

How are ParentChild+ graduates performing in elementary school?
K-3rd grade Outcomes for Studies One and Two¹

In reports found [here](#) we describe in detail the initial study designs and implementation, as well as evidence from randomized controlled trial evaluations of the impact of Parent Child + on diverse, low-income, urban children and their parents after participation in the two-year program. The purpose of the brief is to present findings from the long-term follow-up of child participants in these trials on critical school-based outcomes. Children who participated in initial evaluations were followed from Kindergarten through 3rd grade. Data obtained from the Department of Education (DOE) on outcomes of interest were analyzed at each grade-level. In sum, no evidence of longitudinal impact of Parent Child + were found at any time point on attendance rates, grade promotion, or Math and English Language Arts (ELA) Third-Grade State exams in either sample. In Study 1, there were also no impacts on Individualized Education Plan (IEP) referrals rates. In Study 2, IEP referrals in Kindergarten were significantly less for children who participated in Parent Child + than those who did not. The impact of COVID on continued data collection for these follow-up studies are discussed.

Overview

Facilitated by the Research Alliance for New York City Schools, we received outcome data on a total of N = 302 for our analytical samples (Study 1, N = 176; Study 2, N = 126). All data reported below are representative of these samples. Both samples are uniquely diverse. For example, in study one parents report being from a variety of countries. The top three countries reported in order of largest representation are: Mexico, Jamaica, and Guyana. In study two, parents are 100% immigrant origin from a Spanish speaking country. The majority of the families come from Mexico and Ecuador. Notably, the participants in Study 1 were younger on average than the participants in Study 2. Additional sample characteristics for each study sample are presented in Tables 1 and 2.

Table 1: Study One Sample Characteristics

Variable	N	Range	Percentage
<i>Education Level</i>			
Less than high school	60		34.5
High school or above	114		65.5
<i>Annual Income</i>			
Up to \$20,000	75		71.4
Greater than \$20,000	30		28.6
<i>Immigrant Origin</i>			

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Nonimmigrant parent	81	47.1
Immigrant parent	91	52.9
<i>Ethnicity of Parent/Primary Caregiver</i>		
African-American	57	33.3
Afro-Caribbean (Immigrant Born)	48	27
Latino (US Born)	41	24
Latino (Immigrant Born)	26	15.2
<i>Parent Language</i>		
English	140	80.5
Spanish	34	19.5
<i>Sex of Child</i>		
Male	75	43.1
Female	99	56.9

Table 2: Study Two Sample Characteristics

Variable	N	Percentage
<i>Education Level</i>		
Less than high school	58	46
High school or above	68	54
<i>Annual Income</i>		
Up to \$20,000	86	69.9
Greater than \$20,000	37	30.1
<i>Immigrant Origin</i>		
Immigrant parent	126	100
<i>Ethnicity of Parent/Primary Caregiver</i>		
Latino	126	100
<i>Parent Language</i>		
Spanish	126	100
<i>Sex of Child</i>		
Male	60	47.6
Female	66	52.4

Analytical Strategy

Analysis of the effect of the intervention used a complete case analysis approach with regression adjustment for baseline covariates. The analytic strategy for testing the effects of the intervention used regression analyses to obtain adjusted group differences. Control variables that were explored included child characteristics (e.g., child sex, child participation in center-based care), family characteristics (e.g., parent languages). Models were chosen based on predictability of outcome; model fit statistics, and model simplicity.

Research Aims

This report includes analysis of DOE cross-sectional data from the 2016-2018 school years. The following research questions were examined to assess the long-term effects of participating in ParentChild+.

Attendance Rates

Study One.

- Do (ParentChild+) children have better attendance rates at kindergarten?
- Do (ParentChild+) children have better attendance rates at 1st grade?
- Do (ParentChild+) children have better attendance rates at 2st grade?

Study Two.

- Do (ParentChild+) children have better attendance rates at kindergarten?
- Do (ParentChild+) children have better attendance rates at 1st grade?
- Do (ParentChild+) children have better attendance rates at 2nd grade?
- Do (ParentChild+) children have better attendance rates at 3st grade?

Grade Promotion

Study One.

- Do (ParentChild+) children have better grade promotion rates at kindergarten?
- Do (ParentChild+) children have better grade promotion rates at 1st grade?
- Do (ParentChild+) children have better grade promotion rates at 2st grade?

Study Two.

- Do (ParentChild+) children have better grade promotion rates at kindergarten?
- Do (ParentChild+) children have better grade promotion rates at 1st grade?
- Do (ParentChild+) children have better grade promotion rates at 2nd grade?
- Do (ParentChild+) children have better grade promotion rates at 3st grade?

Individualized Education Plan (IEP)

Study One.

- Do (ParentChild+) children have a lower likelihood of having an IEP referral at kindergarten?
- Do (ParentChild+) children have a lower likelihood of having an IEP referral in 1st grade?
- Do (ParentChild+) children have a lower likelihood of having an IEP referral in 2nd grade?

Study Two.

- Do (ParentChild+) children have a lower likelihood of having an IEP referral at kindergarten?
- Do (ParentChild+) children have a lower likelihood of having an IEP referral in 1st grade?
- Do (ParentChild+) children have a lower likelihood of having an IEP referral in 2nd grade?
- Do (ParentChild+) children have a lower likelihood of having an IEP referral in 3rd grade?

3rd Grade ELA Test Scores²

Study Two

- Are (ParentChild+) children more likely to score higher on ELA Standardized Tests?

3rd Grade Math Test Scores

Study Two

- Are (ParentChild+) children more likely to score higher on Math Standardized Tests?

Results

There were no statistically significant results found in kindergarten, first grade, and second grade on any outcome for Study One. By contrast, in Study 2, children who received intervention services (ParentChild+) were over **3 times less likely to have an IEP referral at kindergarten**, $b = 1.26$, $\exp(B) = 3.527$, $p = 0.043$. This result falls within the acceptable range of attrition and potential bias as indicated by WWC.4. All other outcomes explored were insignificant for this sample.

² For Study 1, we were expecting to receive our first data point on this outcome from the academic year 2018-19 during the spring of 2020. The Alliance reported issues with obtaining data from DOE which has delayed any requests requiring a matching algorithm. However, because State tests were cancelled in 2020, we will be unable to conduct analysis on this outcome regardless of the delay in receiving the first data deposit due to lack of analytical power.

Conclusion

The finding reported here should be interpreted with optimistic caution. Replication of causal findings across multiple studies is a stronger indication of intervention efficacy than one stand alone result.

The context of COVID-19 has impacted our ability to continue to explore additional longitudinal outcomes. Most significantly, all third and fourth-grade State exams in 2020 and 2021 were cancelled. The results reported here are final for both Studies 1 and 2.