ELLA
Evidence and lessons from Latin America

Quantitative evaluations show that Latin America's CCTs have had concrete effects on health and education, with documented increases by significant percentages in school attendance and access to health services across a variety of Latin American countries.

IMPROVING HEALTH AND EDUCATION THROUGH CONDITIONAL CASH TRANSFERS

SUMMARY

One of the worst characteristics of poverty is its tendency to self-perpetuate, with poor families often being forced to under-invest in their children's health and education. In Latin America (LA), Conditional Cash Transfer (CCT) programmes have been effective in ensuring higher school attendance and greater health services use, both of which are valuable inputs for human capital development and future productivity. However, CCT evaluations have had a harder time identifying effects on health and education impacts. This brief describes how LA countries have used CCTs to improve health and education, the results achieved, and lessons learned for improving health and education in other settings.

HEALTH AND EDUCATION: THE HUMAN DEVELOPMENT CHALLENGE

Countries in LA, Sub-Saharan Africa (SSA) and South Asia (SA) continue to struggle with low performance in health and education indicators. In 2008, secondary school enrolment was 78% in LA, 32.8% in SSA, and 52.3% in SA. Health outcomes could be improved as well; the child mortality rate is still relatively high in LA, where 20 children die for every 1000 born, while the number rises to 80.8 in SSA and 57.6 in SA.

First introduced in Mexico in 1999, LA countries across the region are now implementing CCTs to meet these health and education challenges.

EFFECTS OF CCT PROGRAMMES ON HEALTH AND EDUCATION

There is considerable evidence demonstrating that CCTs are effective in increasing both children's school enrolment and attendance and families' use of health services. However, there is less evidence about whether the increase in accessing education and health services will have an impact on human development outcomes

KEY LESSONS LEARNED

CCTs have proven to be effective in increasing school attendance and access to health services.

However, it has been more difficult to identify improvements in education and health outcomes and long-term impacts.

Supply side interventions are important to assure that increasing service use has an impact on education and health outcomes.

like improved school performance and nutrition levels. The following sections describe these output and outcome levels, looking at specific LA country cases.

Table 1: Comparing Outputs and Outcomes

	Outputs	Outcomes
Education	School enrolment School attendance	Improved cognition
Health	Accessing pre-natal checks Attending nutrition workshops	Reduced disease incidence Higher birth weight

STRONG RESULTS IN EDUCATION OUTPUTS

At the output level, CCTs effects' have been widely tested and confirmed. Evaluations show that programmes in countries such as Chile and Ecuador have increased school attendance levels by as much as 7.5% and 10.3%, respectively. Table 2 below shows these output increases for various countries.

The amount of the increase in use of educational services is not homogeneous, however, as it seems to vary with some key factors: attendance and socio-economic status at the time of starting the CCT; gender; age; and transfer size.

First, incentives to use educational services seem to be more effective when school enrolment levels previous to CCT interventions were low because there is more room for improvement, as evaluations in Nicaragua and Ecuador show. Baseline socio-economic status is also significant, as poorer households have generally worse education indicators, so again there is greater room for improvement.

Second, CCTs have a greater effect on female attendance. In addition to female attendance being lower at baseline, girls usually face greater obstacles to attending school that can be mitigated through the transfers. For example, parents may face higher transport costs for girls, as they are usually accompanied to school. Some parents think school has lower returns for girls than for boys, for which they see little gain in sending them to school, especially considering the help that girls can provide in the home or by earning wages.

Third, CCTs seem to have greater effects on older children, as adolescent children have higher opportunity costs of attending school. CCTs have been more effective in grades where children usually drop out of school, like in the transition between primary and secondary school. In Mexico, for example, the *Oportunidades* (Opportunities) programme increased attendance by 8.7% for children in the sixth grade, meaning their first year of secondary school, while it did not have a significant impact on primary school children. Because of this, CCTs in countries such as Guatemala, Honduras and Mexico vary transfers according to the age or school grade of the children.

Finally, transfer size may also affect the amount of increased school enrolment and attendance, though the evidence shows that this effect may be modest.

Table 2: CCT Impact on Education Outputs - School Enrolment

	Child's Age Range (Years)	Baseline Enrolment[1] (%)	Increase in Enrolment[2] (%)	Transfer Size[3]
Colombia	8 – 13	91.70	2.1**	17%
	14 – 17	63.20	5.6***	
Chile	6 – 15	60.70	7.5***	7%
Ecuador	6 – 17	75.20	10.3***	10%
Mexico	Grade 0 - 5	94.00	1.9	20%
	Grade 6	45.00	8.7***	
	Grade 7 - 9	42.50	0.6	
Honduras	6 – 13	66.40	3.3***	9%
Nicaragua	7 – 13	72.00	12.8***	27%

* Significant at 10% level ** Significant at 5% level ***Significant at 1% level
[1] Beneficiaries' Baseline enrolment
[2] Increase in enrolment among beneficiaries
[3] As a percentage of pre-transfer expenditures among beneficiaries

Own Elaboration.
Source: Fiszbein, A., Schady, N. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. World Bank, Washington, DC.

MIXED REVIEWS OF EDUCATION OUTCOMES

Although programmes show impressive results in increasing school attendance and enrolment, evaluations are not as consistently encouraging in terms of learning outcomes. Evaluations in Mexico and Ecuador suggest that higher enrolment levels have not led to significant changes in learning outcomes, such as better test scores among CCT recipients.

Positive CCT effects on cognitive development variables, on the other hand, have been found. An evaluation of Nicaragua's CCT Attention to Crisis (*Atención a Crisis*) showed positive effects on language and personal behaviour skills indicators. An evaluation of Ecuador's CCT found positive effects on long-term memory in children ages 3 to 6 belonging to the poorest income decile.

Experts argue that a solution could be found in offering complementary programmes that focus on educational quality. To ensure this, each country should first asses its current level of human capital outcomes and key quality constraints.

Table 3: CCT Effect on Outcomes - Child Cognitive Development

	Age Range (Months)	Effect on child cognitive development[1]	Transfer Size[2]
Ecuador	36 - 83 months	0.177*	10%
Nicaragua	36 - 83 months	0.132***	27%

* Significant at 10% level ** Significant at 5% level ***Significant at 1% level
[1]The measure used is an index for cognitive development based on measures of child language development, gross and fine motor skills, personal-behavioral skills, and incidence of behavior problems. Measures have been standardised so they have mean 0 and standard deviation 1. The coefficients can be interpreted as changes in standard deviation units.
[2]As a percentage of pre-transfer expenditures among beneficiaries

Own Elaboration.
Source: Fiszbein, A., Schady, N. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. World Bank, Washington, DC.

STRONGER RESULTS: CCT EFFECTS ON HEALTH OUTPUTS AND OUTCOMES

CCTs provide incentives for accessing health services by making transfers conditional on healthy practices like vaccination and regular attendance at health checkups. In theory, improved access to health services should lead to improvements in health outcomes. In terms of nutrition, CCTs also have a direct channel of impact, as income transfers should enable households to buy more nutritious food. In contrast to education, CCT effects on both outputs and outcomes have been found, though they vary across countries.

In terms of outputs, an increase in vaccinations was found in Colombia and Honduras, while in Mexico and Nicaragua the effect was non-significant. Evaluations in Colombia and Honduras show that CCTs increased health checkups among small children, but there did not appear to be a significant effect on health care visits in Chile, Ecuador and Mexico. Table 4 below shows the effect of various CCT programmes on the output indicator, health centre visits.

In terms of outcomes, Brazil's *Bolsa Família* (Family Grant) evaluation shows no evidence of an impact on child nutrition or immunisation while Paraguay's pilot programme, *Tekoporã*, has not managed to increase immunisations either. This is probably because higher attendance does not necessarily mean that adequate, quality services have been received.

Other countries, however, have achieved improvements at the outcome level. CCTs in Mexico and Colombia show significant reductions in child illness and improvements in child height. These results appear to be supported by good practices at the programme level. In Mexico, nutritional supplements are provided with the transfers, which probably facilitated the improved nutrition outcomes. In addition, qualitative evaluations show that programme beneficiaries are demanding better service quality as a result of programme involvement. In Colombia, experts believe strong results might be due to a well-designed enforcement system.

Table 4: CCT Impact on Outputs - Health Centre Visits by Children

	Age range	% of children accessing health visits at baseline	Increase in attendance at health visits (%)	Transfer Size[1]
Colombia	0-1	n.a.	22.8***	17%
	2-4	n.a.	33.2***	
	4+	n.a.	1.5*	
Chile	0-6	17.60	2.4	7%
Ecuador	3-7	n.a.	2.7	10%
Mexico	0-2	21.90	-0.03	20%
	35	22.10	0.03	
Honduras	0-3	44.00	20.2***	9%
Nicaragua	0-3	55.40	13.1*	27%

* Significant at 10% level ** Significant at 5% level ***Significant at 1% level
[1] Beneficiary children's baseline health attendance levels
[2] Increase in attendance among CCT beneficiaries, compared to baseline
[3]As a percentage of pre-transfer expenditures among beneficiaries

Own Elaboration.
Source: Fiszbein, A., Schady, N. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. World Bank, Washington, DC.

Table 5: : CCT Effect on Outcomes - Child Growth Indicators

	Outcome	Age Range (months)	Baseline Height Indicator[1]	Increase in Growth[2]	Transfer Size[3]
Colombia	Height-for-age Z score	0-24	n.a.	0.161*	17%
		24-48	n.a.	0.001	
		48+	n.a.	0.012	
Ecuador	Height-for-age Z score	0-23	-1.07	-0.03	10%
		24-47	-1.12	-0.06	
		48-71	-1.23	0.08	
Mexico	Change in Height (cm)	12-36	n.a.	0.959***	20%
Nicaragua	Height-for-age Z score	0-60	-1.79	0.17**	27%

* Significant at 10% level ** Significant at 5% level ***Significant at 1% level
[1] The national baseline Z score for height for all children that age
[2] Increase over baseline of CCT beneficiaries. The Units are Z score points for all except for Mexico, where the units are centimeters.
[3] As a percentage of national per capita expenditures

Own Elaboration.
Source: Fiszbein, A., Schady, N. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. World Bank, Washington, DC.

CONTEXTUAL FACTORS

ENABLING CCT HEALTH AND EDUCATION IMPACTS

What enabled CCTs across the region to achieve success in improving health and education indicators? What factors account for some countries' greater success than others?

LA countries have found CCTs useful because education and health infrastructure was already available, but under-accessed. Demand incentives, such as the ones used by CCTs, were therefore useful because there was already a great enough supply to meet the additional demand.

To achieve success at the outcome level, countries need not only adequate supply but adequate quality. CCTs stimulate demand for services, but if the quality of services is low, the impact on final outcomes will be limited. The existing gaps between different population groups are especially important, as marginalised populations generally suffer from poorer quality services.

Complementary initiatives seem to help CCTs improve not just outputs but outcomes, such as Mexico's use of nutritional supplements with cash transfers. Programmes with better designed enforcement systems have better results because the beneficiaries have more pressure to comply.

The most successful programmes took into account beneficiary differences such as age and gender, making design decisions to vary the transfer amount accordingly, giving them better results amongst these groups.

The consistent use of rigorous, quantitative evaluations allowed countries not only to assess health and education impacts, but to make design modifications to improve those impacts over time. The capacity of governments to design and implement both the CCTs and the evaluations was crucial.

LESSONS LEARNED

1. CCTs in LA have clearly been effective in inducing practices related to human capital development at the output level, such as attending school or health clinic check-ups.
2. In some cases, impact evaluations have also shown that increased service use can translate into improved health outcomes, though evaluations have had a more difficult time proving better education outcomes.
3. Complementary initiatives focused on health and education quality, when provided in addition to the CCT, seem to lead to increased effects at the outcome level.
4. Conditionality design must consider possible disparities among the population, taking into account variables such as transfer size, households' socio-economic status, and children's age and gender, as these all seem to matter for achieving health and education impacts.

CONTACT GRADE

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