "GURI familia" app to access information on their children and their teachers.	Teachers: attendance report, monthly leave and stoppage report, forms, visit reports. Other staff: attendance report. Children: attendance report, enrollment, past school records, current school records, grade completion records.	http://www.ceip.edu.uy/programas/guri

Source: Internet research and local experts.

OPERATIONS INCLUDED IN THE SAMPLE AND DOCUMENT REVIEW FOR THE SECTION ON LESSONS LEARNED

Number	Name	Approval Year
AR-L1152	Program to Support the Policy on Improving Equity in Education – PROMEDU III	31-May-13
AR-L1254	Program to Support the National Early Childhood Plan and the Policy for Universalization of Early Childhood Education	12-Jul-17
AR-L1180	Program to Support the Policy on Improving Equity in Education – PROMEDU IV	7-May-15
BR-L1329	Project to Expand and Improve Early and Basic Education in Florianópolis	20-Nov-13
BR-L1392	Project to Improve Quality and Expand Coverage of the Manaus Municipal Public Education System (PROEMEM)	16-Dec-14
BR-L1393	Education Quality Improvement Program of the Municipality of Porto Alegre	28-Sep-16
BR-L1406	Program of Support for Social Reforms in Ceará – PROREDES III – Stage I	17-Dec-14
CH-L1082	Early Childhood Education Expansion and Improvement Program	11-Dec-14
DR-L1077	Early Childhood Development Support Program Conditional Credit Line (CCLIP) DR-X1004	5-Dec-16
EC-L1235	Investment in the Quality of Child Development Services	19-Sep-18
ES-L1016	Reduction of Vulnerability in Informal Urban Neighborhoods in the San Salvador Metropolitan Area	17-Nov-11
GU-L1087	Education Quality and Coverage Improvement Program	11-Dec-15
HA-L1080	Support to the Education Plan and Reform in Haiti IV	26-Nov-14
PE-L1129	Results-based Management Program for Social Inclusion I	25-Jun-14
PE-L1154	Results-based Management Program for Social Inclusion II	22-Apr-15
PN-L1103	Program for Transparency and Equity in Spending on Social Protection I	5-Aug-15
PN-L1105	Social Inclusion and Development Program	5-Aug-15
PN-L1152	Program for Transparency and Equity in Spending on Social Protection III	29-Aug-18
UR-L1046	National Strategy for Children and Adolescents (ENIA) Support Program	8-Dec-10
UR-L1110	Program to Support the National Integrated Care System Second Operation under the Conditional Credit Line for Investment Projects (CCLIP) for the National Strategy for Children and Adolescents Support Program	20-Jul-16

Note: Loan operations reviewed, approved after 2015. The following technical cooperation operations were included in the document review: ME-T1384, ME-T1337, CO-T1433, CO-T1467, CO-T1419, BR-T1330, BR-T1300, BR-T1389, NI-T1226, RG-T3106, UR-T1137, AR-T1163, UR-T1194, ES-T1282, EC-T1400, CO-T1367, PE-T1254, ME-T1235, ME-T1335, PN-T1166, PN-T1154 y CR-T1134, JA-T1092, and PR-T1182. The economic and sector work documents reviewed included: RG-K1450, RG-K1423, RG-E1547, RG-E1481, RG-K1454, RG-K1249, and RG-K1373.

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