Effects of a Modified Conditional Cash Transfer Program in Two American Cities

Findings from Family Rewards 2.0

Technical Appendixes

Cynthia Miller
Rhiannon Miller
Nandita Verma
Nadine Dechausay
Edith Yang
Timothy Rudd
Jonathan Rodriguez
Sylvie Honig

September 2016

Family Rewards 2.0 is one of five evidence-based programs that were implemented as part of the Social Innovation Fund (SIF) grant to the Mayor's Fund to Advance New York City and the New York City Center for Economic Opportunity. This report is based upon work supported by the SIF, which unites public and private resources to evaluate and grow innovative community-based solutions with evidence of results. The SIF is a program of the Corporation for National and Community Service, a federal agency that engages more than 5 million Americans in service through its AmeriCorps, Senior Corps, SIF, and Volunteer Generation Fund programs, and leads the U.S. President's national call to service initiative, United We Serve.

The SIF grant catalyzes a unique public-private funding model in which each federal dollar must be matched by private and local contributions. Matching funds for Family Rewards 2.0 have been provided by Bloomberg Philanthropies, Open Society Foundations, The Rockefeller Foundation, Benificus Foundation, the City of Memphis, The Kresge Foundation, New York Community Trust, W.K. Kellogg Foundation, and the Women's Foundation of Greater Memphis.

Dissemination of MDRC publications is supported by the following funders that help finance MDRC's public policy outreach and expanding efforts to communicate the results and implications of our work to policymakers, practitioners, and others: The Annie E. Casey Foundation, Charles and Lynn Schusterman Family Foundation, The Edna McConnell Clark Foundation, Ford Foundation, The George Gund Foundation, Daniel and Corinne Goldman, The Harry and Jeanette Weinberg Foundation, Inc., The JBP Foundation, The Joyce Foundation, The Kresge Foundation, Laura and John Arnold Foundation, Sandler Foundation, and The Starr Foundation.

In addition, earnings from the MDRC Endowment help sustain our dissemination efforts. Contributors to the MDRC Endowment include Alcoa Foundation, The Ambrose Monell Foundation, Anheuser-Busch Foundation, Bristol-Myers Squibb Foundation, Charles Stewart Mott Foundation, Ford Foundation, The George Gund Foundation, The Grable Foundation, The Lizabeth and Frank Newman Charitable Foundation, The New York Times Company Foundation, Jan Nicholson, Paul H. O'Neill Charitable Foundation, John S. Reed, Sandler Foundation, and The Stupski Family Fund, as well as other individual contributors.

The findings and conclusions in this report do not necessarily represent the official positions or policies of the funders, the Mayor's Fund to Advance New York City, or the New York City Center for Economic Opportunity.

For information about MDRC and copies of our publications, see our website: www.mdrc.org.

Contents

List of Exhibits

Table

Table

Box

Appendix E

Data and Methods

Random Assignment Process and Baseline Equivalence

Random Assignment Process

The four Neighborhood Partner Organizations (NPOs) were charged with recruiting 1,200 families in each city. Families were eligible for the study if they met the following criteria:

1. They received Temporary Assistance for Needy Families (TANF) or food stamp benefits
2. They lived in one of five targeted community districts in the Bronx or anywhere in the city of Memphis
3. They had an adult at least 18 years of age
4. The adult was a U.S. citizen or U.S. legal permanent resident
5. The household included at least one child entering ninth or tenth grade in the 2011 school year

Recruitment began in August 2011 in the Bronx and September 2011 in Memphis, when the NPOs received lists of potentially eligible participants provided by the human services agencies and departments of education in each city.[1] NPO staff members were then required to call families on the lists, making multiple attempts to reach eligible families, including additional phone calls and home visits. Ultimately, NPOs resorted to a range of recruitment strategies in order to reach their targets. For example, in the Bronx, an additional letter was sent to potentially eligible families in November, and information about the study was added to the city's public service call center. In Memphis, the local press and the mayor's office promoted the study, the NPOs set up satellite intake offices at two local libraries, and they began accepting walk-ins, or eligible families who were not on the NPOs' existing lists but who had heard about the program through local media.

[1]In the Bronx, the New York City Human Resources Administration provided the recruitment list. Families were chosen for recruitment if they received TANF or food stamps and had children between the ages of 14 and 16. Only those families who were receiving TANF or food stamps at the time of enrollment were randomly assigned into the study. Grade-level data from the New York City Department of Education were matched with the recruitment list to help prioritize families most likely to have children entering the ninth or tenth grade. In Memphis, the Memphis City Schools provided the recruitment list. Families were chosen for recruitment if they had children entering the ninth or tenth grade. These data did not include information about benefit status, so NPO staff members determined enrollees in Memphis were eligible for Family Rewards based on their own reports of receiving TANF or food stamps.

Interested and eligible families would then visit the NPO to hear more about the study. They would meet individually with NPO staff to hear about the study's goals, the random assignment process, data the research team would collect, and the benefits and risks of participation. If they agreed to participate, they would sign the necessary informed consent forms and fill out the baseline survey.

Once the consent forms were signed and the baseline survey completed, NPO staff would log into MDRC's online random assignment application and enter a few pieces of identifying information for the respondent and family. Key identifiers, such as social security number and name, were entered in twice. The application would then randomly assign the participant to either the program group, eligible for Family Rewards, or the control group, not eligible for Family Rewards. Random assignment was conducted at the site level with a ratio of 50:50, or an equal probability of selection to the program and control groups. Individuals assigned to the control group were told that they were not selected for the program and were given a list of resources available in the community. They were also given a $25 gift or transportation card for their time and travel costs. Control group members could not participate in the program at any time during its operation. Children's Aid Society's central office in Manhattan, New York (CAS-Central), which managed the overall program and led the payment processing, only validated coupons for families who were listed as program group participants.[2] Similarly, the advisors at the NPOs did not provide services to families who were not listed as in the program group.

Immediately following random assignment, individuals assigned to the program group met with NPO staff to receive a more formal orientation to the program. During this orientation, which typically took place in groups and lasted an average of 68 minutes, staff would go through all of the rewards available and conditions necessary to earn them. Staff also handed out the coupon books for Year 1 during group orientation sessions conducted by the advisors. In Year 2, participants picked up the coupon books individually or during a group session held during the summer before the start of the new program year. Staff delivered some to participants' homes, especially in Memphis.

The pace of recruitment varied in each city, as staff members faced challenges to reaching potential participants, including outdated or incorrect contact information, a high level of skepticism among potential participants about the program, concern among some potential

[2]CEO transferred overall management of Family Rewards to Children's Aid Society in 2012 after local and federal investigations uncovered irregularities in Seedco's administration of workforce services unrelated to Family Rewards.

participants about the effect that participation might have on benefits they were receiving,[3] and lack of transportation (particularly in Memphis). Recruitment continued through January 2012 in the Bronx and February 2012 in Memphis. A total of 2,461 families enrolled in the study, with 1,234 families in the Bronx and 1,227 families in Memphis. Four families from the Bronx and one family from Memphis later withdrew from the study.

Baseline Equivalence

Tables E.1 and E.2 present comparisons of selected baseline characteristics for the program and control groups, for the full sample combined and by city. The tables show that random assignment was conducted successfully. Overall, there are very few statistically significant differences between the two research groups for the combined sample or for each city. Any differences that are statistically significant are small in size. Tables E.3 and E.4 summarize baseline equivalence by showing results from a logistic regression of program group status on selected characteristics. The models are not statistically significant and show the overall equivalence of the research groups for the full sample and by city.

Data and Outcomes

The various data providers transferred the data on the implementation of the program, education outcomes, earnings outcomes, and benefit receipt outcomes, and from the 24-month survey to MDRC. Data files transferred to MDRC containing items identifying individuals were encrypted in transit and at rest via password-protected data repositories such as Axway utilizing HTTPS protocols.

MDRC has developed a robust technical environment, secured by firewalls that limit access to designated network areas and requires authorized individuals to gain access via password identification systems. MDRC's network provides centralized services for data storage and processing, thus avoiding proliferation of file copies to multiple workstations. Designated data managers are the sole authorities regarding which staff has access to the data and this access is limited to a need-to-know basis.

MDRC recognizes that merged data sources present additional risks of identification of individuals. Upon creation of analysis files, key identifiers associated with each individual are removed to preclude identification of individuals. To link data from different sources for each individual once data are encrypted, unique numbers are randomly assigned to each sample

[3]The cash transfers did not affect eligibility or payment amounts for most existing government transfer benefits, including TANF, food stamps, Medicaid, the Children's Health Insurance Program, housing assistance, or the Earned Income Tax Credit.

member. The cross-reference file of assigned numbers and identifiers is controlled by the data manager and is accessible only to staff assigned to the project and on a need-to-know basis.

Data were cleaned according to MDRC standards. Outlier values on outcome variables measured in dollar amounts, such as income, savings, debt, and earnings, were set to missing and affected less than 1 percent of the sample for a given outcome.

Baseline Data

At the time of random assignment, the NPOs administered a baseline survey to all study participants, which collected demographic, employment, and health-related statuses at or before study enrollment. The form was completed after the participant signed the informed consent form but before random assignment was conducted. Baseline data collection spanned the same time as random assignment, or from August 2011 through January 2012 in the Bronx, and from September 2011 through February 2012 in Memphis. (See the discussion below on missing values for the baseline data).

Reward Payment Data

Data on rewards payments earned and paid were obtained from the program's centralized management information system, which CAS-Central maintained. These data include when families earned and submitted verification for their rewards, how the rewards were verified, what types of rewards were earned, and how and when they were paid out to families. Data cover rewards earned between September 2011 and December 2014 and include details of administrative processing between October 2011 and June 2015. Outcomes created using these data include the number of rewards families received in each domain and the total amount of rewards received by each family during each program year.

Program Data on Guidance

Data on guidance sessions were also obtained from the program's centralized management information system, which CAS-Central maintained. Staff at all four participating NPOs received training on how to record data from guidance sessions. These data include the dates and times of when advisors conducted guidance and outreach sessions with participants as well as the content of those sessions. Outcomes measuring the volume and type of guidance, customer service, and outreach interactions with participants in each program year were created using these data.

Focus Groups and Interviews

Data for the implementation analysis include observations of program activities (including family guidance sessions), interviews with advisors at the NPOs and CAS-Central, focus groups and individual interviews with 106 adults and 75 high school students, a review of all program materials, case-file review to analyze the implementation of the Family Earning Plans, and an analysis of the management information system and payment-processing data. MDRC staff and consultants conducted all focus groups and interviews, which were stored at MDRC on secure servers. For a more complete description and analysis of this data, see Dechausay, Miller, and Quiroz-Becerra (2014).

Education Records

Data on education outcomes were obtained from the New York City Department of Education, Memphis City Schools, and Shelby County Schools. These data are available for all students in the study for roughly two years before study entry, or school year 2009-2010, and for four years after study entry, or for school years 2011-2012 through 2014-2015. The data include performance on eighth-grade standardized English and math tests, enrollment status, attendance rates, credits earned, and performance on Regents exams (in New York City) and End-of-Course exams (in Memphis). These data do not provide information for students attending parochial schools or private schools or public schools outside of New York City or Memphis. Data from the survey indicate that fewer than 5 percent of students in the study were attending these types of schools at the time of the 24-month survey, and the percentage was similar for the program and control groups.

Unemployment Insurance Wage Records

Data on quarterly earnings were obtained from the New York State Department of Labor and the Tennessee Department of Labor and Workforce Development. These data are available for all parents for two years before random assignment and three years after random assignment. Outcomes on yearly earnings and employment rates were created.

Administrative Records on Benefit Receipt

Data on monthly TANF and food stamps amounts were obtained from the New York City Human Resources Administration and the Tennessee Department of Human Services. These data are available for all families for two years before random assignment and two years after random assignment. Outcomes on yearly benefit amounts and benefit receipt were created.

Table E.5 presents sample sizes for selected outcomes and data sources listed above.

24-Month Survey

MDRC contracted with Decision Information Resources (DIR) to design and administer the Family Rewards 24-month follow-up survey. The survey data were used to create outcomes related to a range of measures that are not available on records data. These outcomes include parent involvement in education, children's activities, family income and material hardship, parents' and children's health and well-being, preventive care visits, and job characteristics. DIR used its Computer-Assisted Telephone Interview (CATI) call center and database system to conduct all interviews. DIR sought to interview at least 80 percent of the Family Rewards 2.0 sample (all sample members were selected to be interviewed) and to attain this response rate for both research groups in each city. (See Appendix F for an analysis of survey response.)

MDRC worked with the DIR survey team to create marketing materials (including letters, postcards, e-mail messages, website postings, and refrigerator magnets) and scripts for marketing phone calls to encourage participants to complete survey interviews. MDRC shared with DIR each respondent's date of birth and Social Security number. At the start of each interview, respondents were asked to provide this information to the interviewer to verify their identity. No proxy interviews by third parties were allowed. All interviews were conducted by phone with interviewers at DIR's call center. Field locators did not interview respondents.

The survey and research teams used several methods to achieve high response rates:

Respondent location efforts. DIR used standard locator databases to find updated contact information for study participants. MDRC also provided DIR with updated data for participants in the program using contact information from administrative records.

Financial incentives. Respondents received either a $30 or $60 gift card after completing an interview. Notice of the gift cards was included in marketing materials. During each fielding period, MDRC and DIR team members monitored survey response rates, and increased the value of the gift card approximately two months after the sample was released. About 61 percent of respondents received a $30 gift card, and 39 percent received a $60 gift card.

Field locators. DIR employed and trained a group of field locators and assigned them to personally contact study participants who had not yet completed an interview. Field locators set up appointments for interviews with DIR's call center but did not interview respondents on site. DIR monitored the success rate of each field locator weekly.

Monitoring responses. During the fielding period, DIR prepared and shared with MDRC weekly reports on survey response rates, organized by city and research group. Members of the DIR and MDRC teams reviewed these reports weekly and made adjustments to fielding efforts in response to identification of low response rates or relatively large differences

in response rates by research group. See Table E.6 for selected item response rates for each research group.

Analysis Methods

Regression Models

Impacts were estimated for each outcome using ordinary least squares (OLS) regression, in which the outcome is regressed on an indicator for program status and several variables measured at or before the point of random assignment. For binary outcomes, the results using logistic regression were very similar to those reported here.

The regression models included the following variables:

- Program group status
- Random assignment month
- City
- Sex
- Race/ethnicity
- Age
- Educational attainment
- Number of children
- Marital status
- Employment status
- Self-rated health
- Citizenship status
- Public assistance receipt

When impacts are estimated for children's school progress, the regression model also includes the student's prior year test scores in English language arts and math. Impact estimates for adults' and children's health also included covariates for insurance coverage. Missing values were imputed with a constant value, and the models also include dummy indicators for missing status. Missing values for outcome variables were not imputed. The observation was dropped from the analysis. As shown in Tables E.5 and E.6, data for any given outcome were missing for few observations.

Table E.7 presents regression results from one model for family income and one model for student attendance in Year 2. When impacts were estimated on individual outcomes, standard errors were calculated adjusting for clustering within families. No weights were used

in the regression models, since there was no attrition in the records data and the survey response analysis determined that weights for survey response were not necessary.

Multiple Comparison Adjustment

The study examines many outcomes across a number of domains. When multiple outcomes are examined, the probability of finding a statistically significant effect increases, even when the intervention has no effect. For example, if 10 independent outcomes are examined in a study of an ineffective treatment, it is likely that at least one of them will be statistically significant at the 10 percent level by chance.

The main text of the report addresses this issue by designating in each domain a handful of primary outcomes versus secondary outcomes. If effects on primary outcomes are not statistically significant, significant differences for secondary outcomes are given less weight. A more formal method for accounting for multiple hypothesis testing involved adjusting the p-values for the number of comparisons made.

Tables E.8 through E.11 present impact estimates on primary outcomes for each domain. The significance levels have been adjusted within domains, using the Westfall-Young resampling method, to reflect that each domain includes multiple tests. For each group of outcomes, the residuals from the effect estimation models as well as predicted (fitted) values of the outcomes are stored. For each outcome, the Westfall-Young method resamples the residuals a large number of times. Each time, it adds the resampled residuals to the corresponding predicted outcomes. In this way, it simulates many samples from the data in which the outcomes are different but all of the independent variables remain the same. The true (original) sample and each simulated sample are then tested for impacts. The p-values associated with the impact estimates from the true sample are ordered by significance, as are the p-values from each of the simulated samples. The most statistically significant of the true sample's p-values is then compared with the most significant p-value from each simulated sample to calculate the Westfall-Young adjusted p-value. Similarly, the second lowest true sample p-value is compared with the second lowest p-value from each sample, and so on. MRDC used 10,000 simulated samples for each domain.

The resampling (or scrambling) of residuals from the estimated regression models implies that the impacts on all domains in all replicates are expected to be zero and, therefore, that the distribution of replicate p-values is expected to follow the distribution one would observe in the case of no effects. This logic applies to impacts on a single domain, but it also applies to the most significant impact in any domain: if the program had no true effects, the most significant impact by baseline treatment status is unlikely to be larger than the most significant impact by replicate treatment status in the great majority of replicates. For example, if the true sample's p-

value is lower than all but 10 percent of the corresponding p-values from the simulated samples, then the Westfall-Young adjusted p-value is 0.1.

In Table E.8, for example, the income and material hardship domain included eight related outcomes. In the original sample, seven of the eight outcomes were considered statistically significant. After adjusting for multiple comparisons, all seven outcomes remained statistically significant.

The adjusted p-values in Tables E.8 though E.10 showing impacts in the income and poverty, education, and health domains indicate that effects of the program are unlikely to have arisen by chance and suggest that these differences are true effects of the program. The adjusted p-values in the work domain (Table E.11) suggest that the findings in this domain are less robust. As discussed in Chapter 6, the impact of the intervention on employment outcomes varied by data source. These adjustments confirm that the negative effects of the program on earnings are less certain.

Effect Sizes for Outcomes of Interest

For many outcomes that are presented in nonstandard units, it is often easier to assess the size of program impacts using effect sizes. Effect sizes are calculated using "Cohen's d" method, or by taking the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined. By standardizing the impact by the standard deviation, effects sizes allow for a comparison of the impacts across outcomes that are measured in different units.

Table E.12 shows effect sizes for all outcomes in Table ES.2. Because effects were found on a number of outcomes in Chapter 3, outcomes are displayed in Tables E.13 through E.15 with effect sizes. As an example of subgroup outcomes, Table 7.2 from Chapter 7 is also replicated with effect sizes and shown as Table E.16. Though effect sizes are typically used to compare impacts on measures with different scales, these tables provide a comparison of the effects of Family Rewards 2.0 across a variety of outcomes of interest by converting the impacts to standard deviation units. For example, the effect size of the impact for average total household income was 0.129 standard deviations. The effect on the percentage of families living at or below the federal poverty line was similar in magnitude. The percentage of households in the program group living at or below the poverty level was 0.112 standard deviations lower than the control group. Even though the former is measured in dollars and the latter is a binary outcome, it is possible to compare the magnitude of the impact by comparing the change in standard deviations.

Implementation Study

The implementation analysis used a mixed methods approach to investigate mediating pathways in the program's theory of change. Implementation research questions focused on the two main features of program design: the financial incentives and the guidance component — although other issues were investigated, including the recruitment experience. The main implementation study research questions included:

- To what degree were all program components fully articulated and to what degree was the program implemented with fidelity to the model?
- Were financial incentives understandable and delivered to participants in an efficient manner?
- How did staff deliver the guidance component for all participants and target more intensive outreach to low-earners, and what was the response from participants?
- How did the context — especially, differences in the density of high-quality service providers in New York City and Memphis — affect the staff's ability to refer participants to other services?
- In general, how much variation is there in program delivery and participant response, and what factors are related to this variation?

Several types of data were collected and analyzed as part of the implementation study. These data included (1) regular observations of program activities, including guidance sessions and review of materials throughout the program; (2) annual interviews with advisors at the NPOs and staff from CAS-Central; (3) focus groups with 85 adults and 57 high school students who were members of subgroups of interest (for example, students who scored proficient on their eighth-grade reading exams) or selected based on their reward earning patterns in Years 1 and 2; (3) interviews with 21 adults and 18 high school students who were a mix of high and low reward-earners in Years 3 and 4; (4) analysis of all payment and case management data from the centralized management information system; and (5) analysis of program implementation items on the 24-month survey. The implementation research team consisted of two to three local researchers in each city who conducted regular observations of program events and guidance sessions and collected program materials. The team based in New York City included bilingual field researchers.

Table E.17 describes the data sources used to analyze each of the dimensions of program implementation.

Qualitative data were analyzed using a software program called Dedoose. A code book was generated through a mix of deductive and inductive approaches, interrater reliability was tested, and a small team of researchers coded all observation and interview (or focus group) data. The quantitative data were cleaned and processed using Statistical Analysis System (SAS) software.

Appendix Table E.1

Characteristics of Participants at the Time of Random Assignment, by Research Group

Characteristic	Program Group	Control Group	Full Sample	
Family baseline measures				
Two-parent family[a] (%)	14.4	14.7	14.5	
Two parents enrolled in Family Rewards[b] (%)	4.6	4.5	4.5	
Average number of children in the household	2.8	2.6	2.7	***
Primary language spoken at home is English (%)	73.3	74.0	73.6	
Family living in public housing (%)	22.1	22.8	22.4	
Family receiving Section 8 rental assistance (%)	19.6	17.6	18.6	
Earnings above 50% of the federal poverty level (%)	51.1	50.7	50.9	
City (%)				
Bronx	50.2	50.0	50.1	
Memphis	49.8	50.0	49.9	
Randomly assigned before December 2011	32.8	32.5	32.7	
Parents' baseline measures[c]				
Female (%)	95.4	93.6	94.5	*
Average age (years)	40.6	40.8	40.7	
U.S. citizen by birth (%)	88.4	85.8	87.1	*
Race/ethnicity (%)				
Hispanic/Latino	37.6	37.6	37.6	
Black, non-Hispanic/Latino	60.8	60.9	60.9	
Other, non-Hispanic/Latino	1.6	1.6	1.6	
Education (highest degree or diploma earned) (%)				
Less than high school diploma or equivalency certificate	47.5	49.5	48.5	
High school diploma or equivalency certificate	12.1	11.9	12.0	
More than high school diploma or equivalency certificate	40.4	38.6	39.5	
Currently working (%)	50.4	50.5	50.5	
Working full time[d] (%)	36.0	36.6	36.3	

(continued)

Appendix Table E.1 (continued)

Characteristic	Program Group	Control Group	Full Sample	
Is covered by public health insurance (%)	83.7	84.8	84.2	
Rates health as excellent, very good, or good (%)	26.1	26.1	26.1	
Has a physical or mental condition that limits work (%)	17.9	19.9	18.9	
Over the past 2 weeks, had little or no interest in doing things and felt down, depressed, or hopeless (%)	29.0	28.9	29.0	
Target children's baseline measures (%)				
Born in the United States	92.9	91.2	92.1	
Race/ethnicity				
Hispanic/Latino	38.0	37.5	37.7	
Black, non-Hispanic/Latino	59.9	60.9	60.4	
Other, non-Hispanic/Latino	2.1	1.6	1.9	
Attended public school in the past year	94.5	95.9	95.2	*
Grade[e]				
Grade 9	54.3	54.8	54.5	
Grade 10	43.4	42.6	43.0	
Is covered by public health insurance	98.5	98.9	98.7	
Has a physical, emotional, or mental health problem that limits activities	6.0	4.8	5.4	
Parent's rating of child's health is excellent, very good, or good	2.9	3.1	3.0	
Administrative data measures				
Earnings in the year before random assignment ($)	8,586	8,657	8,622	
Family receives TANF or Safety Net Assistance (%)	25.1	24.9	25.0	
TANF payments in the year before random assignment ($)	571	512	542	
Family receives food stamps (%)	92.0	92.6	92.3	
Food stamp payments in before random assignment ($)	5,288	5,083	5,186	*
Target child proficient on English exam[f] (%)	18.5	20.9	19.7	
Target child proficient on math exam[f] (%)	24.1	26.3	25.2	
Sample size	1,230	1,226	2,456	

(continued)

Appendix Table E.1 (continued)

SOURCES: MDRC calculations using Family Rewards baseline survey and random assignment module data, New York City Department of Education and Shelby County Schools administrative records, New York State unemployment insurance (UI) wage records, Tennesee Department of Labor and Workforce Development UI wage records, and administrative records data from the New York City and Memphis human resources administrations.

NOTES: TANF = Temporary Assistance for Needy Families.

To assess differences in characteristics between research groups, chi-square tests were used for categorical variables and t-tests were used for continuous variables. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

[a]Families with parents who reported their marital status as single, single but living with a boyfriend or girlfriend, separated, divorced, or widowed are considered single-parent families; those with parents who reported their marital status as married or legal domestic partnership are considered two-parent families.

[b]This measure refers to sample members who enrolled in Family Rewards with their spouses or legal domestic partners.

[c]These measures exclude information for enrolled second parents in two-parent households, of which there were 111.

[d]"Full time" means 30 hours a week or more.

[e]Grades 9 and 10 were "target grades" for the Family Rewards program. Therefore, every enrolled family had to have a child in grade 9 or 10.

[f]Proficiency level is only reported for high school students who had taken a standardized test to determine proficiency within the two years prior to enrollment. Data were available for most students who were in ninth or tenth grade at enrollment.

Appendix Table E.2

Characteristics of Participants at the Time of Random Assignment, by Research Group and City

Characteristic	Program Group	Control Group	Full Sample	
Bronx				
Family baseline measures				
Two-parent family[a] (%)	19.9	22.2	21.1	
Two parents enrolled in Family Rewards[b] (%)	6.2	7.0	6.6	
Average number of children in the household	2.4	2.3	2.4	
Primary language spoken at home is English (%)	48.0	48.5	48.2	
Family living in public housing (%)	33.6	35.5	34.6	
Family receiving Section 8 rental assistance (%)	24.7	22.3	23.5	
Earnings above 50% of the federal poverty level (%)	57.4	57.4	57.4	
Randomly assigned before December 2011 (%)	47.2	47.0	47.1	
Parents' baseline measures[c]				
Female (%)	94.2	91.7	92.9	*
Average age (years)	42.2	42.3	42.2	
U.S. citizen by birth (%)	77.3	72.1	74.7	**
Race/ethnicity (%)				
Hispanic/Latino	74.1	74.3	74.2	
Black, non-Hispanic/Latino	23.5	23.7	23.6	
Other, non-Hispanic/Latino	2.4	2.0	2.2	
Education (highest degree or diploma earned) (%)				
Less than high school diploma or equivalency certificate	37.1	39.7	38.4	
High school diploma or equivalency certificate	15.1	12.5	13.8	
More than high school diploma or equivalency certificate	47.8	47.8	47.8	
Currently working (%)	56.8	57.3	57.1	
Working full time[d] (%)	38.6	39.1	38.9	

(continued)

Appendix Table E.2 (continued)

Characteristic	Program Group	Control Group	Full Sample	
Is covered by public health insurance (%)	84.7	86.9	85.8	
Rates health as excellent, very good, or good (%)	26.7	25.9	26.3	
Has a physical or mental condition that limits work (%)	15.8	18.6	17.2	
Over the past 2 weeks, had little or no interest in doing things and felt down, depressed, or hopeless (%)	27.8	28.3	28.1	
Target children's baseline measures (%)				
Born in the United States	86.7	82.5	84.6	**
Race/ethnicity				
Hispanic/Latino	74.7	74.0	74.4	
Black, non-Hispanic/Latino	22.2	23.7	22.9	
Other, non-Hispanic/Latino	3.1	2.3	2.7	
Attended public school in the past year (%)	99.7	99.7	99.7	
Grade[e]				
Grade 9	54.1	55.6	54.9	
Grade 10	41.5	39.6	40.6	
Is covered by public health insurance	97.7	98.4	98.0	
Has a physical, emotional, or mental health problem that limits activities	5.2	4.2	4.7	
Parent's rating of child's health is excellent, very good, or good	3.4	3.1	3.3	
Administrative data measures				
Earnings in the year before random assignment, according to unemployment data ($)	9,730	10,244	9,986	
Family receives TANF or Safety Net Assistance (%)	15.4	15.0	15.2	
TANF payments in the year before random assignment ($)	524	441	483	
Family receives food stamps (%)	90.9	91.0	91.0	
Food stamp payments in the year before to random assignment ($)	5,125	4,986	5,056	
Target child proficient on English exam (%)[f]	24.4	25.6	25.0	
Target child proficient on math exam (%)[f]	42.1	45.4	43.7	
Sample size	617	613	1,230	

(continued)

Appendix Table E.2 (continued)

Characteristic	Program Group	Control Group	Full Sample	
Memphis				
Family baseline measures				
Two-parent family[a] (%)	8.8	7.2	8.0	
Two parents enrolled in Family Rewards[b] (%)	2.9	2.0	2.4	
Average number of children in the household	3.1	2.9	3.0	***
Primary language spoken at home is English (%)	98.7	99.5	99.1	
Family living in public housing (%)	10.7	10.0	10.3	
Family receiving Section 8 rental assistance (%)	14.4	12.8	13.6	
Earnings above 50% of the federal poverty level (%)	44.9	43.9	44.4	
Randomly assigned before December 2011	18.3	18.1	18.2	
Parents' baseline measures[c]				
Female (%)	96.6	95.6	96.1	
Average age (years)	38.9	39.4	39.2	
U.S. citizen by birth	99.5	99.5	99.5	
Race/ethnicity (%)				
Hispanic/Latino	0.8	0.8	0.8	
Black, non-Hispanic/Latino	98.4	98.0	98.2	
Other, non-Hispanic/Latino	0.8	1.1	1.0	
Education (highest degree or diploma earned) (%)				
Less than high school diploma or equivalency certificate	57.9	59.3	58.6	
High school diploma or equivalency certificate	9.1	11.2	10.1	
More than high school diploma or equivalency	33.0	29.5	31.2	
Currently working (%)	44.0	43.7	43.9	
Working full time[d] (%)	33.4	34.0	33.7	

(continued)

Appendix Table E.2 (continued)

Characteristic	Program Group	Control Group	Full Sample	
Is covered by public health insurance (%)	82.7	82.7	82.7	
Rates health as excellent, very good, or good (%)	25.4	26.2	25.8	
Has a physical or mental condition that limits work (%)	20.0	21.2	20.6	
Over the past 2 weeks, had little or no interest in doing things and felt down, depressed, or hopeless (%)	30.3	29.4	29.9	
Target children's baseline measures (%)				
Born in the United States	99.2	99.8	99.5	
Race/ethnicity				
Hispanic/Latino	1.0	1.0	1.0	
Black, non-Hispanic/Latino	97.9	98.0	98.0	
Other, non-Hispanic/Latino	1.1	1.0	1.1	
Attended public school in the past year	89.2	92.2	90.7	*
Grade[e]				
Grade 9	54.4	53.9	54.2	
Grade 10	45.4	45.6	45.5	
Is covered by public health insurance	99.2	99.5	99.3	
Has a physical, emotional or mental health problem that limits activities	6.7	5.4	6.1	
Parent's rating of child's health is excellent, very good, or good	2.3	3.1	2.7	
Administrative data measures				
Earnings in the year before random assignment, according to unemployment data ($)	7,435	7,070	7,253	
Family receives TANF or Safety Net Assistance (%)	34.9	34.7	34.8	
TANF payments in the year before random assignment ($)	618	583	601	
Family receives food stamps (%)	93.0	94.1	93.6	
Food stamp payments in the year before to random assignment ($)	5,451	5,180	5,316	
Target child proficient on English exam (%)[f]	12.7	16.5	14.6	*
Target child proficient on math exam (%)[f]	6.3	7.8	7.1	
Sample size	613	613	1,226	

(continued)

Appendix Table E.2 (continued)

SOURCES: MDRC calculations using Family Rewards baseline survey and random assignment module data, New York City Department of Education and Shelby County Schools administrative records, New York State unemployment insurance (UI) wage records, Tennesee Department of Labor and Workforce Development UI wage records, and administrative records data from the New York City and Memphis human resources administrations.

NOTES: TANF = Temporary Assistance for Needy Families.

To assess differences in characteristics between research groups, chi-square tests were used for categorical variables and t-tests were used for continuous variables. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

[a]Families with parents who reported their marital status as single, single but living with a boyfriend or girlfriend, separated, divorced, or widowed are considered single-parent families; those with parents who reported their marital status as married or legal domestic partnership are considered two-parent families.

[b]This measure refers to sample members who enrolled in Family Rewards with their spouses or legal domestic partners.

[c]These measures exclude information for enrolled second parents in two-parent households, of which there were 111.

[d]"Full time" means 30 hours a week or more.

[e]Grades 9 and 10 were "target grades" for the Family Rewards program. Therefore, every enrolled family had to have a child in grade 9 or 10.

[f]Proficiency level is only reported for high school students who had taken a standardized test to determine proficiency within the two years prior to enrollment. Data were available for most students who were in ninth or tenth grade at enrollment.

Appendix Table E.3

Estimates from a Logistic Regression for the Probability of Being a Program Group Participant

Variable	Parameter Estimate		P-Value
Intercept	-0.4		0.587
Family baseline measures			
Site: Bronx	0.1		0.333
Two adults in the household	0.0		0.873
Age	0.0		0.840
Number of children in the household	0.1	**	0.010
Primary language spoken at home is English	-0.3	*	0.076
Female	0.3	*	0.098
Does not have a high school diploma or equivalency certificate or above	0.1		0.399
Currently working	0.1		0.601
Working full time	0.0		0.745
U.S. citizen by birth	0.4	**	0.017
Black, non-Hispanic/Latino	-0.1		0.831
Hispanic/Latino	-0.2		0.634
Target child is a U.S. citizen by birth	0.2		0.307
TANF payments in the year before random assignment	0.0		0.330
Family lives in public housing or receives Section 8 rental assistance	-0.1		0.306
Family receives TANF or Safety Net Assistance	-0.1		0.395
Covered by public health insurance	-0.4		0.263
Missing			
Race	-11.4		0.966
Education status	0.3		0.492
Employment status	-0.1		0.829
Housing status	-0.5		0.101
Likelihood ratio	31.6		0.138
Wald statistic	29.3		0.207
Sample size			2,456

SOURCES: MDRC calculations using Family Rewards baseline survey and random assignment module data and administrative records data from the New York City and Memphis human resources administrations.

NOTE: TANF = Temporary Assistance for Needy Families.
Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.
In two-parent families, only characteristics for the first adult who enrolled in the study are included.

Appendix Table E.4

Estimates from a Logistic Regression for the Probability of Being a Program Group Participant, by City

Variable	Parameter Estimate		P-Value
Estimate for Bronx participants			
Intercept	-0.4		0.659
Family baseline measures			
Two adults in the household	-0.1		0.719
Age	0.0		0.467
Number of children in the household	0.1		0.203
Primary language spoken at home is English	-0.2		0.149
Female	0.4		0.118
High school diploma or equivalency certificate or above	0.0		0.858
Currently working	0.0		0.850
Working full time	0.0		0.951
U.S. citizen by birth	0.3	**	0.038
Black, non-Hispanic/Latino	-0.3		0.425
Hispanic/Latino	-0.4		0.364
Target child is U.S. citizen by birth	0.3		0.152
TANF payments in the year prior to random assignment	0.0		0.317
Family lives in public housing or receives Section 8 rental assistance	-0.2		0.190
Family receives TANF or Safety Net Assistance	-0.2		0.463
Family is covered by public health insurance	-0.3		0.435
Missing			
Race	-12.5		0.978
Education status	0.3		0.541
Employment status	-0.2		0.758
Housing status	0.3		0.543
Likelihood ratio	19.8		0.651
Wald statistic	17.9		0.762
Sample size			1,230

(continued)

Appendix Table E.4 (continued)

Variable	Parameter Estimate		P-Value
Estimate for Memphis participants			
Intercept	0.7		0.672
Family baseline measures			
Two adults in the household	0.1		0.518
Age	0.0		0.582
Number of children in the household	0.1	**	0.031
Primary language spoken at home is English	-14.4		0.978
Female	0.2		0.493
High school diploma or equivalency certificate or above	0.1		0.310
Currently working	0.1		0.495
Working full time	-0.1		0.556
U.S. citizen by birth	14.9		0.977
Black, non-Hispanic/Latino	0.6		0.339
Hispanic/Latino	0.0		0.991
Target child is U.S. citizen by birth	-1.6		0.307
TANF payments in the year prior to random assignment	0.0		0.729
Family lives in public housing or receives Section 8 rental assistance	0.0		0.903
Family receives TANF or Safety Net Assistance	-0.1		0.480
Family is covered by public health insurance	-0.5		0.539
Missing			
Race	0.0		.
Education status	0.0		0.960
Employment status	0.0		0.964
Housing status	-0.9	**	0.022
Likelihood ratio	30.5		0.107
Wald statistic	22.0		0.458
Sample size			1,226

SOURCES: MDRC calculations using Family Rewards baseline survey and random assignment module data and administrative records data from the New York City and Memphis human resources administrations.

NOTE: TANF = Temporary Assistance for Needy Families.
Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.
In two-parent families, only characteristics for the first adult who enrolled in the study are included.

Appendix Table E.5

Sample Sizes and Missing Values for Selected Outcomes

Outcome	Sample Size	Missing Values
Income and material hardship		
Average total household income in the month before the survey (including Family Rewards payments)	1,912	104
Household income at or below the federal poverty level (including rewards)	1,910	106
Currently has any bank account	1,980	36
Any savings	1,960	56
Any housing/utilities material hardship in the past 12 months	1,987	29
Average score on "State of Hope" scale	1,979	37
Parents rating themselves pretty happy	2,000	16
Education		
Graduated on time	2,676	0
Attendance rate is 95% or higher, Year 3	2,676	0
Number of credits earned, Years 1 to 3	2,676	0
State core exams passed, Years 1 to 3	2,676	0
Health		
Adults		
Had a health checkup	1,950	66
Had 1 or more dental checkups	1,974	42
Average self-rated health	2,011	5
Children		
Had a health checkup or got shots	1,864	152
Had 1 or more dental checkups	1,832	184
Employment and work		
Has any trade license or training certification	2,016	0
Ever participated in any education, training, or employment activity	2,010	6
Employed in the past year	2,012	4
Average quarterly employment	2,565	2
Total earnings	2,565	2

SOURCES: MDRC calculations using data from the Family Rewards 24-month survey, Children's Aid Society's Family Rewards program data, New York City Department of Education and Shelby County Schools administrative records, New York State unemployment insurance (UI) wage records, and Tennesee Department of Labor and Workforce Development UI wage records.

Appendix Table E.6

Family Rewards 24-Month Survey
Response Rates for Selected Outcomes

Outcome (%)	Program Group	Control Group
Income and material hardship		
Average total household income in the month before the survey (including Family Rewards payments)	95.4	94.2
Currently has any bank account	98.7	97.7
Any savings	97.8	96.7
Any housing/utilities material hardship in the past 12 months	98.6	98.5
Average score on "State of Hope" scale	98.5	97.8
Parents rating themselves pretty happy	99.3	99.1
Health		
Adults		
Had a health checkup	96.7	96.8
Had 1 or more dental checkups	97.4	98.5
Average self-rated health	99.8	99.7
Children		
Had a health checkup or got shots	94.4	90.4
Had 1 or more dental checkups	92.9	88.8
Employment and work		
Has any trade license or training certification	100.0	100.0
Ever participated in any education, training, or employment activity	99.6	99.8
Employment in the past year	99.7	99.9
Sample size (total= 2,016)	1,025	991

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

Appendix Table E.7

Regression Coefficients for Estimated Impacts on Household Income and Attendance in Year 2

Variable	Parameter Estimate		P-Value
Household income in the month before the survey			
Intercept	1750.0	***	0.000
Assigned to Family Rewards program group (impact)	138.1	***	0.004
Family baseline measures			
Age	-11.8	***	0.000
Married	236.8	***	0.001
U.S. citizen by birth	135.5	*	0.096
Male	128.7		0.262
Black, non-Hispanic/Latino	181.1	**	0.019
Does not have a high school diploma or equivaleency certificate or above	-201.7	***	0.000
Site: Bronx	34.2		0.653
Working at the time of enrollment	59.3		0.363
Self-rated health status fair/poor at enrollment	13.5		0.810
Enrolled in the study after December 1, 2011	-89.3	*	0.089
Employed in the quarter before enrollment	-215.5	***	0.008
Employment earnings in the quarter before enrollment	0.1	***	0.000
Family receiving TANF or Safety Net Assistance in the year before enrollment	-144.3	**	0.013
R-Square	0.080		
Sample size			1,912

Variable	Parameter Estimate		P-Value
Attendance Rate, Year 2			
Intercept	80.4	***	0.000
Assigned to Family Rewards program group (impact)	2.0	**	0.045
Family baseline measures			
Site: Bronx	-8.9	***	0.000
Male	-1.3		0.185
Black, non-Hispanic/Latino	-0.9		0.615
Special education	-2.8	**	0.047
Number of children in the household	-0.9	**	0.012
Primary language spoken at home is English	-1.3		0.435
Parents are married	3.6	**	0.012
Mother has a high school diploma or equivalency certificate	3.5	***	0.001
Mother employed at enrollment	3.5	***	0.001
Mother does not live in the household	2.9		0.241
Enrolled in the study after December 1, 2011	-2.9	***	0.010
Score from English language arts proficiency test, eighth grade	-0.1	***	0.003
Score from math proficiency test, eighth grade	4.4		0.452
In ninth grade at study enrollment	-2.5	**	0.011
R-Square	0.087		
Sample size			2676
Number of clusters			2407

(continued)

Appendix Table E.7 (continued)

SOURCES: MDRC calculations using Family Rewards baseline survey and random assignment module data and administrative records data from the New York City and Memphis human resources administrations, New York State unemployment insurance (UI) wage records, and Tennessee Department of Labor and Workforce Development UI wage records.

NOTE: TANF = Temporary Assistance for Needy Families.
Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Appendix Table E.8

Impacts on Income, Poverty, and Well-Being with Westfall-Young Adjusted P-Values

Outcome	Program Group	Control Group	Difference (Impact)		P-Value	Adjusted P-Value	Effect Size
Income and poverty							
Average total household income in the month before the survey (including Family Rewards payments)[a] ($)	1,636	1,498	138	***	0.004	0.016	
Household income at or below the federal poverty level (including rewards)[a,b] (%)	73.5	78.3	-4.8	**	0.012	0.045	
Use of banking/financial services (%)							
Currently has any bank account	65.5	44.4	21.1	***	0.000	0.000	
Family savings							
Any savings (%)	20.5	12.0	8.5	***	0.000	0.000	
Material hardship							
Financial situation is better than last year	60.0	51.7	8.3	***	0.000	0.001	
Any housing/utilities material hardship in the past 12 months (%)	64.4	64.1	0.3		0.879	0.878	
Psychosocial well-being							
Average score on "State of Hope" scale (6 = low; 24 = high)[c]	17.8	17.6	0.2	**	0.044	0.086	0.089
Parents rating themselves pretty happy[d] (%)	45.1	39.9	5.2	**	0.017	0.049	
Sample size (total = 2,016)	1,025	991					

(continued)

Appendix Table E.8 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

The Westfall-Young multiple comparison correction adjusts p-values to deal with inflated familywise error rates, or the probability of making one or more false discoveries when examining multiple outcomes.

[a]Monthly household income amounts equal to or greater than $10,000 were excluded from this calculation. About 4.9 percent of the sample was excluded from the income measures because respondents did not know the information or refused to provide the information. An additional 0.2 percent of the sample was excluded because the income provided was over $10,000.

[b]Annual household income was calculated by multiplying the respondent's income in the month before the survey interview by 12. For program group members, it includes Family Rewards payments earned during program Years 2 and 3. Families' status relative to the federal poverty level was calculated based on their annual incomes (monthly income multiplied by 12) and the household sizes at the time of the survey. The poverty threshold was derived from the 2013 or 2014 Poverty Guidelines, depending on when a respondent was interviewed.

[c]The "State of Hope" scale measures the level of ongoing goal-directed thinking. The response codes (1 to 4) of the six items for each person are summed, with lower values representing less goal-directed thinking and higher values representing more. The scale was taken from Snyder et al. (1996).

[d]Happiness was measured using the U.S. General Social Survey question: "Taken all together, how would you say things are these days — would you say that you are very happy, pretty happy, or not too happy?"

Appendix Table E.9

Impacts on School Progress Years 1 to 3 for Students in Grades 9 and 10 at the Time of Random Assignment with Westfall-Young Adjusted P-Values

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Adjusted P-Value
Graduated on time	63.4	63.1	0.3	0.850	0.979
Attendance rate is 95% or higher,[a] Year 3	28.9	29.1	-0.2	0.908	0.979
Number of credits earned,[b] Years 1 to 3	30.1	29.9	0.2	0.637	0.976
State core exams passed,[c,d] Years 1 to 3	2.7	2.7	0.0	0.709	0.976
Sample size (total = 2,676)	1,343	1,333			

SOURCE: MDRC calculations using data from New York City Department of Education and Shelby County Schools administrative records.

NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Note that all outcomes in the table include zero values for students who were no longer enrolled.

Years 1, 2, 3, and 4 cover the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years, respectively.

The Westfall-Young multiple comparison correction adjusts p-values to deal with inflated familywise error rates, or the probability of making one or more false discoveries when examining multiple outcomes.

[a]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City include enrollment for the regular school year. Records for students in Memphis include enrollment during the regular school year, alternative education programs, and summer school.

[b]Students in New York City earn 1 credit per course per semester completed. Students in Memphis earn 0.5 credits per course per semester. Credits for students in Memphis were multiplied by two to create a standard scale for comparison. To be considered on time to graduate, students in New York City must earn an average of 11 credits per school year and students in Memphis must earn an average of 5.5 credits per school year.

[c]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[d]The End-of-Course exam measures in this table include the following exams: English 1, English 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History.

Appendix Table E.10

Impacts on Families' Health Services and Outcomes with Westfall-Young Adjusted P-Values

Outcome	Program Group	Control Group	Difference (Impact)		P-Value	Adjusted P-Value	Effect Size
Health care visits in the past 12 months (%)							
Had a health checkup	88.4	87.6	0.8		0.600	0.836	
Had 1 or more dental checkups	66.2	54.0	12.2	***	0.000	0.000	
Parent health outcomes and health care receipt							
Average self-rated health (1 = poor; 5 = excellent)	3.2	3.0	0.2	***	0.001	0.004	0.133
Sample size (total = 2,016)	1,025	991					
Child health outcomes and health care receipt (%)							
Had health checkup or got shots	94.9	94.4	0.5		0.623	0.836	
Had 1 or more dental checkups	92.3	88.4	3.9	***	0.005	0.015	
Sample size (total = 1,881)	976	905					

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

The Westfall-Young multiple comparison correction adjusts p-values to deal with inflated familywise error rates, or the probability of making one or more false discoveries when examining multiple outcomes.

The results in Table E.10 differ slightly from the results presented in Tables 5.1, 5.2, and 5.3. In order to perform the Westfall-Young correction, a different set of covariates common to adults and children were used to obtain the impact estimates in Table E.10.

Appendix Table E.11

Impacts on Education and Employment Activity with Westfall-Young Adjusted P-Values

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Adjusted P-Value
Survey Responses (%)					
Has any trade license or training certification	46.6	42.8	3.9 *	0.077	0.149
Ever participated in any education, training, or employment activity	36.3	32.2	4.1 *	0.051	0.145
Employed in past year	66.5	67.4	-1.0	0.570	0.571
Sample size (total = 2,016)	1,025	991			
Unemployment insurance data, Years 1 to 3					
Average quarterly employment (%)	49.6	52.2	-2.6 **	0.018	0.077
Total earnings ($)	27,684	29,718	-2,034 **	0.019	0.077
Sample size (total = 2,565)	1,286	1,279			

SOURCES: MDRC calculations using data from the Family Rewards 24-month survey, New York State unemployment insurance (UI) wage records, and Tennesee Department of Labor and Workforce Development UI wage records.

NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who were not employed.

This tables includes only employment and earnings in jobs covered by the New York State and Tennessee UI programs. It does not include employment outside of either state, or in jobs not covered by the UI system (for example, "off-the-books" jobs and federal government jobs).

The Westfall-Young multiple comparison correction adjusts p-values to deal with inflated familywise error rates, or the probability of making one or more false discoveries when examining multiple outcomes.

Appendix Table E.12

Summary of Impacts with Effect Sizes

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Income and poverty					
Average total household income in month prior to interview (including Family Rewards payments)[a] ($)	1,636	1,498	138 ***	0.004	0.129
Household income at or below the federal poverty level (including rewards)[a,b] (%)	73.5	78.3	-4.8 **	0.012	-0.112
Any savings (%)	20.5	12.0	8.5 ***	0.000	0.230
Children's Education (%)					
Graduated on time	63.4	63.1	0.3	0.855	0.007
Attendance rate is 95% or higher,[c] Year 3	28.9	29.1	-0.2	0.910	-0.004
Number of credits earned,[d] Years 1 to 3	30.1	29.9	0.2	0.651	0.018
State core exams passed,[e,f] Years 1 to 3	2.7	2.7	0.0	0.716	-0.012
Family Health					
Parent had a health checkup (%)	88.4	87.6	0.8	0.569	0.026
Parent had 2 or more dental checkups (%)	36.1	22.5	13.6 ***	0.000	0.297
Parent's self-rated health (1 = poor; 5 = excellent)	3.2	3.0	0.1 ***	0.002	0.126
Child had health checkup or got shots (%)	94.9	94.4	0.5	0.614	0.023
Child had 2 or more dental checkups (%)	62.4	46.4	16.0 ***	0.000	0.321
Parent's work and training					
Has any degree, license, or certificate (%)	78.5	77.8	0.7	0.651	0.017
Has any trade license or training certification (%)	46.6	42.7	3.9 *	0.073	0.079
Average quarterly employment, Years 1 to 3[g] (%)	49.6	52.2	-2.6 **	0.018	-0.060
Total earnings, Years 1 to 3 ($)[g]	27,684	29,718	-2,034 **	0.019	-0.061
Sample size (total = 2,016)	1,025	991			

(continued)

Appendix Table E.12 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey, Children's Aid Society's Family Rewards program data, New York City Department of Education and Shelby County Schools administrative records, and New York State unemployment insurance (UI) wage records and Tennesee Department of Labor and Workforce Development UI wage records.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

Note that all outcomes in the table include zero values for students who were no longer enrolled.

Dollar averages include zero values for sample members who were not employed.

Years 1, 2, and 3 cover the 2011-2012, 2012-2013, and 2013-2014 school years, respectively.

Education measures include all students who were enrolled in ninth or tenth grade at baseline (2,676 sample memebers). Employment measures calculated from unemployment administrative records include all enrolled parents (2,565 sample members).

[a]Monthly household income amounts equal to or greater than $10,000 were excluded from this calculation. About 4.9 percent of the sample was excluded from the income measures because respondents did not know or refused to provide the information. An additional 0.2 percent of the sample was excluded because the income provided was over $10,000.

[b]Annual household income was calculated by multiplying the respondent's income in the month prior to the survey interview by 12. For program group members, it includes Family Rewards payments earned during program Years 2 and 3. The federal poverty level was calculated based on annual income (monthly income multiplied by 12) and the household size at the time of the survey. The poverty threshold was measured according to the 2013 or 2014 Poverty Guidelines, depending on when a respondent was interviewed.

[c]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City include enrollment for the regular school year. Records for students in Memphis include enrollment during the regular school year, alternative education programs, and summer school.

[d]Students in New York City earn 1 credit per course per semester completed. Students in Memphis earn 0.5 credits per course per semester. Credits for students in Memphis were multiplied by two to create a standard scale for comparison. To be considered on time to graduate, students in New York City must earn an average of 11 credits per school year and students in Memphis must earn an average of 5.5 credits per school year.

[e]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[f]The End-of-Course exam measures in this table include the following exams: English 1, English, 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History.

[g]This category only includes employment and earnings in jobs covered by the New York State and Tennessee UI programs. It does not include employment outside of either state, or in jobs not covered by the UI system (for example, "off-the-books" jobs and federal government jobs).

Appendix Table E.13

Impacts on Income and Income Sources with Effect Sizes

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Income and poverty					
Average total household income in month prior to interview (excluding Family Rewards payments)[a] ($)	1,452	1,497	-45	0.332	-0.043
Average monthly Family Rewards payments received during Year 2 ($)	184				
Average total household income in month prior to interview (including Family Rewards payments)[a] ($)	1,636	1,498	138 ***	0.004	0.129
Household income at or below the federal poverty level (including rewards)[a,b] (%)	73.5	78.3	-4.8 **	0.012	-0.112
Total household income in prior year as a percentage of the federal poverty level (including rewards)[a,b] (%)					
Less than 50%	26.6	33.7	-7.1 ***	0.001	-0.155
50% to 100%	46.9	44.6	2.3	0.313	0.046
101% to 129%	14.1	13.2	1.0	0.539	0.028
130% or more	12.3	8.5	3.8 ***	0.006	0.125
Income sources (%)					
Household income source in month prior to interview					
Respondent's earnings	60.0	60.5	-0.5	0.794	-0.010
Other household members' earnings	23.6	23.6	0.0	0.996	0.000
Food stamps	82.5	81.7	0.8	0.632	0.021
Child support	25.0	22.7	2.3	0.210	0.055
Temporary Assistance for Needy Families (TANF) or other cash assistance	7.4	8.2	-0.8	0.515	-0.029
Unemployment insurance	4.7	5.7	-1.0	0.311	-0.045
Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	11.5	10.7	0.9	0.538	0.027
Heating or cooling assistance	7.4	5.8	1.6	0.153	0.064
Free or reduced-price school lunch	75.8	71.6	4.2 **	0.033	0.095
Supplemental Security Income or Social Security Disability Insurance	32.4	29.9	2.5	0.199	0.053
Other	4.6	4.2	0.4	0.655	0.020
Sample size (total = 2,016)	1,025	991			

(continued)

Appendix Table E.13 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

Italics indicate outcomes calculated for a subset of the full sample.

[a]Monthly household income amounts equal to or greater than $10,000 were excluded from this calculation. About 4.9 percent of the sample was excluded from the income measures because respondents did not know or refused to provide the information. An additional 0.2 percent of the sample was excluded because the income provided was over $10,000.

[b]Annual household income was calculated by multiplying the respondent's income in the month prior to the survey interview by 12. For program group members, it includes Family Rewards payments earned during program Years 2 and 3. The federal poverty level was calculated based on annual income (monthly income multiplied by 12) and the household size at the time of the survey. The poverty threshold was measured according to the 2013 or 2014 Poverty Guidelines, depending on when a respondent was

Appendix Table E.14

Impacts on Banking, Savings, and Debt with Effect Sizes

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Use of banking/financial services (%)					
Currently has any bank account	65.5	44.4	21.1 ***	0.000	0.424
Currently has checking account	44.2	35.2	9.0 ***	0.000	0.184
Financial transactions at least once a month					
Cash check at check casher	18.4	22.8	-4.4 **	0.017	-0.108
Pay bill at check casher	26.3	27.6	-1.3	0.496	-0.030
Family savings and debt					
Average savings ($)	145	82	63 **	0.012	0.115
$0 (%)	79.5	88.0	-8.5 ***	0.000	-0.230
$1 to $250 (%)	7.9	4.9	3.0 ***	0.007	0.124
$251 to $500 (%)	4.3	2.1	2.2 ***	0.006	0.126
More than $500 (%)	6.2	3.5	2.7 ***	0.006	0.126
Any (%)	20.5	12.0	8.5 ***	0.000	0.230
Average debt ($)	7,308	7,012	295	0.636	0.021
$0 (%)	43.6	41.5	2.1	0.344	0.042
$1 to $1,000 (%)	8.6	7.2	1.4	0.250	0.053
$1,001 to $5,000 (%)	18.0	18.1	-0.1	0.971	-0.002
$5,001 to $15,000 (%)	14.8	20.0	-5.2 ***	0.003	-0.136
More than $15,000 (%)	14.2	11.9	2.3	0.133	0.068
Sample size (total = 2,016)	1,025	991			

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

Appendix Table E.15

Impacts on Material Hardship, Financial Strain, and Psychosocial Well-Being with Effect Sizes

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Any housing/utilities material hardship in the past 12 months (%)	64.4	64.1	0.3	0.879	0.007
Did not pay full rent or mortgage	41.4	42.0	-0.6	0.791	-0.012
Evicted from home for not paying rent or mortgage	5.5	5.4	0.2	0.864	0.008
Did not pay full utility bill[a]	42.6	42.9	-0.3	0.876	-0.007
Utility was turned off [a]	13.3	11.8	1.5	0.293	0.047
Phone service was disconnected[b]	22.0	23.6	-1.6	0.400	-0.038
Food security (1 = high; 4 = low)[c]	3.2	3.2	0.0	0.495	0.030
Insufficient food[d]	25.4	26.7	-1.3	0.497	-0.030
Strongly or somewhat agree with the following (%)					
Financial situation is better than last year	60.0	51.7	8.3 ***	0.000	0.167
Do not worry about having enough money in future	20.7	23.3	-2.6	0.160	-0.063
Can generally afford to buy needed things	70.9	66.2	4.7 **	0.023	0.102
Sometimes have enough money to buy something or go somewhere just for fun	30.8	31.7	-0.9	0.665	-0.019
Financial well-being (4 = low; 16 = high)[e]	9.3	9.1	0.2 **	0.021	0.103
Did not have enough money to buy food sometime in the past 12 months (%)	43.3	47.3	-4.0 *	0.074	-0.079
Did not get needed medical care because of cost in past 12 months[f] (%)	11.1	11.1	-0.1	0.974	-0.002
Did not fill prescription because of cost in past 12 months (%)	18.5	19.5	-1.0	0.573	-0.025
Psychosocial well-being					
Average score on "State of Hope" scale (6 = low; 24 = high)[g]	17.8	17.6	0.2 **	0.042	0.090
How life today compares to way it was a year ago (%)					
Much or somewhat better	66.4	58.3	8.2 ***	0.000	0.168
Level of happiness[h] (%)					
Very or pretty happy	76.2	72.2	4.0 **	0.037	0.091
Sample size (total = 2,016)	1,025	991			

(continued)

Appendix Table E.15 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

[a]Utilities include gas, oil, and electricity.

[b]This otucome includes cellular or land service.

[c]The food security question describes food eaten by the family in the prior month: 1 = Enough to eat of the kinds of food desired; 2 = Enough to eat but not always the kinds of food desired; 3 = Sometimes not enough to eat; 4 = Often not enough to eat.

[d]Insufficient food is defined as "sometimes or "often times" not having enough food to eat.

[e]Components of the financial well-being scale have been coded such that a lower score implies being worse off and a higher score implies being better off. The scale was calculated by summing responses to the four component questions. Thus, the financial well-being scale presented here ranges from 4 to 16 points.

[f]This outcome excludes prescriptions.

[g]The "State of Hope" scale measures the level of ongoing goal-directed thinking. The response codes (1 to 4) of the six items for each person are summed, with lower values representing less goal-directed thinking and higher values representing more. The scale was taken from Snyder et al. (1996).

[h]Happiness was measured using the U.S. General Social Survey question: "Taken all together, how would you say things are these days — would you say that you are very happy, pretty happy, or not too happy?"

Appendix Table E.16

Summary Program Impacts by Poverty Level at Random Assignment with Effect Sizes

Outcome	Income Less Than 50% of FPL at Baseline: Program Group	Control Group	Difference (Impact)	P-Value	Effect Size	Income at or Above 50% of FPL at Baseline: Program Group	Control Group	Difference (Impact)	P-Value	Effect Size	
Income and Poverty (%)											
Household income at or below the federal poverty level (including rewards)[a,b]	79.4	83.4	-4.1	0.110	-0.104	68.0	73.3	-5.3 *	0.065	-0.116	
Any savings	16.6	10.3	6.4 ***	0.004	0.186	24.3	13.8	10.5 ***	0.000	0.267	
Any housing/utilities material hardship in the past 12 months	62.5	64.5	-2.0	0.516	-0.042	66.2	63.5	2.7	0.371	0.056	
Did not have enough money to buy food sometime in the past 12 months	41.9	48.1	-6.2 *	0.052	-0.124	44.8	46.4	-1.7	0.590	-0.034	
Very or pretty happy[c]	75.9	69.5	6.3 **	0.026	0.142	76.6	74.7	1.9	0.468	0.044	
Education											
Number state core exams passed, Years 1 to 3[d,e]	2.3	2.4	-0.1	0.329	-0.049	3.0	2.92	0.1	0.522	0.030	
Attendance rate is 95% or higher, Year 3 (%)[f]	26.2	27.5	0.0	0.604	-0.029	31.4	30.7	0.7	0.787	0.015	
Graduated on time (%)	57.9	61.5	0.0	0.192	-0.072	68.8	64.6	4.3 *	0.098	0.090	††
Health											
All dependent children had health insurance (%)[g]	97.6	94.7	2.8 **	0.024	0.147	93.1	94.9	-1.9	0.213	-0.078	††
Parents' average self-rated health (1 = poor; 5 = excellent)	3.0	2.9	0.1 *	0.093	0.096	3.3	3.1	0.2 **	0.010	0.147	
Focal child had 2 or more dental checkups in past 12 months (%)	60.2	48.0	12.2 ***	0.000	0.244	65.2	44.2	21.0 ***	0.000	0.421	†

(continued)

Appendix Table E.16 (continued)

Outcome	Income Less Than 50% of FPL at Baseline: Program Group	Control Group	Difference (Impact)	P-Value	Effect Size	Income at or Above 50% of FPL at Baseline: Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Work										
Ever participated in any education, training, or employment activity (%)	33.5	31.9	1.6	0.590	0.034	39.1	32.2	6.9 **	0.021	0.144
Currently employed at the time of the survey	36.9	37.6	-0.7	0.799	-0.014	74.1	75.8	-1.7	0.497	-0.040
Unemployment Insurance-covered employment earnings, Years 1 to 3 ($)	8,239	11,323	-3,083 ***	0.003	-0.150	45,955	47,185	-1,230	0.360	-0.036
Reward Participation, Years 1 to 4										
Among families who earned at least one reward										
Average reward amount earned[h]	*5,328*	—	—	—	—	*7,103*	—	—	—	—
Average reward amount earned, by domain										
Education	*2,767*	—	—	—	—	*3,111*	—	—	—	—
Health	*1,907*	—	—	—	—	*1,713*	—	—	—	—
Workforce	*2,515*	—	—	—	—	*3,101*	—	—	—	—
Sample size (total = 2,016)	497	490				528	501			

(continued)

Appendix Table E.16 (continued)

SOURCES: MDRC calculations using data from the Family Rewards 24-month survey, Children's Aid Society's Family Rewards program data, New York City Department of Education and Shelby County Schools administrative records, New York State unemployment insurance (UI) wage records, and Tennesee Department of Labor and Workforce Development UI wage records.

NOTES: FPL = federal poverty level.

This table presents survey outcomes only for focal children who were living in the household at the time of the interview and at random assignment.

Sample sizes vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. The p-value indicates the likelihood that the difference between the program and control groups arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Statistical significance levels across subgroups are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

Education measures include all students who were enrolled in ninth or tenth grade at baseline (2,676 sample members). Employment measures calculated from unemployment administrative records include all enrolled parents (2,565 sample members).

[a]Monthly household income amounts equal to or greater than $10,000 were excluded from this calculation. About 4.9 percent of the sample was excluded from the income measures because respondents did not know or refused to provide the information. An additional 0.2 percent of the sample was excluded because the income provided was over $10,000.

[b]Annual household income was calculated by multiplying by 12 the respondent's income in the month prior to the survey interview. For program group members, it includes Family Rewards payments earned during program Years 2 and 3. The federal poverty level was calculated based on annual income (monthly income multiplied by 12) and the household size at the time of the survey. The poverty threshold was measured according to the 2011 Poverty Guidelines, depending on when a respondent was interviewed.

[c]Happiness was measured using the U.S. General Social Survey question: "Taken all together, how would you say things are these days — would you say that you are very happy, pretty happy, or not too happy?"

[d]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[e]The End-of-Course exam measures in this table include the following exams: English 1, English, 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History.

[f]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City included enrollment for the regular school year. Records for students in Memphis included enrollment during the regular school year, alternative education programs, and summer school.

[g]Child-related health insurance measures were calculated for sample members with at least one child at the time of the survey.

[h]The lowest and highest amounts earned in in all years combined were $40 and $20,700 for families with income less than 50 percent of the federal poverty level at baseline and $40 and $22,185 for families with income at or above 50 percent of the federal poverty level at baseline.

Appendix Table E.17

Implementation Study Data Sources

Fidelity to program design	• Documents created by the program designers and lead program operator • Interviews with staff from CAS-Central • Regular observations of program operation • Review of all relevant program documents (for example, training materials and Family Earnings Plans) • Case management data from the program's management information system (MIS) (namely, to determine if participants received biannual Family Earning Plan reviews) • Interviews with staff and participant
Program exposure (dosage)	• Case management and reward receipt data from program's MIS
Quality of program delivery	• Regular observations of program operation • Analysis of coupon rejections and payment errors • Participant satisfaction items on 24-month survey
Program participant responsiveness	• Case management and reward receipt data from program's MIS • Participant engagement items on 24-month survey • Interviews with staff and participants
Program differentiation	• Case management and reward receipt data from program's MIS • Interviews with staff and participants • Review of program documents
Participant satisfaction	• Participant satisfaction items on 24-month survey • Interviews with participants • Regular observations of program operation

Appendix F

Response Analysis for the 24-Month Survey

The Family Rewards 2.0 24-month survey provides information about the study sample members on a range of topics, including participation in employment and education activities, health care, employment and job characteristics, household composition, and child outcomes. It is necessary to assess the reliability of impact results for the survey sample along two dimensions. First, the results for the survey sample may or may not generalize to (or be representative of) the research sample because individuals who responded to the survey may be different from those who did not respond. Second, the failure of some families to respond to the survey may compromise the validity of the impact estimates, particularly if response rates differed by research group. This appendix presents a description of the survey fielding effort and assesses the survey in terms of its generalizability to the research sample and its validity for estimating program impacts. Overall, the results suggest that the survey sample provides valid estimates of the program's effects that can be generalized to the research sample.

Sample Selection and Survey Administration

The research sample includes 2,456 families; all enrolled families were selected to be interviewed for the survey.[1] Box F.1 provides definitions of the sample groups referred to in this appendix. The survey instrument consisted of 10 modules, which were administered to the entire research sample. The fielding period for the survey began in October 2013 and concluded in May 2014. Members of the fielded sample were initially contacted by letter, and then telephoned to conduct the survey interviews. Individuals were offered $30 for completing the interview.[2] Respondents were interviewed anywhere from 24 to 31 months after they were randomly assigned. Control group members were interviewed on average nearly a couple of weeks later (relative to random assignment) than were program group members, 26.7 months versus 26.2 months, respectively.

Characteristics of Respondents and Non-Respondents

Among the 2,456 families in the research sample, 2,016 completed a survey interview, for an overall response rate of 82 percent. The response rate was about 83 percent for the program group and 81 percent for the control group.

[1]The unit of selection for the fielded sample was families, and the interview was administered to one adult family member. Only 4.5 percent of the research sample families had two adult participants. In these cases, the adult family member who completed the baseline information form first, usually the female, was contacted for the survey interview.

[2]Incentives increased from $30 to $60 if participants had not responded within 26 months of their random assignment date. Approximately 61 percent of the respondent sample received a $30 incentive, 39 percent received a $60 incentive.

Box F.1

Sample Definitions

Research sample: All 2,456 families randomly assigned during the sample intake period, which ranged from September, 2011, through February, 2012.

Respondent sample: Research sample members who completed the Family Rewards 2.0 24-month survey.

Non-respondent sample: Research sample members who did not complete the Family Rewards 2.0 24-month survey for various reasons — for example, because they were not located or refused to be interviewed.[*]

---

[*]The non-respondent sample includes 10 deceased sample members.

Table F.1 presents selected baseline characteristics for survey respondents and non-respondents. Some differences are to be expected, given that individuals who respond to surveys tend to be different, usually less disadvantaged, from those who do not. The table illustrates these differences. The respondent sample, for example, has a higher fraction of individuals for whom English is the primary language spoken at home. U.S. citizens by birth were more likely to have responded to the survey than naturalized citizens and non-citizens. The first row of Table F.1 shows that individuals in the program group were more likely to respond to the survey than those in the control group. Although there is always the possibility that program group respondents are different from control group respondents, even with similar response rates between the two groups, this issue becomes more of a concern with differential response rates. Differences in characteristics between the program and control groups, in turn, lead to the possibility that impact estimates may be biased, or invalid.

These differences were also tested in a regression model, in which the probability of response was regressed on a range of baseline covariates. Table F.2 presents the results. Some of the statistically significant differences shown in Table F.1 remain statistically significant in the model shown in Table F.2. Although the difference shown in Table F.1 between respondents and non-respondents in the program group is not large (4 percentage points), this difference remains statistically significant in the regression model (Table F.2). In addition, the full model is statistically significant. The differences between the two groups suggest that the survey findings should be generalized to the research sample with moderate caution.

Appendix Table F.1

Characteristics of the Fielded Survey Sample at the Time of Random Assignment, by Response Status

Characteristic	Survey Respondents	Non-respondents	Full Sample	
Assigned to program group (%)	50.8	46.6	50.1	
Family baseline measures				
Two-parent family[a] (%)	14.3	15.7	14.5	
Two parents enrolled in Family Rewards[b] (%)	4.3	5.7	4.5	
Average number of children in the household	2.6	2.8	2.7	**
Primary language spoken at home is English (%)	75.0	67.5	73.6	***
Family living in public housing (%)	23.6	16.9	22.4	***
Family receiving Section 8 rental assistance (%)	19.1	16.3	18.6	
Earnings above 50% of the federal poverty level (%)	51.0	50.2	50.9	
City (%)				
Bronx	50.0	50.7	50.1	
Memphis	50.0	49.3	49.9	
Randomly assigned before December 2011	33.1	30.5	32.7	
Parents' baseline measures[c]				
Female (%)	95.0	92.0	94.5	**
Average age (years)	40.8	40.4	40.7	
U.S. citizen by birth (%)	88.1	82.3	87.1	***
Race/ethnicity (%)				
Hispanic/Latino	36.9	40.5	37.6	**
Black, non-Hispanic/Latino	61.8	56.6	60.9	**
Other, non-Hispanic/Latino	1.3	3.0	1.6	**
Education (highest degree or diploma earned) (%)				
Less than high school diploma or equivalency certificate	49.2	45.0	48.5	*
High school diploma or equivalency certificate	12.2	10.9	12.0	*
More than high school diploma or equivalency certificate	38.5	44.1	39.5	*
Currently working (%)	51.5	45.6	50.5	**
Working full time[d] (%)	37.1	32.8	36.3	*

(continued)

Appendix Table F.1 (continued)

Characteristic	Survey Respondents	Non-Respondents	Full Sample	
Is covered by public health insurance (%)	83.8	86.1	84.2	
Rates health as excellent, very good, or good (%)	25.4	29.1	26.1	
Has a physical or mental condition that limits work (%)	18.6	20.2	18.9	
Over the past 2 weeks, had little or no interest in doing things and felt down, depressed, or hopeless (%)	29.4	27.0	29.0	
Target children's baseline measures (%)				
Born in the United States	92.7	89.1	92.1	**
Race/ethnicity				
Hispanic/Latino	37.2	40.2	37.7	**
Black, non-Hispanic/Latino	61.3	56.4	60.4	**
Other, non-Hispanic/Latino	1.5	3.4	1.9	**
Attended public school in the past year	95.2	95.2	95.2	
Grade[e]				
Grade 9	54.5	54.5	54.5	
Grade 10	43.4	41.4	43.0	
Is covered by public health insurance	98.5	99.5	98.7	*
Has a physical, emotional, or mental health problem that limits activities	5.6	4.6	5.4	
Parent's rating of child's health is excellent, very good, or good	2.8	3.9	3.0	
Administrative data measures				
Earnings in the year before random assignment according to unemployment insurance data ($)	8,746	8,053	8,622	
Family receives TANF or Safety Net Assistance (%)	24.4	27.7	25.0	
TANF payments in the year before random assignment ($)	491	774	542	***
Family receives food stamps (%)	92.4	91.8	92.3	
Food stamp payments in the year before random assignment ($)	5,176	5,231	5,186	
Target child proficient on English exam[f] (%)	19.6	20.2	19.7	
Target child proficient on math exam[f] (%)	25.0	26.0	25.2	
Sample size	2,016	440	2,456	

(continued)

Appendix Table F.1 (continued)

SOURCES: MDRC calculations using Family Rewards baseline survey and random assignment module data, New York City Department of Education and Shelby County Schools administrative records, New York State unemployment insurance (UI) wage records, Tennesee Department of Labor and Workforce Development UI wage records, and administrative records data from the New York City and Memphis human resources administrations.

NOTES: TANF = Temporary Assistance for Needy Families.

To assess differences in characteristics between research groups, chi-square tests were used for categorical variables and t-tests were used for continuous variables. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

[a]Families with parents who reported their marital status as single, single but living with a boyfriend or girlfriend, separated, divorced, or widowed are considered single-parent families; those with parents who reported their marital status as married or legal domestic partnership are considered two-parent families.

[b]This measure refers to sample members who enrolled in Family Rewards with their spouses or legal domestic partners.

[c]These measures exclude information for enrolled second parents in two-parent households, of which there were 111 (86 from respondent households and 25 from non-respondent households).

[d]"Full time" means 30 hours a week or more.

[e]Grades 9 and 10 were "target grades" for the Family Rewards program. Therefore, every enrolled family had to have a child in grade 9 or 10.

[f]Proficiency level is only reported for high school students who had taken a standardized test to determine proficiency within the two years prior to enrollment. Data were available for most students who were in ninth or tenth grade at enrollment.

Comparison Between the Research Groups in the Survey Respondent Sample

Table F.3 shows selected baseline characteristics for program and control group survey respondents. The two groups are similar across most dimensions with a few moderate exceptions. For example, among survey respondents, parents in the program group were slightly younger than those in the control group. Families in the program group on average had more children than families in the control group. Most of these differences are small.

These differences are also estimated in a regression framework, in which the likelihood of being in the program group is regressed on a range of baseline characteristics (Table F.4). Only one of the differences found in Table F.3 remains statistically significant in the full model and the model as a whole is not statistically significant. This finding confirms that the survey respondent sample is balanced between the research groups and that the program's effects using the survey are unlikely to be biased.

Appendix Table F.2

Estimates from a Logistic Regression for the Probability of Being a Respondent to the Family Rewards 24-Month Survey

Variable	Research Sample Parameter Estimate		P-Value
Intercept	0.3		0.773
Family baseline measures			
Assigned to program group	0.2	*	0.080
Site: Bronx	0.2		0.439
Two adults in the household	0.1		0.449
Age	0.0		0.130
Number of children in the household	-0.1		0.136
Primary language spoken at home is English	0.4	**	0.024
Female	0.4	*	0.058
Does not have a high school diploma or equivalency certificate or above	-0.1		0.225
Currently working	0.3		0.106
Working full time	0.0		0.942
U.S. citizen by birth	0.3	*	0.085
Black, non-Hispanic/Latino	0.8	**	0.027
Hispanic/Latino	0.8	**	0.046
Target child is U.S. citizen by birth	0.1		0.805
TANF payments in the year before random assignment ($)	0.0	***	0.007
Family lives in public housing or receives Section 8 rental assistance	0.4	***	0.006
Family receives TANF or Safety Net Assistance	0.2		0.296
Child covered by health insurance	-1.2		0.113
Missing			
Race	10.2		0.978
Education status	-0.4		0.339
Employment status	0.8		0.430
Housing status	-0.4		0.268
Likelihood ratio	74.4		<.0001
Wald statistic	71.1		<.0001
Sample size			2,456

SOURCES: MDRC calculations using Family Rewards baseline survey and random assignment module data and administrative records data from the New York City and Memphis human resources administrations.

NOTE: TANF = Temporary Assitance for Needy Families.
Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.
In two-parent families, only characteristics for the first adult who enrolled in the study are included.

Appendix Table F.3

Characteristics of the Fielded Survey Sample at the Time of Random Assignment, by Response Status

Characteristic	Respondents		
	Program	Control	
Family baseline measures			
Two-parent family[a] (%)	14.3	14.2	
Two parents enrolled in Family Rewards[b] (%)	4.3	4.2	
Average number of children in the household	2.7	2.6	**
Primary language spoken at home is English (%)	74.7	75.2	
Family living in public housing (%)	23.3	24.0	
Family receiving Section 8 rental assistance (%)	19.9	18.3	
Earnings above 50% of the federal poverty level (%)	51.5	50.6	
City (%)			
Bronx	50.3	49.5	
Memphis	49.7	50.5	
Randomly assigned before December 2011 (%)	33.7	32.6	
Parents' baseline measures[c]			
Female (%)	95.9	94.1	*
Average age (years)	40.5	41.1	*
U.S. citizen by birth (%)	89.0	87.3	
Race/ethnicity (%)			
Hispanic/Latino	37.0	36.9	
Black, non-Hispanic/Latino	61.7	61.9	
Other, non-Hispanic/Latino	1.4	1.2	
Education (highest degree or diploma earned) (%)			
Less than high school diploma or equivalency certificate	48.7	49.8	
High school diploma or equivalency certificate	12.2	12.2	
More than high school diploma or equivalency certificate	39.1	38.0	
Currently working (%)			
Working full time[d] (%)	37.5	36.6	

(continued)

Appendix Table F.3 (continued)

Characteristic	Respondents	
	Program	Control
Is covered by public health insurance (%)	83.1	84.7
Rates health as excellent, very good, or good (%)	24.8	26.1
Has a physical or mental condition that limits work (%)	17.3	20.0
Over the past 2 weeks, had little or no interest in doing things and felt down, depressed, or hopeless (%)	28.5	30.3
Target children's baseline measures (%)		
Born in the United States	93.6	91.8
Race/ethnicity		
Hispanic/Latino	37.5	36.9
Black, non-Hispanic/Latino	60.7	61.9
Other, non-Hispanic/Latino	1.9	1.2
Attended public school in thepast year	94.3	96.1 *
Grade[e]		
Grade 9	54.3	54.8
Grade 10	43.8	42.9
Is covered by public health insurance	93.4	93.7
Has a physical, emotional, or mental health problem that limits activities	6.2	4.9
Parent's rating of child's health is excellent, very good, or good	2.5	3.0
Administrative data measures		
Earnings in the year before random assignment according to unemployment insurance data ($)	8,953	8,531
Family receives TANF or Safety Net Assistance (%)	23.8	25.0
TANF payments in the year before random assignment ($)	484	498
Family receives food stamps (%)	91.8	92.9
Food stamp payments in the year before random assignment ($)	5,228	5,122
Target child proficient on English exam[f] (%)	18.2	21.1
Target child proficient on math exam[f] (%)	24.3	25.7
Sample size	1,025	991

(continued)

Appendix Table F.3 (continued)

SOURCES: MDRC calculations using Family Rewards baseline survey and random assignment module data, New York City Department of Education and Shelby County Schools administrative records, New York State unemployment insurance (UI) wage records, Tennesee Department of Labor and Workforce Development UI wage records, and administrative records data from the New York City and Memphis human resources administrations.

NOTES: TANF = Temporary Assistance for Needy Families.

To assess differences in characteristics between research groups, chi-square tests were used for categorical variables and t-tests were used for continuous variables. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Sample sizes may vary because of missing values.

Rounding may cause slight discrepancies in calculating sums.

[a]Families with parents who reported their marital status as single, single but living with a boyfriend or girlfriend, separated, divorced, or widowed are considered single-parent families; those with parents who reported their marital status as married or legal domestic partnership are considered two-parent families.

[b]This measure refers to sample members who enrolled in Family Rewards with their spouses or legal domestic partners.

[c]These measures exclude information for enrolled second parents in two-parent households, of which there were 111 (44 from program groupt households and 42 from control group households).

[d]"Full time" means 30 hours a week or more.

[e]Grades 9 and 10 were "target grades" for the Family Rewards program. Therefore, every enrolled family had to have a child in grade 9 or 10.

[f]Proficiency level is only reported for high school students who had taken a standardized test to determine proficiency within the two years prior to enrollment. Data were available for most students who were in ninth or tenth grade at enrollment.

Consistency of Impacts

The previous section comparing survey respondents and non-respondents suggested that the survey findings should be generalized to the research sample with some caution. The results for the survey sample may not be generalizable to the full research sample on English language use and related characteristics given the differences on these same characteristics between individuals who responded to the survey and those who did not.

This section helps put the survey results in context, by comparing impacts estimated from administrative data for the research and respondent samples. Impacts for the research sample represent the best estimate of the program's effects, given that they use the full program group and control group, and not a potentially nonrandom subset of survey respondents. Thus, finding similar impacts for the survey sample and the larger research sample would give more credibility to the survey analysis. Tables F.5, F.6, and F.7 present the results, showing impacts for employment outcomes, using unemployment insurance records data; education outcomes, using data from department of education records; and impacts on Temporary Assistance to Needy Families (TANF), Safety Net Assistance (SNA), and food stamp receipt, using public

Appendix Table F.4

Estimates from a Logistic Regression for the Probability of Being a Program Group Respondent to the Family Rewards 24-Month Survey

	Fielded Sample	
Variable	Parameter Estimate	P-Value
Intercept	-0.1	0.8429
Family baseline measures		
Site: Bronx	0.2	0.304
Two adults in the household	0.1	0.689
Age	0.0	0.435
Number of children in the household	0.1 **	0.046
Primary language spoken at home is English	-0.2	0.212
Female	0.3	0.141
Does not have a high school diploma or equivalency certificate or above	0.0	0.637
Currently working	0.2	0.102
Working full time	-0.1	0.327
U.S. citizen by birth	0.3	0.137
Black, non-Hispanic/Latino	-0.1	0.773
Hispanic/Latino	-0.2	0.578
Target child is U.S. citizen by birth	0.2	0.224
TANF payments in the year before random assignment	0.0	0.947
Family lives in public housing or receives Section 8 rental assistance	-0.1	0.382
Family receives TANF or Safety Net Assistance	-0.1	0.492
Covered by public health insurance	-0.3	0.467
Missing		
Race	-11.6	0.966
Education status	0.2	0.587
Employment status	0.0	0.954
Housing status	-0.7 *	0.059
Likelihood ratio	28.0	0.258
Wald statistic	25.9	0.361
Sample size		2,016

SOURCES: MDRC calculations using Family Rewards baseline survey and random assignment module data and administrative records data from the New York City and Memphis human resources administrations.

NOTE: TANF = Temporary Assistance for Needy Families.
Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.
In two-parent families, only characteristics for the first adult who enrolled in the study are included.

assistance records. A test of significance was conducted comparing the impacts of respondents to non-respondents. The primary purpose of this analysis is to compare whether the impact for one group (respondents) is significantly different from the impact for another group (non-respondents). If the difference between these two impacts is not statistically significant, as indicated by daggers in the rightmost column of the tables, this comparison confirms that estimates from the administrative outcomes are similar across the two groups.

The employment outcomes presented in Table F.5 are largely consistent across each of the three samples. Only one significant difference between the respondent and non-respondent sample is apparent for having been employed in Year 1. In general, the impacts on the respondent sample are larger in magnitude than impacts on the non-respondent sample, but are very similar to impacts for the research sample and do not differ enough to cause concern. Table F.6 shows impacts on educational outcomes. Impacts are larger for the survey respondent sample than for the research and non-respondent samples. With the exception of the impacts on graduation and attendance, the impacts across samples are consistent. For outcomes in which differences in impacts between respondent and non-respondent samples are statistically significant, impacts for the respondent sample are similar to the full sample. Table F.7 shows impacts on public assistance receipt. Receipt rates of TANF or SNA benefits differed between respondents and non-respondents. Though some differences between the respondent and non-respondent samples are statistically significant, impacts for the respondent sample are similar to the research sample.

Taken together, Tables F.5, F.6, and F.7 do not suggest any major problems for the generalizability of the respondent sample. The magnitude and direction of impacts of the respondent sample are similar to those in the research sample and confirm that the respondent sample is generalizable to the research sample. The most consistent differences between the respondent and non-respondent samples are observed in education outcomes for graduation and attendance. As an additional test of sensitivity, outcomes in the education domain derived from the survey were run using weights. Survey weights were constructed as the inverse of the predicted probability of response. Overall, the impact estimates across the range of outcomes are not highly sensitive to weighting.

Conclusion

Overall, the variety of tests conducted and results presented suggest that the survey sample provides valid estimates of the program's effects and these effects are representative of those that would have been obtained for the full research sample. Although the survey sample differed from the full sample in terms of English language use and some other baseline characteristics, the administrative record impacts for the survey sample were similar to those for the full research sample and confirmed the generalizability of the respondent sample.

Appendix Table F.5

Impacts on Unemployment Insurance-Covered Earnings and Employment for the Research and Respondent Samples, Years 1 to 3

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	
Year 1					
Ever employed (%)					
Research sample	58.9	61.1	-2.2	0.105	
Respondent sample	58.9	62.7	-3.8 ***	0.010	††
Non-respondent sample	59.1	54.8	4.4	0.224	††
Average quarterly employment (%)					
Research sample	49.0	51.4	-2.4 **	0.029	
Respondent sample	49.4	52.9	-3.4 ***	0.004	
Non-respondent sample	46.7	45.5	1.2	0.671	
Employed four consecutive quarters (%)					
Research sample	39.3	41.2	-1.9	0.151	
Respondent sample	40.0	42.5	-2.6 *	0.074	
Non-respondent sample	35.4	35.9	-0.5	0.886	
Total earnings ($)					
Research sample	8,353	8,927	-574 **	0.020	
Respondent sample	8,522	9,122	-600 **	0.029	
Non-respondent sample	7,451	8,157	-706	0.218	
Year 2					
Ever employed (%)					
Research sample	58.5	61.1	-2.6 *	0.090	
Respondent sample	59.0	62.7	-3.7 **	0.030	
Non-respondent sample	55.6	54.1	1.5	0.699	
Average quarterly employment (%)					
Research sample	49.9	52.0	-2.1	0.113	
Respondent sample	50.4	53.3	-2.9 **	0.048	
Non-respondent sample	47.3	46.5	0.8	0.808	
Employed four consecutive quarters (%)					
Research sample	40.5	42.5	-2.0	0.197	
Respondent sample	40.9	43.3	-2.4	0.158	
Non-respondent sample	38.7	39.0	-0.4	0.919	
Total earnings ($)					
Research sample	9,105	9,929	-824 **	0.016	
Respondent sample	9,265	10,111	-846 **	0.026	
Non-respondent sample	8,238	9,221	-983	0.230	

(continued)

Appendix Table F.5 (continued)

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Year 3				
Ever employed (%)				
Research sample	58.9	63.2	-4.3 ***	0.008
Respondent sample	60.5	64.2	-3.7 **	0.034
Non-respondent sample	51.1	58.4	-7.3 *	0.072
Average quarterly employment (%)				
Research sample	50.9	53.4	-2.5 *	0.086
Respondent sample	52.1	54.5	-2.5	0.119
Non-respondent sample	45.6	48.1	-2.6	0.477
Employed four consecutive quarters (%)				
Research sample	41.9	44.3	-2.4	0.137
Respondent sample	42.5	45.7	-3.1 *	0.083
Non-respondent sample	38.7	38.1	0.6	0.873
Total earnings ($)				
Research sample	10,143	10,529	-386	0.339
Respondent sample	10,317	10,605	-288	0.513
Non-respondent sample	9,235	10,245	-1,011	0.324

SOURCES: New York State unemployment insurance (UI) wage records and Tennesee Department of Labor and Workforce Development UI wage records.

NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Differences across impacts for respondents and non-respondent samples were tested for statistical significance. Statistical significance levels are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who were not employed.

This tables includes only employment and earnings in jobs covered by the New York State and Tennessee UI programs. It does not include employment outside of either state, or in jobs not covered by the UI system (for example, "off-the-books" jobs and federal government jobs).

In two-parent families, only the first adult who enrolled in the study is included.

The full sample includes 2,456 sample members (1,230 program group members and 1,226 control group members). The respondent sample includes 2,016 sample members (1,025 program group members and 991 control group members). The non-respondent sample includes 440 sample memnbers (205 program group members and 235 control group members).

Appendix Table F.6

Impacts on Attendance, Test Scores, and Credits for the Research and Respondent Samples, Students in Grade 9 or 10 at Random Assignment

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	
Enrollment and graduation (%)					
On grade, Year 3					
Research sample	80.9	78.8	2.1	0.186	
Respondent sample	83.1	79.8	3.3 *	0.054	†
Non-respondent sample	69.2	74.6	-5.3	0.219	†
Graduated on-time					
Research sample	65.9	63.3	2.6	0.178	
Respondent sample	68.0	63.7	4.3 **	0.039	††
Non-respondent sample	54.8	61.7	-6.9	0.155	††
Attendance rate[a] (%)					
Year 1					
Research sample	87.9	87.5	0.4	0.628	
Respondent sample	88.2	87.6	0.7	0.417	
Non-respondent sample	85.9	87.1	-1.1	0.533	
Year 2					
Research sample	83.4	80.8	2.6 ***	0.010	
Respondent sample	85.1	81.0	4.1 ***	0.000	††
Non-respondent sample	75.8	79.3	-3.5	0.237	††
Year 3					
Research sample	78.7	76.5	2.2 *	0.070	
Respondent sample	80.4	77.1	3.3 ***	0.009	††
Non-respondent sample	69.8	74.2	-4.4	0.184	††
Attendance rate 95% or higher[a] (%)					
Year 1					
Research sample	45.8	43.0	2.8	0.153	
Respondent sample	46.6	43.6	3.1	0.162	
Non-respondent sample	42.0	40.2	1.9	0.704	
Year 2					
Research sample	37.7	36.0	1.7	0.383	
Respondent sample	39.6	35.8	3.9 *	0.074	††
Non-respondent sample	28.0	36.8	-8.8 *	0.057	††

(continued)

Appendix Table F.6 (continued)

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	
Year 3					
Research sample	29.8	29.4	0.4	0.832	
Respondent sample	30.9	28.4	2.5	0.220	†††
Non-respondent sample	23.4	34.6	-11.3 **	0.013	†††
Number of credits earned[b]					
Year 1					
Research sample	11.1	11.1	0.0	0.995	
Respondent sample	11.3	11.1	0.2	0.358	††
Non-respondent sample	10.5	11.4	-1.0 **	0.040	††
Year 2					
Research sample	10.3	10.0	0.3	0.160	
Respondent sample	10.5	10.0	0.6 **	0.022	††
Non-respondent sample	9.2	10.0	-0.8	0.152	††
Year 3					
Research sample	9.4	9.0	0.4 *	0.081	
Respondent sample	9.7	9.0	0.7 ***	0.006	†††
Non-respondent sample	8.0	9.1	-1.1 *	0.076	†††
Total credits earned, Years 1 to 3[b]					
Research sample	30.8	30.1	0.7	0.178	
Respondent sample	31.5	30.0	1.4 **	0.013	†††
Non-respondent sample	27.7	30.6	-2.9 **	0.027	†††
State core exams passed, Years 1 to 3[c,d]					
Research sample	2.7	2.8	0.0	0.893	
Respondent sample	2.8	2.8	0.0	0.660	
Non-respondent sample	2.5	2.7	-0.2	0.286	

(continued)

Appendix Table F.6 (continued)

SOURCES: New York City Department of Education and Shelby County Schools administrative records.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Differences across impacts for respondents and non-respondent samples were tested for statistical significance. Statistical significance levels are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Only target children are included.

Note that all outcomes in the table include zero values for students who were no longer enrolled.

Years 1, 2, 3, and 4 cover the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years, respectively.

The full sample includes 2,383 students (1,197 program group members and 1,186 control group members). The respondent sample includes 1,964 students (1,001 program group members and 963 control group members). The non-respondent sample includes 419 students (196 program group members and 275 control group members).

[a]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City include enrollment for the regular school year. Records for students in Memphis include enrollment during the regular school year, alternative education programs, and summer school.

[b]Students in New York City earn 1 credit per course per semester completed. Students in Memphis earn 0.5 credits per course per semester. Credits for students in Memphis were multiplied by two to create a standard scale for comparison. To be considered on time to graduate, students in New York City must earn an average of 11 credits per school year and students in Memphis must earn an average of 5.5 credits per school year.

[c]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[d]The End-of-Course exam measures in this table include the following exams: English 1, English, 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History.

Appendix Table F.7

Impacts on Temporary Assistance for Needy Families (TANF) or Safety Net Assistance (SNA) and Food Stamp Receipt and Payments, Years 1 to 2

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	
Year 1					
Ever received TANF/SNA (%)					
Research sample	18.1	17.6	0.5	0.706	
Respondent sample	16.5	17.2	-0.8	0.597	††
Non-respondent sample	26.4	19.1	7.3 **	0.024	††
Amount of TANF/SNA received ($)					
Research sample	450	413	36	0.516	
Respondent sample	362	408	-46	0.410	††
Non-respondent sample	883	444	440 **	0.016	††
Ever received food stamps (%)					
Research sample	91.2	91.5	-0.3	0.790	
Respondent sample	91.1	91.6	-0.6	0.658	
Non-respondent sample	92.1	90.3	1.9	0.503	
Amount of food stamps received ($)					
Research sample	5,289	5,021	268 **	0.021	
Respondent sample	5,259	5,018	240 *	0.060	
Non-respondent sample	5,444	5,029	415	0.160	
Year 2					
Ever received TANF/SNA (%)					
Research sample	14.6	13.9	0.7	0.613	
Respondent sample	14.0	15.1	-1.1	0.460	†††
Non-respondent sample	17.8	8.3	9.5 ***	0.002	†††
Amount of TANF/SNA received ($)					
Research sample	448	421	27	0.670	
Respondent sample	393	451	-58	0.378	††
Non-respondent sample	737	279	458 **	0.019	††
Ever received food stamps (%)					
Research sample	90.1	89.1	1.0	0.403	
Respondent sample	91.2	90.5	0.8	0.551	
Non-respondent sample	85.0	82.4	2.6	0.466	

(continued)

Appendix Table F.7 (continued)

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Amount of food stamps received ($)				
Research sample	4,699	4,576	123	0.292
Respondent sample	4,737	4,663	74	0.560
Non-respondent sample	4,565	4,163	402	0.179

SOURCES: MDRC calculations using administrative records data from the New York City and Memphis human resources administrations.

NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Differences across impacts for respondents and non-respondent samples were tested for statistical significance. Statistical significance levels are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who were not receiving TANF or SNA benefits or food stamps.

The full sample includes 2,456 sample members (1,230 program group members and 1,226 control group members). The respondent sample includes 2,016 sample members (1,025 program group members and 991 control group members). The non-respondent sample includes 440 sample memnbers (205 program group members and 235 control group members).

Appendix G

Impacts by City

Table G.1

Impacts on Income and Income Sources in the Bronx

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Income and poverty				
Average total household income in month prior to interview (excluding Family Rewards payments)[a] ($)	1,418	1,459	-42	0.52
Average monthly Family Rewards payments received during Year 2 ($)	193			
Average total household income in month prior to interview (including Family Rewards payments)[a] ($)	1,610	1,460	150 **	0.02
Household income at or below the federal poverty level (including rewards)[a,b] (%)	71.0	78.8	-7.8 ***	0.01
Total household income in prior year as a percentage of the federal poverty level (including rewards)[a,b] (%)				
Less than 50%	25.8	32.7	-6.9 **	0.02
50% to 100%	45.2	46.1	-0.9	0.78
101% to 129%	17.1	13.2	3.9 *	0.10
130% or more	11.9	8.0	3.9 **	0.04
Income sources (%)				
Household income source in month prior to interview				
Respondent's earnings	61.5	66.3	-4.8 *	0.05
Other household members' earnings	24.8	24.4	0.3	0.90
Food stamps	79.9	82.3	-2.4	0.33
Child support	20.3	17.1	3.2	0.19
Temporary Assistance for Needy Families (TANF) or other cash assistance	5.5	6.7	-1.2	0.41
Unemployment insurance	6.5	6.3	0.2	0.92
Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	10.6	11.3	-0.7	0.72
Heating or cooling assistance	6.6	4.5	2.1	0.14
Free or reduced-price school lunch	70.3	66.2	4.1	0.17
Supplemental Security Income or Social Security Disability Insurance	28.5	25.1	3.4	0.19
Other	4.2	4.3	-0.1	0.94
Sample size (total = 1,007)	516	491		

(continued)

Table G.1 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Italics indicate outcomes calculated for a subset of the full sample.

[a]Monthly household income amounts equal to or greater than $10,000 were excluded from this calculation. About 4.9 percent of the sample was excluded from the income measures because respondents did not know or refused to provide the information. An additional 0.2 percent of the sample was excluded because the income provided was over $10,000.

[b]Annual household income was calculated by multiplying the respondent's income in the month prior to the survey interview by 12. For program group members, it includes Family Rewards payments earned during Years 2 and 3. The federal poverty level was calculated based on annual income (monthly income multiplied by 12) and the household size at the time of the survey. The poverty threshold was measured according to the 2013 or 2014 Poverty Guidelines, depending on when a respondent was interviewed.

Table G.2

Impacts on Income and Income Sources in Memphis

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Income and poverty				
Average total household income in month prior to (excluding Family Rewards payments)[a] ($)	1,488	1,532	-44	0.52
Average monthly Family Rewards payments received during Year 2 ($)	175			
Average total household income in month prior to interview (including Family Rewards payments)[a] ($)	1,663	1,533	130 *	0.06
Household income at or below the federal poverty level (including rewards)[a,b] (%)	76.1	77.9	-1.8	0.49
Total household income in the prior year as a percentage of the federal poverty level (including rewards)[a,b] (%)				
Less than 50%	27.4	34.8	-7.4 ***	0.01
50% to 100%	48.7	43.1	5.6 *	0.08
101% to 129%	11.1	13.1	-2.0	0.34
130% or more	12.9	9.0	3.8 *	0.06
Income sources (%)				
Household income source in the month before the survey				
Respondent's earnings	58.5	55.0	3.5	0.19
Other household members' earnings	22.5	22.6	-0.1	0.98
Food stamps	85.2	81.1	4.0 *	0.08
Child support	29.5	28.3	1.2	0.68
Temporary Assistance for Needy Families (TANF) or other cash assistance	9.4	9.6	-0.2	0.90
Unemployment insurance	2.9	4.9	-2.0 *	0.10
Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	12.5	9.9	2.6	0.19
Heating or cooling assistance	8.3	7.1	1.2	0.47
Free or reduced-price school lunch	81.3	76.9	4.3 *	0.09
Supplemental Security Income or Social Security Disability Insurance	36.2	34.8	1.4	0.63
Other	5.2	4.1	1.1	0.43
Sample size (total = 1,009)	509	500		

(continued)

Table G.2 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Italics indicate outcomes calculated for a subset of the full sample.

[a]Monthly household income amounts equal to or greater than $10,000 were excluded from this calculation. About 4.9 percent of the sample was excluded from the income measures because respondents did not know or refused to provide the information. An additional 0.2 percent of the sample was excluded because the income provided was over $10,000.

[b]Annual household income was calculated by multiplying the respondent's income in the month prior to the survey interview by 12. For program group members, it includes Family Rewards payments earned during Years 2 and 3. The federal poverty level was calculated based on annual income (monthly income multiplied by 12) and the household size at the time of the survey. The poverty threshold was measured according to the 2013 or 2014 Poverty Guidelines, depending on when a respondent was interviewed.

Table G.3

Impacts on Banking, Savings, and Debt in the Bronx

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Use of banking/financial services (%)				
Currently has any bank account	64.1	47.1	17.0 ***	0.000
Currently has checking account	52.4	39.5	12.8 ***	0.000
Financial transactions at least once a month				
Cash check at check casher	18.8	24.5	-5.7 **	0.032
Pay bill at check casher	37.1	39.3	-2.1	0.496
Family savings and debt				
Average savings ($)	164	100	64 *	0.099
$0 (%)	81.7	88.4	-6.7 ***	0.003
Any (%)	18.3	11.6	6.7 ***	0.003
$1 to $250 (%)	4.4	4.0	0.4	0.758
$251 to $500 (%)	4.8	2.0	2.8 **	0.019
More than $500 (%)	7.1	4.5	2.6 *	0.082
Average debt ($)	6,192	5,321	871	0.243
$0 (%)	42.0	42.5	-0.5	0.876
$1 to $1,000 (%)	9.4	6.9	2.5	0.165
$1,001 to $5,000 (%)	21.8	22.2	-0.4	0.879
$5,001 to $15,000 (%)	14.7	18.2	-3.5	0.144
More than $15,000 (%)	11.2	8.9	2.3	0.225
Sample size (total = 1,007)	516	491		

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Table G.4

Impacts on Banking, Savings, and Debt in Memphis

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Use of banking/financial services (%)				
Currently has any bank account	66.9	41.6	25.3 ***	0.00
Currently has checking account	36.2	30.7	5.5 *	0.06
Financial transactions at least once a month				
Cash check at check casher	18.1	21.1	-3.0	0.23
Pay bill at check casher	15.7	16.1	-0.4	0.85
Family savings and debt				
Average savings ($)	126	63	63 **	0.05
$0 (%)	77.2	87.5	-10.3 ***	0.00
Any (%)	22.8	12.5	10.3 ***	0.00
$1 to $250 (%)	11.5	5.8	5.7 ***	0.00
$251 to $500 (%)	3.9	2.2	1.7	0.13
More than $500 (%)	5.4	2.6	2.8 **	0.03
Average debt ($)	8,453	8,685	-232	0.82
$0 (%)	45.2	40.6	4.7	0.13
$1 to $1,000 (%)	7.9	7.4	0.5	0.78
$1,001 to $5,000 (%)	14.0	14.1	0.0	0.99
$5,001 to $15,000 (%)	14.9	21.6	-6.7 ***	0.01
More than $15,000 (%)	17.2	15.0	2.3	0.33
Sample size (total = 1,009)	509	500		

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Table G.5

Impacts on Material Hardship, Financial Strain, and Psychosocial Well-Being in the Bronx

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Any housing/utilities material hardship in the past 12 months (%)	59.7	60.1	-0.5	0.880	
Did not pay full rent or mortgage	41.4	44.2	-2.8	0.371	
Evicted from home for not paying rent or mortgage	4.9	5.9	-0.9	0.517	
Did not pay full utility bill[a]	33.0	32.2	0.9	0.773	
Utility was turned off[a]	6.9	6.1	0.9	0.589	
Phone service was disconnected[b]	17.9	20.6	-2.7	0.279	
Food security (1 = high; 4 = low)[c]	3.1	3.1	0.0	0.548	0.038
Insufficient food[d]	28.1	31.5	-3.3	0.248	
Strongly or somewhat agree with the following (%)					
Financial situation is better than last year	57.1	48.4	8.7 ***	0.006	
Do not worry about having enough money in future	21.8	25.1	-3.3	0.234	
Can generally afford to buy needed things	68.3	62.7	5.6 *	0.066	
Sometimes have enough money to buy something or go somewhere just for fun	36.4	35.5	0.9	0.770	
Financial well-being (4 = low; 16 = high)[e]	9.4	9.1	0.4 **	0.012	0.158
Did not have enough money to buy food sometime in the past 12 months (%)	45.0	50.2	-5.2	0.101	
Did not get needed medical care because of cost in past 12 months[f] (%)	6.1	7.5	-1.4	0.391	
Did not fill prescription because of cost in past 12 months (%)	13.7	14.9	-1.2	0.576	
Psychosocial well-being					
Average score on "State of Hope" scale (6 = low; 24 = high)[g]	18.1	17.6	0.5 ***	0.003	0.188
How life today compares to way it was a year ago (%)					
Much or somewhat better	67.0	52.6	14.4 ***	0.000	
Level of happiness[h] (%)					
Very or pretty happy	72.3	67.1	5.2 *	0.075	
Sample size (total = 1,007)	516	491			

(continued)

Table G.5 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

[a]Utilities include gas, oil, and electricity.

[b]This category includes cellular or land service.

[c]The food security question describes food eaten by the family in the prior month: 1 = Enough to eat of the kinds of food desired; 2 = Enough to eat but not always the kinds of food desired; 3 = Sometimes not enough to eat; 4 = Often not enough to eat.

[d]Insufficient food is defined as "sometimes" or "often times" not having enough food to eat.

[e]Components of the financial well-being scale have been coded such that a lower score implies being worse off and a higher score implies being better off. The scale was calculated by summing responses to the four component questions, each of which is scored on a four-point scale. Thus, the financial well-being scale presented here ranges from 4 to 16 points.

[f]This outcome excludes prescriptions.

[g]The "State of Hope" scale measures the level of ongoing goal-directed thinking. The response codes (1 to 4) of the six items for each person are summed, with lower values representing less goal-directed thinking and higher values representing more. The scale was taken from Snyder et al. (1996).

[h]Happiness is measured using the U.S. General Social Survey question: "Taken all together, how would you say things are these days — would you say that you are very happy, pretty happy, or not too happy?"

Table G.6

Impacts on Material Hardship, Financial Strain, and Psychosocial Well-Being in Memphis

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Any housing/utilities material hardship in the past 12 months (%)	69.1	67.9	1.2	0.678	
Did not pay full rent or mortgage	41.7	39.7	2.1	0.507	
Evicted from home for not paying rent or mortgage	6.2	4.8	1.5	0.311	
Did not pay full utility bill[a]	52.0	53.6	-1.7	0.593	
Utility was turned off[a]	19.8	17.4	2.4	0.330	
Phone service was disconnected[b]	26.3	26.3	0.0	0.999	
Food security (1 = high; 4 = low)[c]	3.3	3.3	0.0	0.687	0.026
Insufficient food[d]	22.7	22.0	0.7	0.799	
Strongly or somewhat agree with the following (%)					
Financial situation is better than last year	62.9	55.0	7.9 **	0.011	
Do not worry about having enough money in future	19.6	21.7	-2.0	0.433	
Can generally afford to buy needed things	73.3	69.8	3.5	0.218	
Sometimes have enough money to buy something or go somewhere just for fun	25.3	27.9	-2.5	0.364	
Financial well-being (4 = low; 16 = high)[e]	9.2	9.1	0.1	0.454	0.047
Did not have enough money to buy food sometime in the past 12 months (%)	41.8	44.3	-2.5	0.417	
Did not get needed medical care because of cost in past 12 months[f] (%)	16.1	14.7	1.4	0.545	
Did not fill prescription because of cost in past 12 months (%)	23.6	24.0	-0.4	0.877	
Psychosocial well-being					
Average score on "State of Hope" scale (6 = low; 24 = high)[g]	17.6	17.6	0.0	0.865	-0.011
How life today compares to way it was a year ago (%)					
Much or somewhat better	65.8	63.8	2.1	0.484	
Level of happiness[h] (%)					
Very or pretty happy	80.2	77.3	2.9	0.261	
Sample size (total = 1,009)	509	500			

(continued)

Table G.6 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

[a]Utilities include gas, oil, and electricity.

[b]This category includes cellular or land service.

[c]The food security question describes food eaten by the family in the prior month: 1 = Enough to eat of the kinds of food desired; 2 = Enough to eat but not always the kinds of food desired; 3 = Sometimes not enough to eat; 4 = Often not enough to eat.

[d]Insufficient food is defined as "sometimes" or "often times" not having enough food to eat.

[e]Components of the financial well-being scale have been coded such that a lower score implies being worse off and a higher score implies being better off. The scale was calculated by summing responses to the four component questions, each of which is scored on a four-point scale. Thus, the financial well-being scale presented here ranges from 4 to 16 points.

[f]This outcome excludes prescriptions.

[g]The "State of Hope" scale measures the level of ongoing goal-directed thinking. The response codes (1 to 4) of the six items for each person are summed, with lower values representing less goal-directed thinking and higher values representing more. The scale was taken from Snyder et al. (1996).

[h]Happiness is measured using the U.S. General Social Survey question: "Taken all together, how would you say things are these days — would you say that you are very happy, pretty happy, or not too happy?"

Table G.7

Impacts on Enrollment, Graduation, Attendance, Credits, and Regents or End-of-Course Exams for Students in Grades 9 and 10 at the Time of Random Assignment in the Bronx

Grade Level and Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Enrollment, Year 3 (%)				
On grade	75.6	72.6	3.0	0.209
Not on grade	15.6	16.4	-0.8	0.692
Not enrolled	8.8	11.0	-2.2	0.193
Graduation (%)				
Graduated on time	61.4	57.2	4.2	0.122
Graduated by Year 4[a]	64.8	61.6	3.2	0.239
Attendance[b] (%)				
Attendance rate, Year 1	83.6	84.1	-0.5	0.725
Attendance rate, Year 2	79.3	77.7	1.6	0.340
Attendance rate, Year 3	73.7	70.8	3.0	0.118
Attendance rate is 95% or higher, Year 1	42.7	39.1	3.6	0.198
Attendance rate is 95% or higher, Year 2	34.3	34.2	0.1	0.977
Attendance rate is 95% or higher, Year 3	25.6	26.8	-1.2	0.630
Credits[c]				
Number of credits earned, Year 1	10.8	10.6	0.2	0.518
Number of credits earned, Year 2	10.1	9.6	0.4	0.199
Number of credits earned, Year 3	9.1	8.6	0.5	0.117
Number of credits earned, Years 1 to 3	29.9	28.8	1.1	0.185
Earned adequate credits, Years 1 to 3 (%)	60.7	54.7	6.1 **	0.028
Regents or End-of-Course exams[d,e]				
Number of state core exams taken, Years 1 to 3	7.8	7.7	0.2	0.540
Number of state core exams passed, Years 1 to 3	3.7	3.7	0.0	0.928
Sample size (total = 1,296)	656	640		

(continued)

Table G.7 (continued)

SOURCES: MDRC calculations using data from New York City Department of Education administrative records.

NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

All outcomes in the table include zero values for students who were no longer enrolled.

Years 1, 2, 3, and 4 cover the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years, respectively.

[a]Students enrolled in tenth grade at the time of random assignment had five years to complete graduation in this measure. Students enrolled in ninth grade at the time of random assignment had four years.

[b]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City include enrollment for the regular school year. Records for students in Memphis include enrollment during the regular school year, alternative education programs, and summer school.

[c]Students in New York City earn 1 credit per course per semester completed. Students in Memphis earn 0.5 credits per course per semester. Credits for students in Memphis were multiplied by two to create a standard scale for comparison. To be considered on time to graduate, students in New York City must earn an average of 11 credits per school year and students in Memphis must earn an average of 5.5 credits per school year.

[d]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[e]The End-of-Course exam measures in this table include the following exams: English 1, English, 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History.

Table G.8

Impacts on Enrollment, Graduation, Attendance, Credits, and Regents or End-of-Course Exams for Students in Grades 9 and 10 at the Time of Random Assignment in Memphis

Grade Level and Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Enrollment, Year 3 (%)				
On grade	83.5	82.9	0.6	0.760
Not on grade	7.7	8.0	-0.3	0.818
Not enrolled	8.9	9.1	-0.3	0.858
Graduation (%)				
Graduated on time	66.4	67.5	-1.1	0.660
Graduated by Year 4[a]	68.4	69.3	-0.9	0.722
Attendance[b] (%)				
Attendance rate, Year 1	90.2	90.3	0.0	0.942
Attendance rate, Year 2	86.0	82.7	3.2 ***	0.005
Attendance rate, Year 3	81.5	80.1	1.4	0.334
Attendance rate is 95% or higher, Year 1	46.6	46.9	-0.3	0.903
Attendance rate is 95% or higher, Year 2	40.1	36.6	3.5	0.203
Attendance rate is 95% or higher, Year 3	32.7	30.6	2.1	0.412
Credits[c]				
Number of credits earned, Year 1	11.1	11.4	-0.2	0.336
Number of credits earned, Year 2	10.1	10.1	0.0	0.998
Number of credits earned, Year 3	9.2	9.2	0.0	0.933
Number of credits earned, Years 1 to 3	30.4	30.6	-0.2	0.746
Earned adequate credits, Years 1 to 3 (%)	51.1	54.4	-3.3	0.220
Regents or End-of-Course exams[d,e]				
Number of state core exams taken, Years 1 to 3	5.1	5.0	0.1	0.460
Number of state core exams passed, Years 1 to 3	1.8	1.7	0.1	0.193
Sample size (total = 1,380)	687	693		

(continued)

Table G.8 (continued)

SOURCES: MDRC calculations using data from Shelby County Schools administrative records.

NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

All outcomes in the table include zero values for students who were no longer enrolled.

Years 1, 2, 3, and 4 cover the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years, respectively.

[a]Students enrolled in tenth grade at the time of random assignment had five years to complete graduation in this measure. Students enrolled in ninth grade at the time of random assignment had four years.

[b]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City include enrollment for the regular school year. Records for students in Memphis include enrollment during the regular school year, alternative education programs, and summer school.

[c]Students in New York City earn 1 credit per course per semester completed. Students in Memphis earn 0.5 credits per course per semester. Credits for students in Memphis were multiplied by two to create a standard scale for comparison. To be considered on time to graduate, students in New York City must earn an average of 11 credits per school year and students in Memphis must earn an average of 5.5 credits per school year.

[d]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[e]The End-of-Course exam measures in this table include the following exams: English 1, English, 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History.

Table G.9

Impacts on Enrollment, Graduation, Attendance, Credits, and Regents or End-of-Course Exams for Students in Grade 9 at the Time of Random Assignment in the Bronx

Grade Level and Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Enrollment and graduation, Year 4 (%)				
On grade	71.5	66.8	4.8	0.164
Not on grade	12.7	14.4	-1.7	0.503
Not enrolled	15.8	18.8	-3.1	0.288
Graduated on time	58.9	56.3	2.6	0.468
Attendance[a] (%)				
Attendance rate, Year 1	82.8	83.9	-1.1	0.538
Attendance rate, Year 2	78.5	76.3	2.2	0.319
Attendance rate, Year 3	74.1	70.3	3.8	0.111
Attendance rate, Year 4	64.2	61.7	2.5	0.389
Attendance rate is 95% or higher, Year 1	42.9	38.3	4.5	0.207
Attendance rate is 95% or higher, Year 2	32.3	33.6	-1.4	0.696
Attendance rate is 95% or higher, Year 3	26.3	29.1	-2.8	0.383
Attendance rate is 95% or higher, Year 4	18.5	18.0	0.4	0.882
Credits[b]				
Number of credits earned, Year 1	10.6	10.4	0.1	0.705
Number of credits earned, Year 2	10.1	9.5	0.6	0.128
Number of credits earned, Year 3	9.3	8.6	0.7 *	0.096
Number of credits earned, Year 4	8.0	7.5	0.5	0.294
Number of credits earned, Years 1 to 4	38.0	36.0	2.0	0.173
Earned adequate credits, Years 1 to 4 (%)	56.8	55.2	1.6	0.659
Regents/End-of-Course exams[c,d]				
Number of state core exams taken, Years 1 to 4	9.3	8.7	0.6	0.189
Number of state core exams passed, Years 1 to 4	4.2	4.2	0.1	0.692
Sample size (total = 729)	366	363		

(continued)

Table G.9 (continued)

SOURCES: MDRC calculations using data from New York City Department of Education administrative records.

NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

All outcomes in the table include zero values for students who were no longer enrolled.

Years 1, 2, 3, and 4 cover the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years, respectively.

[a]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City include enrollment for the regular school year. Records for students in Memphis include enrollment during the regular school year, alternative education programs, and summer school.

[b]Students in New York City earn 1 credit per course per semester completed. Students in Memphis earn 0.5 credits per course per semester. Credits for students in Memphis were multiplied by two to create a standard scale for comparison. To be considered on time to graduate, students in New York City must earn an average of 11 credits per school year and students in Memphis must earn an average of 5.5 credits per school year.

[c]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[d]The End-of-Course exam measures in this table include the following exams: English 1, English, 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History. The U.S. History exam was not administered for students in Year 4.

Table G.10

Impacts on Enrollment, Graduation, Attendance, Credits, and Regents or End-of-Course Exams for Students in Grade 9 at the Time of Random Assignment in Memphis

Grade Level and Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Enrollment and graduation, Year 4 (%)				
On grade	72.0	71.9	0.1	0.974
Not on grade	7.9	6.7	1.2	0.531
Not enrolled	20.1	21.4	-1.3	0.659
Graduated on time	65.7	63.8	1.9	0.589
Attendance[a] (%)				
Attendance rate, Year 1	90.8	89.6	1.3	0.133
Attendance rate, Year 2	86.7	82.4	4.3 ***	0.004
Attendance rate, Year 3	84.6	81.2	3.4 *	0.063
Attendance rate, Year 4	60.3	55.0	5.3 *	0.096
Attendance rate is 95% or higher, Year 1	47.9	47.0	1.0	0.784
Attendance rate is 95% or higher, Year 2	42.7	35.2	7.5 **	0.039
Attendance rate is 95% or higher, Year 3	40.5	35.6	4.9	0.170
Attendance rate is 95% or higher, Year 4	17.0	16.7	0.4	0.900
Credits[b]				
Number of credits earned, Year 1	10.9	10.9	0.0	0.891
Number of credits earned, Year 2	10.4	9.9	0.5	0.171
Number of credits earned, Year 3	9.7	9.1	0.6	0.127
Number of credits earned, Year 4	9.4	8.9	0.5	0.266
Number of credits earned, Years 1 to 4	40.5	38.8	1.7	0.126
Earned adequate credits, Years 1 to 4 (%)	51.9	50.3	1.6	0.654
Regents/End-of-Course exams[c,d]				
Number of state core exams taken, Years 1 to 4	6.0	5.8	0.2	0.177
Number of state core exams passed, Years 1 to 4	2.1	1.9	0.2	0.118
Sample size (total = 742)	368	374		

(continued)

Table G.10 (continued)

SOURCES: MDRC calculations using data from Shelby County Schools administrative records.

NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

All outcomes in the table include zero values for students who were no longer enrolled.

Years 1, 2, 3, and 4 cover the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years, respectively.

[a]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City include enrollment for the regular school year. Records for students in Memphis include enrollment during the regular school year, alternative education programs, and summer school.

[b]Students in New York City earn 1 credit per course per semester completed. Students in Memphis earn 0.5 credits per course per semester. Credits for students in Memphis were multiplied by two to create a standard scale for comparison. To be considered on time to graduate, students in New York City must earn an average of 11 credits per school year and students in Memphis must earn an average of 5.5 credits per school year.

[c]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[d]The End-of-Course exam measures in this table include the following exams: English 1, English, 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History. The U.S. History exam was not administered for students in Year 4.

Table G.11

Impacts on Parent-Child Interactions and Focal Child's Educational Outcomes and Activities, High School Students in the Bronx

Outcome	Program Group	Control Group	Difference (Impact)		P-Value	Effect Size
Parent-child interactions in past month						
Respondent has done the following (1 = never; 4 = several times per week)						
Talked with child about school	3.7	3.6	0.1	**	0.011	0.167
Helped child with homework	2.2	2.3	-0.1		0.257	-0.075
Checked to see child's homework was complete	3.3	3.2	0.0		0.853	0.012
Helped child prepare for test	2.2	2.3	0.0		0.593	-0.035
Respondent discussed child's report card with child during 2012-2013 school year (%)	96.1	94.8	1.3		0.341	
Activities since random assignment (%)						
Child has done the following since random assignment						
Participated in educational programs, such as extra classes or tutoring	58.0	58.4	-0.4		0.898	
Enrolled in college exam preparation program	62.3	66.5	-4.2		0.179	
Received special education	17.0	18.2	-1.2		0.556	
Prepared for the ACT or SAT	82.8	83.8	-1.0		0.699	
Took the ACT or SAT	57.3	61.1	-3.8		0.244	
Child participated in any extracurricular activity	87.4	84.6	2.8		0.214	
Program to help with schoolwork, test preparation, or homework	59.0	60.1	-1.1		0.743	
Sports	66.2	58.8	7.4	**	0.018	
Non-sports lessons	38.5	42.3	-3.8		0.238	
Club or youth group	35.9	30.3	5.7	*	0.069	
Work for pay	22.3	20.0	2.4		0.376	
Sample size (total = 940)	489	451				

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: This table presents outcomes only for focal children who were living in the household at the time of the survey and at random assignment.

Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

Table G.12

Impacts on Parent-Child Interactions and Focal Child's Educational Outcomes and Activities, High School Students in Memphis

Outcome	Program Group	Control Group	Difference (Impact)		P-Value	Effect Size
Parent-child interactions in past month						
Respondent has done the following						
(1 = never; 4 = several times per week)						
Talked with child about school	3.7	3.7	0.0		0.855	0.012
Helped child with homework	2.7	2.7	0.0		0.979	0.002
Checked to see child's homework was complete	3.3	3.3	0.0		0.569	0.038
Helped child prepare for test	2.6	2.6	0.0		0.887	-0.009
Respondent discussed child's report card with child during 2012-2013 school year (%)	95.2	93.1	2.1		0.179	
Activities since random assignment (%)						
Child has done the following since random assignment						
Participated in educational programs, such as extra classes or tutoring	63.3	62.6	0.7		0.833	
Enrolled in college exam preparation program	70.1	70.2	-0.1		0.972	
Received special education	15.1	12.0	3.1	*	0.089	
Prepared for the ACT or SAT	87.1	83.0	4.2	*	0.073	
Took the ACT or SAT	58.2	63.6	-5.5	*	0.065	
Child participated in any extracurricular activity	88.4	86.6	1.8		0.426	
Program to help with schoolwork, test preparation, or homework	59.1	58.6	0.5		0.880	
Sports	55.0	55.3	-0.3		0.930	
Non-sports lessons	45.8	42.8	3.1		0.354	
Club or youth group	57.0	51.7	5.3		0.107	
Work for pay	29.2	25.2	4.0		0.177	
Sample size (total = 941)	487	454				

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: This table presents outcomes only for focal children who were living in the household at the time of the survey and at random assignment.

Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

Table G.13

Impacts on Enrollment, Graduation, Attendance, Credits, and Regents or End-of-Course Exams for Students in Grades 9 and 10 at the Time of Random Assignment, by English Proficiency Test Score in the Bronx

	Proficient on Eighth-Grade ELA Test				Not Proficient on Eighth-Grade ELA Test				
Grade Level and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Program Group	Control Group	Difference (Impact)	P-Value	
Enrollment, Year 3 (%)									
On grade	86.1	91.7	-5.5	0.139	77.5	70.3	7.3 **	0.016	†††
Not on grade	10.1	5.1	5.0	0.114	16.1	19.5	-3.4	0.192	††
Not enrolled	3.8	3.2	0.6	0.814	6.4	10.2	-3.9 *	0.055	
Graduation (%)									
Graduated on time	77.5	75.3	2.3	0.663	61.2	54.8	6.3 *	0.060	
Graduated by Year 4[a]	78.0	79.6	-1.6	0.753	64.1	58.9	5.3	0.112	
Attendance[b] (%)									
Attendance rate, Year 1	87.6	83.7	3.8	0.235	83.8	85.7	-1.9	0.262	
Attendance rate, Year 2	85.2	83.7	1.5	0.648	79.3	77.9	1.4	0.502	
Attendance rate, Year 3	82.0	82.1	-0.1	0.972	74.5	70.4	4.2 *	0.078	
Attendance rate is 95% or higher, Year 1	53.7	44.9	8.8	0.132	40.4	38.6	1.8	0.586	
Attendance rate is 95% or higher, Year 2	44.4	43.8	0.5	0.929	32.4	32.6	-0.3	0.936	
Attendance rate is 95% or higher, Year 3	31.7	37.8	-6.1	0.276	24.1	24.7	-0.6	0.846	
Credits[c]									
Number of credits earned, Year 1	12.2	11.7	0.6	0.350	10.6	10.6	0.0	0.997	
Number of credits earned, Year 2	11.5	11.3	0.2	0.788	10.1	9.6	0.5	0.238	
Number of credits earned, Year 3	10.4	10.2	0.2	0.708	9.3	8.6	0.7 *	0.070	

(continued)

Table G.13 (continued)

Grade Level and Outcome	Proficient on Eigth-Grade ELA Test: Program Group	Control Group	Difference (Impact)	P-Value	Not Proficient on Eigth-Grade ELA Test: Program Group	Control Group	Difference (Impact)	P-Value
Number of credits earned, Years 1 to 3	34.2	33.2	1.0	0.572	30.0	28.8	1.2	0.241
Earned adequate credits, Years 1 to 3 (%)	75.8	69.3	6.5	0.231	60.3	53.4	6.9 **	0.047
Regents or End-of-Course exams[d,e]								
Number of state core exams taken, Years 1 to 3	6.6	6.9	-0.4	0.346	8.5	8.1	0.4	0.227
Number of state core exams passed, Years 1 to 3	4.9	5.2	-0.3	0.252	3.5	3.4	0.1	0.654
Sample size (total = 1,150)	145	143			447	415		

SOURCES: MDRC calculations using data from New York City Department of Education administrative records.

NOTES: ELA = English language arts.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Statistical significance levels across subgroups are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

All outcomes in the table include zero values for students who were no longer enrolled.

Years 1, 2, 3, and 4 cover the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years, respectively.

[a]Students enrolled in tenth grade at the time of random assignment had five years to complete graduation in this measure. Students enrolled in ninth grade at the time of random assignment had four years.

[b]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City include enrollment for the regular school year. Records for students in Memphis include enrollment during the regular school year, alternative education programs, and summer school.

[c]Students in New York City earn 1 credit per course per semester completed. Students in Memphis earn 0.5 credits per course per semester. Credits for students in Memphis were multiplied by two to create a standard scale for comparison. To be considered on time to graduate, students in New York City must earn an average of 11 credits per school year and students in Memphis must earn an average of 5.5 credits per school year.

[d]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[e]The End-of-Course exam measures in this table include the following exams: English 1, English, 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History.

Table G.14

Impacts on Enrollment, Graduation, Attendance, Credits, and Regents or End-of-Course Exams for Students in Grades 9 and 10 at the Time of Random Assignment, by English Proficiency Test Score in Memphis

	Proficient on Eighth-Grade ELA Test				Not Proficient on Eighth-Grade ELA Test				
Grade Level and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Program Group	Control Group	Difference (Impact)	P-Value	
Enrollment, Year 3 (%)									
On grade	97.4	91.5	6.0 *	0.088	83.7	84.1	-0.5	0.830	
Not on grade	2.4	1.0	1.5	0.542	8.5	9.0	-0.6	0.730	
Not enrolled	0.1	7.5	-7.4 ***	0.006	7.9	6.8	1.1	0.501	†††
Graduation (%)									
Graduated on time	87.8	84.6	3.2	0.541	64.4	66.6	-2.2	0.452	
Graduated by Year 4[a]	89.1	84.5	4.6	0.361	66.3	68.9	-2.6	0.375	
Attendance[b] (%)									
Attendance rate, Year 1	94.5	95.2	-0.7	0.450	89.9	90.3	-0.4	0.553	
Attendance rate, Year 2	94.0	90.0	4.0 **	0.037	85.8	83.9	1.9	0.128	
Attendance rate, Year 3	92.8	85.9	6.9 **	0.011	81.9	81.8	0.1	0.931	††
Attendance rate is 95% or higher, Year 1	65.5	67.3	-1.8	0.799	44.3	45.5	-1.2	0.706	
Attendance rate is 95% or higher, Year 2	59.6	53.6	6.0	0.423	38.4	35.3	3.1	0.310	
Attendance rate is 95% or higher, Year 3	49.4	48.1	1.4	0.854	32.0	28.7	3.3	0.247	
Credits[c]									
Number of credits earned, Year 1	12.5	13.2	-0.8	0.153	11.0	11.2	-0.2	0.431	
Number of credits earned, Year 2	11.4	11.2	0.2	0.793	9.9	10.1	-0.1	0.672	
Number of credits earned, Year 3	11.6	11.0	0.6	0.387	9.3	9.2	0.0	0.907	

(continued)

Table G.14 (continued)

Grade Level and Outcome	Proficient on Eigth-Grade ELA Test: Program Group	Control Group	Difference (Impact)	P-Value	Not Proficient on Eigth-Grade ELA Test: Program Group	Control Group	Difference (Impact)	P-Value
Number of credits earned, Years 1 to 3	35.4	35.4	0.0	0.984	30.2	30.5	-0.3	0.665
Earned adequate credits, Years 1 to 3 (%)	67.3	69.7	-2.5	0.724	50.1	53.7	-3.6	0.242
Regents or End-of-Course exams[d,e]								
Number of state core exams taken, Years 1 to 3	5.2	5.2	0.0	0.872	5.3	5.3	0.0	0.860
Number of state core exams passed, Years 1 to 3	3.7	3.8	-0.1	0.706	1.5	1.4	0.2 **	0.025
Sample size (total = 1,283)	80	105			561	537		

SOURCES: MDRC calculations using data from Shelby County Schools administrative records.

NOTES: ELA = English language arts.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Statistical significance levels across subgroups are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

All outcomes in the table include zero values for students who were no longer enrolled.

Years 1, 2, 3, and 4 cover the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years, respectively.

[a]Students enrolled in tenth grade at the time of random assignment had five years to complete graduation in this measure. Students enrolled in ninth grade at the time of random assignment had four years.

[b]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City include enrollment for the regular school year. Records for students in Memphis include enrollment during the regular school year, alternative education programs, and summer school.

[c]Students in New York City earn 1 credit per course per semester completed. Students in Memphis earn 0.5 credits per course per semester. Credits for students in Memphis were multiplied by two to create a standard scale for comparison. To be considered on time to graduate, students in New York City must earn an average of 11 credits per school year and students in Memphis must earn an average of 5.5 credits per school year.

[d]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[e]The End-of-Course exam measures in this table include the following exams: English 1, English, 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History.

Table G.15

Impacts on Enrollment, Graduation, Attendance, Credits, and Regents or End-of-Course Exams for Students in Grade 9 at the Time of Random Assignment, by English Proficiency Test Score in the Bronx

	Proficient on Eighth-Grade ELA Test				Not Proficient on Eighth-Grade ELA Test				
Grade Level and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Program Group	Control Group	Difference (Impact)	P-Value	
Enrollment and Graduation, Year 4 (%)									
On grade	78.8	87.9	-9.1	0.192	71.2	63.3	7.9 *	0.053	††
Not on grade	2.7	3.3	-0.6	0.855	16.1	17.1	-1.0	0.766	
Not enrolled	18.5	8.8	9.8	0.126	12.7	19.6	-7.0 **	0.033	††
Graduated on time	71.4	80.5	-9.1	0.270	58.5	52.9	5.7	0.186	
Attendance[a] (%)									
Attendance rate, Year 1	86.1	85.7	0.4	0.937	82.7	84.8	-2.1	0.303	
Attendance rate, Year 2	83.2	83.2	-0.1	0.991	78.5	76.2	2.4	0.346	
Attendance rate, Year 3	80.8	83.9	-3.1	0.494	74.4	68.9	5.6 *	0.055	
Attendance rate, Year 4	69.3	71.3	-2.0	0.768	64.8	60.7	4.2	0.213	
Attendance rate is 95% or higher, Year 1	51.3	48.8	2.5	0.761	42.1	35.8	6.3	0.132	
Attendance rate is 95% or higher, Year 2	44.8	43.3	1.5	0.858	30.0	32.0	-2.0	0.624	
Attendance rate is 95% or higher, Year 3	30.1	44.0	-13.9 *	0.099	26.3	25.2	1.1	0.763	
Attendance rate is 95% or higher, Year 4	25.9	22.0	3.9	0.598	17.8	17.6	0.2	0.956	
Credits[b]									
Number of credits earned, Year 1	12.2	12.3	-0.2	0.880	10.3	10.3	0.1	0.889	
Number of credits earned, Year 2	11.6	11.8	-0.2	0.882	9.9	9.2	0.7	0.160	
Number of credits earned, Year 3	10.3	11.3	-1.0	0.307	9.3	8.2	1.1 **	0.035	†
Number of credits earned, Year 4	8.8	9.2	-0.4	0.690	8.0	7.3	0.7	0.186	

(continued)

Table G.15 (continued)

Grade Level and Outcome	Proficient on Eighth-Grade ELA Test				Not Proficient on Eighth-Grade ELA Test			
	Program Group	Control Group	Difference (Impact)	P-Value	Program Group	Control Group	Difference (Impact)	P-Value
Number of credits earned, Years 1 to 4	42.9	44.6	-1.8	0.640	37.5	34.9	2.6	0.133
Earned adequate credits, Years 1 to 4 (%)	69.1	72.5	-3.5	0.678	56.0	52.5	3.5	0.412
Regents or End-of-Course exams[c,d]								
Number of state core exams taken, Years 1 to 4	7.6	7.7	-0.1	0.893	9.9	9.1	0.8	0.164
Number of state core exams passed, Years 1 to 4	6.0	6.0	-0.1	0.890	4.0	3.8	0.2	0.458
Sample size (total = 677)	64	70			283	260		

SOURCES: MDRC calculations using data from New York City Department of Education administrative records.

NOTES: ELA = English language arts.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Statistical significance levels across subgroups are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

All outcomes in the table include zero values for students who were no longer enrolled.

Years 1, 2, 3, and 4 cover the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years, respectively.

[a]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City include enrollment for the regular school year. Records for students in Memphis include enrollment during the regular school year, alternative education programs, and summer school.

[b]Students in New York City earn 1 credit per course per semester completed. Students in Memphis earn 0.5 credits per course per semester. Credits for students in Memphis were multiplied by two to create a standard scale for comparison. To be considered on time to graduate, students in New York City must earn an average of 11 credits per school year and students in Memphis must earn an average of 5.5 credits per school year.

[c]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[d]The End-of-Course exam measures in this table include the following exams: English 1, English, 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History. The U.S. History exam was not administered for students in Year 4.

Table G.16

Impacts on Enrollment, Graduation, Attendance, Credits, and Regents or End-of-Course Exams for Students in Grade 9 at the Time of Random Assignment, by English Proficiency Test Score in Memphis

	Proficient on Eighth-Grade ELA Test				Not Proficient on Eighth-Grade ELA Test			
Grade Level and Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Program Group	Control Group	Difference (Impact)	P-Value
Enrollment and Graduation, Year 4 (%)								
On grade	84.2	85.6	-1.4	0.837	70.5	71.0	-0.5	0.895
Not on grade	-0.6	2.1	-2.6	0.315	9.0	8.3	0.8	0.738
Not enrolled	16.4	12.4	4.0	0.532	20.5	20.8	-0.3	0.937
Graduated on time	88.1	87.2	0.8	0.907	62.7	61.1	1.6	0.698
Attendance[a] (%)								
Attendance rate, Year 1	94.0	94.9	-0.9	0.539	90.6	89.3	1.3	0.192
Attendance rate, Year 2	93.5	89.7	3.8	0.160	86.7	82.9	3.8 **	0.019
Attendance rate, Year 3	94.3	86.9	7.4 **	0.042	83.9	82.2	1.7	0.407
Attendance rate, Year 4	71.1	69.5	1.6	0.833	58.5	53.4	5.1	0.156
Attendance rate is 95% or higher, Year 1	60.4	64.8	-4.4	0.653	46.0	45.5	0.5	0.907
Attendance rate is 95% or higher, Year 2	59.5	51.1	8.4	0.413	40.9	33.6	7.3 *	0.073
Attendance rate is 95% or higher, Year 3	59.1	54.6	4.5	0.658	38.4	32.8	5.6	0.156
Attendance rate is 95% or higher, Year 4	17.3	27.7	-10.5	0.228	17.2	15.1	2.1	0.500
Credits[b]								
Number of credits earned, Year 1	12.4	12.7	-0.3	0.685	10.8	10.6	0.2	0.592
Number of credits earned, Year 2	11.3	11.0	0.3	0.737	10.4	9.8	0.6	0.147
Number of credits earned, Year 3	11.5	11.7	-0.2	0.837	9.6	8.9	0.7	0.151
Number of credits earned, Year 4	10.9	11.3	-0.4	0.725	9.3	8.9	0.4	0.370

(continued)

Table G.16 (continued)

Grade Level and Outcome	Proficient on Eighth-Grade ELA Test				Not Proficient on Eighth-Grade ELA Test			
	Program Group	Control Group	Difference (Impact)	P-Value	Program Group	Control Group	Difference (Impact)	P-Value
Number of credits earned, Years 1 to 4	46.2	46.7	-0.6	0.824	40.0	38.1	1.9	0.119
Earned adequate credits, Years 1 to 4 (%)	67.8	76.5	-8.8	0.330	50.6	47.5	3.1	0.455
Regents or End-of-Course exams[c,d]								
Number of state core exams taken, Years 1 to 4	5.9	5.8	0.1	0.707	6.1	6.0	0.1	0.430
Number of state core exams passed, Years 1 to 4	4.3	4.1	0.2	0.529	1.7	1.5	0.2 *	0.098
Sample size (total = 714)	51	62			305	296		

SOURCES: MDRC calculations using data from Shelby County Schools administrative records.

NOTES: ELA = English language arts.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Statistical significance levels across subgroups are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

All outcomes in the table include zero values for students who were no longer enrolled.

Years 1, 2, 3, and 4 cover the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years, respectively.

[a]Attendance was calculated as a percentage of total days present divided by total days enrolled according to district records. Records provided for students in New York City include enrollment for the regular school year. Records for students in Memphis include enrollment during the regular school year, alternative education programs, and summer school.

[b]Students in New York City earn 1 credit per course per semester completed. Students in Memphis earn 0.5 credits per course per semester. Credits for students in Memphis were multiplied by two to create a standard scale for comparison. To be considered on time to graduate, students in New York City must earn an average of 11 credits per school year and students in Memphis must earn an average of 5.5 credits per school year.

[c]The Regents exam measures in this table include the following Regents exams: English, Math A, Math B, Geometry, Integrated Algebra, Algebra 2/Trigonometry, U.S. History and Government, Global History and Geography, Living Environment, Chemistry, Physics, and Earth Science.

[d]The End-of-Course exam measures in this table include the following exams: English 1, English, 2, English 3, Biology, Algebra 1, Algebra 2, and U.S. History. The U.S. History exam was not administered for students in Year 4.

Table G.17

Impacts on Parents' Receipt of Services and Health Outcomes in the Bronx

Outcome	Program Group	Control Group	Difference (Impact)		P-Value	Effect Size
Health care visits in past 12 months (%)						
Has seen a health professional for any reason	94.4	94.8	-0.4		0.788	
Had a health checkup	91.5	92.2	-0.7		0.687	
Has seen a dentist for any reason	85.6	77.9	7.6	***	0.002	
Had 1 or more dental checkups	85.1	75.4	9.7	***	0.000	
Had 2 or more dental checkups	52.7	34.2	18.5	***	0.000	
Respondent's health care use (%)						
Has a usual source of health care	94.1	93.1	1.0		0.515	
Clinic or health center	60.7	61.4	-0.7		0.830	
Doctor's office	19.0	17.8	1.2		0.616	
Hospital emergency room	6.4	6.6	-0.2		0.910	
Hospital outpatient department	7.6	7.3	0.3		0.880	
Other	0.4	0.0	0.4		0.186	
Health insurance coverage in previous month (%)						
Respondent had health insurance	93.1	94.4	-1.3		0.414	
Unmet health needs due to cost in past 12 months (%)						
Did not get needed medical care	6.1	7.5	-1.4		0.384	
Did not fill a prescription	13.7	14.9	-1.3		0.573	
Health status and outcomes						
Smokes cigarettes (%)	9.9	13.4	-3.5	*	0.075	
Has any medical condition[a] (%)	52.9	49.9	3.0		0.306	
Treated for any medical condition[a] (%)	46.2	44.8	1.3		0.641	
Average Body Mass Index (BMI)[b]	29.7	29.4	0.3		0.431	0.049
Overweight (%)	37.1	36.2	0.9		0.766	
Obese (%)	39.1	40.2	-1.1		0.714	
Average self-rated health (1 = poor; 5 = excellent)	3.1	3.0	0.1		0.154	0.082
Sample size (total = 1,007)	516	491				

(continued)

Table G.17 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

[a]Participants were asked about the following conditions: asthma, allergies, arthritis, back pain, bone or joint problems, cancer, diabetes, depression, digestive problems, blood pressure, high cholesterol, lung disease, sinus infections, weight conditions, or other specified problems. The four most reported conditions were asthma, diabetes, high blood pressure, and high cholesterol.

[b]Weight categories are from the National Institutes of Health. Underweight is defined as having a BMI of less than 18.5. Normal weight is defined as having a BMI between 18.5 and 24.9. Overweight is defined as having a BMI between 25.0 and 29.9. Obesity is defined as having a BMI of at least 30. About 4.5 percent of the sample was excluded from this analysis because of missing data.

Table G.18

Impacts on Parents' Receipt of Services and Health Outcomes in Memphis

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Health care visits in past 12 months (%)					
Has seen a health professional for any reason	91.0	88.8	2.2	0.239	
Had a health checkup	85.3	83.1	2.2	0.347	
Has seen a dentist for any reason	57.0	44.5	12.5 ***	0.000	
Had 1 or more dental checkups	47.9	33.1	14.8 ***	0.000	
Had 2 or more dental checkups	19.8	11.1	8.7 ***	0.000	
Respondent's health care use (%)					
Has a usual source of health care	94.6	90.9	3.7 **	0.023	
Clinic or health center	46.9	45.6	1.3	0.677	
Doctor's office	42.2	38.0	4.3	0.163	
Hospital emergency room	4.0	5.2	-1.3	0.349	
Hospital outpatient department	1.0	1.8	-0.7	0.321	
Other	0.5	0.3	0.1	0.749	
Health insurance coverage in previous month (%)					
Respondent had health insurance	92.2	90.4	1.8	0.300	
Unmet health needs due to cost in past 12 months (%)					
Did not get needed medical care	16.0	14.8	1.3	0.582	
Did not fill a prescription	23.5	24.1	-0.6	0.828	
Health status and outcomes					
Smokes cigarettes (%)	21.7	22.8	-1.2	0.653	
Has any medical condition[a] (%)	51.8	58.7	-6.9 **	0.018	
Treated for any medical condition[a] (%)	46.3	52.4	-6.1 **	0.036	
Average Body Mass Index (BMI)[b]	32.7	32.0	0.7	0.200	0.081
Overweight (%)	24.4	25.2	-0.9	0.752	
Obese (%)	57.5	55.1	2.5	0.437	
Average self-rated health (1 = poor; 5 = excellent)	3.2	3.0	0.2 ***	0.003	0.169
Sample size (total = 1,009)	509	500			

(continued)

Table G.18 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

[a]Participants were asked about the following conditions: asthma, allergies, arthritis, back pain, bone or joint problems, cancer, diabetes, depression, digestive problems, blood pressure, high cholesterol, lung disease, sinus infections, weight conditions, or other specified problems. The four most reported conditions were asthma, diabetes, high blood pressure, and high cholesterol.

[b]Weight categories are from the National Institutes of Health. Underweight is defined as having a BMI of less than 18.5. Normal weight is defined as having a BMI between 18.5 and 24.9. Overweight is defined as having a BMI between 25.0 and 29.9. Obesity is defined as having a BMI of at least 30. About 4.5 percent of the sample was excluded from this analysis because of missing data.

Table G.19

Impacts on Focal Child's Receipt of Services and Health Outcomes in the Bronx

Outcome	Program Group	Control Group	Difference (Impact)		P-Value	Effect Size
Health care visits in past 12 months (%)						
Has seen a health professional for any reason	97.8	98.2	-0.4		0.639	
Has seen a pediatrician for any reason	77.2	80.2	-3.0		0.277	
Had a health checkup or got shots	95.6	96.3	-0.8		0.562	
Has seen a dentist for any reason	92.0	88.7	3.2		0.102	
Had 1 or more dental checkups	91.2	87.9	3.3		0.106	
Had 2 or more dental checkups	60.5	42.7	17.8	***	0.000	
Respondent's health care use (%)						
Has usual source of care when sick	93.6	94.7	-1.1		0.466	
Clinic or health center	62.9	63.6	-0.7		0.837	
Doctor's office	18.6	19.5	-0.9		0.739	
Hospital outpatient department	5.9	5.4	0.6		0.719	
Hospital emergency room	5.8	6.0	-0.2		0.884	
Other	0.4	0.3	0.1		0.856	
Health insurance coverage in the previous month (%)						
All dependent children had health insurance[a]	94.3	94.6	-0.3		0.823	
Health Outcomes						
Child's health (1 = poor; 5 = excellent)	3.9	3.8	0.1		0.178	0.085
Child has any health condition[b] (%)	18.2	21.2	-3.0		0.218	
Sample size (total = 940)	489	451				

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: This table presents outcomes only for focal children who were living in the household at the time of the survey interview.

Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

[a]Child-related health insurance measures were calculated for sample members with at least one child at the time of the survey.

[b]Participants were asked about the following conditions: learning disability, attention deficit disorder or attention deficit hyperactivity disorder, autism, depression or other emotional condition, speech disorder or delay, asthma, heart problems, chrinic illness, weight conditions, or other specified problems.

Table G.20

Impacts on Focal Child's Receipt of Services and Health Outcomes in Memphis

Outcome	Program Group	Control Group	Difference (Impact)	P-Value	Effect Size
Health care visits in past 12 months (%)					
Has seen a health professional for any reason	96.6	94.9	1.7	0.210	
Has seen a pediatrician for any reason	71.2	67.4	3.8	0.213	
Had a health checkup or got shots	94.3	92.2	2.1	0.207	
Has seen a dentist for any reason	93.5	89.9	3.6 **	0.046	
Had 1 or more dental checkups	93.3	89.1	4.2 **	0.024	
Had 2 or more dental checkups	64.3	50.0	14.3 ***	0.000	
Respondent's health care use (%)					
Has usual source of care when sick	96.1	95.5	0.7	0.621	
Clinic or health center	48.2	47.9	0.3	0.937	
Doctor's office	45.6	43.8	1.8	0.584	
Hospital outpatient department	0.2	2.2	-2.0 ***	0.005	
Hospital emergency room	1.4	1.2	0.3	0.743	
Other	0.7	0.3	0.4	0.405	
Health insurance coverage in the previous month (%)					
All dependent children had health insurance[a]	96.5	94.8	1.7	0.190	
Health status					
Child's health (1 = poor; 5 = excellent)	4.0	4.1	0.0	0.657	-0.029
Child has any health condition[b] (%)	23.9	19.2	4.7 *	0.069	
Sample size (total = 941)	487	454			

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: This table presents outcomes only for focal children who were living in the household at the time of the survey interview.

Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

The effect size is the difference between program and control group outcomes expressed as a proportion of the standard deviation of the outcomes for both groups combined.

[a]Child-related health insurance measures were calculated for sample members with at least one child at the time of the survey.

[b]Participants were asked about the following conditions: learning disability, Attention deficit disorder or Attention deficit hyperactivity disorder, autism, depression or other emotional condition, speech disorder or delay, asthma, heart problems, chrinic illness, overweight, or other specified problems.

Table G.21

Impacts on Educational Attainment and Participation in Educational and Employment Activities in the Bronx

Outcome (%)	Program Group	Control Group	Difference (Impact)	P-Value
Has any degree, license, or certificate	77.1	77.1	0.0	0.993
Has any trade license or training certification	53.8	51.0	2.8	0.371
Home health aide	20.1	23.3	-3.3	0.175
Nurse's aide/nurse's assistant	3.5	2.3	1.1	0.279
Child care/teaching	5.9	4.8	1.1	0.431
Medical assistant	4.3	1.6	2.7 **	0.011
Security	3.2	1.6	1.6	0.104
Other	17.2	17.1	0.1	0.975
Highest degree or diploma				
High school equivalency certificate	15.2	16.4	-1.1	0.611
High school diploma	22.4	25.4	-3.0	0.248
Associate's degree	11.9	8.9	3.0	0.107
Bachelor's degree or higher	7.1	7.9	-0.8	0.619
Ever participated in any education, training, or employment activity	40.0	32.3	7.7 **	0.011
Adult basic education, high school equivalency, or high school classes	8.5	8.0	0.5	0.780
English as a second language classes	13.4	10.9	2.5	0.226
College courses for credit	9.3	7.8	1.6	0.366
Vocational training	14.7	13.7	1.0	0.643
Other educational, training, or employment program activities	7.0	5.7	1.3	0.387
Currently participating in any education, training, or employment activity	12.2	7.7	4.5 **	0.019
Sample size (total = 1,007)	516	491		

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause discrepancies in calculating sums and differences.

Percentages may sum to more than the overall participation rate because sample members could list more than one response.

Table G.22

Impacts on Educational Attainment and Participation in Educational and Employment Activities in Memphis

Outcome (%)	Program Group	Control Group	Difference (Impact)	P-Value
Has any degree, license, or certificate	79.8	78.5	1.4	0.479
Has any trade license or training certification	39.4	34.5	4.9	0.100
Home health aide	0.2	0.0	0.2	0.379
Nurse's aide/nurse's assistant	7.1	5.4	1.6	0.293
Child care/teaching	3.5	2.5	1.0	0.337
Medical assistant	5.6	4.1	1.5	0.259
Security	0.4	0.8	-0.5	0.359
Other	22.7	21.4	1.3	0.608
Highest degree or diploma				
High school equivalency certificate	15.6	14.6	1.0	0.647
High school diploma	45.1	45.2	-0.1	0.964
Associate's degree	9.7	9.1	0.6	0.735
Bachelor's degree or higher	4.4	4.9	-0.5	0.682
Ever participated in any education, training, or employment activity	32.5	32.2	0.3	0.920
Adult basic education, high school equivalency, or high school classes	8.6	9.4	-0.8	0.648
English as a second language classes	2.0	1.4	0.6	0.474
College courses for credit	17.7	18.6	-0.9	0.701
Vocational training	6.0	5.4	0.6	0.685
Other educational, training, or employment program activities	4.8	3.5	1.4	0.281
Currently participating in any education, training, or employment activity	12.8	11.5	1.3	0.533
Sample size (total = 1,009)	509	500		

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause discrepancies in calculating sums and differences.

Percentages may sum to more than the overall participation rate because sample members could list more than one response.

Table G.23

Impacts on Unemployment Insurance-Covered Employment and Earnings, Years 1 to 3 in the Bronx

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Ever employed (%)				
Year 1	60.7	60.1	0.6	0.707
Year 2	60.2	59.1	1.1	0.587
Year 3	59.0	62.7	-3.7 *	0.075
Years 1 to 3	67.7	69.8	-2.1	0.249
Average quarterly employment (%)				
Year 1	51.6	52.4	-0.8	0.570
Year 2	52.2	52.9	-0.7	0.670
Year 3	53.1	55.5	-2.3	0.227
Years 1 to 3	52.3	53.6	-1.3	0.370
Total earnings ($)				
Year 1	9,398	9,607	-209	0.530
Year 2	10,278	10,933	-655	0.181
Year 3	11,594	11,887	-293	0.620
Years 1 to 3	31,270	32,427	-1,157	0.354
Sample size (total = 1,311)	655	656		

SOURCE: MDRC calculations using data from New York State unemployment insurance (UI) wage records.

NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who were not employed.

This tables includes only employment and earnings in jobs covered by the New York State UI programs. It does not include employment outside of the state or jobs not covered by the UI system (for example, "off-the-books" jobs and federal government jobs).

Table G.24

Impacts on Unemployment Insurance-Covered Employment and Earnings, Years 1 to 3 in Memphis

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Ever employed (%)				
Year 1	56.2	62.2	-5.9 ***	0.004
Year 2	55.8	62.8	-7.0 ***	0.002
Year 3	57.8	62.8	-5.1 **	0.032
Years 1 to 3	68.4	74.1	-5.7 ***	0.005
Average quarterly employment (%)				
Year 1	45.8	50.5	-4.7 ***	0.004
Year 2	46.6	50.9	-4.3 **	0.032
Year 3	47.9	50.9	-3.1	0.147
Years 1 to 3	46.8	50.8	-4.0 **	0.014
Total earnings ($)				
Year 1	7,371	8,471	-1,100 ***	0.002
Year 2	7,910	9,125	-1,215 ***	0.009
Year 3	8,652	9,297	-645	0.221
Years 1 to 3	23,933	26,893	-2,960 **	0.013
Sample size (total = 1,254)	631	623		

SOURCE: MDRC calculations using data from Tennesee Department of Labor and Workforce Development unemployment insurance (UI) wage records.

NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who were not employed.

This tables includes only employment and earnings in jobs covered by Tennessee UI programs. It does not include employment outside of the state or jobs not covered by the UI system (for example, "off-the-books" jobs and federal government jobs).

Table G.25

Impacts on Employment and Job Characteristics in the Bronx

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Employment status (%)				
Employed at the time of the survey	58.1	63.0	-4.9 **	0.048
Employed in past year	66.3	69.6	-3.3	0.165
Characteristics of current job[a]				
Average hourly wage ($)	*11.52*	*11.48*		
Less than $7.00 (%)	5.7	9.1	-3.4 **	0.038
$7.00 to $8.99 (%)	10.4	9.1	1.2	0.512
$9.00 or more (%)	37.5	37.4	0.1	0.959
Not reported (%)	4.5	7.4	-2.9 *	0.050
Worked at least 30 hours per week (%)	42.6	46.1	-3.5	0.217
Average weekly earnings ($)	210	226	-17	0.254
Usual work schedule (%)				
Regular daytime shift	43.4	47.2	-3.8	0.170
Regular evening/night shift	5.1	6.0	-0.9	0.522
Self-employed (%)	8.0	9.8	-1.8	0.301
Worked for a temporary employment agency (%)	6.4	6.5	-0.1	0.952
Received any employer-provided benefit[b] (%)	42.4	42.6	-0.2	0.925
Employment search (%)				
Looked for work in previous 4 weeks	27.6	22.7	4.9 *	0.071
Sample size (total = 1,007)	516	491		

(continued)

Table G.25 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]If a respondent worked multiple jobs at the time of the interview, then only the characteristics of the primary job are reported. (The job at which the respondent worked the most hours is considered primary.) Respondents who were not employed at the time of the survey are included in all the current job characteristics measures, except for average hourly wage. The average hourly wage measure includes only respondents who were employed at the time of the survey.

[b]This category includes benefits that are or eventually will be offered, regardless of whether the respondent received them. Sample members were asked whether they received paid sick days, paid vacation days, paid holidays, dental benefits, retirement benefits, or health or medical insurance from their current employers.

Table G.26

Impacts on Employment and Job Characteristics in Memphis

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Employment status (%)				
Employed at the time of the survey	53.8	51.3	2.5	0.360
Employed in past year	66.6	65.2	1.4	0.587
Characteristics of current job[a]				
Average hourly wage ($)	*11.08*	*11.20*		
Less than $7.00 (%)	5.5	5.0	0.4	0.757
$7.00 to $8.99 (%)	9.3	9.6	-0.3	0.884
$9.00 or more (%)	27.8	23.4	4.5 *	0.078
Not reported (%)	11.0	13.4	-2.4	0.252
Worked at least 30 hours per week (%)	41.2	40.4	0.8	0.773
Average weekly earnings ($)	177	170	6	0.621
Usual work schedule (%)				
Regular daytime shift	31.2	31.4	-0.2	0.936
Regular evening/night shift	7.3	9.4	-2.2	0.209
Self-employed (%)	11.0	6.8	4.2 **	0.019
Worked for a temporary employment agency (%)	5.6	5.7	-0.1	0.945
Received any employer-provided benefit[b] (%)	33.1	34.8	-1.7	0.505
Employment search (%)				
Looked for work in previous 4 weeks	40.9	38.4	2.5	0.403
Sample size (total = 1,009)	509	500		

(continued)

Table G.26 (continued)

SOURCE: MDRC calculations using data from the Family Rewards 24-month survey.

NOTES: Sample sizes may vary because of missing values.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Standard errors were adjusted to account for multiple observations per family. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]If a respondent worked multiple jobs at the time of the interview, then only the characteristics of the primary job are reported. (The job at which the respondent worked the most hours is considered primary.) Respondents who were not employed at the time of the survey are included in all the current job characteristics measures, except for average hourly wage. The average hourly wage measure includes only respondents who were employed at the time of the survey.

[b]This category includes benefits that are or eventually will be offered, regardless of whether the respondent received them. Sample members were asked whether they received paid sick days, paid vacation days, paid holidays, dental benefits, retirement benefits, or health or medical insurance from their current employers.

About MDRC

MDRC is a nonprofit, nonpartisan social and education policy research organization dedicated to learning what works to improve the well-being of low-income people. Through its research and the active communication of its findings, MDRC seeks to enhance the effectiveness of social and education policies and programs.

Founded in 1974 and located in New York City and Oakland, California, MDRC is best known for mounting rigorous, large-scale, real-world tests of new and existing policies and programs. Its projects are a mix of demonstrations (field tests of promising new program approaches) and evaluations of ongoing government and community initiatives. MDRC's staff bring an unusual combination of research and organizational experience to their work, providing expertise on the latest in qualitative and quantitative methods and on program design, development, implementation, and management. MDRC seeks to learn not just whether a program is effective but also how and why the program's effects occur. In addition, it tries to place each project's findings in the broader context of related research — in order to build knowledge about what works across the social and education policy fields. MDRC's findings, lessons, and best practices are proactively shared with a broad audience in the policy and practitioner community as well as with the general public and the media.

Over the years, MDRC has brought its unique approach to an ever-growing range of policy areas and target populations. Once known primarily for evaluations of state welfare-to-work programs, today MDRC is also studying public school reforms, employment programs for ex-offenders and people with disabilities, and programs to help low-income students succeed in college. MDRC's projects are organized into five areas:

- Promoting Family Well-Being and Children's Development
- Improving Public Education
- Raising Academic Achievement and Persistence in College
- Supporting Low-Wage Workers and Communities
- Overcoming Barriers to Employment

Working in almost every state, all of the nation's largest cities, and Canada and the United Kingdom, MDRC conducts its projects in partnership with national, state, and local governments, public school systems, community organizations, and numerous private philanthropies.