

SOCIAL PROTECTION PROGRAMS AND EARLY CHILDHOOD DEVELOPMENT: **UNEXPLORED POTENTIAL**

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FOREWORD

In 2012, Plan International Australia commissioned Pia Britto from Yale University to undertake research around social protection and Early Childhood Care and Development (ECCD). ECCD is a core program area for Plan, in recognition of growing evidence from Plan's own programs, as well as from around the world, that young children will only grow up to fulfil their potential when their rights to survival, protection, development, education and participation are guaranteed through integrated, quality and holistic early childhood programs. Access to ECCD programs helps children get the best possible start in life and supports parents, caregivers and other duty bearers to fulfil their roles and responsibilities to young children. Plan believes that ECCD has a critical role to play in addressing poverty and inequality.

Plan wanted to support new research on ECCD in an area that is still relatively unexplored, in a climate where there is increasing recognition of the important role of ECCD in mitigating the effects of poverty and disadvantage. Plan's primary aims in supporting this research are to develop new knowledge and understanding that can be used for influencing government and donor agency policy and resource allocations in ECCD, to inform programming practice and to make a positive contribution to international knowledge on ECCD.

We hope that in making this research available, we can add to the global ECCD knowledge bank and generate interest to further explore the association between social protection programs and ECCD. We also hope there will be future impetus in the social protection field for incorporating interventions at the early childhood stage, targeted at improving child outcomes.

Our sincere thanks to Pia Britto, April Williamson, Travis Snow, Kedar Mankad and Yale University for their work on this valuable research.

PLAN INTERNATIONAL AUSTRALIA, SEPTEMBER 2013.

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Cover Photo: A young girl in Ethiopia is developing her literacy skills through an early learning program.



EXECUTIVE SUMMARY

The rapid growth in social protection programs has been fueled in part by the promise of this approach to reduce poverty, including emerging findings on improved child health and education outcomes. In parallel, early childhood care and development (ECCD) is also gaining wide recognition as a robust and viable approach to building human capital and alleviating poverty. However, there has thus far been relatively little inquiry into the relationship between social protection and early childhood development. The aim of this study, which uses a systematic review methodology, is to address that gap by examining the effects of social protection programs on ECCD outcomes in low- and middle-income countries (LMIC). The systematic review approach allows us to draw policy-relevant conclusions about the impact of social protection on ECCD, by: identifying the social protection functions and programs most effective in promoting ECCD; investigating potential linkages between social protection and early childhood education, health, and development and finally, considering which social protection programs can be scaled up to achieve equity in child outcomes, with a focus on the most vulnerable populations.

This report begins with an overview of social protection programs and their increasing importance in the developing world as a tool for poverty reduction. With increased emphasis on these types of programs, it is important to examine their associations with ECCD as another approach to poverty alleviation. Therefore, the report follows with an exploration of early childhood care and its growing interest in the development agenda, as well as a review of the relevant literature on the interactions between these two fields. The report also presents a description of the systematic review methodology employed in this study, with an in-depth analysis of search terms, keywords, and study design.

Following the study protocol, twenty articles were coded as eligible from an initial search that yielded 401 articles. Population, intervention, comparison, outcome, and context (PICOC) criteria were used to screen the articles and determine their eligibility. The 20 articles included in the study represent a range of social protection programs. Heterogeneity was noted on the following dimensions: location; modality (program target and mechanism); outcome group (age, gender); outcome type (health, education, development); and evaluation methodology (type of comparison, timing of measurement). The implications for scale-up are clear. In any program, there needs to be explicit targeting of ECCD outcomes in order to measure and evaluate these effects. Programs must be generated considering applicability across contexts, with a clear theory of change, and include early and ongoing evaluation with a phased scale-up.

A mother in Indonesia supports physical growth and health of her child through good nutrition practices.



SECTION 1: INTRODUCTION

1.1. CONCEPTUAL FRAMEWORKS

1.1.1. WHAT ARE SOCIAL PROTECTION, ITS AIM, AND ITS OPERATIONAL TOOLS?

One of the most dominant sectors in low- and middle- income countries (LMIC) working toward poverty alleviation and reduction of vulnerability is social protection (Andrews et al., 2012; Devereux, 2004). The aim of social protection programs and policies is to reduce the risk factors that affect wellbeing through several approaches:

1. Labor market policies and programs that are aimed at promoting efficient labor markets, increasing employment, reducing discrimination, improving job training, and encouraging labor demand and functioning;
2. Social insurance policies and programs that help reduce exposure to risk by providing schemes to manage economic and social risks, such as unemployment, exclusion, sickness, disability and old age;
3. Social assistance policies and programs that are designed to help the most vulnerable through services, cash, and subsidies, to improve wellbeing.

While social protection has long been an area of focus for high-income countries, only since the turn of the century have donors to LMIC countries increased their attention to this area. In part, this focus was spurred by globalization, the need for poverty reduction, and strong economic growth across all countries, as well as changes in development practice favoring sustainable solutions for poverty, vulnerability, and exclusion (Ervik et al., 2009). Therefore, modalities of social protection, such as cash transfer schemes, subsidies, and targeted poverty reduction programs, have seen a rise in LMIC (Andrews et al., 2012).

Historically, Latin America as a region has taken a lead in the use of social protection programs to address poverty. In this region, where conditional cash transfer programs are currently most predominant amongst the LMIC, social assistance until the 1980s consisted almost exclusively of commodity subsidies related to food and energy (Ferreira, 2010). These initiatives included the Brazilian Program Nacional de Alimentacao e Nutricao (PRONAN) and programs in Costa Rica and Guatemala. After these programs took root and the economic crisis of the 1980s occurred, there was a rise in programs directed at poverty alleviation, such as non-contributory social insurance, workfare, social funds, and conditional cash transfers. Mexico and Brazil were the first to implement conditional cash transfer schemes. Mexico began with a program in 1997 for 300,000 individuals called PROGRESA (now Oportunidades). Brazil's cash transfer program also began in 1997 in municipal areas of Brasilia and was called Bolsa Escola (now Bolsa Família). As of 2008, these programs combined serve over 16 million individuals (Fiszbein, 2009).

There are many variations of social protection program types. The dominant forms are conditional cash transfers (CCT), unconditional cash transfers (UCT), conditional cash transfer plus services (CCT +), in-kind transfers and microcredit.

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Parenting sessions in Laos take place in the community and help parents of young children to improve their knowledge and skills for childrearing.

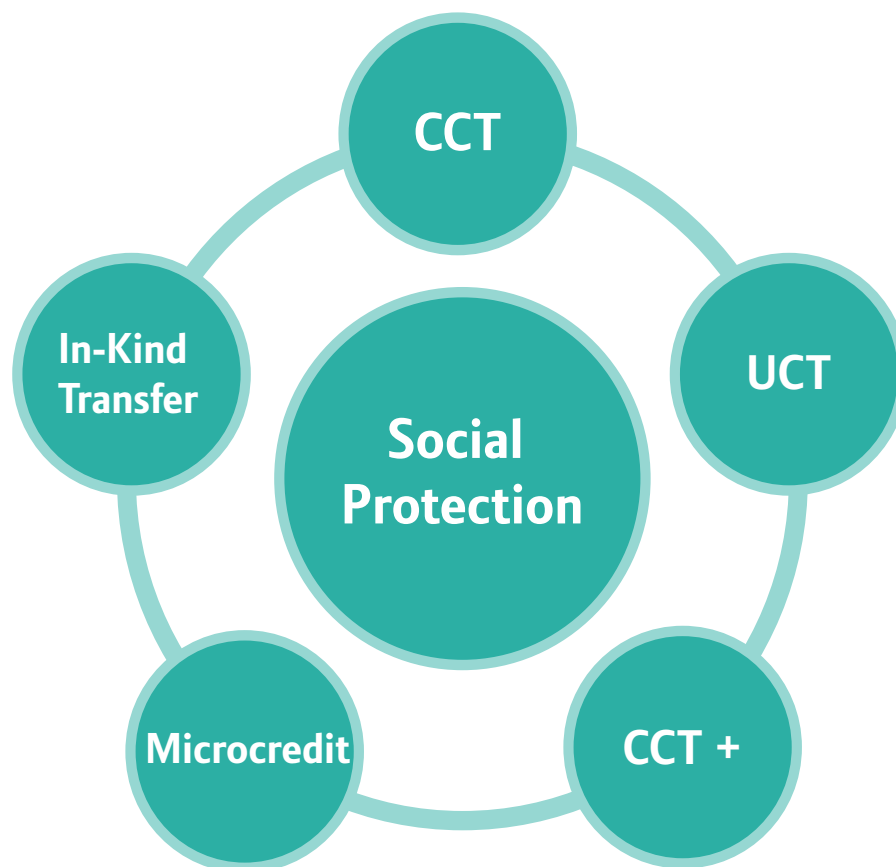


Figure 1: Basic Social Protection Program Types that Relate to Children

Conditional Cash Transfers (CCT)

CCTs provide cash only to beneficiaries who have fulfilled prescribed conditions. Common conditions can range from child school attendance to preventive health checkups, among others (Garcia and Moore, 2012). Mexico's Oportunidades and Brazil's Bolsa Familia are the most expansive examples of CCT programs. They have been running since 1997 and are conditioned mainly on child school attendance and health measures.

Conditional Cash Transfers Plus (CCT +)

CCTs + provide the same benefits as CCTs, but include an additional program component on top of the transfer. These components could include additional caregiver training, whether vocational, nutritional, or educational; health services; or an in-kind transfer. Nicaragua's Atención a Crisis is one example of a CCT +. In addition to the traditional CCT component, the program also includes occupational training and a business grant component (Fiszbein, 2009). The idea behind these additional program components is to provide the sort of transformative benefit necessary to break free of the cycle of poverty.

Unconditional Cash Transfers (UCT)

UCTs provide cash to all eligible and registered beneficiaries without conditionality. UCTs tend to occur in areas where there is not the administrative capacity to enforce conditionality. They also depend on whether the pre-intervention assessment of households shows that the constraints placed by conditionality (i.e. child attendance, health requirements, etc.) are conducive to better development outcomes. One example of a UCT is Ecuador's Bono de Desarrollo Humano. This program gives a monthly cash stipend to targeted households with no conditionality (Fernald, 2011).

In-kind Transfers

In-kind transfers provide non-cash benefits to eligible and registered beneficiaries. These are usually in the form of a commodity good (e.g. milk). Peru's Vaso de Leche, the largest transfer program in the country, is an example of this type of program. Targeted low-nutrition and resource-constrained households are provided with a milk subsidy as a way to improve the nutritional outcomes of children (Stifel, 2006).

Microcredit

Microcredit encompasses loans or savings programs offered to eligible households. Private banks may run these programs, unlike the other transfer programs. Microcredit programs have been implemented throughout the world. One example is Ethiopia's WISDOM program, which offers microloans to resource-constrained households through a group-lending model (Doocy, 2005).

According to Gatenio (2012), countries with social protection systems already in place, including strong public investments in sectors such as education and health, appear to be able to achieve better child wellbeing outcomes, have a more inclusive social and economic development process, and usher in more stable economies and domestic politics.

Several social protection programs, particularly Latin American programs such as PROGRESA in Mexico, have demonstrated improved health and education outcomes for children and families (Behrman, 2006). Social protection instruments, including cash transfers with or without conditionality, have by and large had positive effects on household consumption and on poverty, led to increased school enrollment among the poorest children, and led to more visits to health providers for preventive check-ups and immunizations (Deveraux, 2004; Fiszbein, 2009; Garcia, 2012; Gatenio, 2012). The effects on cognitive, physical, and emotional development have been mixed, depending on the context of the program and what complementary actions were taken alongside it (Fiszbein, 2009).

Social assistance programs have been created to accelerate progress toward human development goals for the most vulnerable and marginalized; and by its nature, ECCD falls into the same category. Not only do youngest children bear the greatest burden of poverty and disease, but early childhood is also the stage in life in which humans are completely dependent on their environment for their development. However, investigations on social protection programs have largely not been conducted for ECCD outcomes. Given the rise of social protection interventions in LMIC and the fact that the traditional approaches of the health and education sectors have not achieved all of their goals, it is important to explore the role of social protection in achieving ECCD outcomes.

According to Deveraux (2004), Guhan (1994), Aber and Rawlings (2011), and Aber et al., (2013), there are 4 functions of social assistance that are potentially relevant for ECCD:

The first is the protection function. This function serves to maintain minimally acceptable levels of consumption, especially of necessities like food and shelter. Social protection programs may protect households with young children from hunger and food insecurity. For example, Peru's Vaso de Leche in-kind transfer program provides subsidies for milk, Uganda's Universal Primary Education policy abolishes health and education charges, and other targeted resource transfers aim to protect families (Deveraux, 2004).

The second is the prevention function. This function serves to ensure that those who are vulnerable to adverse events and shocks do not become even more vulnerable. Programs that serve families with young children who are facing adverse events, such as natural disasters, emergencies, or post-conflict situations, fall into this category. Social insurance policies are the main mechanism for prevention. Examples range from informal savings clubs like the rotating savings and credit associations (ROSCAS) in Kenya to formal insurance.

The third is the promotion function. This function serves to enable people to become less vulnerable in the future. Cash transfer programs fit into this category, which often uses direct transfers to broaden the scope of protection to break the cycle of poverty. Microcredit may also serve a promotion function, as it aims to smooth consumption and prevent against future health or environmental shocks.

The fourth is the transformative function. This function serves to promote and advance social justice by building the rights of, and empowering, the poor and vulnerable. Rights-based programs that advance

Page 8: Plan works with families from ethnic minority groups in Vietnam to support child development.



the interest of the child serve transformative functions. Cash transfer programs may, over time, also fall into the transformative category, particularly those that have additional training components or serve to increase demand for health and education services (Fiszbein, 2009).

These functions certainly overlap, therefore, the relevance and impact of these functions needs to be fully explored in order to develop an effective social protection strategy for ECCD and understand the long-term implications for investing in sustainable development.

1.1.2. WHAT IS ECCD AND WHY IS IT IMPORTANT?

Early Childhood Care and Development (ECCD) is starting to gain its deserved attention on national and international agendas (United Nations General Assembly Report of the Secretary-General A/65/206). In part, this increasing recognition can be attributed to the scientific evidence from neurobiology, economics, and education that has demonstrated the importance of the earliest stages of human development for later progress of the individual, society, and country. Early childhood is considered the most beneficial and robust foundational period for human progress, social equity and economic development (Britto, Engle and Super, 2013).

Early Childhood development is a complex construct that is known by several names, including “early childhood care and education” (ECCE), “early childhood care and development” (ECCD), or “integrated early child development” (IECCD) (UNESCO, 2002). However, in essence, all these names capture two dimensions of the term: the child and the context. At the level of the child, ECCD refers to two elements: child age and domains of development. With respect to the context, ECCD refers to the proximal environment characterized by young children and families, and the programs, services, policies and systems that serve them.

With respect to the age specification for ECCD, the period starts from prenatal development and lasts until eight years of age, or until the transition to school is complete. This classification aligns with the almost universally endorsed international Convention on the Rights of the Child (CRC) (UNICEF, 2002) and the developmental science of early childhood (McCartney and Phillips, 2006). Domains of development of ECCD include growth, learning, and physical and cognitive development, with a unified focus on holistic development. The academic fields of neuroscience, psychology, health, and education conceptualize holistic development to include physical health and motor development, cognitive skills, social and emotional functioning, competencies in language and literacy, ethical and spiritual development, and a sense of national identity (Britto and Kagan, 2010). The grey literature, emanating from the global practice community, also employs a holistic definition of ECCD. The United Nations World Fit for Children mission statement highlights the importance of a good start in life in creating a nurturing and safe environment that enables children to survive, and be physically healthy, mentally alert, emotionally secure, socially competent and able to learn (WFFC, 2002).

1.1.3. WHAT IS THE CURRENT SITUATION OF ECCD AND WHAT IS THE POTENTIAL ROLE OF SOCIAL PROTECTION PROGRAMS IN ADDRESSING IT?

Early child development does not take place in a vacuum — context is an important determinant of children’s achievement of developmental potential. Within the first few years of life, children make rapid strides in all aspects of development through interaction with their environment (Irwin, Siddiqui and Hertzman, 2007; Richter, 2010; Richter, Dawes and DeKadt, 2010; Shonkoff and Phillips, 2000). Theoretical models and practice frameworks posit that a host of factors influence early human development, including supportive, nurturing, and stimulating environments; contexts; and conditions (McCartney and Phillips, 2006). International declarations and frameworks also address the ecology of early childhood by holding it responsible for child outcomes. For example, the CRC focuses on the rights of a child from an ecological development perspective, where the most proximal contexts (e.g. family) to the most distal contexts (e.g. international policies) are discussed with respect to their impact on child development (Britto and Ulkuer, 2012; Hodgkin and Newell, 2007).

However, a recent set of publications have estimated that over 200 million children under five years of age fail to achieve their developmental potential due to challenges from under-nutrition; poor health; environmental toxins; and lack of stable, loving, and responsive care (Grantham-McGregor et al, 2007), and that the basic rights to health, development and protection for over one-third of the world's children under five are not being realized (Britto and Ulkuer, 2012). Young children around the globe bear the greatest burden of poverty, disease, war, social marginalization, and limited health, nutrition, and education services. These risk factors are noted not just for children residing in LMIC, but also for disadvantaged children in high-income countries.

Most strategies and interventions to improve the lives and wellbeing of young children center around basic health, survival, nutrition, and to some extent early learning and stimulation (Engle et al., 2011). Not only are these the most common approaches, but they are also the oldest. Traditionally, and in most LMIC, the sectors of health and education are the primary leaders of programming for young children and families (Garcia, Pence and Evans, 2008). These programs have focused on immunization, improving intake of basic nutrition and micronutrients, and access to education through primary school, and in some instances, preschool or pre-primary programs. These approaches have been considered central because they address the two pillars of building human capital: health and education (UNDP, 2004). However, despite these long-standing efforts, nearly one-third of young children globally are not developing to their full potential and health and education outcomes are poor. Therefore, an investigation is required to understand which other sectors and areas can influence and improve young children's health, development and wellbeing.

Social protection programs provide a huge financial facility through which ECCD programs and outcomes can be improved. As Figure 2 illustrates, social protection makes up a large share of national budgets, particularly in Latin America, the Middle East, North Africa, North America, and Europe (GESS 2013). In Latin America, the share of social security expenditure as part of gross domestic product (GDP) is close to 10%. This high proportion of spending on social protection indicates that it is important to understand the relationship between these programs and their impacts on children.

1.2. INTRODUCTION TO THE STUDY

1.2.1. BACKGROUND

Even though the use of social protection as a tool for economic and social transformation is growing, its impact on ECCD is relatively unknown. Most social protection programs have focused on poverty reduction, as well as improvements in health, nutrition and education. Moreover, most of these programs' outcomes have been examined among adult beneficiaries and primary school-aged children. The goal of this study is to examine the association between social protection programs and ECCD, drawing on the growing body of literature on the topic.

1.2.2. AIM OF THE STUDY

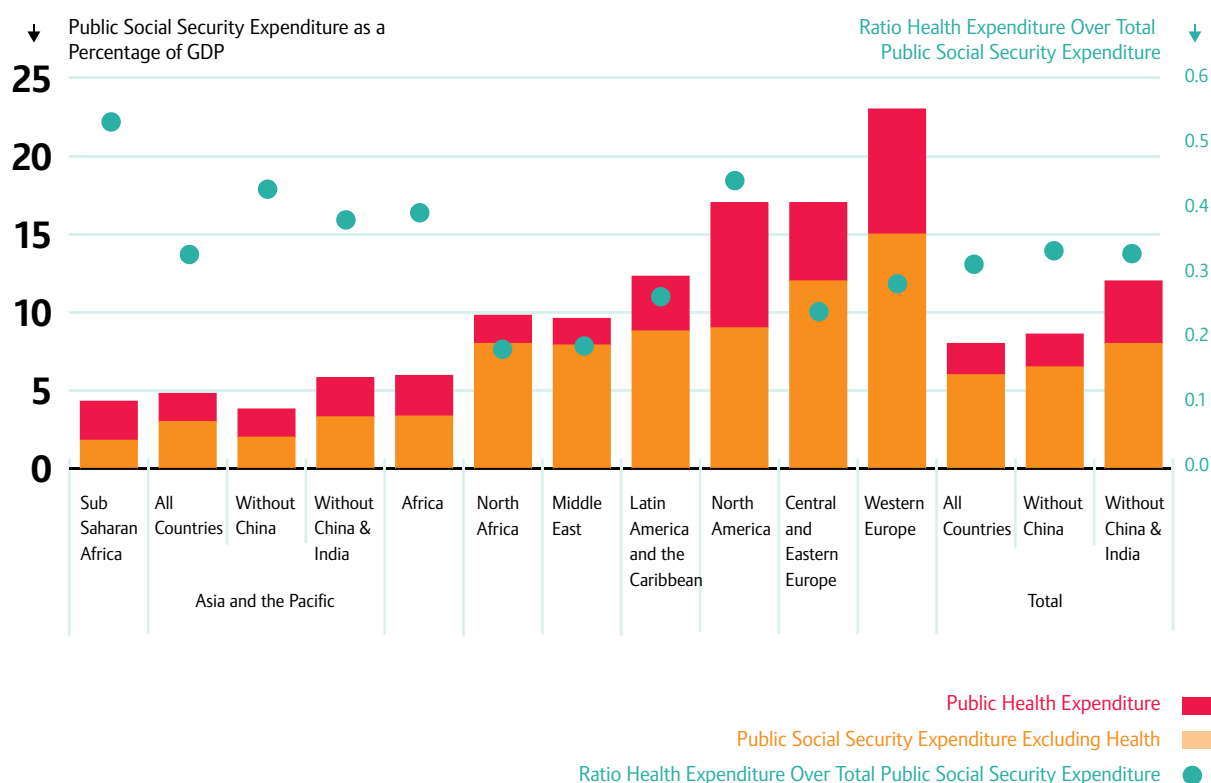
The overall aim of the study is to understand as the role social protection plays in improving human development outcomes in the earliest years of life. Currently, the role of health and education is well understood, however, as the social protection sector continues to grow, it is critical to understand the association between social protection and ECCD.

Study questions include:

1. In which geographic regions of the world are social protection programs that are linked with ECCD outcomes implemented?
2. What social protection programs are most effective in promoting ECCD outcomes?
3. Which are the predominant social protection functions linked to ECCD outcomes?

Social Security Expenditure as a Percentage of GDP By Region Latest Available Year

(weighted by population)



1.2.3. STUDY DESIGN

A systematic study design was developed to examine the research questions and achieve the aims. A systematic review is a form of structured literature review that addresses questions that are formulated to be answered by analysis of evidence. It involves objective means of searching the existing literature, applying predetermined inclusion and exclusion criteria to this body of literature, critically appraising the relevant literature, and systematically extracting and synthesizing data from the reviewed evidence base to formulate findings (Petticrew and Roberts, 2006). Given the recent increase in literature on social protection, there is a sufficiently large repository of evidence that can be examined through systematic review procedures. However, since social protection programs differ in functions and outcomes, a review is needed to synthesize the information in a meaningful manner. This methodology is considered appropriate for the study because it allows for an objective and systematic use of techniques to comprehensively identify, appraise, and synthesize the relevant studies and papers.

There are several well-established systematic review protocols (e.g. Assessment of Multiple Systematic Reviews [AMSTAR], Higgins and Green, 2006; Institution of Medicine [Standards for Systematic Reviews]; Preferred Reporting Items for Systematic Reviews and Meta-Analyses [PRISMA]). Given the exploratory nature of this study, and due to the fact that social protection and ECCD have only recently been examined together, the parameters of the study and specific questions were designed carefully so as to enable a broad analysis of the academic literature. Therefore, the steps of the study were informed by the existing protocols.

The systematic review study consisted of the following 8 steps:

- Step 1:** Identification of the research questions and underlying constructs
- Step 2:** Identification of types of literature and databases to be searched
- Step 3:** Delineation of a construct table with key search terms
- Step 4:** Execution of the academic literature searches
- Step 5:** Selection of literature using filters
- Step 6:** Extraction of information from the documents
- Step 7:** Data analysis
- Step 8:** Reporting of results

Figure 2: Social Security Expenditure as a Percentage of GDP



SECTION 2: METHODS



2.1. SEARCH STRATEGY

The objective in developing a search strategy was to comprehensively identify relevant literature on social protection programs with early childhood outcomes in LMIC. The search methodology has two distinct aspects: search location and search terms. With respect to the search location, databases to be searched were identified. Through the examination of previous literature reviews relating to early childhood development, as well as consultation with colleagues and social science librarians at Yale University, a list of academic databases to search was developed. Given the interdisciplinary nature of ECCD, attempts were made to include at least one database from each of various disciplines in order to cast a wide net for relevant literature on the topic.

In the interest of minimizing subjectivity and keeping the search as systematic as possible, only academic databases, which have standardized search functions consistent with our search strategy, were included in the study. By utilizing a standardized search strategy, the potential for selection bias was reduced.

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An early learning program in Bangladesh provides children with a range of materials and activities to support child development.

LIST OF DATABASES SEARCHED

Anthropology

- » Africa Wide Information
- » Anthropology Plus

Economics/Business

- » Econlit
- » Business Source
- » ABI/Inform

Education

- » Education Research Complete (EBSCO)

International Relations

- » PAIS

Medicine

- » CINAHL

Political Science

- » International Political Science Abstracts
- » Worldwide Political Science Abstracts

Psychology

- » PsychINFO

Religion

- » Religion and Philosophy Collection

Social Sciences

- » Academic Search Premier
- » Social Science Citation Index
- » Social Science Full Text (H.W. Wilson)
- » Sociological Abstracts

After setting wide parameters in terms of databases to search, a further objective of the search strategy was to specifically target empirical evaluations of social protection interventions measuring ECCD outcomes in LMIC. Therefore, the second key element of the search methodology was to create the list of words that were used to locate the literature. Crafting a comprehensive list of relevant search terms is of paramount importance in a systematic review study, as these are the words that enable researchers to locate the relevant articles that then provide the data for the study. Therefore, great attention was paid to developing the search strings. A keyword search strategy was selected because these words both reflect the key concepts in the social protection and early childhood development literature, and are also the mechanism through which articles are tagged in databases. Multiple iterations of the keyword list were used in order to refine the search methodology.

In order to comprehensively locate relevant studies while keeping the scope of results within the desired constraints, we ultimately developed a set of four search filters for the search strategy:

Keyword Search Filters for Academic Databases

1) Social Protection Programs Filter

A comprehensive list of keywords related to social protection was compiled from research on existing social protection programs in low and middle income countries.

2) ECCD Filter

Only studies of social protection interventions with a specific focus on young children were desired. A list of terms related to young children was developed and included to increase the relevancy of search hits.

3) Evaluation Filter

Only studies involving an empirical evaluation of a specific social protection intervention, and which used a treatment and control group, were included in the review. To ensure relevancy of hits, a list of terms broadly relating to evaluations was developed and included as a further filter.

4) Low and Middle Income Countries (LMIC) Filter

Only studies conducted in the context of low and middle income countries were included in the review. A list of low and middle income countries, as defined by the World Bank, was combined with a list of terms related to low and middle income and developing countries.

By separating the search terms within each filter by an 'OR' operator and separating each list by an 'AND' operator on database search platforms, results were guaranteed to have at least one keyword from each filter. Proximity (N2) and truncation operators (asterisk) were used to increase the scope of the search by allowing alternative combinations and forms of relevant terms.

Moreover, search settings were adjusted to only include English language studies published in peer-reviewed journals within the last 10 years (2002-2012).

2.2. SCREENING AND DETERMINATION OF ELIGIBILITY

After searching each database with the strategy outlined above, and then removing duplicate articles, the remaining 354 articles were screened for eligibility in the study. The selection criteria consisted of commonly used PICOC framework (Sackett et al., 1997) outlined below.

PICOC Criteria

P—Population: Only studies examining subjects in the age range from prenatal to nine years old were included. If older children were included, the mean age was used to determine eligibility. Studies focusing at the family level were only included if children were specifically examined in at least one component reported in the study. When unclear, the ‘methods’ section was carefully reviewed to determine eligibility.

I—Intervention: Only studies that focused on a specific programmatic intervention related to social protection, as defined above, were included. Examples of accepted interventions include cash transfer and social insurance programs. Programs focusing on health that were not specifically linked to social protection were excluded. Similarly, studies examining programs focusing on child labor from a social protection perspective (e.g. conditional cash transfer programs) were included, while such programs not specifically linked to social protection were excluded.

C—Comparison: Studies were only included when there was a control or comparison group in the study design. Before and after studies were excluded.

O—Outcome: Only empirical studies reporting data on specific metrics measured at the family or individual (child) level were included. Studies giving results at the broader community or contextual level were excluded.

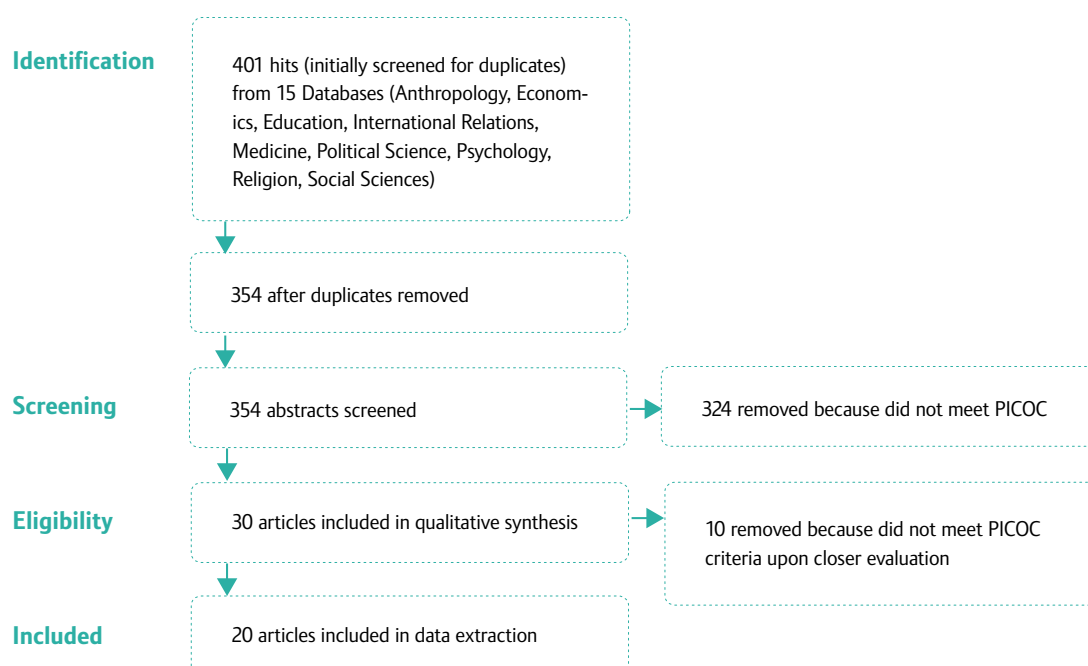
C—Context: Since a LMIC filter was incorporated in the search strategy to limit results to the desired context of lower and middle income countries, search results were presumed to already relate to the appropriate context.

As noted above, the search strategy also limited results to peer-reviewed literature published within the conventional ten-year date range (2002-2012), so search results were also presumed to meet this criterion.

Following the initial screening, a robustness check was conducted in which ten random articles screened by each researcher were screened a second time by a different researcher. The results of the robustness check determined that there was consistency between screeners in the selection process.

The search and screening process is summarized in Figure 3:

Figure 3: PRISMA Flow Diagram





2.3. EXTRACTION OF DATA AND ANALYSIS OF RESULTS

Following the search and screening process outlined above, the 20 articles deemed eligible for inclusion in the study were carefully read and coded using a detailed data extraction coding sheet. The data extraction process involved collecting detailed information from each article. First, details were recorded about the specific intervention, including information about the program country and setting, program type, details about program participants, and the cultural context. Second, information was collected about the evaluation design, including the type of study and design, as well as details on the sample size and outcome categories. A third section was included to extract the data on each separate outcome reported in the study, including information on means, standard deviations, and types of measurements. A fourth section enabled the coder to comment subjectively on the coding challenges and their degree of confidence in rating each article. A final section enabled coders to assess the quality of each study, and consisted of questions such as whether the article explicitly focused on ECCD outcomes, whether appropriate scientific and statistical standards were used, and whether cultural adaptations or accommodations were used. While one individual formally coded each article, the data extraction process was broadly shared across the research team during the analysis of results and organization by outcome described below. This team analysis allowed for an informal robustness check of the data extraction process.

Following the extraction of data, the articles were analyzed and their results organized according to three type(s) of child outcomes reported: health outcomes, education outcomes, and child development outcomes (including cognitive and motor development). While the specific indicators reported varied somewhat by study, all reported outcomes in the studies analyzed fit into these overall patterns. Studies reporting outcomes in more than one category were included in multiple categories.

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Children play and learn at a Plan ECCD centre in Haiti. The ECCD centre is housed in a temporary shelter that is inexpensive and environmentally friendly.

SECTION 3: RESULTS



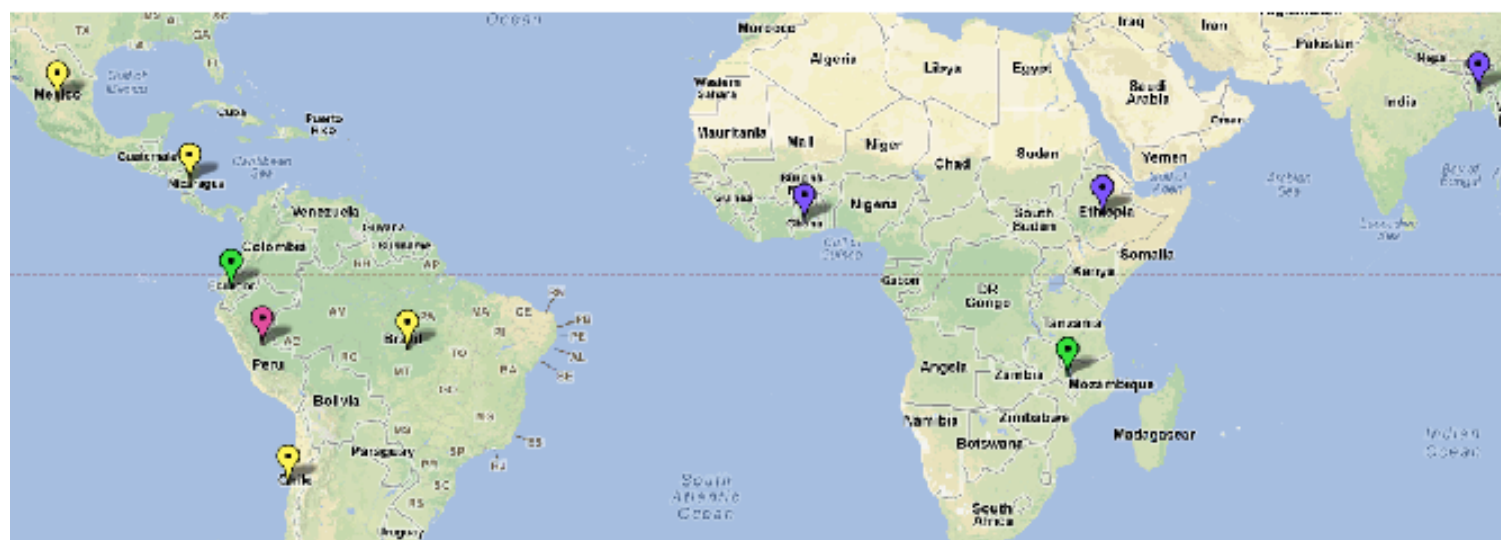
The results are presented in two parts. First, the descriptive results of the papers reviewed in this study are presented by country to provide an overview of the geographic prevalence of social protection programs. Second, the results are examined by each category of child outcomes outlined above.

Parents in Cambodia come together for mutual support on child and community development.

3.1. DESCRIPTIVE RESULTS

Countries:

- CCT: Brazil, Chile, Mexico, Nicaragua, Peru
- UCT: Ecuador, Malawi
- Microcredit: Bangladesh, Ethiopia, Ghana
- In-kind Transfer: Peru



Low Income: Bangladesh, Ethiopia, Malawi

Middle Income: Brazil, Chile, Ecuador, Ghana, Mexico, Nicaragua, Peru

The above map indicates the types and locations of the eleven programs examined from ten different countries. While 20 papers were reviewed, several of the papers were based on the same program. Conditional cash transfer programs were largely concentrated in Latin America, while unconditional cash transfers were in Africa and Latin America and microcredit programs were in Africa and South Asia. The sole in-kind transfer program examined was in Latin America. This geographic range is

Figure 4: Social Protection Program Types and Locations

important to note with respect to the generalizability of results and future development of social protection programs. The following programs were examined:

Conditional cash transfer and conditional cash transfer plus services programs

- » Bolsa Família (including Bolsa Escola and Bolsa Alimentação) - Brazil (middle income)
- » Red de Protección Social - Nicaragua (middle income)
- » PROGRESA/Oportunidades - Mexico (middle income)
- » Chile Solidario - Chile (middle income)
- » Atención a Crisis - Nicaragua (middle income)

Unconditional cash transfer programs

- » Malawi Social Cash Transfer Scheme - Malawi (low income)
- » Bono de Desarrollo Humano - Ecuador (middle income)

Microcredit programs

- » Enhancing Child Nutrition through Animal Source Management (ENAM) - Ghana (middle income)
- » Group-based credit - Bangladesh (low income)
- » Microcredit - Ethiopia (low income)

In-kind transfer program

- » Vaso de Leche (“Glass of Milk”) subsidy - Peru (middle income)

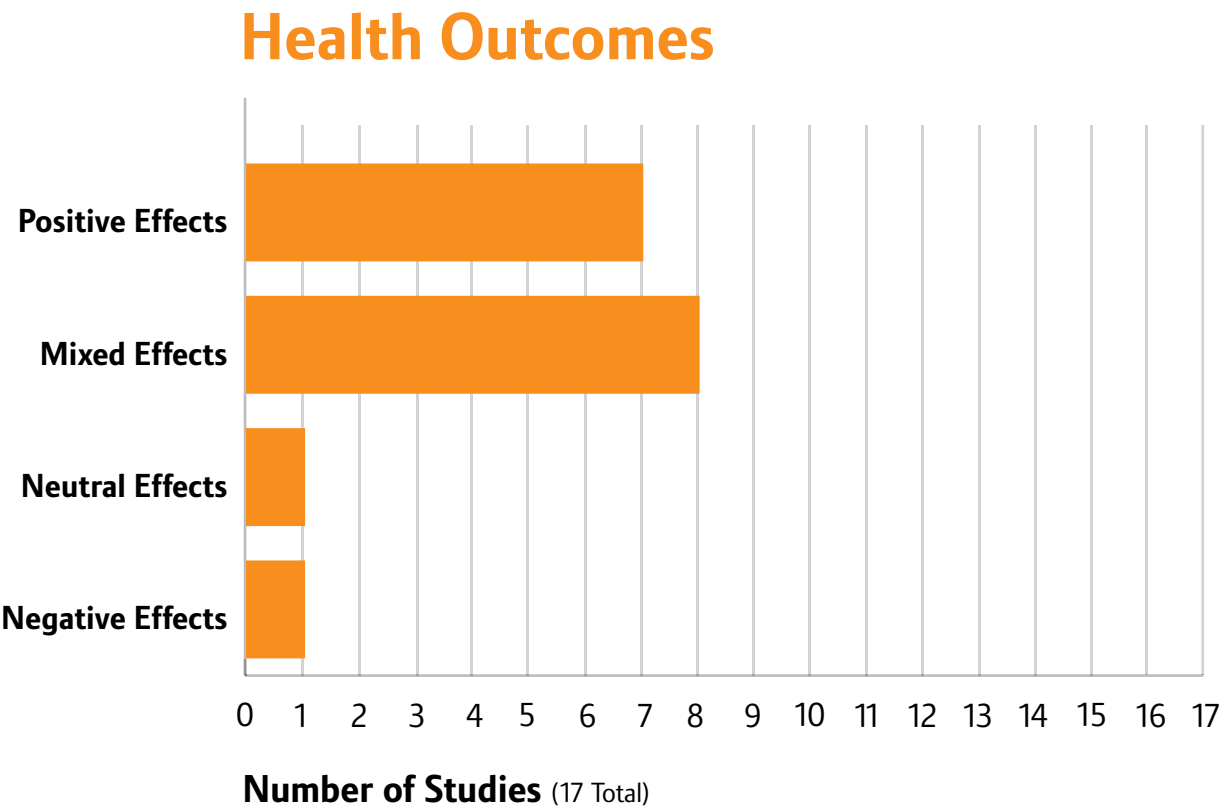
3.2. RESULTS BY OUTCOMES

This section presents the analysis of the results by child outcomes associated with positive early childhood development. Given that very few papers examined holistic ECCD outcomes, the patterns of results in the papers are mirrored in the review and analysis of results.

3.2.1. CHILD HEALTH OUTCOMES (PHYSICAL AND MENTAL HEALTH)

Of the seventeen studies that looked at child health outcomes of social protection programs, seven reported primarily positive effects, eight reported mixed (positive and neutral) effects, one reported neutral effects, and one reported negative effects.

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Graph 1: Child Health Outcomes by Type of Effect



Types of Health Outcomes

It should be noted that the measurement models across these papers varied greatly. Therefore, direct comparison of outcomes was difficult. Some papers measured access to services, such as vaccination coverage and rates (Barham and Maluccio, 2009) or health care enrollment, use, and spending (Martorano and Sanfilippo, 2012; Macours et al., 2012); many measured child physical growth outcomes, such as birthweight (Barber and Gertler, 2008; Paes-Sousa et al., 2011) and growth indicators (Rivera et al., 2004; Paes-Sousa et al., 2011; Morris et al. 2004; Fernald et al., 2008; Stifel and Alderman, 2006; Pitt et al., 2003; Paxson and Schady, 2010; Fernald and Hidrobo, 2011); and still others measured population status, such as neonatal mortality (Barham, 2011) or disease prevalence (Reis, 2010). A few studies measured nutritional indicators, such as intake of animal sources of food (Colecraft et al., 2012), nutrition status (Doocy et al. 2005), supplementation (Rivera et al., 2004; Fernald and Hidrobo, 2011), and receipt of food aid (Doocy et al., 2005). A few studies also measured bio-markers (e.g. salivary cortisol) as an indicator of mental health (Fernald and Gunnar, 2008).

Positive Effects

Programs of a wide range of types and modalities resulted in primarily positive health outcomes for children.

A study of Red de Protección Social, a Nicaraguan conditional cash transfer plus services program targeted at low-income families of children aged 12 to 23 months, found that the program resulted in large increases in vaccination coverage and increased vaccination rates for children (Barham and Maluccio, 2009). On-time vaccination coverage rose dramatically in the treatment group, from 68 - 77% in 2000 to 87 - 97% in 2002. Effects were especially large among children who are typically harder to reach with traditional supply-side interventions. The program benefit included cash transfers conditional on meeting health and education criteria, such as bringing children to preventive health workshops, ensuring weight gain for children, and attending bimonthly health education workshops. The program also included health care by contracted and trained private health providers. During the first two years of the program, the average annual family transfer was equivalent to approximately 17% of pre-program total household annual expenditures.

A few studies of PROGRESA/Oportunidades, Mexico's national conditional cash transfer scheme, also showed primarily positive health outcomes for children. The program includes an unconditional cash delivery component, a conditional cash transfer (based on school attendance), food delivery and nutritional supplements, and health care (Rivera et al., 2004). The goal is to build human capital within low-income households (Rivera et al., 2004).

One study of Oportunidades found that mothers' participation in the program was associated with a 127.3g higher birthweight and 4.6% decrease in low birthweight among their children (Barber and Gertler, 2008). Furthermore, the longer a family spends in a program, the more likely it is to experience a decline in low birthweight among children.

A second study of PROGRESA found that a doubling of cash transfers was associated with higher height-for-age, lower prevalence of stunting, lower body-mass index for age percentile, and lower prevalence of being overweight among children aged 24-68 months (Fernald et al., 2008).

A final PROGRESA study found lower salivary cortisol levels among children whose families participated in the cash transfer program, controlling for a variety of individual, household, and community level variables (Fernald and Gunnar, 2008). Salivary cortisol levels indicate activity of the stress-sensitive hypothalamic-pituitary-adrenocortical (HPA) system. Previous correlational studies have shown a causal link between childhood poverty and higher activity of the HPA system. This study supports this finding, indicating lower levels of stress among children in beneficiary households.

Macours et al. (2012) examined a different conditional cash transfer program, Nicaragua's Atención a Crisis, which provided transfers to low-income families in rural areas conditional on regular preventive

Page 20:

1.Children in a Plan-supported ECCD project in Uganda have their own slates on which to practice writing, so as to develop early numeracy and literacy skills.

2. Preschool children in China use hands-on materials to help them learn numbers and letters.



health checkups, school enrollment, vocational training, or creation of a business development plan. The authors found that beneficiary households spent more on critical inputs for child health and nutrition, including nutrient-rich foods, and made more use of preventive health care services.

In addition to conditional cash transfer programs, some microcredit programs have also been found to have positive effects on child health. One study that examined a variety of microcredit programs in Ethiopia found that these programs had a positive impact on nutritional status and wellbeing of female recipients and their children aged 6 to 59 months (Doocy et al., 2005). These female clients and their families were less likely to be food aid recipients, suggesting that microcredit can reduce vulnerability to food insecurity amongst children.

Another study, which examined Enhancing Child Nutrition through Animal Source Management (ENAM), a nutrition and microcredit project in Ghana, found that participation in the program was associated with higher intake of animal source foods among children aged 2 to 5 (Colecraft et al., 2012). The program targeted households of low income and low nutritional status through an integrated microcredit, entrepreneurship, and nutrition education intervention.

Mixed Effects

Eight studies found both positive and neutral program effects, depending on beneficiary, type of outcome examined, group examined, or amount of time spent in the program.

While some of the previous studies found positive impacts on child health from Mexico's conditional cash transfer program, PROGRESA/Oportunidades, a couple of others found mixed effects. One study found that while PROGRESA led to a 17% decline in infant mortality among rural beneficiary households, it did not impact average neonatal mortality rates (Barham, 2011).

Another study of PROGRESA found differences in program effects depending on the amount of time beneficiaries spent in the program and on the group examined (Rivera et al., 2004). After one year of treatment, children under 12 months of age in beneficiary households saw positive effects on regular intake of papilla (a nutritional supplement), hemoglobin values, and age-adjusted anemia. However, when comparing the original beneficiary group after two years of participation in the program to a new group of beneficiaries who received treatment for one year, the study found no significant differences in program effects between the two groups. These findings indicate that the majority of the program benefits occur during the first year of program participation. However, when comparing the two beneficiary groups, the study did find larger positive effects on incremental growth in height (from baseline at the start of the program) among those who had been in the program longer, indicating that benefits on growth continue to accrue with time in the program. However, these effects were only present among a specific beneficiary group: infants who were younger than six months at baseline and who lived in the poorest households.

An examination of Brazil's conditional cash transfer plus services program, Bolsa Família, which focuses on improving physical health status and reducing poverty among low income households in underprivileged communities, found positive impacts of the program on infants' height-for-age and weight-for-age, but no significant effect on weight-for-height (Paes-Sousa et al., 2011). The program includes unconditional cash delivery, cash delivery, food and nutritional delivery, and health care components.

A look at Bolsa Escola, a predecessor to Brazil's Bolsa Família program, in which cash transfers to low income families to reduce poverty and improve education outcomes were conditional on school attendance, found that even this education-oriented cash transfer program had some positive health effects for children (Reis, 2010). Comparing beneficiary and non-beneficiary households, children aged 0-13 in beneficiary households had better health status and fewer restricted activity days. However, the program didn't have an effect on number of bed days, vomiting or diarrhea, or respiratory conditions. Comparing beneficiary and non-beneficiary children within households, beneficiary children had fewer back problems, less arthritis, less bronchitis or asthma, fewer heart conditions, less kidney disease, and less prevalence of depression.

Chile's conditional cash transfer plus services program, Chile Solidario, which includes unconditional cash transfer, conditional cash transfer, family meeting, and psychosocial support components, found positive effects of the program on child health enrollment for those under 15, but no significant impact on household enrollment in the public health system (Martorano and Sanfilippo, 2012).

Another Latin American program, Bono de Desarrollo Humano, an Ecuadorian unconditional cash transfer program, found that rural children aged 12-35 months in treatment areas were more likely to have received vitamin A or iron supplementation (Fernald and Hidrobo, 2011). However, the program had no effect on child height-for-age or hemoglobin concentrations in either urban or rural areas.

A Latin American in-kind transfer program, Peru's Vaso de Leche ("Glass of Milk") explicitly targeted nutritional objectives among children by providing food subsidies to families of children aged three to eleven (Stifel and Alderman, 2006). Transfers were distributed based both on need and the age of children, with priority given to younger children. Yet, despite the explicit nutritional aims of the program, one study found no direct effect of per-capita district expenditure for the program on height-for-age among those under five. However, the authors also projected increases in household expenditure due to the in-kind transfer and found that those increases resulted in increased height-for-age.

Finally, one study that examined a series of group-based microcredit programs in Bangladesh found mixed results that depended on type of outcome and whether women or men received the credit (Pitt et al., 2003). An increase in credit to women resulted in increases in boys' and girls' arm circumference and height for age, but no effect on boys' or girls' weight-by-height. Increases in credit to men had no effect on any of the child health outcomes.

Neutral Effects

Although the majority of the social protection programs examined resulted in positive or positive and neutral effects, one study of social protection programs found no effects on the child health outcomes examined.

Paxson and Schady (2010) looked at the same Ecuadorian unconditional cash transfer program, Bono de Desarrollo Humano, which showed positive effects on vitamin A and iron supplementation in a different study. However, these study authors found no effect on the outcomes examined: elevation-adjusted hemoglobin or height among children aged three to seven years at time of measurement.

Negative Effects

Finally, one evaluation found negative impacts of a conditional cash transfer program on child health outcomes. The Bolsa Alimentação program in Brazil, a precursor to Bolsa Família, was a cash transfer program conditioned on regular attendance at antenatal care, growth monitoring, and vaccination compliance, whose goal was to improve physical health status by reducing nutritional deficiencies and increasing household integration into the national health service (Morris et al., 2004). The authors of the study found that participation in the program was associated with lower weight-for-age and lower monthly weight gain, as well as no impact on height-for-age. They hypothesized that the negative effects could have been due to mothers' misperceptions that eligibility for participation in the program depended on a child being underweight and that benefits would be suspended if the child gained weight. Although that condition wasn't an element of Bolsa Alimentação, it had been enforced in a previous federal program.



3.2.2. CHILD EDUCATION OUTCOMES

Of the four studies reporting education outcomes, three reported positive effects and one reported mixed effects.

Types of Education Outcomes

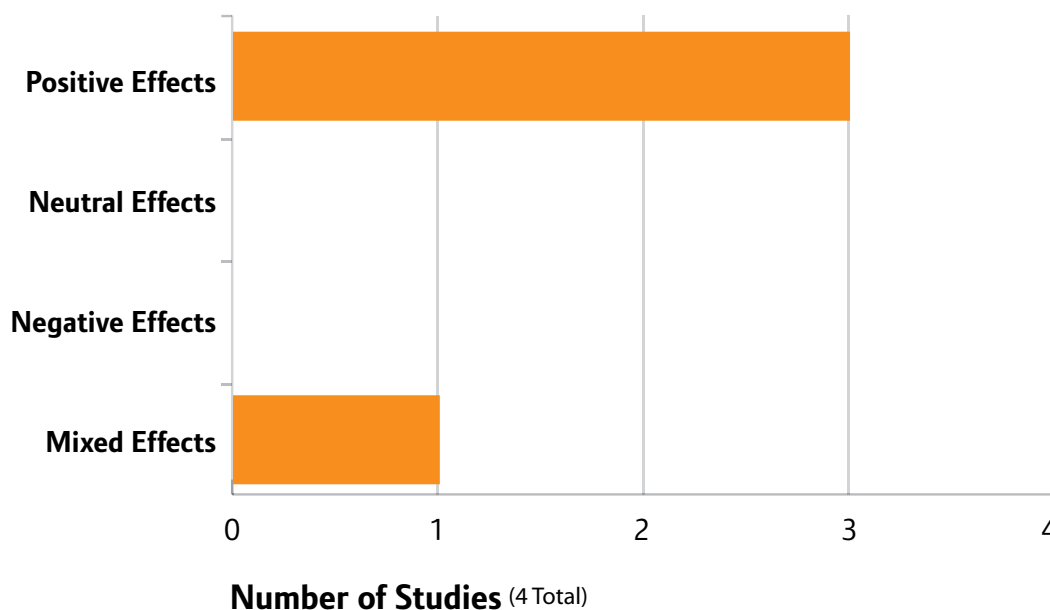
Most of the studies examining the impact of social protection programs on education outcomes reported the program effects on specific schooling outcomes. One measure reported was school attendance (Dammert, 2009; Martorano and Sanfilippo, 2012); another was the age of starting primary school (Behrman, 2006); and a third was school completion/grade progression (Behrman, 2006). An outcome related to schooling outcomes reported in one study was the level of child labor (Dammert, 2009). A final measure employed was the knowledge of child nutrition by caregivers (Colecraft et al., 2012).

Positive Effects

A study examining the effect of Mexico's Oportunidades conditional cash transfer program on schooling outcomes found positive effects of the program on reducing the age of starting primary school, improving grade progression, and increasing on time school completion (Behrman, 2006). The empirical findings showed positive program impacts on reducing the age of entering school for younger children, aged one to two years in 1997 (seven years in 2003). Estimates implied a 1% reduction in the age of entry to primary school. The authors cite suggestive evidence that this result partially reflects the effect of the nutritional supplements. Nonetheless, they also maintain that the children aged three to five years in 1997 most likely did not benefit from the early nutritional intervention. The program also had a positive effect on increasing grades of completed schooling and progressing on time for older children after 5.5 years of benefits. Estimates suggest an increase in grades of schooling completed to date of about eight to 9%. These results are consistent with families anticipating the receipt of grants for these children or possible income effects through program receipt. Children aged six to eight years in 1997 (12 to 14 years in 2003) show the largest increases in schooling indicators.

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A Plan-supported primary school in Guatemala promotes quality education, non violence, education for girls and a safe environment for children.

Education Outcomes



Graph 2: Child Education Outcomes by Type of Effect

Dammert's (2009) study of Nicaragua's Red de Protección Social (RPS) conditional cash transfer program examines the heterogeneous impact of the program on education outcomes. In addition to examining the program's impact on direct schooling outcomes, labor outcomes are also examined. While not directly related to education, labor outcomes are included under education since it is theorized that by reducing child labor, education outcomes will increase. The RPS program was found to have a heterogeneous impact on school attendance by gender, age, and location. Boys were found to experience a larger positive impact of the program on schooling and a negative impact on the probability of engaging in labor activities and in hours worked. Moreover, older children experienced a smaller impact of the program on schooling and participation in labor activities. Finally, children located in more impoverished areas experienced a larger impact on schooling and a smaller impact on working hours.

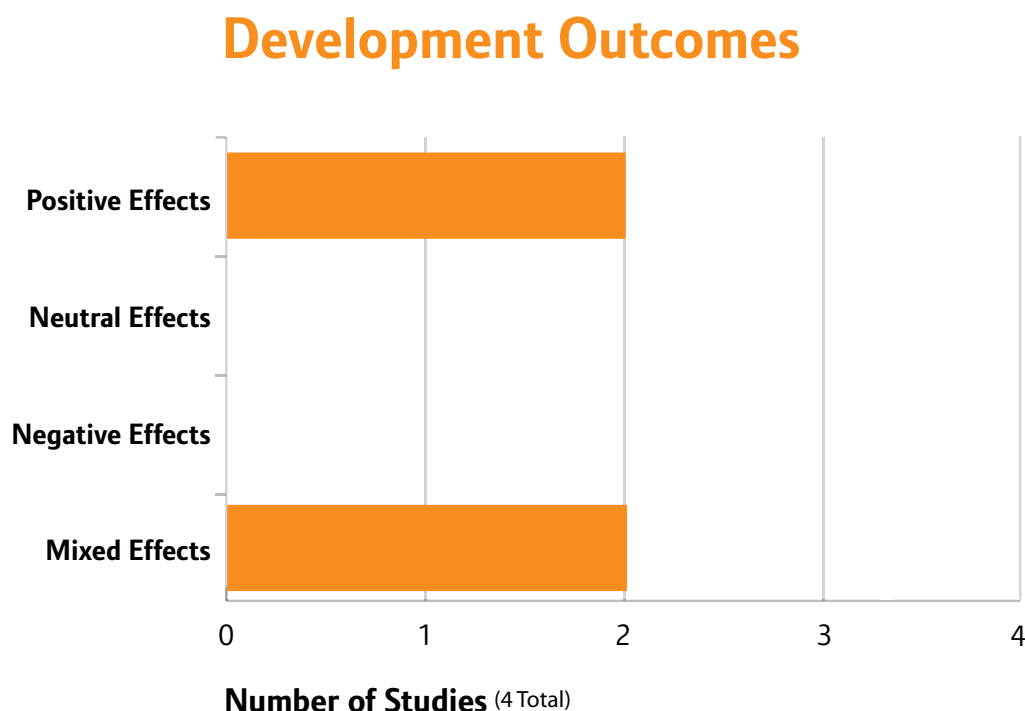
Colecraft et al.'s (2012) examination of the Enhancing Child Nutrition through Animal Source Management (ENAM) project studied the effects of a multidisciplinary intervention on caregivers' knowledge of child nutrition, particularly in understanding the importance of animal source foods for children's micronutrient status and cognitive development. The study found positive program effects in improving caregivers' knowledge of child nutrition related to animal source foods, but did not give more specific details of program effects regarding metrics used and magnitudes.

Mixed Effects

Martorano and Sanfilippo's (2012) impact evaluation of Chile's Chile Solidario conditional cash transfer plus services program examines the program's impact on a number of multidimensional measures of poverty, including schooling outcomes. The study finds an increase in educational enrollment for older children, aged 6-14 years. Enrollment in this age group increased by 8 percentage points, from 47% to 55% during the study period. The program, however, was found to have no significant impact on educational enrollment for younger children, aged three to five years. A possible explanation for this finding cited by the authors is a finding from qualitative studies by Chile's Ministerio de Planificación y Cooperación (Ministry of Planning and Cooperation) indicating that families seem to prefer to take care of children under six years of age at home, considering them too young to go to school.

3.2.3. CHILD DEVELOPMENT OUTCOMES (COGNITIVE AND MOTOR DEVELOPMENT)

As the chart below indicates, there were four studies in the review with development outcomes, two with positive effects and two with mixed effects.



Types of Development Outcomes

The development indicators used in these studies employed a wide range of measures, including the Peabody Picture Vocabulary Test (Paxson and Schady, 2010); Denver Developmental Screening Test (Macours et al., 2010); McCarthy test battery for gross and fine motor skills (Fernald et al., 2008; Macours et al., 2010); Woodcock-Johnson-Muñoz battery for memory (Fernald et al., 2008); and the BPI (Behavior Problem Index) (Macours et al., 2010).

Graph 3: Child Development Outcomes by Type of Effect

Positive Effects

The positive effects were from two studies on conditional cash transfer programs, Mexico's Oportunidades (Fernald et al. 2008) and Nicaragua's Atención A Crisis (Macours et al. 2010).

In Mexico, an effective doubling of cash transfers was associated with children doing better on a scale of motor development, three scales of cognitive development and with receptive language. A doubling of cash transfers was associated with improvements in endurance ($p=0.001$), long-term memory ($p=0.002$), short-term memory ($p<0.0001$), visual integration ($p=0.02$), and language development ($p<0.0001$).

In Nicaragua, program development measurements were performed using two types of behavior, language and memory tests. Atención a Crisis program effects on cognitive outcomes (language and memory) were 0.19 standard deviations better in 2006, and 0.20 in 2008. 79% of the coefficients are positive and 45% are significant at 10% level or higher. Treated households had substantial increases in various measures of child stimulation. They were more likely to tell stories, sing to, or read to their children, and to have pen, paper and toys for children in the house. There were no significant negative coefficients.

Mixed Effects

The mixed effects were from two studies on unconditional transfer programs, both using data from Ecuador's Bono de Desarrollo Humano (Fernald et al., 2011; Paxson and Schady, 2010).

Paxson et al. (2010) find no effect on TVIP score for receptive language, no effect on short-term memory, no effect on fine motor control, and a positive effect on long-term memory. When disaggregating these effects, they found that in fine motor control, vocabulary, and two tests of memory, children in the lowest quartile of per capita expenditure improved sharply. The children in the higher quartile of the distribution's outcomes improve slowly or not at all.

Fernald et al. (2011) find that in rural areas, being randomly selected to receive the transfer in very early childhood led to significantly better performance on the number of words a child was saying and on the probability that the child was combining two or more words. There were no significant effects on language development for children in urban areas, which led to the mixed effects.

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In Timor Leste, community preschools offer a safe space for children to play and learn.



SECTION 4: IMPLICATIONS



4.1. IMPLICATIONS BY CHILD OUTCOMES

Since the turn of the century, social protection has emerged as a dominant policy tool to address poverty and reduce vulnerability of families in LMIC. This emphasis has led to a massive increase in social protection programs using innovative designs, and in the evaluation of their impact. The rise in social protection programs has also been associated with their growing influence on improving basic health and education outcomes for children, a population vulnerable to poverty and adversity. However, impacts of these programs for early childhood development have not yet been fully understood. Therefore, this systematic review study was conducted to understand the association between social protection and ECCD in three sets of outcomes: health, education and child development. In this section of the report, the implications of the results of this study are discussed and presented in 2 parts: implications by outcomes and general implications.

Page 31: Poov, aged 10, has a hearing impairment and learnt to sign when he was 4. With support from his family, friends and teachers in India he was ready to succeed in school.

4.1.1. IMPLICATIONS FOR CHILD HEALTH OUTCOMES

Many of the social protection programs examined had positive effects on child health outcomes. Often these programs specifically target child health and are based on a clear theory of change that outlines the mechanisms through which program treatment will impact child health. For example, nutritional supplements in Peru (Stifel and Alderman, 2006) and cash transfer conditional on health- and education-promoting family behavior in Nicaragua (Barham and Maluccio, 2009) both resulted in positive child health outcomes.

Even those programs that did not explicitly target child health often found some positive health effects for children. For example, an unconditional cash transfer in Ecuador aimed at poverty reduction was associated with increased vitamin A and iron supplementation (Paxson and Schady, 2010). Reduction in poverty is one mechanism through which programs can impact child health outcomes, even when program treatment isn't specifically related to, or conditioned on, health.

In the cases of positive child health effects, program impacts varied greatly in their magnitudes. Effects were often largest among the poorest, most vulnerable, and least served populations, those for whom a small increase in family resources represents the largest relative change. Sometimes, the marginal benefit of program participation was quite large initially and declined over time, while in other cases, the magnitude of the effect increased with longer participation.

The overwhelmingly positive or mixed (positive and neutral) results should not be taken as an indicator that all social protection programs will improve children's health. For example, the impact of Bangladeshi microcredit programs depended entirely on whether women or men received the credit, with positive effects on child health only when women were the program beneficiaries (Pitt et al., 2003). Impacts of social protection programs on health depend on a variety of factors, including program modality, target, dosage, beneficiary and context, all of which interact in a complex manner to affect outcomes.

Finally, it is always important for those designing social protection programs to consider potential unintended consequences, giving special consideration to the local historical, social, cultural and economic context. In the case of Bolsa Alimentação, the program had negative effects on children's weight, possibly because of misperceptions among mothers that arose from the design of previous federal programs (Morris et al., 2004). With better foresight, program planners and implementers possibly could have avoided these pitfalls, perhaps by better educating program participants about the true conditions of participation. One cannot assume that a social protection program will automatically positively impact child health. Again, many factors interact to affect outcomes.

4.1.2. IMPLICATIONS FOR CHILD EDUCATION OUTCOMES

The results of the studies demonstrate that social protection programs, particularly conditional cash transfer programs, have had positive effects on a range of education outcomes for young children. Nonetheless, these results also indicate a degree of heterogeneity of program impacts. Program effects were found to vary by factors such as age, gender, location (e.g. urban versus rural) and type of program.

Behrman's (2006) results from Mexico indicate that social protection programs can have positive impacts in terms of reducing the age of school entry for young children. By contrast, Martorano and Sanfilippo's (2012) findings in Chile demonstrate that parents' prior beliefs about when to send their children to school can limit the effectiveness of social protection programs aimed at reducing age of school entry.

These findings imply that policymakers should not take a 'one size fits all' approach to implementing social protection policies geared towards improving education outcomes for young children. Policymakers should consider these heterogeneous impacts to create social protection interventions that are targeted to the specific populations, contexts, and changes desired.

4.1.3. IMPLICATIONS FOR CHILD DEVELOPMENT OUTCOMES

Given that the results varied by the type of transfer, it is natural to question whether conditionality affects outcomes. As stated earlier, conditional cash transfers provide cash only to beneficiaries who have fulfilled prescribed conditions. UCTs assume that parents are income-constrained and simply do not have the money to meet their families' most pressing needs (Fernald, 2011).

In the context of these four studies, the two conditional cash transfer programs provided cash contingent on well-enforced educational requirements. The Bono de Desarrollo Humano unconditional transfer had no such requirement. It is not possible on the basis of these four studies to state empirically that conditionality is the key in these outcomes, but it is an area that should be further explored.

4.2. GENERAL IMPLICATIONS

This study reveals that social protection programs are a heterogeneous group of programs ranging from conditional and unconditional cash transfers to in-kind transfers. This result is validated by the broad landscape of social protection programs. The results are further supported by the geographic prevalence of these programs in Latin America. Social protection programs studied in the academic literature are primarily in middle income countries, as opposed to low income countries. This set of results has important implications for the findings. The study results are most likely to have greater relevance for middle-income and higher low-income countries. The results may be less applicable for low-income and least developed countries.

The study also revealed that the focus on early childhood in social protection programs is fairly limited. Given the burgeoning literature in the field, only 20 papers were determined to be eligible, of



A snack is provided to young children in an ECCD program in Zambia.

which several of them referred to the same program. This result clearly suggests that the inquiry into the association between social protection and early childhood is quite limited. Within the set of child outcomes examined, a majority of the papers focused on physical health with a few papers examining child mental health. This result is not entirely surprising given the emphasis on child survival in LMIC. Secondly, most of the outcome measures across the papers were based on household survey data. There was little focus on individual child measurement. With respect to education, there is also little to no mention of learning outcomes, with a majority focusing on education as defined in traditional outcomes, such as enrollment. The most limited focus was on child cognitive outcomes in the category of child development.

However, it should be noted that this study was only conducted on the academic literature on the impact of social protection programs using a very stringent categorization for eligibility of studies to be included in the review. It is possible that if the scope of this study was expanded to include the grey literature, published by development agencies and NGOs, a larger set of papers and concomitant outcomes might have been obtained. It is recommended that a subsequent systematic review study of the grey literature should be conducted to supplement the results of the academic literature.

Notwithstanding the focus of a primarily academic review, this study does recommended a greater emphasis on early childhood development by the social protection sector. Given that the stated aim of social protection programs is poverty alleviation, investing in early childhood should be seen as a key strategy. The evidence from early childhood has clearly demonstrated that this is the age when maximum human development potential can be actualized; and in doing so, the intergenerational cycle of poverty can be broken. Therefore, it is surprising to note the limited attention given by social protection programs to this critical stage of human capital development.

Social protection plays a major role in strengthening of families and their ability to withstand adversity. Families also provide the most important environment for young children during the earliest years of

life. The symbiotic relationship between social protection and ECCD then meets at the juncture or institution of the family. By building the resilience of families and supporting their ability to care for and nurture their young children, social protection programs can not only achieve immediate impacts, but also sustained, long-term outcomes. Therefore, this report recommends innovation in the next generation of social protection programming, with a particular focus on ECCD. Furthermore, this focus should emphasize equity in child outcomes and social inclusion.

The theory of change underlying social protection programs is that social protection not only addresses the outcome of poverty, but also the underlying causes. With respect to examining the reasons for poverty, there are structural issues and population-level issues. While early childhood development cannot address the structural issues, it can provide insight into the population issues linked with poverty. Limited human capabilities limit the individual's earning capacity. The most rapid development of capabilities occurs early in life, prior to school entry. Therefore, by focusing on early childhood outcomes, social protection programs can address poverty more effectively.

The review also suggests that there is an opportunity for social protection programs to improve outcomes for young children, taking into consideration the contexts within which these programs are implemented. These programs hold great potential for improving the lives of young children and families and that potential should be further supported in the next generation of programs.

REFERENCES

Aber, L. and Rawlings, L. B. (2011), 'North-South Knowledge Sharing on Incentive-based Conditional Cash Transfer Programs', Social Protection Discussion Papers 1101, The World Bank

Aber, L., Biersteker, L., Dawes, A., and Rawlings, L. (2013), Social Protection and Welfare Systems: Implications for Early Childhood Development, Handbook of Early Childhood Development Research and Its Impact on Global Policy, Oxford University Press USA

Andrews, C., Das, M., Elder, J., Ovadiya, M., and Zampaglione, G. (2012), 'Social protection in low income countries and fragile situations: challenges and future directions', Social Protection Discussion Papers 67607, The World Bank

Barber, S. L., and Gertler, P. J. (2008), 'The impact of Mexico's conditional cash transfer programme, Oportunidades, on birthweight', Tropical Medicine and International Health, 13(11), 1405-1414. doi: 10.1111/j.1365-3156.2008.02157.x

Barham, T. (2011), 'A healthier start: The effect of conditional cash transfers on neonatal and infant mortality in rural Mexico', Journal of Development Economics, 94(1), 74-85. doi: 10.1016/j.jdevec.2010.01.003

Barham, T., and Maluccio, J. A. (2009), 'Eradicating diseases: The effect of conditional cash transfers on vaccination coverage in rural Nicaragua', Journal of Health Economics, 28(3), 611-621. doi: 10.1016/j.jhealeco.2008.12.010

Behrman J. R., Skoufias E. (2006), 'Mitigating myths about policy effectiveness: evaluation of Mexico's antipoverty program', The ANNALS of the American Academy of Political and Social Science; 606: 244-275.

Britto, P.R., and Kagan, S.L. (2010), 'Global status of early learning and development standards', in P. Peterson, P., Baker, E., and McGaw, B. (Eds.) International Encyclopedia of Education, vol. 2: 138-143, Oxford, UK: Elsevier

Britto, P.R., and Ulkuer, N. (2012), 'Child development in developing countries: Child rights and policy implications', Child Development, 83(1): 92-103

Colecraft, E. K., Marquis, G. S., Sakyi-Dawson, O., Lartey, A., Butler, L. M., Ahunu, B., Canacoo, E. (2012), 'Planning, Design and Implementation of the Enhancing Child Nutrition Through Animal Source Food Management (ENAM) Project', African Journal of Food, Agriculture, Nutrition and Development, 12(1): 5687-5708

Devereux, S., and Sabates-Wheeler, R. (2004), 'Transformative social protection', IDS Working Paper 232. Brighton: IDS

Doocy, S., and et al. 'Credit Program Outcomes: Coping Capacity and Nutritional Status in the Food Insecure Context of Ethiopia', Social Science and Medicine 60.10 (2005): 2371-82

Engle, P. L., Fernald, L., Alderman, H., Behrman, J., O'Gara, C., Yousafzai, A., Cabral De Mello, M., Hidrobo, M., Ulkuer, N., Ertem, I., and Iltus, S. (2011), 'Strategies for Reducing Inequalities and Improving Developmental Outcomes for Young Children in Low-income and Middle-income Countries', The Lancet n. pag

Ervik, R., Kildal, N., and Nilssen, E. (2009), 'The Role of International Organizations in Social Policy: Ideas, Actors, and Impact', Edward Elgar Publishing

Ferreira, H.G.F., Robalino, D (2010), 'Social Protection in Latin America: Achievements and Limitations', World Bank Policy Research Working Paper 5305

Fernald, L., Gertler, P.J., and Neufeld, L. M. (2008), 'Role of Cash in Conditional Cash Transfer Programmes for Child Health, Growth, and Development: An Analysis of Mexico's Oportunidades', *The Lancet* 371.9615, 828-37

Fernald, L., and Gunnar M.R. (2009), 'Poverty-Alleviation Program Participation and Salivary Cortisol in Very Low-Income Children', *Social Science and Medicine* 68.12 (2009), 2180-89

Fernald, L., and Hidrobo. M. (2011), 'Effect of Ecuador's Cash Transfer Program (Bono De Desarrollo Humano) on Child Development in Infants and Toddlers: A Randomized Effectiveness Trial', *Social Science and Medicine* 72.9, 1437-46

Fiszbein, A., and Schady, N. (2009), *Conditional Cash Transfers: Reducing Present and Future Poverty*, Washington, D.C: World Bank

Gabel, G. S. (2012), 'Social Protection and Children in Developing Countries', *Children and Youth Services Review*, vol. 34, issue 3, 537-545

Garcia, M., Evans, J.L., and Pence, A. (2008), *Africa's Future, Africa's Challenge: Early Childhood Care and Development in Sub Saharan Africa*. Washington, DC: World Bank

Garcia, M., and Moore C.M.T. (2012), *The Cash Dividend. The Rise of Cash Transfer Programs in Sub-Saharan Africa*, Washington, DC: World Bank

Global Extension of Social Security (2013), "Statistics – (5) Additional Indicators" <<http://www.social-protection.org/gimi/gess/ShowTheme.do?tid=10>> Accessed June 3, 2013

Grantham-McGregor, S., Cheung, Y. B., Cueto, S., Glewwe, P., Richter, L., Strupp, B., et al. (2007), 'Developmental potential in the first 5 years for children in developing countries', *Lancet*, 369 (9555): 60-70

Guhan, S. (1994), 'Social Security Options for Developing Countries', *International Labour Review* 133(1)

Hodgking, R., and Newell, P. (2007), *Implementation handbook for the convention on the rights of the child*, UNICEF, Geneva, Switzerland

Irwin, L.G., Siddiqui, A., and Hertzman, C. (2007), 'Early child development: A powerful equalizer', *Help Research Institute, College of Interdisciplinary Studies, University of British Columbia, British Columbia, Canada*
Macours, K., Schady, N., and Vakis, R. (2012), 'Cash Transfers, Behavioral Changes, and Cognitive Development in Early Childhood: Evidence from a Randomized Experiment', *American Economic Journal: Applied Economics* 4.2 (2012): 247-73

Martorano, B., and Sanfilippo, M. (2012), 'Innovative Features in Poverty Reduction Programs: An Impact Evaluation of Chile Solidario on Households and Children', *Journal of International Development*, 24(8), 1030-1041. doi: 10.1002/jid.2873

McCartney, K. and Phillips, D. A. (Eds.) (2006), *Handbook of Early Childhood Development*. Oxford: Blackwell Publishing

Morris, S. S., Olinto, P., Flores, R., Nilson, E. A. F., and Figueiró, A. C. (2004), 'Conditional Cash Transfers Are Associated with a Small Reduction in the Rate of Weight Gain of Preschool Children in Northeast Brazil', *Journal of Nutrition*, 134(9): 2336-2341

- Paes-Sousa, R., Santos, L. M. P., and Miazaki, É. S. (2011), 'Effects of a Conditional Cash Transfer Programme on Child Nutrition in Brazil', *Bulletin of the World Health Organization*, World Health Organization, 89(7): 496-503
- Paxson, C., and Schady, N. (2010), 'Does Money Matter? The Effects of Cash Transfers on Child Development in Rural Ecuador', *Economic Development and Cultural Change*, 59(1): 187-229
- Pitt, M. M., Khandker, S. R., Chowdhury, O. H., and Millimet, D. L. (2003), 'Credit Programs for the Poor And the Health Status of Children in Rural Bangladesh', *International Economic Review*, 44(1): 87-118
- Reis, M. (2010), 'Cash transfer programs and child health in Brazil', *Economics Letters*, 108(1): 22-25. doi: 10.1016/j.econlet.2010.04.009
- Richter, L., Dawes, A., and de Kadt, J. (2010), 'Early childhood' in Peterson, I., Bhana, A., Flisher, A.J., Swartz, L., and Richter, L. (Eds.), *Promoting mental health in scarce-resource contexts*, 99-123, Human Science Research Council, Cape Town, South Africa
- Rivera, J. A., Sotres-Alvarez, D., Habicht, J.-P., Shamah, T., and Villalpando, S. (2004), 'Impact of the Mexican Program for Education, Health, and Nutrition (Progresa) on Rates of Growth and Anemia in Infants and Young Children: A Randomized Effectiveness Study', *Journal of the American Medical Association*, 291(21): 2563-2570
- Sackett, D.L., Richardson, W.S., Rosenberg, W., Haynes R.B. (1997), *Evidence-based medicine: How to practice and teach EBM*, Churchill Livingstone, New York
- Shonkoff, J.P., Philips, D.A. (Eds.). (2000), *From neurons to neighborhoods: The science of early childhood development*, National Academy Press, Washington, DC
- Stifel, D., and Alderman, H. (2006), 'The "Glass of Milk" Subsidy Program and Malnutrition in Peru', *World Bank Economic Review*, 20(3): 421-448
- United Nations Educational Scientific and Cultural Organization (2002), 'Early Childhood Care? Development? Education?', *UNESCO Policy Briefs on Early Childhood*
- United Nations General Assembly, (2011), *Millennium Development Goals Report 2011*
- United Nations General Assembly, (2010), *Status of the Convention on the Rights of the Child*
- United Nations General Assembly, (2002), *Resolution S-27/2, A world fit for children*
- United Nations General Assembly, (1989), *Convention on the Rights of the Child*, United Nations Treaty Series, 1577(3)

APPENDIX 1: NARRATIVE SYNTHESIS OF INCLUDED STUDIES

Barber, S. L., and Gertler, P.J. (2008), 'The Impact of Mexico's Conditional Cash Transfer Program, Oportunidades, on Birthweight', *Tropical Medicine and International Health* 13.11: 1405-14.

Abstract:

Objectives: To evaluate the impact of Oportunidades, a large-scale, conditional cash transfer program in Mexico, on birthweight. The program provides cash transfers to low income, rural households in Mexico, conditional on accepting nutritional supplements, health education and healthcare. **Methods:** The primary analyses used retrospective reports from 840 women in poor rural communities participating in an effectiveness study and randomly assigned to incorporation into the program in 1998 or 1999 across seven Mexican states. Pregnant women in participating households received nutrition supplements and healthcare, and accepted cash transfers. Using multivariate and instrumental variable analyses, estimates were made about the impact of the program on birthweight in grams and low birthweight (<2500 g), receipt of any pre-natal care, and number of pre-natal visits.

Country:

» Mexico

Sample:

» 840 women in 306 poor rural communities

Intervention:

» Oportunidades conditional cash transfer program

Measures:

» Retrospective official reports of birth weight

Outcomes:

» Program impact on birthweight

Results:

- » Oportunidades beneficiary status was associated with 127.3 g higher birthweight among participating women
- » Oportunidades beneficiary status was associated with and a 4.6% reduction in low birth weight among participating women

Take Home Messages:

- » The Oportunidades conditional cash transfer program improved birthweight outcomes
- » This finding is relevant to countries implementing conditional cash transfer programs

Barham, T. (2011), 'A Healthier Start: The Effect of Conditional Cash Transfers on Neonatal and Infant Mortality in Rural Mexico', Journal of Development Economics 94.1: 74-85

Abstract:

Conditional cash transfer programs seek to break the intergenerational transmission of poverty by building the human capital of poor children. Despite their popularity throughout the developing world, relatively little is known about their effect on children's health outcomes. This paper evaluates the impact of the Mexican conditional cash transfer program, Progresa, on two important health outcomes: infant and neonatal mortality. It exploits the phasing-in of Progresa over time throughout rural Mexico to identify the impact of the program.

Country:

» Mexico

Sample:

» Not reported

Intervention:

» Progresa (later renamed Oportunidades) conditional cash transfer program

Measures:

» Neonatal and Infant Mortality data from a nationwide database from the Mexican Ministry of Public Health

Outcomes:

» Program impact on Neonatal and Infant Mortality rates

Results:

- » Progresa led to a large 17% decline in rural infant mortality among the treated
- » Progresa did not reduce neonatal mortality on average

Take Home Messages:

- » Progresa had a large impact on infant mortality in rural areas, but did not have an impact on neonatal mortality
- » The benefit–cost ratio for the program is between 1.3 and 3.6
- » Tests for heterogeneity show larger declines for some groups including those municipalities whose pre-program levels of mortality were above the median, and those that prior to the program had higher illiteracy rates, and less access to electricity

Barham, T., and Maluccio, J. A. (2009), 'Eradicating Diseases: The Effect of Conditional Cash Transfers on Vaccination Coverage in Rural Nicaragua', *Journal of Health Economics* 28.3: 611-21

Abstract:

Despite significant global efforts to improve vaccination coverage against major childhood diseases, vaccination rates are below 90%. To eradicate diseases such as measles, however, vaccination rates close to 95% are needed. A randomized experiment was used to investigate the effect of a demand incentive, a conditional cash transfer program, in improving vaccination coverage in rural Nicaragua. Double-difference estimates were used to estimate the program impact on vaccination coverage.

Country:

» Nicaragua

Sample:

- » Program group n
- » 12 mo: 125 ; 12-23 mo: 164 ; 24-35 mo: 146
- » Control group n
- » 12 mo: 134 ; 12-23 mo: 142 ; 24-35 mo: 155

Intervention:

- » Red de Protección Social (RPS) conditional cash transfer program

Measures:

- » Rates of vaccination against major childhood diseases as officially reported by the Ministry of Health in Nicaragua

Outcomes:

- » Impact of the RPS program on vaccination rates

Results:

- » The RPS program increased vaccination rates amongst the diseases examined: Tuberculosis, Measles, Polio, and Diptheria-pertussis-tetanus
- » The RPS program resulted in vaccination levels greater than 95% for some vaccines

Take Home Messages:

- » The program led to large increases in vaccination coverage
- » Effects were especially large for children who are typically harder to reach with traditional supply-side interventions

Behrman, J. E., Parker, S. W., and Todd, P. E. (2009), 'Schooling Impacts of Conditional Cash Transfers on Young Children: Evidence from Mexico', *Economic Development and Cultural Change* 57.3: 439-77

Abstract:

This paper evaluates impacts of Oportunidades, a Mexican conditional cash transfer program, on educational outcomes 5.5 years after program initiation for a group of children who were age 0 to 8 years pre-program. The oldest children within this age range received educational scholarships. The youngest children did not receive the scholarships because they had not yet started the third grade of school (the initial grade for scholarships), but were beneficiaries of the program's health components that included nutritional supplements for children 24 months of age or younger. All of these children also may have benefitted more generally from increased household income resulting from the program. This paper investigates how the program differentially affected younger and older children within this age range and examines whether the early nutritional intervention led to improvements in subsequent educational performance.

Country:

» Mexico

Sample:

- » Program group n - 320 communities
- » Control group n – 186 communities

Intervention:

- » Oportunidades conditional cash transfer program

Measures:

- » Data on school entry and grade progression from the Rural Evaluation Survey (2003)

Outcomes:

- » Program impact on age of entry to primary school and grades of schooling completed

Results:

- » The empirical findings show positive program impacts on reducing ages of entering primary school for younger children
- » Estimates imply a 1% reduction in the age of school entry
- » The program had a positive impact on accumulated grades of schooling after 5.5 years of benefits for older children
- » Estimates imply average increase in grades of schooling completed of about 8 to 9%

Take Home Messages:

- » While previous evaluations of the educational impacts of Oportunidades have focused on the impacts for children at least of school age, the impacts on children who were initially too young to be eligible for the program are also important to consider
- » The medium term impacts of the program examined in this study are likely different from the short term impacts examined in previous studies

Colecraft, E. K., et al (2012), 'Planning, Design and Implementation of the Enhancing Child Nutrition through Animal Source Food Management (Enam) Project', African Journal of Food, Agriculture, Nutrition and Development 12.1: 5687-708

Abstract:

The Global-Livestock Collaborative Research Support Program's (GL-CRSP) Child Nutrition Project, a controlled feeding trial in rural Kenya, demonstrated the importance of Animal Source Foods (ASF) for children's micronutrient status and cognitive development. These findings prompted research efforts to understand the constraints to ASF in children's diets in Africa so as to design targeted interventions to improve the ASF quality of children's diets. The Enhancing Child Nutrition through Animal Source Management (ENAM) project (2004-2009) undertook a multidisciplinary community development, research and capacity building initiative with the goal of augmenting caregivers' access to, and use of, ASF in children's diets. Participatory processes were used to implement an integrated microcredit, entrepreneurship and nutrition education intervention in Ghana.

Country:

» Ghana

Sample:

- » Program group = 629
- » Control group n = 540

Intervention:

- » The Enhancing Child Nutrition through Animal Source Management (ENAM) Project

Measures:

- » Pre- and post-intervention community surveys
- » Longitudinal surveys and child anthropometric assessments
- » Periodic in-depth dietary assessments

Outcomes:

- » Program impact on enhancing child's intake of Animal Source Foods
- » Program impact on improving caregivers' child nutrition knowledge

Results:

- » Preliminary data analysis showed that the intervention was successful in achieving the objectives of :
 - improving caregivers' child nutrition knowledge
 - enhancing children's ASF intakes

Take Home Messages:

- » A key enabling influence for the successful implementation of the project methodology was the application of community mobilization principles in the planning and implementation of the project interventions
- » A major challenge faced was ensuring effective management of the multiple project components, often occurring concurrently, in multiple project sites

Covarrubias, K., Davis, B., and Winters, P. (2012), 'From Protection to Production: Productive Impacts of the Malawi Social Cash Transfer Scheme', *Journal of Development Effectiveness* 4.1: 50-77

Abstract:

The Malawi Social Cash Transfer (SCT) scheme is part of a wave of social protection programs providing cash to poor households in order to reduce poverty and hunger and promote child education and health. This paper looks beyond the protective function of such programs, analyzing their productive impacts, taking advantage of an experimental impact evaluation design.

Country:

» Malawi

Sample:

- » Program group n= 386 households
- » Control group n= 365 households

Intervention:

- » The Malawi Social Cash Transfer (SCT) scheme

Measures:

- » Survey instrument designed and implemented by field teams trained by the researchers at Boston University's School of Public Health and the Centre for Social Research of the University of Malawi
- » Detailed information on demographics, anthropometrics, employment, time use, health and health-care, disabilities and migration

Outcomes:

- » Program impact on changes in labor allocation
- » Program impact on investments in productive assets and livestock

Results:

- » The study finds that the SCT had several measurable impacts. The program:
 - Limits child labor outside the home
 - Increases child involvement in household farm activities
 - Reduces adult participation in low skilled labor
 - Generates agricultural asset investments

Take Home Messages:

- » The paper dispels the notion that cash support to ultra poor households in Malawi is charity or welfare, and provides evidence of its economic development impacts
- » Cash transfer programs, even if focused on health, education and nutritional outcomes, have important implications for the productive activities of beneficiary households

Dammert, A. C. (2009), 'Heterogeneous Impacts of Conditional Cash Transfers: Evidence from Nicaragua', *Economic Development and Cultural Change* 58.1: 53-83

Abstract:

This study contributes to the small but growing literature on the estimation of heterogeneous effects of conditional cash transfers in developing countries. The purpose of this study is to investigate the degree of heterogeneity in program impacts of the RPS program for education, health, and nutrition in Nicaragua. This paper explores the heterogeneity of impacts as a function of observable characteristics (age, gender, poverty, and household head characteristics) and the criteria used by the Red de Protección Social (RPS) to select beneficiaries.

Country:

» Nicaragua

Sample:

- » Program group n 706
- » Control group n 653

Intervention:

- » The Red de Protección Social (RPS) conditional cash transfer program

Measures:

- » Panel data observations for households over three rounds of survey (baseline: September 2000; follow-ups: October 2001 and October 2002)
- » Information collected on socioeconomic and demographic characteristics such as parental schooling, labor market outcomes, health, nutrition and attributes of the physical infrastructure of the household, among others

Outcomes:

- » Program impact on school attendance
- » Program impact on child participation in labor activities
- » Program impact on number of child hours worked

Results:

- » Boys experienced a larger positive impact of the program on schooling
- » Boys experienced a negative impact on the probability of engaging in labor activities and hours worked
- » Older children experienced a smaller impact of the program on schooling and participation in labor activities.
- » There are differential impacts by whether the child is living with a male head of household and with education of the head of household
- » Children located in more impoverished areas experienced a larger impact on schooling and a smaller impact on working hours

Take Home Messages:

- » There was considerable heterogeneity in the impacts of the RPS on the distributions of expenditures, which is missed by looking only at average treatment effects
- » The impacts are greater for households with higher expenditures who are more likely to be meeting or almost meeting program requirements prior to the program
- » These results have important implications for the implementation and evaluation of conditional cash transfers that are spreading rapidly in developing countries

Doocy, S., and et al. (2005), 'Credit Program Outcomes: Coping Capacity and Nutritional Status in the Food Insecure Context of Ethiopia', *Social Science and Medicine* 60.10: 2371-82

Abstract:

This paper presents findings of a survey that was primarily intended as (1) an assessment of coping capacity in drought and food insecure conditions and (2) a microfinance program outcome study. A three group cross-sectional survey of 819 households was conducted in May 2003 in two predominantly rural sites in Ethiopia. Established clients of the WISDOM Microfinance Institution were compared with similar incoming clients and community controls.

No overall pattern of enhanced prevalence of coping mechanisms was observed in any participant group, suggesting that participation in the lending program did not affect coping capacity at the household level. No significant differences in mean mid-upper arm circumference or prevalence of acute malnutrition were found in males or females when the total sample was assessed. In the primary survey site, Sodo, female clients and their children had significantly better nutritional status than other comparison groups: the odds of malnourishment in female community controls compared to established female clients was 3.2 (95% CI: 1.1–9.8) and the odds of acute malnutrition in children 6–59 months of age were 1.6 times greater in children of both male clients and community controls (95% CI: .78–3.32). Household food security among female client households in Sodo was significantly better than in other comparison groups according to a variety of indicators. As compared to female clients, male clients and community controls, respectively, were 1.94 (95% CI: 1.05–3.66) and 2.08 (95% CI: 1.10–4.00) times more likely to have received food aid during the past year.

Findings of the present study suggest that microfinance programs may have an important impact on nutritional status and wellbeing of female clients and their families. That female clients were significantly less likely to be food aid recipients suggests that microfinance programs may be successful in reducing vulnerability to prolonged drought and food insecurity.

Country:

» Ethiopia

Sample:

» 819 Households, 456 Males, 352 Females, 608 Children 6-59 months

Intervention:

» Assessment of coping capacity in drought and food insecure conditions and microfinance program outcomes

Measures:

» Mid-upper arm circumference

Outcomes:

» Nutritional status of households with microfinance programs

Results:

» Female clients of the microcredit intervention had significantly better nutritional status than community controls
» Male clients and controls were 1.94 and 2.08 times more likely to have received food aid in the past year

Take Home Messages:

» Microfinance programs may have an important effect on nutritional status of female-headed households with access
» More research needs to be done to see why there was a significant difference between female and male-headed households that are participants in microcredit schemes

Fernald, L. C. H., Gertler, P.J., and Neufeld, L.M. (2008), 'Role of Cash in Conditional Cash Transfer Programmes for Child Health, Growth, and Development: An Analysis of Mexico's Oportunidades', The Lancet, 371.9615: 828-37

Abstract:

Background: Many governments have implemented conditional cash transfer (CCT) programmes with the goal of improving options for poor families through interventions in health, nutrition, and education. Families enrolled in CCT programmes receive cash in exchange for complying with certain conditions: preventive health requirements and nutrition supplementation, education, and monitoring designed to improve health outcomes and promote positive behaviour change. The aim was to disaggregate the effects of cash transfer from those of other programme components.

Methods:

In an intervention that began in 1998 in Mexico, low-income communities (n=506) were randomly assigned to be enrolled in a CCT programme (Oportunidades, formerly Progresa) immediately or 18 months later. In 2003, children (n=2449) aged 24–68 months who had been enrolled in the programme their entire lives were assessed for a wide variety of outcomes. Linear and logistic regression were used to determine the effect size for each outcome that is associated with a doubling of cash transfers while controlling for a wide range of covariates, including measures of household socioeconomic status.

Findings:

A doubling of cash transfers was associated with higher height-for-age Z score (\hat{a} 0.20, 95% CI 0.09–0.30; $p < 0.0001$), lower prevalence of stunting (-0.10 , -0.16 to -0.05 ; $p < 0.0001$), lower body-mass index for age percentile (-2.85 , -5.54 to -0.15 ; $p = 0.04$), and lower prevalence of being overweight (-0.08 , -0.13 to -0.03 ; $p = 0.001$). A doubling of cash transfers was also associated with children doing better on a scale of motor development, three scales of cognitive development, and with receptive language.

Interpretation: The results suggest that the cash transfer component of Oportunidades is associated with better outcomes in child health, growth, and development.

Country:

» Mexico

Sample:

» 506 households; 2449 children aged 24-69 months

Intervention:

» Conditional cash transfer program

Measures:

» Height-for-Age Z score, BMI, motor development, cognitive development, receptive language

Outcomes:

» Child health, growth, and development

Results:

» A doubling of cash transfers was associated with higher height-for-age Z score, lower prevalence of stunting, lower BMI for age percentile, and lower prevalence of being overweight
» A doubling of transfers was also associated with better motor, cognitive, and receptive language indicators

Take Home Messages:

» It is important to look at the long-term effects of cash transfer programs, as some outcomes were enhanced over time. However it is difficult to interpret the results as a measure of doubling the cash transfer due to the measurement

Fernald, L. C. H., and Gunnar, M. (2009), 'Poverty-Alleviation Program Participation and Salivary Cortisol in Very Low-Income Children', *Social Science and Medicine* 68.12: 2180-89

Abstract:

Correlational studies have shown associations between social class and salivary cortisol, suggestive of a causal link between childhood poverty and activity of the stress-sensitive hypothalamic-pituitary-adrenocortical (HPA) system. Using a quasi-experimental design, the association between a family's participation in a large-scale, conditional cash transfer program in Mexico (Oportunidades, formerly Progresá) during the child's early years of life and children's salivary cortisol (baseline and responsivity) were evaluated. Also examined was whether maternal depressive symptoms moderated the impact of program participation. Low-income households (income <20th percentile nationally) from rural Mexico were enrolled in a large-scale poverty-alleviation program between 1998 and 1999. A comparison group of households from demographically similar communities was recruited in 2003. Following 3.5 years of the Oportunidades program, three saliva samples were obtained from children age 2-6 years old from intervention and comparison households (n=1197). Maternal depressive symptoms were obtained using the Center for Epidemiologic Studies- Depression Scale (CES-D). Children who had been in the Oportunidades program had lower salivary cortisol levels when compared with those who had not participated in the program, while controlling for a wide range of individual-, household- and community-level variables. Reactivity patterns did not differ between intervention and comparison children. Maternal depression moderated the association between Oportunidades program participation and baseline salivary cortisol in children. Specifically, there was a large and significant Oportunidades program effect of lowering cortisol in children of mothers with high depressive symptoms but not in children of mothers with low depressive symptomatology. These findings provide the strongest evidence to date that the economic circumstances of the family impact the child's developing stress system and provide a mechanism through which poverty early in life could impact life-course risk for physical and mental health disorders.

Country:

» Mexico

Sample:

» 1197 Households

Intervention:

» Conditional cash transfer program

Measures:

» Salivary cortisol level

Outcomes:

» Child stress level

Results:

» Children enrolled in the cash transfer program had lower levels of salivary cortisol when compared to those who had not participated in the program

Take Home Messages:

» It is possible that cash transfer programs, through effecting the economic circumstances of the child, can effect the stress system and provide a mechanism to reducing risk for future physical and mental health disorders

Fernald, L. C. H., and Hidrobo, M. (2011), 'Effect of Ecuador's Cash Transfer Program (Bono De Desarrollo Humano) on Child Development in Infants and Toddlers: A Randomized Effectiveness Trial', *Social Science and Medicine* 72.9: 1437-46

Abstract:

The effects of Ecuador's Bono de Desarrollo Humano (BDH), an unconditional cash transfer program that was rolled-out using a randomized design on health and development outcomes in very young children was examined. Communities that were randomly assigned to the treatment group began receiving the BDH in 2004 and those randomly assigned to the comparison group began receiving benefits two years later. Families enrolled in the BDH received a monthly cash stipend (\$15USD) representing an approximate 10% increase in household income. Participants analyzed in this study are children aged 12-35 months from treatment (n = 797) and comparison (n = 399) communities in rural and urban Ecuador. Main outcomes measured were language skills (the Fundación MacArthur Inventario del Desarrollo de Habilidades Comunicativas e Breve), height-for-age z-score, and hemoglobin concentration. Results indicate that in rural areas, being randomized to receive the BDH in very early childhood led to significantly better performance on the number of words a child was saying, and on the probability that the child was combining two or more words. There were no significant effects on language development for children in urban areas and there were no effects on height-for-age z-score or hemoglobin concentration in rural or urban areas. A limited number of potential pathways with respect to cognitive/language stimulation, health behaviors, and parenting quality were also explored. Findings indicate that compared to children in comparison areas, rural children in treatment areas were more likely to have received vitamin A or iron supplementation and have been bought a toy in the past six months. This study provides evidence for significant benefits of an unconditional cash transfer program for language development in very young children in rural areas.

Country:

» Ecuador

Sample:

» 1196 households

Intervention:

» Conditional cash transfer program

Measures:

» Salivary cortisol level

Outcomes:

» Child stress level

Results:

- » In rural areas exposed to the unconditional cash transfer program, receptive language performance in early childhood was improved
- » Children in rural areas exposed to the intervention were more likely to have received supplementation and stimulation as a result

Take Home Messages:

- » The difference in outcomes between rural and urban areas for the unconditional transfer needs to be further studied
- » Cash transfers can have positive effects on child development even without conditionality

Macours, K., Schady, N., and Vakis, R. (2012), 'Cash Transfers, Behavioral Changes, and Cognitive Development in Early Childhood: Evidence from a Randomized Experiment,' American Economic Journal: Applied Economics 4.2: 247-73

Abstract:

Cash transfer programs have become extremely popular in the developing world. There is a large literature on the effects of these programs on schooling, health and nutrition, but relatively little is known about possible impacts on child development. This paper analyzes the impact of a cash transfer program on cognitive development in early childhood in rural Nicaragua. Identification is based on random assignment. Children in households assigned to receive benefits had significantly higher levels of development nine months after the program began. There is no fade-out of program effects two years after the program had ended and transfers were discontinued. Changes in child development observed are unlikely to be a result of the cash component of the program alone.

Country:

» Nicaragua

Sample:

» 4,021 households

Intervention:

» Conditional cash transfer program

Measures:

» TVIP, language, short-term memory, associative memory, social-personal, behavior, gross motor skills, fine motor, leg motor, height-for-age, weight-for-age

Outcomes:

» Cognitive and socio-emotional outcomes; health and motor development outcomes

Results:

» Children in treatment households had positive cognitive, developmental, and health outcomes
» Effects of the treatment did not fade-out after the transfer was stopped, indicating a more permanent change in vulnerability of the household

Take Home Messages:

» The intervention in rural Nicaragua showed only positive effects, indicating that in rural areas the conditional transfer was successful
» It is important to note the lack of fade-out of program effects two years after the transfers were discontinued. This indicates a long-term positive effect on child health and development

Martorano, B., and Sanfilippo, M. (2012), 'Innovative Features in Poverty Reduction Programs: An Impact Evaluation of Chile Solidario on Households and Children', *Journal of International Development*, 24(8): 1030-1041

Abstract:

The Chile Solidario programme is an innovative conditional cash transfer (CCT) in the Latin American context, aimed at addressing specifically the multidimensional nature of poverty. This paper, using data from the Panel Caracterización Socioeconómica Nacional (CASEN) Survey for the years 2001 and 2006, presents an impact evaluation of this programme. Using matching techniques to compare participants in the programme with a control group, and a difference-in-differences estimator, its impact on various socioeconomic dimensions and results at the household and child level are differentiated and evaluated. At the household-level, it was found that the programme has a significant impact on lifting families out of extreme poverty and that it does not have disincentive effects on labour participation. For children, it was found that it has contributed to increasing participation in school for those between the ages of 6 and 15 years, and to increased enrolment with the public health services.

Country:

» Chile

Sample:

» Unclear

Intervention:

» Chile Solidario conditional cash transfer plus program

Measures:

» Health and educational enrollment

Outcomes:

» Health and education

Results:

- » Chile Solidario had no overall significant impact on enrollment in the public health system, but had a positive impact among those under 15
- » The program had no significant impact on educational enrollment among those aged 3-5, but a positive effect on educational enrollment among those aged 6-14

Take Home Messages:

- » Effects were only visible among certain age groups, indicating heterogeneity in program impact based on age
- » This study does not differentiate the effects of the CCT and services aspects of the program

Morris, S. S., Olinto, P., Flores, R., Nilson, E. A. F., and Figueiró, A. C. (2004), 'Conditional Cash Transfers Are Associated with a Small Reduction in the Rate of Weight Gain of Preschool Children in Northeast Brazil', *Journal of Nutrition*, 134(9): 2336-2341

Abstract:

Programs providing cash transfers to poor families, conditioned upon uptake of preventive health services, are common in Latin America. Because of the consistent association between undernutrition and poverty, and the role of health services in providing growth promotion, these programs are supposed to improve children's growth. The impact of such a program was assessed in 4 municipalities in northeast Brazil by comparing 1387 children under 7 years of age from program beneficiary households with 502 matched nonbeneficiaries who were selected to receive the program but who subsequently were excluded as a result of quasi-random administrative errors. Anthropometric status was assessed 6 months after benefits began to be distributed, and beneficiary children were 0.13 Z-scores lighter (weight-for-age) than excluded children, after adjusting for confounders ($P = 0.024$). The children's growth trajectories were reconstructed by copying up to 10 recorded weights from their Ministry of Health growth monitoring cards and by relating each weight to the child's age, gender, and duration of receipt of the program benefit in a random effects regression model. Totals of 472 beneficiary and 158 excluded children under 3 years of age were included in this analysis. Each additional month of exposure to the program was associated with a rate of weight gain 31g lower than that observed in excluded children of the same age ($P < 0.001$). This failure to respond positively to the program may have been due to a perception that benefits would be discontinued if the child started to grow well. Nutrition programs should guard against giving the impression that poor growth will be rewarded.

Country:

» Brazil

Sample:

» Program group n 1387; control group n 502

Intervention:

» Bolsa Alimentação conditional cash transfer plus program

Measures:

» Weight-for-age; height-for-age; monthly weight gain

Outcomes:

» Child growth

Results:

- » Bolsa Alimentação was associated with lower weight-for-age and lower monthly weight gain
- » The program had no effect on height-for-age

Take Home Messages:

- » Not all social protection programs have positive effects on ECCD outcomes
- » It is important to consider historical context when designing an effective social protection program—previous programs can have unintended impacts on new ones

Paes-Sousa, R., Santos, L. M. P., and Miazaki, É. S. (2011), 'Effects of a conditional cash transfer programme on child nutrition in Brazil', World Health Organization, Bulletin of the World Health Organization, 89(7): 496-503

Abstract:

To examine the association between Brazil's Bolsa Família programme (BFP), which is the world's largest conditional cash transfer programme, and the anthropometric indicators of nutritional status in children. Using the opportunity provided by vaccination campaigns, the Brazilian government promotes Health and Nutrition Days to estimate the prevalence of anthropometric deficits in children. Data collected in 2005-2006 for 22375 impoverished children under 5 years of age were employed to estimate nutritional outcomes among recipients of Bolsa Família. All variables under study, namely child birth weight, lack of birth certificate, educational level and gender of family head, access to piped water and electricity, height for age, weight for age and weight for height, were converted into binary variables for regression analysis. Children from families exposed to the BFP were 26% more likely to have normal height for age than those from non-exposed families; this difference also applied to weight for age. No statistically significant deficit in weight for height was found. Stratification by age group revealed 19% and 41% higher odds of having normal height for age at 12-35 and 36-59 months of age, respectively, in children receiving Bolsa Família, and no difference at 0-11 months of age. The BFP can lead to better nutritional outcomes in children 12 to 59 months of age. Longitudinal studies are needed to confirm these findings.

Country:

» Brazil

Sample:

» Program group n 9152; control group n 13223

Intervention:

» Bolsa Família conditional cash transfer program

Measures:

» Height-for-age; weight-for-age; weight-for-height; birthweight

Outcomes:

» Child growth

Results:

- » Bolsa Família had positive effects on adequate height-for-age and weight-for-age
- » The program had no significant impact on adequate weight-for-height

Take Home Messages:

- » Poverty alleviation programs can have positive effects on child growth and nutrition
- » Program impacts may be heterogeneous depending on type of outcome examined

Paxson, C., and Schady, N. (2010), 'Does Money Matter? The Effects of Cash Transfers on Child Development in Rural Ecuador', *Economic Development and Cultural Change*, 59(1): 187-229

Abstract:

The article presents an analysis of the effect of a conditional cash transfer program on early childhood development statistics in rural Ecuador. It emphasizes the program's effect on cognitive and social development, as well as physical health. An overview of related previous research is provided, involving cash transfer programs in various developing countries. Details of the research protocol are presented, which involved studying the implementation of the Bono de Desarrollo Humano program in six Ecuadorian provinces. It was found that the poorest children benefited the most from the program.

Country:

» Ecuador

Sample:

» Program group n 1,388 families; control group n 681 families

Intervention:

» Bono de Desarrollo Humano unconditional cash transfer program

Measures:

» TVIP; WJ-1; WJ-2; WJ-5; behavior problems scale; elevation-adjusted hemoglobin; height; fine motor control

Outcomes:

» Cognitive and social development; physical health

Results:

» Bono de Desarrollo Humano had no effect on children's receptive vocabulary, long-term memory, short-term memory, visual integration, behavior problems, elevation-adjusted hemoglobin, height, or fine motor control

» The program had a positive impact on children's long-term memory

Take Home Messages:

» Unconditional cash transfers may not be as efficient as conditional cash transfers in promoting child health and development outcomes. More study is needed

» Programs may have heterogeneous effects depending on the type of outcome examined and the socioeconomic status of the group examined. In this case, the poorest children benefited most from the program

Pitt, M. M., Khandker, S. R., Chowdhury, O. H., and Millimet, D. L. (2003), 'Credit Programs for the Poor And the Health Status of Children in Rural Bangladesh', *International Economic Review*, 44(1): 87-118

Abstract:

The impact of participation in group-based credit programs, by gender of participant, on the health status of children by gender in rural Bangladesh is investigated. These credit programs are well suited to studies of how gender-specific resources alter intra-household allocations because they induce differential participation by gender. Women's credit is found to have a large and statistically significant impact on two of three measures of the healthiness of both boy and girl children. Credit provided to men has no statistically significant impact and the null hypothesis of equal credit effects by gender of participant is rejected.

Country:

» Bangladesh

Sample:

» Program group n 1,538 target households (of which 905 were program participants); control group n 260 non-target households

Intervention:

» Microcredit programs

Measures:

» Arm circumference; weight-by-height; height-for-age

Outcomes:

» Child growth

Results:

» An increase in microcredit to women in Bangladesh resulted in increases in boys' and girls' arm circumference and height for age, but had no effect on boys' or girls' weight-by-height
» Increases in credit to men had no effect on any of the child health outcomes

Take Home Messages:

» In some cases, microcredit can have a positive impact on children's growth
» Programs may have heterogeneous effects depending on the type of outcome examined and the program target or beneficiary
» Targeting program benefits to certain groups may have other unintended consequences for social and family dynamics

Reis, M. (2010); 'Cash transfer programs and child health in Brazil', *Economics Letters*, 108(1): 22-25

Abstract:

This note presents evidence from Brazil that children who benefit from cash transfer programs have better health indicators than those who live in a nonbenefited household and than nonbenefited children who live in a household that receives cash transfers.

Country:

» Brazil

Sample:

» 27,996 observations

Intervention:

» Bolsa Escola conditional cash transfer program

Measures:

» Child health status; number of bed days; prevalence of restricted activity days; number of restricted activity days; vomiting or diarrhea; respiratory conditions; back problems; arthritis; bronchitis or asthma; heart condition; kidney disease; depression

Outcomes:

» Child health

Results:

» Comparing beneficiary and non-beneficiary households, children aged 0-13 in beneficiary households had better health status and fewer restricted activity days, but the number of bed days and prevalence of vomiting or diarrhea, or respiratory conditions, were similar among the two groups
» Comparing beneficiary and non-beneficiary children within households, beneficiary children had fewer back problems, less arthritis, less bronchitis or asthma, fewer heart conditions, less kidney disease, and less prevalence of depression

Take Home Messages:

» Program effects can be heterogeneous, even within households
» Beneficiary children did better than non-beneficiary children, regardless of whether those children who didn't receive program benefits were within beneficiary or non-beneficiary households
» It is important to consider how resources are allocated within households in evaluating the effect of social protection programs on ECCD
» Though the program benefits were conditioned on school attendance, and not health, they had a positive impact on beneficiary children's health; therefore, the transfer itself and not the condition may be more significant in impacting ECCD outcomes

Rivera, J. A., Sotres-Alvarez, D., Habicht, J.-P., Shamah, T., and Villalpando, S. (2004), 'Impact of the Mexican Program for Education, Health, and Nutrition (Progresa) on Rates of Growth and Anemia in Infants and Young Children: A Randomized Effectiveness Study', *Journal of the American Medical Association*, 291(21): 2563-2570

Abstract:

Malnutrition causes death and impaired health in millions of children. Existing interventions are effective under controlled conditions, however, little information is available on their effectiveness in large-scale programs. Objective: To document the short-term nutritional impact of a large-scale, incentive-based development program in Mexico (Progresa), which included a nutritional component. Design, Setting, and Participants: A randomized effectiveness study of 347 communities randomly assigned to immediate incorporation to the program in 1998 (intervention group; n = 205) or to incorporation in 1999 (crossover intervention group; n = 142). A random sample of children in those communities was surveyed at baseline and at 1 and 2 years afterward. Participants were from low-income households in poor rural communities in 6 central Mexican states. Children (N = 650) 12 months of age or younger (n = 373 intervention group; n = 277 crossover intervention group) were included in the analyses. Intervention children and pregnant and lactating women in participating households received fortified nutrition supplements, and the families received nutrition education, health care, and cash transfers. Main Outcome Measures: Two-year height increments and anemia rates as measured by blood hemoglobin levels in participating children. Results: Progresa was associated with better growth in height among the poorest and younger infants. Age- and length-adjusted height was greater by 1.1 cm (26.4 cm in the intervention group vs 25.3 cm in the crossover intervention group) among infants younger than 6 months at baseline and who lived in the poorest households. After 1 year, mean hemoglobin values were higher in the intervention group (11.12 g/dL; 95% confidence interval [CI], 10.9-11.3 g/dL) than in the crossover intervention group (10.75 g/dL; 95% CI, 10.5-11.0 g/dL) who had not yet received the benefits of the intervention (P = .01). There were no differences in hemoglobin levels between the 2 groups at year 2 after both groups were receiving the intervention. The age-adjusted rate of anemia (hemoglobin level <11 g/dL) in 1999 was higher in the crossover intervention group than in the intervention group (54.9% vs 44.3%; P = .03), whereas in 2000 the difference was not significant (23.0% vs 25.8%, respectively; P = .40). Conclusion: Progresa, a large-scale, incentive-based development program with a nutritional intervention, is associated with better growth and lower rates of anemia in low-income, rural infants and children in Mexico.

Country:

» Mexico

Sample:

» Program group n 461 infants; control group n 332 infants

Intervention:

» Progresa conditional cash transfer plus program

Measures:

» Regular papilla intake; incremental growth in height from baseline; hemoglobin values; age-adjusted anemia

Outcomes:

» Child health and growth

Results:

» After one year of treatment, children under 12 months of age in beneficiary households saw positive effects on regular intake of papilla—a nutritional supplement, on hemoglobin values, and on age-adjusted anemia

- » When comparing the original beneficiary group after two years of participation in the program to a new group of beneficiaries who received treatment for one year, there were no significant differences in regular intake of papilla, hemoglobin values, and age-adjusted anemia between the two groups
- » When comparing the two beneficiary groups, the study did find larger positive effects on incremental growth in height (from baseline at the start of the program) among those who had been in the program longer

Take Home Messages:

- » The majority of program impact occurred immediately (within the first year)
- » The growth impacts seem to continue and compound over time
- » Length of benefit is an important factor to consider and may impact various outcomes differently

Stifel, D., and Alderman, H. (2006), 'The "Glass of Milk" Subsidy Program and Malnutrition in Peru', *World Bank Economic Review*, 20(3): 421-448

Abstract:

This study of the Vaso de Leche ("Glass of Milk") feeding program in Peru looks for evidence that this in-kind transfer program aimed at young children furthers nutritional objectives. The study links public expenditure data with household survey data to substantiate the targeting and to model the determinants of nutritional outcomes. It confirms that the social transfer program targets poor households and households with low nutritional status. Nevertheless, the study fails to find econometric evidence that the nutritional objectives are being achieved.

Country:

» Peru

Sample:

» 19,063 observations

Intervention:

» Vaso de Leche in-kind transfer program

Measures:

» Height-for-age

Outcomes:

» Child growth

Results:

- » There was no direct effect of per-capita district expenditure for the program on height-for-age among those under five
- » The authors projected increases in household expenditure due to the in-kind transfer and found that those increases resulted in increased height-for-age

Take Home Messages:

- » Despite the explicit nutritional aims of the program, it did not directly impact child nutritional status
- » However, it may have indirectly impacted child nutrition through increases in household expenditures
- » While it is important to have a clear theory of change, sometimes program impacts are indirect. A good theory can and should account for these indirect channels of impact

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