Social Protection and Early Childhood Development in Low and Middle Income Countries: Unexplored Potential

Kedar Mankad, MA
Travis Snow, MA
April Williamson, MA

Pia Britto, PhD

Yale JACKSON INSTITUTE FOR GLOBAL AFFAIRS
Acknowledgements

Advised by:
Gwyneth Crowley
Nancy Fallon
William Hodges
Chin Reyes
Anna Zonderman

Travel support from:
Yale Jackson Institute for Global Affairs
Yale Graduate Student Association (GSA) Conference Fund

Funded by:
Rationale

• Early Childhood Development (ECD) is starting to gain its deserved attention on national and international agendas.
• To contribute to this growing research agenda, a systematic review methodology was employed to examine the role of social protection policies in improving human development outcomes, through ECD, in low and middle income countries.
Early Childhood Development Outcomes: we used a broad definition of ECD in order to locate any and all studies that may evaluate children in the context of social protection.

- Mental Health
  - Stress
  - Behavior

- Physical Health
  - Stunting
  - Wasting
  - Malnourishment

- Holistic Development
  - Language
  - Social-Personal
  - Memory
  - Motor

- Education
  - Attendance
  - Enrollment / Age
  - Completion
Social Protection & GDP

Social security expenditure as a percentage of GDP by region latest available year (weighted by population)

- Public health expenditure
- Public social security expenditure excluding health
- Ratio health expenditure over total public social security expenditure

Source: International Labor Organization
Social Protection Programs: are designed to help the disadvantaged and vulnerable through services, income support, cash transfers and subsidies to improve well-being.

**Protection**
- Maintain minimum standards to avoid deprivation of basic needs

**Prevention**
- Prevent further vulnerability in the face of adverse events

**Promotion**
- Support movement out of vulnerability

**Transformation**
- Advance social justice through empowerment and by eliminating social discrimination of marginalized groups
Social Protection Programs: are heterogeneous – there are many established program designs and methods of delivery. Over 150 million households are estimated to have benefited from cash transfer programs.

Source: Garcia et al., 2012
Systematic Review Methodology

Narrative Review
- Synthesize primary studies descriptively

Systematic Review
- Comprehensively identify, appraise and synthesize all the relevant studies and literature

Meta-Analysis
- Statistical analyses to synthesize results from several studies into a quantitative estimate

## Social Protection Matrix

<table>
<thead>
<tr>
<th>Organization/Agency</th>
<th>Program</th>
<th>Primary function</th>
<th>Secondary function</th>
<th>Tertiary function</th>
<th>Outcome</th>
<th>Theory of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN</td>
<td>1) Social transfers</td>
<td>Protect</td>
<td></td>
<td></td>
<td>Lessened impact of shocks; more accumulation of assets</td>
<td>Predictable direct transfers to individuals or households, both in-kind and in cash, to protect them from the impacts of shocks and support the accumulation of human, financial and productive assets.</td>
</tr>
<tr>
<td>UN</td>
<td>1a) Conditional cash transfers</td>
<td>Protect</td>
<td></td>
<td></td>
<td>Enhanced education and health outcomes</td>
<td>Regular income transfers to poor households conditional on particular actions and/or changes in behaviour to enhance education and health outcomes</td>
</tr>
<tr>
<td>UN</td>
<td>1b) Unconditional cash transfers</td>
<td>Protect</td>
<td></td>
<td></td>
<td>Improved income</td>
<td>Regular income transfers without behavioral conditions to help improve households’ income and thus meet basic needs</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Social Cash Transfer Pilot Programme</td>
<td></td>
<td>Promote</td>
<td>Transform</td>
<td>Increased utilization of state provided education and health services</td>
<td>Increased utilization of state services will increase health and education levels, contributing to human capital formation and decreasing social marginalization</td>
</tr>
</tbody>
</table>
Search Strategy
Defining the Search Terms
<table>
<thead>
<tr>
<th>Databases Examined</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anthropology</strong></td>
</tr>
<tr>
<td>• Africa-Wide Information</td>
</tr>
<tr>
<td>• Anthropology Plus</td>
</tr>
<tr>
<td><strong>Economics/Business</strong></td>
</tr>
<tr>
<td>• Econlit</td>
</tr>
<tr>
<td>• Business Source</td>
</tr>
<tr>
<td>• ABI/Inform</td>
</tr>
<tr>
<td><strong>Education</strong></td>
</tr>
<tr>
<td>• Education Research Complete</td>
</tr>
<tr>
<td><strong>International Relations</strong></td>
</tr>
<tr>
<td>• PAIS</td>
</tr>
<tr>
<td><strong>Medicine</strong></td>
</tr>
<tr>
<td>• CINAHL</td>
</tr>
<tr>
<td><strong>Political Science</strong></td>
</tr>
<tr>
<td>• International Political Science Abstracts</td>
</tr>
<tr>
<td>• Worldwide Political Science Abstracts</td>
</tr>
<tr>
<td><strong>Psychology</strong></td>
</tr>
<tr>
<td>• PsychINFO</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
</tr>
<tr>
<td>• Religion and Philosophy Collection</td>
</tr>
<tr>
<td><strong>Social Sciences</strong></td>
</tr>
<tr>
<td>• Academic Search Premier</td>
</tr>
<tr>
<td>• Social Sciences Full Text (H.W. Wilson)</td>
</tr>
<tr>
<td>• Sociological Abstracts</td>
</tr>
</tbody>
</table>
Inclusion Criteria: PICO

Population: Only studies examining subjects in the age range from prenatal to nine years old were included.

Intervention: Only studies were included which focused on a specific programmatic intervention related to social protection.

Control: Studies were only included when there was a control or comparison group in the study design.

Outcome: Only empirical studies with data on specific metrics measured at the individual (child) level were included.
Screening Process

Identification

401 hits (initially screened for duplicates) from 15 Databases (Anthropology, Economics, Education, International Relations, Medicine, Political Science, Psychology, Religion, Social Sciences)

Duplicate Removal

354 after duplicates removed

Screening

354 abstracts screened
324 removed because did not meet PICO criteria

Initially Included

30 articles included in qualitative synthesis
10 removed because did not meet PICO upon closer evaluation

Included for Data Extraction

20 articles included in data extraction
Results Overview: Outcomes

- **Child Mental & Physical Health (17)**
  - Nutritional intake and growth
  - Mental health
  - Disease reduction
  - Health system enrollment

- **Child Education (8)**
  - Attendance
  - Age of entry
  - Achievement

- **Child Holistic Development (4)**
  - Cognitive development
  - Social and emotional development
  - Gross and fine motor skills
  - Language
Countries:

Low Income: Bangladesh, Ethiopia, Malawi, Nepal

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

**CCT:** Brazil, Chile, Mexico, Nicaragua, Peru

**UCT:** Ecuador, Malawi

**Microcredit:** Bangladesh, Ethiopia, Ghana
Results: Child Health

Health Outcomes

- Mixed Effects
- Negative Effects
- Neutral Effects
- Positive Effects

Number of Studies
Bangladesh - *Microcredit*

**Citation:** Pitt et al., 2003

**Program Implementer:** INGOs, national government

**Program Purpose:** Poverty reduction

**Program Target:** Landless, rural poor

**Child Age:** 15 & under (mean for boys = 4.4, mean for girls = 4.5)
Detailed Results: Bangladesh - Microcredit

- **10% increase** in credit to women results in:
  - Increase in arm circumference (5.6% for boys & 6.3% for girls)
  - Increase in height-for-age (15.3% for boys & 11.4% for girls)
  - No effect on weight-by-height

- **10% increase** in credit to men results in:
  - No effect on growth outcomes for boys and girls
Results: Child Education

Education Outcomes

- Positive Effects: 6 studies
- Mixed Effects: 2 studies
- Neutral Effects: 0 studies
- Negative Effects: 0 studies

Number of Studies
CCT

Microcredit

Citation: Behrman, 2009

Program Purpose: Education, Health, Poverty Alleviation

Program Target: Low-Income Families

Program Dosage: Cash transfers averaging about 20% of household consumption

Child Age: 0-8 years
Detailed Results: Mexico - Oportunidades

• **Differential** effects by age and program exposure

• **1 % reduction** in the age of entry to primary school

• **8 to 9 % increase** in accumulated grades of schooling for older children after 5.5 years of program benefits
Results: Child Development

Development Outcomes

- Mixed Effects
- Negative Effects
- Neutral Effects
- Positive Effects

Number of Studies

0 1 2 3
CCT
UCT
Microcredit

Citation: Macours, 2010
Program Purpose: Poverty alleviation
Program Target: Low-income families, Food insecure families
Program Dosage: 15-26% of per capita expenditure
Child Age: 0-6 years
Detailed Results: Nicaragua – Atención a Crisis

• Program development measurements using
  • 2 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, 45% are significant at 10% level or higher. No significant negative coefficients.
Implications for Research & Evaluation

• Interpretation--social protection program effects vary based on:
  • Location
  • Modality (program target & mechanism)
  • Outcome group (age, gender)
  • Outcome type (health, education, development)
  • Evaluation methodology (type of comparison, timing of measurement)

• Implications for Scale-Up
  • Explicit targeting of ECD outcomes
  • Considering applicability across contexts
  • Clear theory of change
  • Early & ongoing evaluation with phased scale-up
Thank You!