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Title: Toward Reducing Poverty Across Generations: Early findings from New York City's Conditional Cash Transfer Program

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Abstract 1 Body

Limit 5 pages single spaced.

Background / Context:

Decades of research point to a strong correlation between family income and children's wellbeing (Haveman and Wolfe, 1994; Duncan and Brooks-Gunn, 1997), and more recent research attempting to address the causal effects of poverty also demonstrate positive, albeit small, effects (Dahl and Lochner, 2005; Duncan, Morris, & Rodrigues, under review; Plug and Vijverberg, 2005; Milligan and Stabile, 2007). Poverty appears to impinge on children's cognitive growth and academic achievement, as well as their physical and mental health and behavioral development ((Duncan & Brooks-Gunn, 1997; Gennetian, Castells, & Morris, 2010). Indeed, extreme poverty (and correlates of poverty such as exposure to violence) appears to constrain the optimal development of the underlying brain structure and processes central to early cognitive and language development and emotion regulation, at least in part because low-income parents do not have the resources to invest in children's development. Consequently, as early as kindergarten, poor children exhibit lower scores on tests of early literacy and math abilities as well as other indices of school readiness (Dahl & Lochner, 2005; Gershoff, 2003; Lee and Burkham, 2002). Left unaddressed, and compounded by attendance in lower-quality schools, these early disparities grow into the persistent achievement gap that much of educational policy and practice is now attempting to close (Fryer and Levitt, 2004, 2005; Rathbun and West, 2004). By adolescence, these children are more likely than their peers to repeat a grade and drop out of school before high school completion and, as they reach adulthood, are more likely to face challenges in the labor market, contributing to a cycle of intergenerational poverty (Duncan, Brooks-Gunn, Yeung, & Smith, 1998; Duncan, Kalil, & Ziol-Guest, 2008).

Despite substantial education and health challenges faced by poor children, low-income families may demonstrate relatively low levels of participation in the social service systems that address these challenges. Economists argue that one major disincentive to participation in recommended education and health regimens among low-income parents and children is that they face much higher opportunity costs in doing so. For example, a low-income parent working at minimum wage rates by the hour loses more income to attend a parent-teacher meeting than does a middle-income parent who is paid a salary. Consequently, interventions that incentivize change in education and health behaviors are needed.

One approach to improving outcomes for low-income children and families is conditional cash transfers (or CCTs). These programs have two key components. First, they provide increased income to families and thus have a clear antipoverty component. Second, they can be designed to incentivize behavior that might promote families' longer-term self-sufficiency and break the cycle of intergenerational poverty. CCTs have been tested in a number of international contexts. Nine Latin American countries, beginning with Mexico and Brazil, and ten others primarily in South Asia and Africa have implemented CCTs. Research suggests that CCTs can be an effective social policy in the fight against poverty. Rigorous evaluation studies of CCTs in Mexico (Gertler, 2004; Skoufias, 2005), and early reviews of work in Latin America (Rawlings, 2005) and other parts of the world (Adato & Bassett, 2008) have documented improvements in child and adult health (Rivera, Sotres-Alvarez, Habicht, Shamah, Villalpando, 2004), school attendance (Schultz, 2001), and, when the transfers are sufficiently high, household poverty and food adequacy.

In 2007, the Center for Economic Opportunity (CEO) in the Mayor's Office of the City of New York mounted the first holistic Conditional Cash Transfer initiative in an economically

advanced, services rich jurisdiction. The initiative, ONYC-Family Rewards, is based on the rationale of CCTs like Mexico's "Progresa" program. But ONYC-Family Rewards has been adapted to meet the needs of families and communities in a city like New York. Inspired by Mexico's pioneering program, Family Rewards' program effects are being measured via a rigorous randomized control trial.

Purpose / Objective / Research Question / Focus of Study:

Aimed at low-income families in six of New York City's highest-poverty communities, Family Rewards ties cash rewards to a pre-specified set of activities and outcomes thought to be critical to families' short- and long-term success in the areas of children's education, family preventive health care, and parents' employment (see Table 1 for a description of the key program activities and their associated incentive amounts). The purpose of this project is to experimentally evaluate the effects of this three-year innovative holistic conditional cash transfer (CCT) initiative. This paper presents initial findings from an ongoing and comprehensive evaluation of Family Rewards. It examines the program's implementation in the field and families' responses to it during the first two of its three years of operations, and early findings on the program's impacts on children's educational processes and outcomes.

More specifically, this paper addresses the following questions:

1) What are the effects of ONYC-Family Rewards on family income, poverty, and financial hardship?
2) What are the effects of ONYC-Family Rewards on use of health care and health insurance?
3) What are the effects of ONYC-Family Rewards on parents' employment and educational attainment?
4) What are the effects of ONYC-Family Rewards on children's educational outcomes?

Setting:

The intervention was aimed at low-income families in six of New York City's highest-poverty communities in the Bronx, Brooklyn and Manhattan.

Population / Participants / Subjects:

The study involves approximately 4,800 families and 11,000 children, half of whom could receive the cash incentives if they meet the required conditions. Half were assigned to a control group that could not receive the incentives. Eligible families had to have incomes at or below 130 percent of the federal poverty level and at least one child in the fourth, seventh, or ninth grade. The fourth, seventh, and ninth grades are widely believed to be at or near the start of critical educational transition years. It was thus considered a high priority to determine whether the Family Rewards education incentives could make a difference for students entering the study at those grade levels, and to ensure that sample sizes would be large enough at each of those levels to permit a statistically rigorous and independent impact for each of those groups of target children.

A majority of the families (81 %) who enrolled in Family Rewards were one-parent families at the time of random assignment. Over half of all families (57%) had only one or two children and 43 % of families had three or more children. Just under half (47%) of the families were Hispanic/Latino and most others (51%) were black, non-Hispanic/Latino. Just over half of parents (53%) were employed, with about 37 percent working full time. Half of the parents in the

study (50%) had not completed high school and did not have a GED certificate, about a third (32 %) had only a high school diploma or GED certificate, and the rest of the parents (18 %) had an associate's or bachelor's degree. About 83% were U.S. citizens, and the rest (17%) were legal permanent residents.

Intervention / Program / Practice:

ONYC-Family Rewards is a multi-pronged intervention in which cash incentives are used to promote the extent to which children and their parents become connected and engaged with three key settings and systems – namely education, employment, and health care. ONYC-Family Rewards ties cash rewards to a pre-specified set of activities and outcomes in the areas of children's education, family preventive health care, and parents' employment (see Table 1 for program activities and incentive amounts). Reflecting the important role that parents can play in their children's success in school, the incentives in this domain are intended to encourage parents to become more fully engaged with their children's education. In this way, Family Rewards differs from school-based incentive programs that only offer rewards directly to students, largely bypassing their parents. Control group families were eligible for benefits serving low-income families, but did not receive any special services outside of those generally available.

To implement Family Rewards, Seedco, the main implementing agency, assembled a network of local organizations in the designated community districts. Called "Neighborhood Partner Organizations" (NPOs), these agencies recruited and enrolled eligible families into the research sample and served as the face of the program in the communities. They provided ongoing customer service to participants who requested assistance, such as in making claims for the rewards or for information about other services in the community. NPOs also conducted informational workshops on how to earn and claim rewards in each of the domains in which the incentives are offered. Seedco maintained a telephone helpline and Web site to provide additional information and assistance to families.

Seedco verified that families earned rewards by using a combination of automated data from some City agencies and special "coupon books" forms submitted directly by participants. After verification, it initiated a process of transferring payments electronically into bank accounts that participants newly opened or into their existing accounts they attached to the program, or, if they preferred, onto stored value cards. The payments were made every two months and families could access the money at any time through any ATM.

Envisioned as an "incentives-only" intervention, the program model does not provide social services or case management. The program also does not provide any direct services, such as tutoring, test preparation, or skill training. However, it does include an information-and-referral component wherein the implementing agencies (Seedco and the NPOs) refer families (upon request) to other agencies in the community that provide relevant services.

Research Design:

To ensure that the program reached a broad cross-section of children, not just the most motivated and active, potentially eligible families living in the targeted communities were identified from school lists maintained by the New York City Department of Education. In June 2007, the DOE compiled a list of 37,000 potentially eligible students and sent it to MDRC, where staff pared this initial recruitment list down to about 22,000 based on eligibility criteria. MDRC then split this list into random batches of smaller groups of families in order to ensure that all batches would include similar types of families, which were distributed to the NPOs one batch at a time. Seedco and the NPOs then attempted to recruit all families in a given batch,

through mailings, phone calls, and home visits, before requesting the next batch from MDRC. As long as one child in the family was in the fourth, seventh, or ninth grade, with proper documentation the whole family could enroll in the program, including siblings under the age of 18 and both parents, if they were married or in a legal domestic partnership. Parents had to prove age, identity, and citizenship; marital status; and custody of enrolling children at the time of enrollment. Several analyses comparing families who entered the sample with those who were not in the study suggest that, despite its voluntary nature, the recruited sample is not a distinctively more advantaged or less advantaged subset of the broader target population.

Randomization took place at the family-level after families enrolled in the program, off-site at MDRC. MDRC used batch random assignment for this process, which ensures that program and control group status is assigned randomly within the group of processed enrollees and that there was no attempts to "game the system" by looking for a pattern in the random assignment and trying to circumvent it. Half of the applicant families were picked for Family Rewards and offered the incentives and half were assigned to a control group that was not offered the incentives. Seedco notified families who were assigned to the program group, and MDRC notified families who were assigned to the control group, via mail. Using such a random process to allocate sample members to one group or the other helps ensure that the program effects estimated by the evaluation are truly a result of the intervention.

Data Collection and Analysis:

The evaluation in this study uses an extensive set of quantitative data. This information includes administrative records on school outcomes, employment, earnings, public health insurance, welfare and food stamp payments, and housing subsidies obtained from various New York City and New York State agencies; program-related data on reward payments obtained from Seedco; and one wave of a survey in which a subset of parents in the program and control groups are interviewed eighteen months after treatment began. The parent-survey, administered by the Department of Information Resources (DIR), was administered via telephone using CATI and had an overall response rate of eighty-two percent.

Estimates of intervention impacts on educational outcomes were calculated using ordinary least squares, controlling for a set of pre-random assignment characteristics, including the parent's race/ethnicity, education level, marital status, and employment status. Heterogeneity of impacts was also assessed via multivariate-defined subgroups.

The analysis of education outcomes was conducted for three groups of students, based on the grade at which they entered the study: 4^{th} graders, 7^{th} graders, and 9^{th} graders. There are several reasons to expect that the program might have distinct effects across groups. First, the groups are very different developmentally, suggesting that their ability to respond to the offer, as well as the processes by which they respond may be different. Second, among low-income and disadvantaged students, school performance, in terms of attendance and test scores, tends to decline as students age, suggesting that: a) on the one hand that high school students have more room for improvement in outcomes than do younger students, b) but also that changes might be harder to achieve among high school students. Finally, and partly in response to these patterns in performance, the three groups faced a different incentives structure, in which high school students were eligible for much larger rewards and directly received at least part of any rewards earned in the area of education.

Findings / Results:

Overall, this study shows that, despite an extraordinarily rapid start-up, the program was operating largely as intended by its second year. Although many families struggled with the

complexity of the program, most were substantially engaged with it and received a large amount of money for meeting the conditions it established. Specifically, nearly all families (98 percent) earned at least some rewards in both program years, with payments averaging more than $6,000 during the first two program years combined.

As shown in Table 2, the program: reduced current poverty and hardship; increased savings; increased families' continuous use of health insurance coverage and increased their receipt of medical care; and increased employment in jobs that are not covered by the unemployment insurance (UI) system but reduced employment in UI-covered jobs. The program has had mixed success in improving children's academic performance specifically. Contrary to expectations, Family Rewards did not affect school attendance or annual standardized test scores in Math and English Language Arts (ELA) for either group of youngest children, but did lead to notable gains for a group of more academically prepared high school students. Among ninth-graders who had scored at or above the basic proficiency level on their eighth-grade standardized tests prior to random assignment, the program led to a reduction of 6 percentage points in the proportion of students who repeated the ninth grade, a 15 percentage point increase in the likelihood of having a 95 percent or better attendance rate (in Year 2), an 8 percentage point increase in the likelihood of earning at least 22 credits (needed to remain on track for on-time graduation), and an increase of 6 percentage points in the likelihood of passing at least two Regents exams.

The program also had important effects on several key proposed mediators of the intervention. However, these effects vary by parents with different age groups of children. For the parents of the youngest two groups of children, we found increases in parents' engagement in children's learning (help with homework; helped child prepare for test; $d=0.2$; $p<.001$). For the middle group of children, we observed greater participation in structured after-school activities for children in the program group relative to those in the control group ($d=5.9$ to 6.5 for 5 activities; $p<.05$), in addition to increased parents' attendance of parent-teacher conferences (96.9% versus 93.6%, $p<.05$).

Conclusions:

While Family Rewards did not improve school outcomes overall for elementary or middle school students, it *did* increase school attendance, course credits, grade advancement, and standardized test results among better-prepared high school students. The effects for the more proficient high school students are encouraging. Even though this group may be the least disadvantaged academically among low-income students, they still face many obstacles to success. Longer-term follow up will be needed to assess whether the program can help these students stay on track and whether their control group counterparts fall further behind.

Evaluations of CCT programs in other countries have convincingly shown that such programs can reduce poverty and improve the consumption of goods and services among very poor families (Fiszbein & Schady, 2008). Although findings are still emerging, these initial results from the New York City project provide some encouraging evidence that the program can make a difference in the lives of poor families in a developed country.

Appendices

Not included in page count.

Appendix A. References

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Appendix B. Tables and Figures

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Table 1
Opportunity NYC-Family Rewards Activity List

	Activity	Reward	Maximum Reward (per year)
Education (per child)			
Elementary Sch	Child attends school 95% of scheduled days every two months	$50	$250
	Parent attends Parent-Teacher Conferences	$25	$50
	Child gets or has a Public Library Card	$50	$50 during program
	Child progresses on tests, scores a Level 3 or 4 on the ELA and/or Math Standardized Tests, or improves score	$300 (ELA Test) $300 (Math Test)	$300 $300
	Parent discusses annual tests with teachers, principal, or other school official	$25	$50
Middle School	Child attends school 95% of scheduled days every two months	$50	$250
	Parent attends Parent-Teacher Conferences	$25	$50
	Child gets or has a Public Library Card	$50	$50 during program
	Child progresses on tests, scores a Level 3 or 4 on the ELA and/or Math Standardized Tests, or improves score	$350 (ELA Test) $350 (Math Test)	$350 $350
	Parent discusses annual tests with teachers, principal, or other school official	$25	$50
High School	Child attends school 95% of scheduled days every two months	$100	$500
	Parent attends Parent-Teacher Conferences	$25	$50
	Child gets or has a Public Library Card	$50	$50 during program
	Student passes a Regents Exam (scoring 65 or above)	$600	$3,000 during program
	Student takes the PSAT	$50	$100 during program
	Student accumulates 11 credits in school year	$600	$600
	Student graduates and accumulates 44 credits	$400	$400 during program
Health			
	Get or maintain public health insurance including Medicaid, Family Health Plus, and/or Child Health Plus coverage	$40 per adult, $40 for all children	$480
	Get or maintain private health insurance	$100 per adult, $100 for all children	$600 per adult, $600 for all children
	Complete a yearly non-emergency medical check-up	$200 per family member	$200 per family member
	Complete pediatrician-advised Early Intervention referral and evaluation for a child under 30 months	$200 per child	$200 per child
	Complete two dental visits per year for family members 6 years and older	$100 per family member	$200 per family member
	Complete one dental visit per year for family members ages 1-5	$100 per child	$100 per child
Work			
	Work at least 30 hours pper week for 6 out of 8 weeks during the two-month activity period	$300 per adult	$1,800 per adult per year
	Work at least 10 hours per week each week, during the two-month activity period, while successfully completing an approved education or training course	Up to $600 for each parent	$3,000 per adult during program

Table 2. Impacts on Selected Outcomes Measuring Poverty, Savings, Health, Work, and Education

Outcome	Program Group	Control Group	Difference (Impact)		Change (%)
1. Poverty, hardship, Health, and Work Outcomes					
A. Poverty and hardship (%)					
Household income at or below the federal poverty level	58.9	70	-11.1	***	-15.8
Family usually did not have enough money to make ends meet at the end of the month	34.1	41.8	-7.8	***	-18.5
B. Banking and savings					
Parent currently has bank account (%)	73.3	51.8	21.5	***	41.4
Family's average savings ($)	575	354	221	**	62.6
C. Parents' use of health services and parent's health status (%)					
Had a period with no health insurance coverage since random assignment	16.1	19.4	-3.3	**	-17.0
Saw a personal doctor in the past 12 months	86.1	82.3	3.8	***	4.6
Self-rated health is "excellent"	15.8	13.5	2.3	*	17.3
D. High school student's use of health services (%)					
Had health checkup or got shots in past 12 months	96.1	95.8	0.3		--
Had usual source of care when sick					
Hospital emergency room	9.8	15.9	-6.1	***	-38.4
Other place	86.3	80.1	6.2	**	7.8
E. Employment					
Employment status, UI records[a]					
Ever employed, Year 1 (%)	56.2	58.6	-2.4	***	-4.1
Average earnings, Year 1 ($)	12,091	12,377	-286		--
Employment status, survey (%)					
Currently working	59.9	54.3	5.6	***	10.4
F. Parents' education and training (%)					
Ever participated in an education, training or employment activity	37.3	39.6	-2.3		--
Has any trade license or training certification	54.2	51.2	3	*	5.9
Highest degree or diploma					
Associate's degree	10.2	7.7	2.5	**	32.1
Bachelor's degree	8.4	8.3	0.1		--
2. Education outcomes					
A. 4th-grade cohort					
Has attendance rate of 95% or higher (Year 2)	44.5	41.6	2.9		--
Proficient on math test, Year 2	80.3	78.6	1.7		--
Proficient on English language arts (ELA) test, Year 2	67.6	68.1	-0.4		--
B. 7th-grade cohort					
Has attendance rate of 95% or higher (Year 2)	36.6	34.9	1.6		--
Proficient on math test, Year 2	61.9	63.5	-1.6		--
Proficient on English language arts (ELA) test, Year 2	46.5	46	0.5		--
C. 9th-grade cohort					
Has attendance rate of 95% or higher (Year 2)	28.8	23.7	5.2	***	21.8
Remained in 9th grade	16.3	18	-1.8		--
Passed at least 2 Regents exams, Years 1-2	38.2	37.6	0.7		--
Earned 22 or more credits, Years 1-2	41	41.1	-0.1		--
D. 9th-grade cohort, by proficiency level on 8th-grade standardized math test[b]					
Has attendance rate of 95% or higher (Year 2)					
More proficient subgroup	51.1	36.2	14.9	***	41.2
Less proficient subgroup	21.8	19.3	2.5	--	
Remained in 9th grade, Year 2					
More proficient subgroup	3.0	8.8	-5.8	***	-66.3
Less proficient subgroup	22.1	21.8	0.3		--
Earned 22 credits, Years 1-2					
More proficient subgroup	72.7	64.5	8.1	**	12.6
Less proficient subgroup	38.1	40.1	-2.0		--
Passed at least 2 Regents exams, Years 1-2					
More proficient subgroup	77.6	71.7	5.9	*	8.2
Less proficient subgroup	22.9	25.2	-2.3		--
Sample size (total = 3,082)	1,574	1,508			

SOURCE: MDRC calculations from responses to the Family Rewards 18-Month Survey, New York State unemployment insurance (UI) wage records, and New York City Department of Education administrative records.

NOTES: Statistical significance levels indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates were regression-adjutsed using ordinary least squares, controlling for pre-random assignment characteristics of family or sample members. Rounding may cause slight discrepancies in calculating sums and differences.

Years 1 and 2 cover 2007-2008 and 2008-2009 school years, respectively. Sample sizes vary because of missing values.

a Dollar averages include zero values for sample members who were not employed. b Proficiency levels are based on performance on the annual New York State math test administered in the eighth grade, prior to the student's entering the Family Rewards sample. In New York State, students who score at a level of 3 or higher on a 4-point scale are deemed "proficient." Similar results were attained when proficiency was defined in terms of performance on the annual ELA test.