Web Appendix Tables

to Accompany

Neighborhoods and Academic Achievement:

Results from the Moving to Opportunity Experiment

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2006

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Appendix Table A1

Estimated Effects for Girls in the Experimental Group

	Experimental versus Control								Linear Age Interaction
	Girls All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	0.084	0.051 (0.038) {N = 1853}	-0.763	-0.018 (0.062) {N = 587}	0.352	0.065 (0.061) {N = 628}	0.633	0.099 (0.062) {N = 638}	0.202
Broad reading score [WJR]	0.103	0.060 (0.038)	-0.679	0.036 (0.067)	0.328	0.071 (0.062)	0.631	0.070 (0.060)	0.511
Broad math score [WJR]	0.050	0.028 (0.041)	-0.816	-0.060 (0.065)	0.359	0.030 (0.066)	0.578	0.106 (0.067)	0.161
B. Unadjusted scores									
Broad reading score [WJR]	0.103	0.058 (0.038)	-0.657	0.001 (0.064)	0.324	0.065 (0.062)	0.613	0.101 (0.064)	0.232
Broad math score [WJR]	0.055	0.035 (0.042)	-0.787	-0.085 (0.062)	0.359	0.030 (0.070)	0.563	0.153* (0.071)	0.044
C. Mobility and school									

changes

Moved using MTO voucher	0.000	0.476* (0.021)	-0.000	0.474* (0.030)	-0.000	0.470* (0.032)	-0.000	0.482* (0.034)	0.809
Moved at least 10 miles from BL address [ADDR]	0.114	0.058* (0.023)	0.138	0.038 (0.040)	0.063	0.101* (0.032)	0.145	0.029 (0.039)	0.802
Number of moves since RA [ADDR]	1.185	0.407* (0.069)	1.332	0.341* (0.136)	1.170	0.434* (0.098)	1.058	0.436* (0.095)	0.665
Average share of schools in main BL school districts[a] [SCH]	0.884	-0.102* (0.019)	0.892	-0.145* (0.034)	0.856	-0.046 (0.033)	0.911	-0.122* (0.027)	0.811
School closer to BL than 2002 address [ADDR] [SCH]	0.257	-0.026 (0.030)	0.268	-0.117* (0.045)	0.216	0.078 (0.045)	0.342	-0.092 (0.076)	0.209
Number of schools attended since RA[b], age <= 16 [SCH]	2.083	0.114* (0.050)	1.423	0.082 (0.065)	2.357	0.130 (0.078)	2.901	0.150 (0.132)	0.600
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.172	-0.008 (0.024)	0.135	-0.028 (0.037)	0.186	0.012 (0.036)	0.225	-0.014 (0.061)	0.867

D. Census tract characteristics

Average census tract poverty	0.453	-0.130* (0.009)	0.460	-0.127* (0.015)	0.448	-0.128* (0.014)	0.452	-0.135* (0.014)	0.545

rate [ADDR]									
Male unemployment rate [ADDR]	0.207	-0.042* (0.007)	0.213	-0.040* (0.013)	0.197	-0.035* (0.010)	0.211	-0.052* (0.011)	0.290
Average share of tract minority [ADDR]	0.910	-0.087* (0.009)	0.906	-0.085* (0.017)	0.915	-0.089* (0.013)	0.909	-0.087* (0.015)	0.674
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.119	0.067* (0.005)	0.118	0.071* (0.009)	0.122	0.059* (0.007)	0.118	0.073* (0.010)	0.529

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.733	-0.063* (0.011)	0.800	-0.091* (0.019)	0.744	-0.045* (0.018)	0.654	-0.056* (0.018)	0.381
Average share minority [SCH]	0.908	-0.048* (0.010)	0.922	-0.064* (0.016)	0.895	-0.021 (0.017)	0.910	-0.062* (0.015)	0.687
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.158	0.039* (0.009)	0.145	0.055* (0.015)	0.161	0.020 (0.012)	0.181	0.040* (0.019)	0.914
Average pupil-	18.533	-0.177	18.456	-0.463	18.419	-0.218	18.747	0.154	0.507

teacher ratio, excluding MA [SCH]		(0.233)		(0.440)		(0.425)		(0.329)	
Share magnet schools, excluding MD, NY [SCH]	0.244	-0.065* (0.022)	0.226	-0.098* (0.039)	0.175	-0.037 (0.035)	0.358	-0.061 (0.038)	0.604
Index of positive school climate[d] [SR]	0.639	-0.007 (0.015)	0.677	-0.030 (0.029)	0.632	-0.001 (0.021)	0.621	0.005 (0.030)	0.545
Gangs in child's school or neighborhood [SR]	0.517	-0.075* (0.030)	0.420	-0.087 (0.062)	0.557	-0.114* (0.047)	0.522	-0.030 (0.048)	0.163
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.237	-0.010 (0.014)	0.236	-0.022 (0.024)	0.254	0.002 (0.024)	0.219	-0.011 (0.022)	0.360
Ever repeated a grade in school [PR]	0.196	0.014 (0.023)	0.174	-0.049 (0.038)	0.212	0.005 (0.042)	0.200	0.086* (0.038)	0.004
Suspended from school during past two years [PR]	0.105	-0.006 (0.016)	0.064	-0.025 (0.022)	0.148	-0.002 (0.031)	0.098	0.008 (0.026)	0.314
School asked to come in and talk about problems[f]	0.228	-0.024 (0.024)	0.237	-0.030 (0.043)	0.249	-0.020 (0.038)	0.184	-0.024 (0.040)	0.473

G. School engagement, ages 8 to 18

Always pays attention in class [SR]	0.578	0.049 (0.030)	0.624	0.079 (0.059)	0.613	0.008 (0.045)	0.490	0.093 (0.054)	0.858
Works hard in school [SR]	0.610	0.039 (0.029)	0.739	0.035 (0.056)	0.612	0.036 (0.042)	0.508	0.051 (0.057)	0.769
Reads at least 5 hours/week excluding schoolwork [SR]	0.304	0.014 (0.030)	0.322	-0.030 (0.064)	0.268	0.028 (0.042)	0.346	0.030 (0.055)	0.356
Late for school less than once a month [SR]	0.483	0.028 (0.029)	0.668	-0.067 (0.060)	0.503	0.043 (0.043)	0.309	0.084 (0.051)	0.162

H. Special classes during past 2 years, ages 8 to 18

In class for gifted students or did advanced work [PR]	0.112	0.029 (0.020)	0.130	-0.014 (0.040)	0.132	0.023 (0.032)	0.068	0.067* (0.032)	0.111
Special ed or help with learning, behavioral or emotional problems [PR]	0.182	0.022 (0.023)	0.208	-0.024 (0.057)	0.188	0.024 (0.034)	0.154	0.051 (0.037)	0.284

Sources: Data sources are indicated in square brackets. ADDR = address history from tracking file linked to Census tract data. Average tract characteristics are the mean for a child's residences from randomization through 2001, weighted by duration at each address. Tract characteristics are restricted to children with Woodcock-Johnson Revised (WJR) test scores. Tract characteristics for non-census years were linearly interpolated using 1990 and 2000 Census data and extrapolated using the same linear model for post-2000 years. Due to the temporal variability of male unemployment rates, this characteristic is reported using the child's 2002 address linked to 2000 Census data. PR = parental report. SCH = school history data linked by school name to school demographics from the National Center for Education Statistics (NCES) and to average scores on state exams from the National School-Level State Assessment Score Database. Except for magnet school status, school characteristics were available only for public schools.   Due to missing or inapplicable NCES data, IL is excluded from the analyses of free lunch eligibility, MA is excluded from pupil-teacher ratios, and MD and NY are excluded from the magnet school analyses. School rank analyses exclude children over 13 years-old from MD and NY because average reading and math scores were generally not available for high schools in these states. SR = child self-report, available only for children who were eight years or older as of May 31, 2001. WJR = Woodcock-Johnson Revised battery of tests.

Note: Intent-to-treat (ITT) estimates for "all ages" from equation (1) and for age groups from equation (2), using covariates as described in Table 1 and weights described in section V. Standard errors, adjusted for heteroskedasticity, are in parentheses. BL = baseline. CM = control mean. IL = Illinois. MA = Massachusetts. MD = Maryland. N = the analytic Ns for the control-treatment

group regressions used to estimate effects on combined reading and math scores. NA = not applicable. NY = New York. RA = randomization.

*Statistically significant at the five percent level.

a. The five main baseline school districts are Baltimore City, Boston, Chicago, Los Angeles Unified, and New York City.

b. Number of schools (grades 1 through 12) attended since the year after RA.

c. Any midyear school change was estimated as having attended the same (unrepeated) grade at more than one school.

d. The school climate index is defined as the fraction of favorable responses on five items. Favorable responses consisted of agreeing or strongly agreeing that "discipline is fair," "I feel safe at [this] school," and "teachers are interested in students," and disagreeing or strongly disagreeing with the statements that "there is a lot of cheating on tests and assignments" and "disruptions by other students get in the way of my learning."

e. The behavior problem index is the fraction of the following eleven items that the adult respondent reported were "often" or "sometimes" true for the child: "cheats or tells lies," "bullies or is cruel or mean to others," "hangs around with kids who get into trouble," "is disobedient at school," "has trouble getting along with teachers," "has difficulty concentrating, cannot pay attention for long," "is restless or overly active, cannot sit still," "has a very strong temper and loses it easily," "disobedient at home," "has trouble getting along with other children," and "withdrawn, does not get involved with others."

f. During past two years the school asked someone to come in and talk about problems the child was having with schoolwork or behavior.

Appendix Table A2

Estimated Effects for Boys in the Experimental Group

	Experimental versus Control								
	Boys All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		Linear Age Interaction
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.078	-0.008 (0.042) {N = 1784}	-0.940	-0.008 (0.082) {N = 569}	0.217	0.013 (0.061) {N = 610}	0.545	-0.031 (0.069) {N = 605}	0.444
Broad reading score [WJR]	-0.096	-0.002 (0.045)	-0.863	-0.030 (0.090)	0.131	0.041 (0.068)	0.503	-0.022 (0.073)	0.645
Broad math score [WJR]	-0.046	-0.029 (0.040)	-0.922	-0.008 (0.074)	0.291	-0.022 (0.059)	0.543	-0.054 (0.070)	0.329
B. Unadjusted scores									
Broad reading score [WJR]	-0.096	0.002 (0.047)	-0.877	-0.010 (0.089)	0.135	0.025 (0.068)	0.515	-0.012 (0.081)	0.664
Broad math score [WJR]	-0.051	-0.005 (0.041)	-0.924	0.035 (0.071)	0.292	-0.018 (0.058)	0.530	-0.026 (0.078)	0.291
C. Mobility									

and school changes									
Moved using MTO voucher	0.000	0.446* (0.021)	0.000	0.472* (0.034)	0.000	0.465* (0.032)	0.000	0.400* (0.032)	0.076
Moved at least 10 miles from BL address [ADDR]	0.124	0.067* (0.027)	0.087	0.095* (0.042)	0.177	0.025 (0.040)	0.101	0.086* (0.038)	0.688
Number of moves since RA [ADDR]	1.176	0.281* (0.072)	1.166	0.391* (0.109)	1.176	0.302* (0.120)	1.185	0.154 (0.110)	0.047
Average share of schools in main BL school districts[a] [SCH]	0.888	-0.075* (0.018)	0.899	-0.084* (0.028)	0.900	-0.090* (0.028)	0.862	-0.050 (0.030)	0.437
School closer to BL than 2002 address [ADDR] [SCH]	0.292	-0.082* (0.034)	0.285	-0.080 (0.046)	0.312	-0.082 (0.049)	0.254	-0.092 (0.073)	0.852
Number of schools attended since RA[b], age <= 16 [SCH]	2.145	0.035 (0.055)	1.472	0.064 (0.068)	2.465	0.037 (0.082)	2.991	-0.049 (0.159)	0.459
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.171	0.004 (0.023)	0.101	0.026 (0.029)	0.201	0.008 (0.037)	0.269	-0.066 (0.064)	0.254
D. Census tract characteristics									
Average census	0.459	-0.124*	0.489	-0.142*	0.440	-0.118*	0.448	-0.113*	0.148

tract poverty rate [ADDR]		(0.010)		(0.017)		(0.015)		(0.015)	
Male unemployment rate [ADDR]	0.199	-0.024* (0.008)	0.198	-0.027* (0.012)	0.191	-0.012 (0.012)	0.209	-0.033* (0.013)	0.839
Average share of tract minority [ADDR]	0.900	-0.069* (0.011)	0.910	-0.063* (0.016)	0.899	-0.082* (0.016)	0.891	-0.063* (0.018)	0.472
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.126	0.055* (0.006)	0.118	0.061* (0.009)	0.128	0.062* (0.009)	0.132	0.042* (0.009)	0.044

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.746	-0.074* (0.012)	0.813	-0.078* (0.018)	0.765	-0.085* (0.018)	0.656	-0.057* (0.021)	0.197
Average share minority [SCH]	0.917	-0.051* (0.009)	0.941	-0.056* (0.013)	0.912	-0.059* (0.014)	0.896	-0.037* (0.018)	0.230
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.139	0.053* (0.009)	0.123	0.049* (0.012)	0.140	0.065* (0.013)	0.164	0.042* (0.019)	0.649

Average pupil-teacher ratio, excluding MA [SCH]	18.456	0.043 (0.238)	18.429	-0.406 (0.428)	18.633	-0.072 (0.354)	18.291	0.622 (0.372)	0.111
Share magnet schools, excluding MD, NY [SCH]	0.205	-0.020 (0.024)	0.183	-0.052 (0.041)	0.167	0.003 (0.037)	0.274	-0.011 (0.039)	0.308
Index of positive school climate[d] [SR]	0.653	-0.012 (0.015)	0.691	-0.053* (0.026)	0.664	-0.029 (0.021)	0.599	0.047 (0.030)	0.061
Gangs in child's school or neighborhood [SR]	0.570	-0.062* (0.029)	0.465	-0.017 (0.064)	0.623	-0.137* (0.043)	0.580	-0.009 (0.047)	0.728

F. School and behavior problems

Index of eleven behavior problems[e] [PR]	0.301	0.041* (0.014)	0.331	0.035 (0.023)	0.312	0.061* (0.024)	0.257	0.025 (0.025)	0.613
Ever repeated a grade in school [PR]	0.245	0.029 (0.023)	0.174	0.050 (0.036)	0.239	0.071 (0.041)	0.326	-0.034 (0.042)	0.153
Suspended from school during past two years [PR]	0.224	-0.000 (0.021)	0.159	-0.001 (0.031)	0.265	0.027 (0.040)	0.250	-0.028 (0.039)	0.438
School asked to come in and talk about	0.369	0.044 (0.026)	0.347	0.059 (0.042)	0.412	0.045 (0.046)	0.337	0.020 (0.051)	0.796

problems[f]

G. School engagement, ages 8 to 18								
Always pays attention in class [SR]	0.522	-0.006 (0.031)	0.577	0.089 (0.057)	0.513	-0.068 (0.045)	0.484	0.006 (0.057)	0.243
Works hard in school [SR]	0.542	-0.033 (0.032)	0.614	0.099 (0.057)	0.559	-0.075 (0.047)	0.449	-0.080 (0.056)	0.039
Reads at least 5 hours/week excluding schoolwork [SR]	0.222	-0.023 (0.027)	0.200	-0.036 (0.045)	0.233	-0.055 (0.038)	0.225	0.038 (0.049)	0.274
Late for school less than once a month [SR]	0.482	-0.010 (0.033)	0.531	-0.024 (0.062)	0.504	0.022 (0.047)	0.403	-0.039 (0.057)	0.974
H. Special classes during past 2 years, ages 8 to 18								
In class for gifted students or did advanced work [PR]	0.118	0.006 (0.019)	0.112	0.026 (0.038)	0.103	0.016 (0.027)	0.147	-0.024 (0.039)	0.317
Special ed or help with learning, behavioral or emotional problems [PR]	0.322	0.026 (0.029)	0.286	0.147* (0.055)	0.340	-0.008 (0.045)	0.324	-0.023 (0.047)	0.079

Notes: See notes for Appendix Table A1.

Appendix Table A3

Estimated Effects for Non-Hispanic African-Americans in the Experimental Group

	African-Americans All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		Linear Age Interaction
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.031	0.048 (0.034) {N = 2368}	-0.871	0.074 (0.059) {N = 781}	0.274	0.006 (0.056) {N = 810}	0.561	0.073 (0.057) {N = 777}	0.899
Broad reading score [WJR]	-0.058	0.084* (0.036)	-0.841	0.155* (0.064)	0.214	0.031 (0.059)	0.509	0.077 (0.059)	0.363
Broad math score [WJR]	0.003	-0.005 (0.035)	-0.835	-0.025 (0.059)	0.328	-0.039 (0.056)	0.564	0.058 (0.058)	0.453
B. Unadjusted scores									
Broad reading score [WJR]	-0.059	0.081* (0.038)	-0.836	0.132* (0.064)	0.221	0.019 (0.062)	0.493	0.104 (0.066)	0.691
Broad math score [WJR]	-0.002	0.008 (0.037)	-0.831	-0.014 (0.057)	0.332	-0.041 (0.059)	0.538	0.089 (0.066)	0.390
C. Mobility and school									

changes

Moved using MTO voucher	0.000	0.459* (0.020)	-0.000	0.493* (0.029)	-0.000	0.435* (0.028)	-0.000	0.451* (0.029)	0.278
Moved at least 10 miles from BL address [ADDR]	0.098	0.074* (0.025)	0.101	0.095* (0.037)	0.080	0.088* (0.031)	0.116	0.038 (0.034)	0.161
Number of moves since RA [ADDR]	1.318	0.316* (0.077)	1.360	0.379* (0.118)	1.323	0.269* (0.099)	1.265	0.301* (0.097)	0.348
Average share of schools in main BL school districts[a] [SCH]	0.905	-0.108* (0.016)	0.914	-0.159* (0.026)	0.896	-0.086* (0.025)	0.906	-0.075* (0.024)	0.059
School closer to BL than 2002 address [ADDR] [SCH]	0.273	-0.062* (0.030)	0.278	-0.123* (0.042)	0.251	0.013 (0.042)	0.328	-0.114 (0.065)	0.148
Number of schools attended since RA[b], age <= 16 [SCH]	2.126	0.075 (0.050)	1.495	0.074 (0.060)	2.411	0.101 (0.077)	2.919	-0.005 (0.117)	0.862
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.198	-0.009 (0.022)	0.149	-0.019 (0.031)	0.214	0.008 (0.033)	0.278	-0.038 (0.060)	0.671

D. Census tract characteristics

Average census tract poverty	0.484	-0.141* (0.010)	0.505	-0.158* (0.015)	0.473	-0.130* (0.014)	0.474	-0.135* (0.014)	0.325

rate [ADDR]

Male unemployment rate [ADDR]	0.221	-0.037* (0.009)	0.217	-0.038* (0.013)	0.215	-0.023* (0.011)	0.234	-0.049* (0.013)	0.510
Average share of tract minority [ADDR]	0.933	-0.087* (0.010)	0.937	-0.089* (0.014)	0.929	-0.083* (0.013)	0.931	-0.087* (0.015)	0.824
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.113	0.069* (0.005)	0.109	0.078* (0.008)	0.117	0.062* (0.007)	0.115	0.068* (0.008)	0.469

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.742	-0.088* (0.011)	0.816	-0.125* (0.019)	0.756	-0.071* (0.016)	0.653	-0.068* (0.018)	0.029
Average share minority [SCH]	0.932	-0.053* (0.008)	0.948	-0.071* (0.013)	0.923	-0.034* (0.013)	0.926	-0.054* (0.013)	0.363
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.134	0.052* (0.007)	0.124	0.064* (0.012)	0.145	0.037* (0.010)	0.133	0.054* (0.015)	0.996
Average pupil-	18.131	0.061	18.295	-0.129	18.292	-0.091	17.743	0.473	0.350

teacher ratio, excluding MA [SCH]		(0.170)		(0.266)		(0.306)		(0.279)	
Share magnet schools, excluding MD, NY [SCH]	0.255	-0.029 (0.025)	0.263	-0.088* (0.040)	0.196	0.007 (0.034)	0.328	0.003 (0.039)	0.138
Index of positive school climate[d] [SR]	0.639	0.004 (0.014)	0.688	-0.027 (0.025)	0.629	0.003 (0.018)	0.613	0.033 (0.026)	0.119
Gangs in child's school or neighborhood [SR]	0.553	-0.080* (0.027)	0.504	-0.156* (0.057)	0.579	-0.084* (0.037)	0.554	-0.036 (0.043)	0.116
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.290	0.011 (0.014)	0.306	-0.007 (0.024)	0.306	0.051* (0.021)	0.252	-0.013 (0.022)	0.960
Ever repeated a grade in school [PR]	0.235	0.028 (0.020)	0.189	-0.009 (0.033)	0.252	0.056 (0.036)	0.263	0.035 (0.037)	0.425
Suspended from school during past two years [PR]	0.198	0.011 (0.018)	0.144	-0.007 (0.028)	0.252	0.032 (0.034)	0.194	0.006 (0.032)	0.995
School asked to come in and talk about problems[f]	0.320	0.039 (0.023)	0.320	0.035 (0.043)	0.357	0.049 (0.038)	0.260	0.027 (0.042)	0.646

G. School engagement, ages 8 to 18									
Always pays attention in class [SR]	0.570	-0.007 (0.028)	0.643	0.004 (0.052)	0.578	-0.037 (0.039)	0.492	0.034 (0.050)	0.825
Works hard in school [SR]	0.623	-0.036 (0.027)	0.693	0.034 (0.049)	0.635	-0.052 (0.039)	0.541	-0.068 (0.051)	0.264
Reads at least 5 hours/week excluding schoolwork [SR]	0.293	-0.020 (0.027)	0.281	-0.031 (0.049)	0.288	-0.046 (0.036)	0.310	0.032 (0.049)	0.176
Late for school less than once a month [SR]	0.465	0.027 (0.029)	0.604	-0.035 (0.054)	0.460	0.060 (0.040)	0.347	0.030 (0.049)	0.558
H. Special classes during past 2 years, ages 8 to 18									
In class for gifted students or did advanced work [PR]	0.118	0.014 (0.017)	0.117	0.012 (0.033)	0.128	0.022 (0.026)	0.103	0.004 (0.029)	0.828
Special ed or help with learning, behavioral or emotional problems [PR]	0.245	0.060* (0.022)	0.249	0.068 (0.051)	0.266	0.052 (0.035)	0.209	0.066 (0.036)	0.757

Notes: See notes for Appendix Table A1.

Appendix Table A4

Estimated Effects for Hispanics in the Experimental Group

	Experimental versus Control								Linear Age Interaction
	Hispanics All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.010	-0.029 (0.050) {N = 1061}	-0.856	-0.170 (0.105) {N = 317}	0.277	0.074 (0.072) {N = 367}	0.566	-0.002 (0.079) {N = 377}	0.457
Broad reading score [WJR]	0.035	-0.033 (0.053)	-0.680	-0.231* (0.109)	0.199	0.124 (0.081)	0.609	-0.013 (0.084)	0.325
Broad math score [WJR]	-0.060	-0.034 (0.051)	-0.961	-0.100 (0.102)	0.329	0.020 (0.073)	0.471	-0.021 (0.084)	0.876
B. Unadjusted scores									
Broad reading score [WJR]	0.037	-0.021 (0.051)	-0.682	-0.195 (0.104)	0.186	0.144 (0.076)	0.631	-0.030 (0.088)	0.477
Broad math score [WJR]	-0.046	-0.000 (0.048)	-0.930	-0.066 (0.094)	0.319	0.067 (0.068)	0.492	-0.004 (0.083)	0.940
C. Mobility and school									

changes

Moved using MTO voucher	-0.000	0.427* (0.030)	-0.000	0.422* (0.045)	-0.000	0.459* (0.044)	0.000	0.399* (0.043)	0.531
Moved at least 10 miles from BL address [ADDR]	0.148	0.030 (0.035)	0.128	0.034 (0.047)	0.175	-0.002 (0.050)	0.137	0.058 (0.045)	0.704
Number of moves since RA [ADDR]	0.936	0.358* (0.097)	1.023	0.378* (0.157)	0.873	0.439* (0.132)	0.916	0.256 (0.139)	0.491
Average share of schools in main BL school districts[a] [SCH]	0.882	-0.040 (0.028)	0.885	-0.023 (0.048)	0.869	-0.011 (0.039)	0.894	-0.091* (0.038)	0.306
School closer to BL than 2002 address [ADDR] [SCH]	0.278	-0.049 (0.042)	0.279	-0.057 (0.064)	0.297	-0.049 (0.060)	0.222	-0.030 (0.082)	0.863
Number of schools attended since RA[b], age <= 16 [SCH]	2.089	0.031 (0.069)	1.384	-0.006 (0.086)	2.411	0.045 (0.104)	3.027	0.085 (0.196)	0.978
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.130	0.015 (0.027)	0.063	0.001 (0.036)	0.159	0.042 (0.043)	0.223	-0.026 (0.072)	0.828

D. Census tract characteristics

Average census tract poverty	0.409	-0.097* (0.012)	0.425	-0.095* (0.017)	0.396	-0.099* (0.017)	0.406	-0.096* (0.017)	0.823

rate [ADDR]

Male unemployment rate [ADDR]	0.173	-0.028* (0.008)	0.188	-0.030* (0.011)	0.160	-0.028* (0.011)	0.171	-0.026* (0.012)	0.733
Average share of tract minority [ADDR]	0.881	-0.042* (0.015)	0.868	-0.024 (0.021)	0.902	-0.062* (0.020)	0.872	-0.037 (0.022)	0.902
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.139	0.035* (0.008)	0.135	0.032* (0.011)	0.138	0.043* (0.011)	0.143	0.030* (0.014)	0.746

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.763	-0.038* (0.013)	0.810	-0.032 (0.022)	0.772	-0.037* (0.019)	0.699	-0.047* (0.019)	0.994
Average share minority [SCH]	0.919	-0.042* (0.013)	0.934	-0.039 (0.022)	0.908	-0.045* (0.019)	0.915	-0.041* (0.018)	0.609
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.162	0.029* (0.013)	0.148	0.025 (0.022)	0.162	0.035 (0.019)	0.188	0.029 (0.018)	0.852
Average pupil-	19.258	-0.478	18.672	-1.331	19.240	-0.637	19.943	0.362	0.148

teacher ratio, excluding MA [SCH]		(0.470)		(0.929)		(0.760)		(0.624)	
Share magnet schools, excluding MD, NY [SCH]	0.193	-0.061* (0.029)	0.086	-0.059 (0.049)	0.137	-0.021 (0.036)	0.373	-0.100* (0.050)	0.781
Index of positive school climate[d] [SR]	0.658	-0.027 (0.022)	0.685	-0.075* (0.035)	0.690	-0.035 (0.031)	0.583	0.025 (0.041)	0.260
Gangs in child's school or neighborhood [SR]	0.541	-0.073 (0.040)	0.362	0.035 (0.084)	0.628	-0.216* (0.065)	0.556	0.012 (0.061)	0.370
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.244	0.020 (0.018)	0.266	0.015 (0.029)	0.235	0.008 (0.031)	0.230	0.038 (0.029)	0.682
Ever repeated a grade in school [PR]	0.194	0.042 (0.028)	0.154	0.075 (0.047)	0.179	0.035 (0.051)	0.260	0.016 (0.050)	0.642
Suspended from school during past two years [PR]	0.109	-0.031 (0.019)	0.072	-0.020 (0.029)	0.123	-0.014 (0.037)	0.137	-0.060 (0.035)	0.424
School asked to come in and talk about problems[f]	0.271	-0.050 (0.031)	0.279	-0.039 (0.052)	0.288	-0.056 (0.056)	0.228	-0.058 (0.059)	0.795

G. School engagement, ages 8 to 18

Always pays attention in class [SR]	0.488	0.116* (0.041)	0.470	0.278* (0.071)	0.533	0.015 (0.058)	0.430	0.121 (0.077)	0.110
Works hard in school [SR]	0.483	0.115* (0.043)	0.587	0.192* (0.079)	0.482	0.094 (0.061)	0.389	0.071 (0.075)	0.247
Reads at least 5 hours/week excluding schoolwork [SR]	0.191	0.017 (0.030)	0.191	0.002 (0.059)	0.182	0.027 (0.043)	0.204	0.010 (0.056)	0.931
Late for school less than once a month [SR]	0.504	0.015 (0.042)	0.529	-0.036 (0.077)	0.594	0.010 (0.058)	0.337	0.066 (0.071)	0.239

H. Special classes during past 2 years, ages 8 to 18

In class for gifted students or did advanced work [PR]	0.103	0.045 (0.026)	0.136	-0.038 (0.049)	0.086	0.074* (0.037)	0.101	0.071 (0.056)	0.566
Special ed or help with learning, behavioral or emotional problems [PR]	0.254	-0.069* (0.034)	0.241	-0.018 (0.073)	0.254	-0.055 (0.055)	0.264	-0.133* (0.057)	0.316

Notes: See notes for Appendix Table A1.

Appendix Table A5

Estimated Effects for the Baltimore Experimental Group

	Experimental versus Control								Linear Age Interaction
	Baltimore All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.054	0.129* (0.058) {N = 519}	-0.754	0.189 (0.100) {N = 137}	0.086	0.073 (0.109) {N = 185}	0.397	0.134 (0.093) {N = 197}	0.661
Broad reading score [WJR]	-0.060	0.120 (0.069)	-0.724	0.247* (0.123)	0.031	0.068 (0.124)	0.425	0.055 (0.112)	0.312
Broad math score [WJR]	-0.071	0.121* (0.055)	-0.817	0.160 (0.095)	0.152	0.031 (0.106)	0.339	0.183* (0.087)	0.971
B. Unadjusted scores									
Broad reading score [WJR]	-0.077	0.138* (0.069)	-0.746	0.260* (0.126)	0.038	0.066 (0.120)	0.386	0.093 (0.112)	0.414
Broad math score [WJR]	-0.053	0.098 (0.056)	-0.822	0.143 (0.100)	0.189	-0.012 (0.105)	0.356	0.179* (0.090)	0.764
C. Mobility and school									

changes

Moved using MTO voucher	-0.000	0.517* (0.041)	0.000	0.570* (0.069)	0.000	0.532* (0.059)	0.000	0.460* (0.054)	0.178
Moved at least 10 miles from BL address [ADDR]	0.024	0.118* (0.035)	0.035	0.086 (0.055)	0.008	0.131* (0.046)	0.036	0.127* (0.051)	0.613
Number of moves since RA [ADDR]	1.568	0.434* (0.130)	1.539	0.877* (0.200)	1.493	0.522* (0.174)	1.688	-0.050 (0.182)	0.001
Average share of schools in main BL school districts[a] [SCH]	0.928	-0.133* (0.033)	0.920	-0.081 (0.060)	0.908	-0.132* (0.045)	0.959	-0.174* (0.044)	0.259
School closer to BL than 2002 address, age <=14 [ADDR] [SCH]	0.267	-0.094 (0.058)	0.197	-0.070 (0.075)	0.325	-0.109 (0.079)	NA	NA	0.553
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.602	-0.063 (0.105)	1.632	0.160 (0.163)	3.003	-0.243 (0.143)	3.645	-0.036 (0.261)	0.555
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.254	-0.057 (0.047)	0.162	0.007 (0.076)	0.297	-0.071 (0.069)	0.335	-0.184 (0.114)	0.110

D. Census tract characteristics

Average census tract poverty rate [ADDR]	0.408	-0.113* (0.016)	0.421	-0.132* (0.024)	0.400	-0.114* (0.022)	0.407	-0.098* (0.022)	0.266
Male unemployment rate [ADDR]	0.235	-0.054* (0.019)	0.262	-0.091* (0.031)	0.212	-0.037 (0.025)	0.239	-0.043 (0.027)	0.187
Average share of tract minority [ADDR]	0.882	-0.140* (0.024)	0.905	-0.137* (0.033)	0.877	-0.141* (0.034)	0.867	-0.142* (0.035)	0.517
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.125	0.084* (0.014)	0.114	0.075* (0.021)	0.131	0.081* (0.020)	0.127	0.095* (0.021)	0.607
E. School characteristics									
Average share free lunch eligible, excluding IL [SCH]	0.748	-0.118* (0.018)	0.822	-0.136* (0.031)	0.763	-0.126* (0.024)	0.661	-0.094* (0.026)	0.112
Average share minority [SCH]	0.920	-0.084* (0.017)	0.933	-0.075* (0.030)	0.913	-0.088* (0.026)	0.915	-0.087* (0.027)	0.934
Average percentile rank on state exams [SCH], excluding age > 13 for MD	0.167	0.063* (0.018)	0.154	0.047 (0.025)	0.182	0.073* (0.024)	NA	NA	NA

and NY

Average pupil-teacher ratio, excluding MA [SCH]	16.496	0.285 (0.206)	16.342	1.091* (0.378)	16.171	0.153 (0.286)	17.019	-0.249 (0.323)	0.024
Share magnet schools, excluding MD, NY [SCH]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Index of positive school climate[d] [SR]	0.589	0.020 (0.029)	0.640	0.039 (0.066)	0.585	0.007 (0.043)	0.558	0.041 (0.054)	0.312
Gangs in child's school or neighborhood [SR]	0.254	0.007 (0.046)	0.327	-0.200 (0.110)	0.245	0.062 (0.072)	0.225	0.023 (0.071)	0.775

F. School and behavior problems

Index of eleven behavior problems[e] [PR]	0.337	-0.032 (0.028)	0.326	-0.030 (0.050)	0.348	0.026 (0.049)	0.333	-0.096* (0.044)	0.358
Ever repeated a grade in school [PR]	0.407	-0.105* (0.044)	0.346	-0.155 (0.088)	0.388	-0.014 (0.076)	0.482	-0.155 (0.079)	0.605
Suspended from school during past two years [PR]	0.305	-0.018 (0.041)	0.268	-0.087 (0.081)	0.402	0.059 (0.077)	0.226	-0.036 (0.067)	0.712
School asked to come in and	0.405	0.019 (0.051)	0.481	-0.081 (0.097)	0.442	0.101 (0.085)	0.257	0.030 (0.081)	0.256

talk about problems[f]

G. School engagement, ages 8 to 18									
Always pays attention in class [SR]	0.452	0.028 (0.057)	0.491	0.152 (0.123)	0.432	0.013 (0.078)	0.456	-0.013 (0.097)	0.062
Works hard in school [SR]	0.534	0.026 (0.055)	0.640	0.122 (0.120)	0.569	-0.030 (0.083)	0.403	0.063 (0.103)	0.915
Reads at least 5 hours/week excluding schoolwork [SR]	0.202	0.003 (0.046)	0.219	0.076 (0.111)	0.123	0.037 (0.069)	0.315	-0.092 (0.079)	0.215
Late for school less than once a month [SR]	0.405	0.045 (0.060)	0.649	-0.052 (0.134)	0.336	0.149 (0.086)	0.335	-0.061 (0.085)	0.498
H. Special classes during past 2 years, ages 8 to 18									
In class for gifted students or did advanced work [PR]	0.128	0.047 (0.041)	0.216	0.112 (0.117)	0.104	0.051 (0.059)	0.099	-0.030 (0.056)	0.407
Special ed or help with learning, behavioral or emotional	0.251	0.093 (0.053)	0.177	0.268* (0.122)	0.323	0.062 (0.078)	0.198	0.041 (0.078)	0.335

problems [PR]

Notes: See notes for Appendix Table A1.

Appendix Table A6

Estimated Effects for the Boston Experimental Group

	Experimental versus Control								Linear Age Interaction
	Boston All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	0.041	-0.028 (0.060) {N = 783}	-0.692	-0.199 (0.125) {N = 262}	0.261	0.047 (0.090) {N = 277}	0.503	0.065 (0.093) {N = 244}	0.117
Broad reading score [WJR]	0.106	-0.031 (0.063)	-0.533	-0.186 (0.136)	0.271	0.053 (0.092)	0.545	0.041 (0.088)	0.159
Broad math score [WJR]	-0.035	-0.037 (0.057)	-0.812	-0.186 (0.112)	0.212	0.050 (0.093)	0.427	0.012 (0.108)	0.362
B. Unadjusted scores									
Broad reading score [WJR]	0.097	-0.026 (0.062)	-0.546	-0.164 (0.136)	0.271	0.032 (0.090)	0.529	0.056 (0.088)	0.197
Broad math score [WJR]	-0.046	-0.011 (0.054)	-0.829	-0.132 (0.106)	0.211	0.043 (0.086)	0.411	0.051 (0.108)	0.462
C. Mobility and school									

changes

Moved using MTO voucher	0.000	0.385* (0.034)	-0.000	0.336* (0.048)	-0.000	0.439* (0.051)	0.000	0.368* (0.054)	0.526
Moved at least 10 miles from BL address [ADDR]	0.095	0.062* (0.031)	0.066	0.052 (0.041)	0.129	0.067 (0.055)	0.082	0.067 (0.048)	0.985
Number of moves since RA [ADDR]	1.082	0.447* (0.096)	1.173	0.288* (0.146)	1.072	0.451* (0.139)	1.004	0.618* (0.158)	0.168
Average share of schools in main BL school districts[a] [SCH]	0.794	-0.093* (0.036)	0.811	-0.084 (0.060)	0.800	-0.075 (0.053)	0.766	-0.129* (0.060)	0.458
School closer to BL than 2002 address, age <= 14 [ADDR] [SCH]	0.284	0.014 (0.053)	0.371	-0.092 (0.070)	0.211	0.111 (0.072)	NA	NA	0.150
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.136	-0.010 (0.070)	1.370	0.092 (0.092)	2.474	-0.048 (0.106)	3.014	-0.224 (0.240)	0.134
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.146	-0.033 (0.030)	0.079	-0.015 (0.036)	0.161	0.005 (0.049)	0.270	-0.216* (0.086)	0.074

D. Census tract characteristics

Average census tract poverty rate [ADDR]	0.354	-0.093* (0.010)	0.370	-0.096* (0.017)	0.345	-0.106* (0.014)	0.348	-0.071* (0.015)	0.114
Male unemployment rate [ADDR]	0.126	-0.014* (0.006)	0.127	-0.018* (0.008)	0.125	-0.021* (0.007)	0.126	0.001 (0.010)	0.159
Average share of tract minority [ADDR]	0.750	-0.081* (0.020)	0.738	-0.076* (0.033)	0.768	-0.097* (0.027)	0.740	-0.063 (0.033)	0.898
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.181	0.047* (0.010)	0.172	0.051* (0.014)	0.184	0.049* (0.013)	0.187	0.039* (0.017)	0.673

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.639	-0.047* (0.018)	0.694	-0.052 (0.032)	0.657	-0.041 (0.028)	0.552	-0.050 (0.034)	0.963
Average share minority [SCH]	0.772	-0.057* (0.019)	0.798	-0.060* (0.031)	0.772	-0.037 (0.030)	0.742	-0.079* (0.037)	0.659
Average percentile rank on state exams [SCH], excluding age > 13 for MD	0.195	0.041* (0.015)	0.186	0.046 (0.029)	0.184	0.043* (0.022)	0.219	0.033 (0.033)	0.956

and NY

Average pupil-teacher ratio, excluding MA [SCH]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnet schools, excluding MD, NY [SCH]	0.023	-0.021 (0.016)	0.034	-0.031 (0.025)	0.030	-0.026 (0.021)	0.001	-0.001 (0.006)	0.195
Index of positive school climate[d] [SR]	0.667	-0.037 (0.022)	0.677	-0.038 (0.039)	0.673	-0.043 (0.029)	0.647	-0.022 (0.045)	0.685
Gangs in child's school or neighborhood [SR]	0.392	-0.032 (0.047)	0.274	0.101 (0.097)	0.432	-0.107 (0.074)	0.407	-0.015 (0.079)	0.748

F. School and behavior problems

Index of eleven behavior problems[c] [PR]	0.240	0.017 (0.019)	0.229	0.031 (0.029)	0.266	0.004 (0.031)	0.218	0.014 (0.035)	0.985
Ever repeated a grade in school [PR]	0.230	-0.022 (0.031)	0.187	-0.005 (0.054)	0.187	-0.018 (0.051)	0.326	-0.051 (0.064)	0.977
Suspended from school during past two years [PR]	0.145	-0.011 (0.026)	0.086	-0.038 (0.037)	0.151	-0.029 (0.045)	0.200	0.044 (0.060)	0.217
School asked to come in and talk about	0.343	-0.060 (0.039)	0.258	0.067 (0.063)	0.397	-0.167* (0.060)	0.372	-0.087 (0.084)	0.140

problems[f]

G. School engagement, ages 8 to 18

Always pays attention in class [SR]	0.516	0.069 (0.045)	0.588	0.179* (0.088)	0.482	-0.004 (0.068)	0.519	0.108 (0.093)	0.554
Works hard in school [SR]	0.555	0.019 (0.044)	0.792	-0.062 (0.075)	0.528	0.030 (0.065)	0.403	0.079 (0.090)	0.298
Reads at least 5 hours/week [SR]	0.236	-0.012 (0.041)	0.183	-0.044 (0.069)	0.247	-0.028 (0.060)	0.260	0.062 (0.073)	0.195
Late for school less than once a month [SR]	0.593	-0.028 (0.043)	0.742	-0.020 (0.078)	0.588	0.012 (0.061)	0.473	-0.113 (0.089)	0.543

H. Special classes during past 2 years, ages 8 to 18

In class for gifted students or did advanced work [PR]	0.097	0.008 (0.026)	0.076	-0.047 (0.042)	0.094	0.017 (0.039)	0.120	0.042 (0.059)	0.311
Special ed or help with learning, behavioral or emotional problems [PR]	0.363	-0.058 (0.043)	0.360	-0.019 (0.089)	0.339	-0.077 (0.064)	0.410	-0.063 (0.074)	0.7091

Notes: See notes for Appendix Table A1.

Appendix Table A7

Estimated Effects for the Chicago Experimental Group

	Experimental versus Control								Linear Age Interaction
	Chicago All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.144	0.020 (0.061) {N = 902}	-1.058	0.061 (0.096) {N = 332}	0.362	-0.060 (0.090) {N = 295}	0.684	0.060 (0.114) {N = 275}	0.746
Broad reading score [WJR]	-0.202	0.047 (0.062)	-1.080	0.121 (0.099)	0.258	-0.049 (0.094)	0.608	0.065 (0.112)	0.564
Broad math score [WJR]	-0.033	-0.040 (0.063)	-0.912	-0.046 (0.099)	0.480	-0.098 (0.090)	0.703	0.039 (0.116)	0.897
B. Unadjusted scores									
Broad reading score [WJR]	-0.205	0.063 (0.069)	-1.087	0.111 (0.099)	0.272	-0.036 (0.106)	0.590	0.119 (0.137)	0.886
Broad math score [WJR]	-0.021	-0.030 (0.072)	-0.894	-0.037 (0.098)	0.514	-0.110 (0.104)	0.680	0.073 (0.146)	0.898
C. Mobility and school									

changes

Moved using MTO voucher	-0.000	0.319* (0.029)	-0.000	0.352* (0.043)	0.000	0.293* (0.039)	-0.000	0.309* (0.045)	0.474
Moved at least 10 miles from BL address [ADDR]	0.143	0.043 (0.043)	0.102	0.117* (0.059)	0.142	0.070 (0.053)	0.208	-0.083 (0.058)	0.007
Number of moves since RA [ADDR]	1.623	-0.089 (0.138)	1.587	-0.047 (0.202)	1.711	-0.197 (0.174)	1.575	-0.012 (0.160)	0.765
Average share of schools in main BL school districts[a] [SCH]	0.932	-0.091* (0.024)	0.940	-0.139* (0.038)	0.909	-0.054 (0.035)	0.952	-0.074* (0.028)	0.312
School closer to BL than 2002 address, age <=16 [ADDR] [SCH]	0.282	-0.096 (0.052)	0.296	-0.156* (0.064)	0.259	-0.031 (0.074)	0.290	-0.096 (0.134)	0.038
Number of schools attended since year after RA[b], age <= 16 [SCH]	1.881	0.102 (0.077)	1.445	0.124 (0.081)	2.166	0.085 (0.132)	2.464	0.075 (0.182)	0.563
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.183	-0.012 (0.035)	0.146	-0.019 (0.059)	0.229	-0.006 (0.057)	0.171	-0.020 (0.092)	0.962

D. Census tract characteristics

Average census tract poverty rate [ADDR]	0.562	-0.108* (0.018)	0.578	-0.127* (0.028)	0.552	-0.089* (0.023)	0.547	-0.107* (0.025)	0.579
Male unemployment rate [ADDR]	0.251	-0.012 (0.017)	0.235	-0.013 (0.024)	0.253	0.009 (0.021)	0.273	-0.033 (0.025)	0.401
Average share of tract minority [ADDR]	0.976	-0.034* (0.009)	0.978	-0.054* (0.016)	0.985	-0.027* (0.010)	0.960	-0.019 (0.017)	0.102
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.107	0.036* (0.008)	0.097	0.059* (0.012)	0.109	0.018 (0.009)	0.120	0.028* (0.012)	0.033
E. School characteristics									
Average share free lunch eligible, excluding IL [SCH]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Average share minority [SCH]	0.978	-0.028* (0.009)	0.978	-0.031 (0.017)	0.974	-0.018 (0.015)	0.984	-0.038* (0.012)	0.669
Average percentile rank on state exams [SCH], excluding age > 13 for MD	0.094	0.029* (0.008)	0.093	0.040* (0.014)	0.105	0.012 (0.011)	0.083	0.034* (0.014)	0.805

and NY

Average pupil-teacher ratio, excluding MA [SCH]	18.327	0.102 (0.195)	19.026	-0.015 (0.337)	18.924	-0.125 (0.276)	16.371	0.561 (0.312)	0.388
Magnet schools, excluding MD, NY [SCH]	0.309	-0.003 (0.037)	0.343	-0.095 (0.057)	0.230	0.050 (0.054)	0.364	0.057 (0.058)	0.141
Index of positive school climate[d] [SR]	0.682	-0.006 (0.022)	0.718	-0.035 (0.038)	0.682	-0.000 (0.028)	0.644	0.016 (0.045)	0.574
Gangs in child's school or neighborhood [SR]	0.691	-0.101* (0.043)	0.584	-0.081 (0.090)	0.753	-0.186* (0.069)	0.696	-0.015 (0.068)	0.263

F. School and behavior problems

Index of eleven behavior problems[c] [PR]	0.292	0.027 (0.023)	0.330	-0.014 (0.040)	0.302	0.044 (0.035)	0.223	0.060 (0.037)	0.206
Ever repeated a grade in school [PR]	0.237	0.043 (0.034)	0.195	0.008 (0.061)	0.341	0.066 (0.068)	0.179	0.063 (0.053)	0.902
Suspended from school during past two years [PR]	0.192	0.050 (0.029)	0.106	0.046 (0.039)	0.293	0.033 (0.061)	0.195	0.072 (0.057)	0.705
School asked to come in and talk about	0.282	0.072* (0.037)	0.282	0.059 (0.069)	0.345	0.051 (0.069)	0.185	0.131 (0.069)	0.321

problems[f]

G. School engagement, ages 8 to 18								
Always pays attention in class [SR]	0.681	-0.057 (0.048)	0.741	-0.099 (0.076)	0.739	-0.121 (0.065)	0.524	0.091 (0.090)	0.121
Works hard in school [SR]	0.721	-0.057 (0.042)	0.779	-0.026 (0.074)	0.747	-0.073 (0.064)	0.616	-0.065 (0.092)	0.801
Reads at least 5 hours/week [SR]	0.420	-0.005 (0.046)	0.401	0.013 (0.079)	0.484	-0.069 (0.064)	0.336	0.073 (0.082)	0.261
Late for school less than once a month [SR]	0.547	0.005 (0.047)	0.595	0.004 (0.077)	0.596	-0.002 (0.069)	0.415	0.010 (0.087)	0.902
H. Special classes during past 2 years, ages 8 to 18								
In class for gifted students or did advanced work [PR]	0.092	0.004 (0.026)	0.041	0.040 (0.035)	0.132	-0.021 (0.043)	0.083	0.000 (0.048)	0.991
Special ed or help with learning, behavioral or emotional problems [PR]	0.195	0.029 (0.038)	0.255	-0.086 (0.085)	0.201	0.056 (0.058)	0.123	0.105 (0.061)	0.072

Notes: See notes for Appendix Table A1.

Appendix Table A8

Estimated Effects for the Los Angeles Experimental Group

	Los Angeles All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		Linear Age Interaction
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	0.020	-0.020 (0.055) {N = 690}	-0.735	-0.084 (0.105) {N = 196}	0.173	0.055 (0.085) {N = 243}	0.455	-0.045 (0.088) {N = 251}	0.760
Broad reading score [WJR]	0.009	0.012 (0.063)	-0.603	-0.085 (0.115)	0.091	0.112 (0.095)	0.409	-0.014 (0.100)	0.912
Broad math score [WJR]	0.019	-0.048 (0.054)	-0.819	-0.066 (0.099)	0.239	-0.010 (0.082)	0.456	-0.070 (0.085)	0.616
B. Unadjusted scores									
Broad reading score [WJR]	0.030	-0.006 (0.067)	-0.592	-0.100 (0.108)	0.112	0.090 (0.094)	0.438	-0.029 (0.111)	0.979
Broad math score [WJR]	0.035	-0.026 (0.055)	-0.797	-0.040 (0.097)	0.244	0.023 (0.081)	0.480	-0.059 (0.087)	0.568
C. Mobility and school									

Experimental versus Control

changes

Moved using MTO voucher	0.000	0.615* (0.038)	0.000	0.611* (0.057)	0.000	0.609* (0.050)	0.000	0.626* (0.052)	0.855
Moved at least 10 miles from BL address [ADDR]	0.184	0.138* (0.050)	0.198	0.092 (0.075)	0.154	0.149* (0.064)	0.203	0.156* (0.071)	0.752
Number of moves since RA [ADDR]	1.179	0.420* (0.116)	1.252	0.342 (0.183)	1.046	0.527* (0.155)	1.254	0.379* (0.157)	0.913
Average share of schools in main BL school districts[a] [SCH]	0.880	-0.156* (0.033)	0.875	-0.203* (0.058)	0.883	-0.129* (0.047)	0.880	-0.146* (0.045)	0.322
School closer to BL than 2002 address, age <= 16 [ADDR] [SCH]	0.276	-0.120* (0.047)	0.221	-0.082 (0.070)	0.261	-0.140* (0.056)	0.412	-0.158 (0.107)	0.309
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.328	0.129 (0.090)	1.446	0.112 (0.106)	2.545	0.321* (0.126)	3.413	-0.183 (0.229)	0.615
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.202	0.006 (0.039)	0.134	-0.017 (0.055)	0.194	0.053 (0.056)	0.337	-0.058 (0.099)	0.957

D. Census tract characteristics

Average census tract poverty rate [ADDR]	0.461	-0.153* (0.017)	0.476	-0.176* (0.027)	0.456	-0.146* (0.023)	0.456	-0.148* (0.023)	0.290
Male unemployment rate [ADDR]	0.179	-0.051* (0.010)	0.184	-0.061* (0.015)	0.175	-0.039* (0.013)	0.178	-0.055* (0.014)	0.435
Average share of tract minority [ADDR]	0.943	-0.111* (0.016)	0.940	-0.107* (0.025)	0.949	-0.121* (0.022)	0.940	-0.108* (0.020)	0.844
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.082	0.082* (0.011)	0.078	0.095* (0.017)	0.084	0.083* (0.015)	0.084	0.074* (0.013)	0.276

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.807	-0.074* (0.014)	0.898	-0.095* (0.023)	0.830	-0.081* (0.021)	0.701	-0.052* (0.023)	0.203
Average share minority [SCH]	0.966	-0.063* (0.011)	0.975	-0.068* (0.020)	0.959	-0.066* (0.019)	0.965	-0.057* (0.015)	0.509
Average percentile rank on state exams [SCH], excluding age > 13 for MD	0.167	0.062* (0.014)	0.137	0.084* (0.024)	0.153	0.061* (0.023)	0.208	0.044* (0.019)	0.186

and NY

Average pupil-teacher ratio, excluding MA [SCH]	2.957	0.303 (0.180)	19.595	-0.120 (0.213)	2.858	0.146 (0.284)	22.273	0.797* (0.327)	0.031
Magnet schools, excluding MD, NY [SCH]	0.333	-0.088* (0.032)	0.162	-0.083 (0.058)	0.260	-0.058 (0.044)	0.565	-0.121* (0.051)	0.932
Index of positive school climate[d] [SR]	0.587	0.048 (0.026)	0.650	0.001 (0.047)	0.593	0.022 (0.036)	0.539	0.116* (0.046)	0.283
Gangs in child's school or neighborhood [SR]	0.739	-0.193* (0.044)	0.644	-0.382* (0.097)	0.805	-0.221* (0.070)	0.720	-0.088 (0.066)	0.017
F. School and behavior problems									
Index of eleven behavior problems[c] [PR]	0.298	-0.022 (0.022)	0.335	-0.033 (0.041)	0.321	-0.031 (0.036)	0.247	-0.009 (0.034)	0.586
Ever repeated a grade in school [PR]	0.101	0.051 (0.026)	0.078	0.113* (0.054)	0.067	0.018 (0.042)	0.154	0.031 (0.047)	0.548
Suspended from school during past two years [PR]	0.188	-0.032 (0.027)	0.171	-0.081 (0.050)	0.191	-0.005 (0.048)	0.198	-0.028 (0.046)	0.501
School asked to come in and talk about	0.318	-0.002 (0.039)	0.383	-0.040 (0.076)	0.300	0.040 (0.061)	0.265	-0.020 (0.069)	0.764

problems[f]

G. School engagement, ages 8 to 18								
Always pays attention in class [SR]	0.487	0.053 (0.048)	0.537	0.218* (0.092)	0.525	-0.016 (0.072)	0.406	0.051 (0.083)	0.474
Works hard in school [SR]	0.510	0.002 (0.045)	0.683	0.060 (0.092)	0.472	-0.005 (0.068)	0.455	-0.033 (0.083)	0.528
Reads at least 5 hours/week [SR]	0.179	0.052 (0.039)	0.205	0.043 (0.079)	0.129	0.080 (0.050)	0.229	0.010 (0.069)	0.853
Late for school less than once a month [SR]	0.516	0.009 (0.048)	0.551	0.060 (0.108)	0.586	-0.007 (0.063)	0.398	0.010 (0.088)	0.418
H. Special classes during past 2 years, ages 8 to 18								
In class for gifted students or did advanced work [PR]	0.183	-0.052 (0.037)	0.200	-0.029 (0.076)	0.201	-0.055 (0.055)	0.146	-0.056 (0.058)	0.888
Special ed or help with learning, behavioral or emotional problems [PR]	0.275	0.007 (0.040)	0.262	0.100 (0.093)	0.290	0.001 (0.060)	0.260	-0.036 (0.064)	0.271

Notes: See notes for Appendix Table A1.

Appendix Table A9

Estimated Effects for the New York Experimental Group

	Experimental versus Control								Linear Age Interaction
	New York All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	0.121	-0.034 (0.065) {N = 747}	-0.873	-0.028 (0.117) {N = 231}	0.453	-0.048 (0.098) {N = 240}	0.809	-0.025 (0.103) {N = 276}	0.952
Broad reading score [WJR]	0.137	-0.034 (0.064)	-0.748	-0.057 (0.122)	0.399	-0.042 (0.104)	0.774	-0.005 (0.102)	0.931
Broad math score [WJR]	0.091	-0.038 (0.070)	-0.933	-0.012 (0.114)	0.465	-0.049 (0.103)	0.769	-0.049 (0.110)	0.850
B. Unadjusted scores									
Broad reading score [WJR]	0.139	-0.033 (0.061)	-0.714	-0.068 (0.113)	0.361	-0.000 (0.099)	0.783	-0.029 (0.100)	0.963
Broad math score [WJR]	0.063	0.011 (0.069)	-0.902	0.007 (0.111)	0.402	0.038 (0.101)	0.714	-0.009 (0.109)	0.948
C. Mobility and school									

changes

Moved using MTO voucher	0.000	0.515* (0.036)	-0.000	0.546* (0.053)	-0.000	0.499* (0.052)	-0.000	0.498* (0.054)	0.409
Moved at least 10 miles from BL address [ADDR]	0.115	0.051 (0.040)	0.137	0.065 (0.068)	0.152	0.003 (0.062)	0.055	0.081 (0.048)	0.869
Number of moves since RA [ADDR]	0.609	0.710* (0.101)	0.745	0.732* (0.172)	0.640	0.705* (0.144)	0.443	0.699* (0.141)	0.604
Average share of schools in main BL school districts[a] [SCH]	0.898	-0.016 (0.032)	0.899	-0.038 (0.053)	0.903	-0.026 (0.053)	0.893	0.014 (0.044)	0.509
School closer to BL than 2002 address, age <= 16 [ADDR] [SCH]	0.247	-0.035 (0.051)	0.258	-0.144* (0.071)	0.274	0.088 (0.078)	0.153	-0.076 (0.094)	0.232
Number of schools attended since year after RA[b], age <= 16 [SCH]	1.877	0.195* (0.079)	1.420	-0.110 (0.094)	2.091	0.376* (0.125)	2.479	0.432* (0.194)	0.005
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.109	0.062 (0.036)	0.077	-0.000 (0.041)	0.121	0.105* (0.051)	0.160	0.096 (0.107)	0.225

D. Census tract characteristics

Average census tract poverty rate [ADDR]	0.462	-0.150* (0.015)	0.458	-0.132* (0.019)	0.454	-0.159* (0.023)	0.473	-0.158* (0.022)	0.323
Male unemployment rate [ADDR]	0.223	-0.052* (0.010)	0.220	-0.046* (0.014)	0.207	-0.049* (0.016)	0.241	-0.062* (0.014)	0.320
Average share of tract minority [ADDR]	0.950	-0.026* (0.011)	0.938	-0.007 (0.015)	0.949	-0.014 (0.017)	0.963	-0.052* (0.017)	0.084
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.120	0.061* (0.009)	0.127	0.050* (0.012)	0.118	0.070* (0.012)	0.114	0.063* (0.012)	0.436

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.771	-0.031* (0.015)	0.832	-0.036 (0.024)	0.788	-0.037 (0.025)	0.695	-0.023 (0.026)	0.533
Average share minority [SCH]	0.923	-0.000 (0.016)	0.945	-0.013 (0.025)	0.916	0.004 (0.026)	0.909	0.005 (0.025)	0.492
Average percentile rank on state exams [SCH], excluding age > 13 for MD	0.133	0.035 (0.021)	0.126	0.037 (0.027)	0.142	0.030 (0.025)	NA	NA	NA

and NY

Average pupil-teacher ratio, excluding MA [SCH]	17.844	-0.362 (0.531)	17.888	-1.695 (0.911)	17.610	-0.276 (0.954)	18.025	0.766 (0.772)	0.122
Magnet schools, excluding MD, NY [SCH]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Index of positive school climate[d] [SR]	0.677	-0.040 (0.023)	0.699	-0.106* (0.039)	0.685	-0.044 (0.035)	0.648	0.019 (0.041)	0.085
Gangs in child's school or neighborhood [SR]	0.536	-0.061 (0.051)	0.349	-0.012 (0.097)	0.617	-0.168* (0.083)	0.571	0.006 (0.079)	0.807

F. School and behavior problems

Index of eleven behavior problems[c] [PR]	0.218	0.032 (0.023)	0.228	0.019 (0.033)	0.213	0.074 (0.039)	0.212	0.006 (0.036)	0.810
Ever repeated a grade in school [PR]	0.188	0.099* (0.037)	0.119	-0.002 (0.049)	0.188	0.180* (0.065)	0.263	0.116 (0.071)	0.043
Suspended from school during past two years [PR]	0.066	0.016 (0.021)	0.036	0.006 (0.027)	0.074	0.058 (0.036)	0.091	-0.014 (0.042)	0.752
School asked to come in and talk about	0.213	-0.013 (0.036)	0.191	-0.008 (0.055)	0.212	0.074 (0.065)	0.249	-0.129* (0.062)	0.643

problems[f]

G. School engagement, ages 8 to 18								
Always pays attention in class [SR]	0.549	0.028 (0.048)	0.544	0.079 (0.086)	0.571	-0.007 (0.070)	0.524	0.038 (0.091)	0.254
Works hard in school [SR]	0.521	0.025 (0.053)	0.473	0.241* (0.093)	0.584	-0.020 (0.074)	0.474	-0.065 (0.092)	0.019
Reads at least 5 hours/week [SR]	0.227	0.001 (0.039)	0.198	-0.099 (0.075)	0.205	0.019 (0.055)	0.284	0.056 (0.073)	0.184
Late for school less than once a month [SR]	0.347	0.052 (0.047)	0.482	-0.088 (0.094)	0.367	0.100 (0.071)	0.202	0.099 (0.076)	0.128
H. Special classes during past 2 years, ages 8 to 18								
In class for gifted students or did advanced work [PR]	0.093	0.083* (0.033)	0.139	-0.001 (0.064)	0.063	0.118* (0.052)	0.097	0.092 (0.055)	0.876
Special ed or help with learning, behavioral or emotional problems [PR]	0.209	0.011 (0.036)	0.191	0.118 (0.079)	0.204	-0.018 (0.057)	0.230	-0.026 (0.069)	0.547

Notes: See notes for Appendix Table A1.

Appendix Table A10

Estimated Effects for Experimental Group Children with BL Characteristics Predictive of Low Test Scores

	Experimental versus Control								Linear Age Interaction
	Low Predicted Scores All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.282	0.052 (0.051) {N = 1187}	-1.040	-0.098 (0.092) {N = 390}	0.115	0.140 (0.084) {N = 375}	0.197	0.138 (0.084) {N = 422}	0.199
Broad reading score [WJR]	-0.283	0.072 (0.054)	-0.946	-0.087 (0.101)	0.055	0.164 (0.090)	0.153	0.161 (0.088)	0.243
Broad math score [WJR]	-0.263	0.027 (0.049)	-1.062	-0.072 (0.086)	0.175	0.090 (0.083)	0.231	0.087 (0.086)	0.358
B. Unadjusted scores									
Broad reading score [WJR]	-0.257	0.046 (0.056)	-0.903	-0.118 (0.096)	0.060	0.130 (0.094)	0.179	0.148 (0.098)	0.164
Broad math score [WJR]	-0.231	0.013 (0.051)	-1.003	-0.089 (0.082)	0.193	0.061 (0.085)	0.244	0.091 (0.096)	0.242
C. Mobility and school									

changes

Moved using MTO voucher	-0.000	0.436* (0.027)	0.000	0.453* (0.042)	0.000	0.419* (0.040)	0.000	0.431* (0.039)	0.541
Moved at least 10 miles from BL address [ADDR]	0.093	0.108* (0.029)	0.066	0.138* (0.048)	0.093	0.074 (0.043)	0.125	0.109* (0.046)	0.377
Number of moves since RA [ADDR]	1.223	0.306* (0.088)	1.326	0.227 (0.149)	1.115	0.361* (0.122)	1.212	0.328* (0.134)	0.923
Average share of schools in main BL school districts[a] [SCH]	0.873	-0.071* (0.027)	0.916	-0.143* (0.040)	0.826	0.016 (0.046)	0.869	-0.081* (0.037)	0.336
School closer to BL than 2002 address [ADDR] [SCH]	0.251	-0.068 (0.037)	0.272	-0.116* (0.053)	0.218	0.013 (0.055)	0.263	-0.083 (0.087)	0.189
Number of schools attended since RA[b], age <= 16 [SCH]	2.036	0.120 (0.067)	1.434	0.116 (0.082)	2.350	0.122 (0.101)	2.775	0.127 (0.190)	0.996
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.172	0.004 (0.030)	0.124	0.031 (0.040)	0.156	0.053 (0.046)	0.316	-0.149* (0.074)	0.153

D. Census tract characteristics

Average census tract poverty	0.460	-0.119* (0.011)	0.477	-0.123* (0.017)	0.455	-0.114* (0.017)	0.445	-0.121* (0.019)	0.686

rate [ADDR]

Male unemployment rate [ADDR]	0.211	-0.036* (0.010)	0.223	-0.038* (0.015)	0.215	-0.034* (0.014)	0.193	-0.035* (0.015)	0.714
Average share of tract minority [ADDR]	0.897	-0.065* (0.013)	0.912	-0.067* (0.021)	0.902	-0.072* (0.017)	0.875	-0.056* (0.020)	0.381
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.124	0.049* (0.007)	0.111	0.059* (0.011)	0.126	0.044* (0.011)	0.138	0.044* (0.012)	0.270

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.748	-0.065* (0.014)	0.816	-0.074* (0.023)	0.756	-0.054* (0.024)	0.650	-0.069* (0.028)	0.606
Average share minority [SCH]	0.912	-0.053* (0.014)	0.948	-0.069* (0.020)	0.887	-0.035 (0.023)	0.890	-0.055* (0.021)	0.623
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.140	0.052* (0.012)	0.121	0.056* (0.017)	0.144	0.043* (0.015)	0.177	0.052* (0.026)	0.939
Average pupil-	18.374	-0.292	18.552	-0.927*	18.515	-0.220	17.935	0.414	0.043

teacher ratio, excluding MA [SCH]		(0.295)		(0.400)		(0.600)		(0.415)	
Share magnet schools, excluding MD, NY [SCH]	0.236	-0.063 (0.036)	0.242	-0.140* (0.050)	0.181	-0.009 (0.059)	0.282	-0.019 (0.051)	0.035
Index of positive school climate[d] [SR]	0.637	-0.000 (0.018)	0.686	-0.045 (0.034)	0.650	-0.017 (0.028)	0.584	0.059 (0.031)	0.031
Gangs in child's school or neighborhood [SR]	0.530	-0.043 (0.037)	0.401	0.059 (0.081)	0.605	-0.145* (0.057)	0.530	0.006 (0.057)	0.654
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.304	0.006 (0.019)	0.349	-0.049 (0.030)	0.283	0.045 (0.033)	0.273	0.024 (0.030)	0.096
Ever repeated a grade in school [PR]	0.230	0.041 (0.027)	0.147	0.061 (0.045)	0.209	0.040 (0.048)	0.348	0.011 (0.050)	0.392
Suspended from school during past two years [PR]	0.171	0.015 (0.024)	0.146	-0.035 (0.035)	0.178	0.024 (0.041)	0.194	0.051 (0.041)	0.221
School asked to come in and talk about problems[f]	0.282	0.025 (0.032)	0.293	0.017 (0.054)	0.269	0.041 (0.051)	0.280	-0.002 (0.055)	0.861

G. School engagement, ages 8 to 18									
Always pays attention in class [SR]	0.552	-0.012 (0.038)	0.600	0.069 (0.073)	0.575	-0.018 (0.055)	0.487	-0.034 (0.065)	0.444
Works hard in school [SR]	0.547	-0.003 (0.038)	0.608	0.180* (0.075)	0.597	-0.024 (0.056)	0.442	-0.084 (0.063)	0.018
Reads at least 5 hours/week excluding schoolwork [SR]	0.254	0.003 (0.034)	0.262	-0.057 (0.068)	0.253	0.007 (0.049)	0.248	0.043 (0.058)	0.377
Late for school less than once a month [SR]	0.441	0.026 (0.040)	0.525	0.005 (0.078)	0.421	0.068 (0.058)	0.404	0.013 (0.064)	0.924
H. Special classes during past 2 years, ages 8 to 18									
In class for gifted students or did advanced work [PR]	0.073	0.030 (0.023)	0.101	0.011 (0.049)	0.072	0.033 (0.034)	0.052	0.038 (0.033)	0.842
Special ed or help with learning, behavioral or emotional problems [PR]	0.315	0.044 (0.036)	0.266	0.109 (0.077)	0.282	0.024 (0.047)	0.395	-0.003 (0.057)	0.189

Notes: See notes for Appendix Table A1.

Appendix Table A11

Estimated Effects for Experimental Group Children with BL Characteristics Predictive of Middle Test Scores

	Experimental versus Control								Linear Age Interaction
	Middle Predicted Scores All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.051	-0.052 (0.041) {N = 1219}	-0.832	-0.012 (0.065) {N = 466}	0.275	-0.058 (0.069) {N = 403}	0.655	-0.103 (0.077) {N = 350}	0.480
Broad reading score [WJR]	-0.050	-0.038 (0.043)	-0.761	0.008 (0.071)	0.224	-0.048 (0.071)	0.633	-0.093 (0.078)	0.581
Broad math score [WJR]	-0.048	-0.077 (0.044)	-0.830	-0.052 (0.069)	0.300	-0.072 (0.075)	0.622	-0.117 (0.084)	0.461
B. Unadjusted scores									
Broad reading score [WJR]	-0.054	-0.024 (0.045)	-0.777	0.028 (0.069)	0.222	-0.021 (0.071)	0.640	-0.101 (0.089)	0.415
Broad math score [WJR]	-0.053	-0.045 (0.046)	-0.832	-0.021 (0.070)	0.295	-0.044 (0.077)	0.615	-0.077 (0.087)	0.500
C. Mobility and school									

changes

Moved using MTO voucher	0.000	0.452* (0.027)	-0.000	0.442* (0.035)	-0.000	0.442* (0.041)	-0.000	0.481* (0.047)	0.552
Moved at least 10 miles from BL address [ADDR]	0.123	0.027 (0.032)	0.118	0.027 (0.046)	0.113	0.016 (0.040)	0.143	0.042 (0.049)	0.913
Number of moves since RA [ADDR]	1.278	0.267* (0.116)	1.259	0.309 (0.164)	1.299	0.376* (0.148)	1.278	0.075 (0.148)	0.040
Average share of schools in main BL school districts[a] [SCH]	0.917	-0.106* (0.020)	0.903	-0.090* (0.033)	0.943	-0.112* (0.029)	0.899	-0.122* (0.035)	0.093
School closer to BL than 2002 address [ADDR] [SCH]	0.315	-0.076 (0.041)	0.281	-0.130* (0.054)	0.347	-0.036 (0.060)	0.326	-0.033 (0.106)	0.646
Number of schools attended since RA[b], age <= 16 [SCH]	2.010	0.160* (0.059)	1.377	0.110 (0.068)	2.360	0.165 (0.101)	2.961	0.303 (0.160)	0.232
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.147	0.012 (0.026)	0.119	-0.029 (0.038)	0.160	0.026 (0.042)	0.196	0.110 (0.083)	0.087

D. Census tract characteristics

Average census tract poverty	0.457	-0.130* (0.012)	0.488	-0.140* (0.019)	0.434	-0.117* (0.015)	0.445	-0.132* (0.021)	0.826

rate [ADDR]

Male unemployment rate [ADDR]	0.201	-0.034* (0.011)	0.209	-0.035* (0.017)	0.183	-0.013 (0.013)	0.215	-0.058* (0.017)	0.397
Average share of tract minority [ADDR]	0.906	-0.071* (0.012)	0.917	-0.050* (0.016)	0.911	-0.080* (0.017)	0.885	-0.091* (0.021)	0.100
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.120	0.064* (0.007)	0.114	0.060* (0.010)	0.123	0.061* (0.010)	0.125	0.074* (0.014)	0.459

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.768	-0.078* (0.013)	0.823	-0.086* (0.020)	0.785	-0.079* (0.022)	0.669	-0.070* (0.023)	0.971
Average share minority [SCH]	0.928	-0.047* (0.010)	0.929	-0.030 (0.015)	0.927	-0.046* (0.016)	0.926	-0.075* (0.018)	0.009
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.139	0.056* (0.010)	0.132	0.043* (0.015)	0.137	0.066* (0.017)	0.160	0.064* (0.021)	0.113
Average pupil-	18.590	0.049	18.430	-0.139	18.786	-0.287	18.567	0.751	0.274

teacher ratio, excluding MA [SCH]		(0.272)		(0.467)		(0.439)		(0.519)	
Share magnet schools, excluding MD, NY [SCH]	0.215	-0.024 (0.031)	0.215	-0.046 (0.051)	0.145	-0.007 (0.039)	0.309	-0.013 (0.052)	0.699
Index of positive school climate[d] [SR]	0.647	-0.008 (0.019)	0.683	-0.017 (0.032)	0.647	-0.016 (0.024)	0.604	0.018 (0.039)	0.604
Gangs in child's school or neighborhood [SR]	0.585	-0.077* (0.036)	0.519	-0.116 (0.068)	0.609	-0.068 (0.056)	0.606	-0.057 (0.063)	0.946
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.271	0.008 (0.018)	0.275	0.007 (0.029)	0.295	0.023 (0.031)	0.231	-0.011 (0.033)	0.577
Ever repeated a grade in school [PR]	0.256	-0.000 (0.028)	0.217	-0.051 (0.046)	0.303	0.024 (0.058)	0.245	0.036 (0.052)	0.293
Suspended from school during past two years [PR]	0.175	-0.029 (0.024)	0.109	-0.015 (0.031)	0.231	-0.022 (0.046)	0.195	-0.058 (0.049)	0.529
School asked to come in and talk about problems[f]	0.335	-0.020 (0.031)	0.341	-0.056 (0.049)	0.376	-0.011 (0.055)	0.247	0.032 (0.064)	0.406

G. School engagement, ages 8 to 18									
Always pays attention in class [SR]	0.573	0.005 (0.038)	0.628	0.069 (0.063)	0.573	-0.071 (0.055)	0.506	0.062 (0.074)	0.649
Works hard in school [SR]	0.608	-0.030 (0.037)	0.696	-0.022 (0.059)	0.587	0.002 (0.056)	0.543	-0.100 (0.073)	0.504
Reads at least 5 hours/week excluding schoolwork [SR]	0.250	-0.020 (0.037)	0.234	0.001 (0.066)	0.242	-0.032 (0.047)	0.285	-0.020 (0.070)	0.758
Late for school less than once a month [SR]	0.497	0.010 (0.040)	0.594	-0.013 (0.064)	0.483	0.079 (0.058)	0.405	-0.077 (0.070)	0.253
H. Special classes during past 2 years, ages 8 to 18									
In class for gifted students or did advanced work [PR]	0.133	-0.011 (0.024)	0.147	-0.014 (0.044)	0.115	0.019 (0.034)	0.148	-0.061 (0.050)	0.592
Special ed or help with learning, behavioral or emotional problems [PR]	0.249	0.025 (0.031)	0.268	0.043 (0.067)	0.277	0.014 (0.054)	0.174	0.024 (0.051)	0.921

Notes: See notes for Appendix Table A1.

Appendix Table A12

Estimated Effects for Experimental Group Children with BL Characteristics Predictive of High Test Scores

	Experimental versus Control								Linear Age Interaction
	High Predicted Scores All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	0.376	-0.009 (0.042) {N = 1235}	-0.586	0.064 (0.086) {N = 302}	0.450	-0.068 (0.060) {N = 462}	0.902	0.005 (0.066) {N = 471}	0.971
Broad reading score [WJR]	0.371	0.017 (0.045)	-0.513	0.129 (0.092)	0.386	-0.018 (0.065)	0.899	-0.014 (0.067)	0.551
Broad math score [WJR]	0.350	-0.053 (0.045)	-0.617	-0.028 (0.087)	0.492	-0.142* (0.066)	0.817	0.021 (0.071)	0.482
B. Unadjusted scores									
Broad reading score [WJR]	0.347	0.039 (0.047)	-0.546	0.143 (0.093)	0.384	-0.025 (0.066)	0.862	0.040 (0.070)	0.833
Broad math score [WJR]	0.319	-0.004 (0.046)	-0.660	0.038 (0.085)	0.482	-0.114 (0.067)	0.774	0.077 (0.073)	0.575
C. Mobility and school									

changes									
Moved using MTO voucher	-0.000	0.480* (0.025)	-0.000	0.536* (0.043)	0.000	0.515* (0.038)	0.000	0.414* (0.037)	0.021
Moved at least 10 miles from BL address [ADDR]	0.144	0.051 (0.032)	0.175	0.071 (0.048)	0.163	0.077 (0.049)	0.105	0.015 (0.042)	0.621
Number of moves since RA [ADDR]	1.024	0.415* (0.075)	1.084	0.562* (0.125)	1.092	0.391* (0.106)	0.924	0.354* (0.112)	0.361
Average share of schools in main BL school districts[a] [SCH]	0.862	-0.087* (0.023)	0.830	-0.113* (0.045)	0.857	-0.095* (0.034)	0.889	-0.063 (0.033)	0.263
School closer to BL than 2002 address [ADDR] [SCH]	0.249	0.039 (0.036)	0.279	0.036 (0.065)	0.205	0.076 (0.048)	0.317	-0.039 (0.083)	0.553
Number of schools attended since RA[b], age <= 16 [SCH]	2.332	-0.084 (0.064)	1.588	-0.085 (0.089)	2.522	-0.019 (0.091)	3.145	-0.260 (0.150)	0.594
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.201	-0.055 (0.028)	0.100	-0.009 (0.036)	0.261	-0.074 (0.044)	0.210	-0.088 (0.067)	0.143

D. Census tract characteristics

Average census tract poverty	0.451	-0.129* (0.012)	0.451	-0.138* (0.020)	0.443	-0.131* (0.020)	0.458	-0.121* (0.015)	0.592

rate [ADDR]

Male unemployment rate [ADDR]	0.196	-0.029* (0.009)	0.169	-0.022 (0.013)	0.186	-0.025* (0.013)	0.223	-0.037* (0.013)	0.133
Average share of tract minority [ADDR]	0.913	-0.083* (0.013)	0.888	-0.093* (0.022)	0.907	-0.081* (0.019)	0.934	-0.078* (0.016)	0.637
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.123	0.062* (0.007)	0.134	0.067* (0.012)	0.128	0.064* (0.011)	0.113	0.057* (0.009)	0.449

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.699	-0.055* (0.015)	0.763	-0.096* (0.032)	0.716	-0.054* (0.025)	0.650	-0.030 (0.020)	0.032
Average share minority [SCH]	0.895	-0.041* (0.012)	0.893	-0.078* (0.025)	0.894	-0.039* (0.018)	0.896	-0.019 (0.017)	0.010
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.171	0.034* (0.012)	0.163	0.054* (0.020)	0.172	0.026 (0.017)	0.180	0.019 (0.020)	0.233
Average pupil-	18.488	0.009	18.086	-0.254	18.268	0.185	18.904	-0.040	0.694

teacher ratio, excluding MA [SCH]		(0.296)		(0.876)		(0.446)		(0.389)
Share magnet schools, excluding MD, NY [SCH]	0.217	-0.056* (0.027)	0.111	-0.050 (0.043)	0.188	-0.053 (0.040)	0.348	-0.063 (0.043)	0.836
Index of positive school climate[d] [SR]	0.657	-0.023 (0.019)	0.686	-0.044 (0.035)	0.652	-0.025 (0.026)	0.646	-0.008 (0.036)	0.762
Gangs in child's school or neighborhood [SR]	0.520	-0.055 (0.036)	0.396	-0.092 (0.081)	0.563	-0.107 (0.057)	0.527	0.005 (0.056)	0.080

F. School and behavior problems

Index of eleven behavior problems[e] [PR]	0.232	0.032* (0.016)	0.196	0.072* (0.029)	0.273	0.033 (0.026)	0.214	0.005 (0.025)	0.210
Ever repeated a grade in school [PR]	0.174	0.025 (0.024)	0.144	-0.047 (0.044)	0.163	0.080 (0.041)	0.203	0.019 (0.041)	0.235
Suspended from school during past two years [PR]	0.151	0.008 (0.021)	0.067	-0.012 (0.029)	0.211	0.058 (0.043)	0.144	-0.030 (0.034)	0.574
School asked to come in and talk about problems[f]	0.282	0.042 (0.030)	0.215	0.094 (0.053)	0.343	0.058 (0.051)	0.255	-0.037 (0.054)	0.356

G. School engagement, ages 8 to 18

Always pays attention in class [SR]	0.515	0.080* (0.037)	0.547	0.165* (0.069)	0.531	0.010 (0.053)	0.471	0.145* (0.065)	0.543
Works hard in school [SR]	0.565	0.022 (0.037)	0.710	0.008 (0.067)	0.569	-0.013 (0.052)	0.465	0.088 (0.067)	0.535
Reads at least 5 hours/week excluding schoolwork [SR]	0.279	0.003 (0.034)	0.274	-0.053 (0.065)	0.254	0.000 (0.044)	0.323	0.038 (0.062)	0.048
Late for school less than once a month [SR]	0.512	-0.020 (0.036)	0.679	-0.193* (0.073)	0.603	-0.008 (0.051)	0.262	0.080 (0.061)	0.001

H. Special classes during past 2 years, ages 8 to 18

In class for gifted students or did advanced work [PR]	0.142	0.032 (0.029)	0.105	0.018 (0.053)	0.161	0.013 (0.041)	0.135	0.068 (0.047)	0.647
Special ed or help with learning, behavioral or emotional problems [PR]	0.199	0.001 (0.028)	0.204	-0.023 (0.058)	0.241	0.009 (0.047)	0.131	0.007 (0.046)	0.394

Notes: See notes for Appendix Table A1.

Appendix Table A13

Estimated Effects for Girls in the Section 8 Group

	Section 8 versus Control								Linear Age Interaction
	Girls All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	0.084 {N = 1503}	-0.009 (0.042)	-0.763 {N = 486}	-0.090 (0.081)	0.352 {N = 493}	-0.008 (0.060)	0.633 {N = 524}	0.060 (0.067)	0.415
Broad reading score [WJR]	0.103	0.012 (0.043)	-0.679	-0.024 (0.090)	0.328	0.002 (0.067)	0.631	0.046 (0.068)	0.901
Broad math score [WJR]	0.050	-0.037 (0.044)	-0.816	-0.120 (0.084)	0.359	-0.037 (0.061)	0.578	0.042 (0.069)	0.427
B. Unadjusted scores									
Broad reading score [WJR]	0.103	-0.004 (0.041)	-0.657	-0.040 (0.085)	0.324	-0.025 (0.065)	0.613	0.041 (0.068)	0.731
Broad math score [WJR]	0.055	-0.045 (0.043)	-0.787	-0.122 (0.076)	0.359	-0.052 (0.066)	0.563	0.033 (0.070)	0.416
C. Mobility and school									

changes

Moved using MTO voucher	0.000	0.616* (0.025)	-0.000	0.666* (0.035)	-0.000	0.619* (0.037)	-0.000	0.572* (0.039)	0.106
Moved at least 10 miles from BL address [ADDR]	0.114	0.019 (0.025)	0.138	-0.028 (0.039)	0.063	0.091* (0.033)	0.145	-0.007 (0.039)	0.671
Number of moves since RA [ADDR]	1.185	0.647* (0.089)	1.332	0.727* (0.168)	1.170	0.687* (0.115)	1.058	0.522* (0.109)	0.099
Average share of schools in main BL school districts[a] [SCH]	0.884	-0.038* (0.019)	0.892	-0.054 (0.031)	0.856	-0.014 (0.036)	0.911	-0.046 (0.028)	0.574
School closer to BL than 2002 address [ADDR] [SCH]	0.257	-0.022 (0.032)	0.268	-0.071 (0.047)	0.216	0.032 (0.047)	0.342	-0.043 (0.079)	0.771
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.083	0.148* (0.057)	1.423	0.135 (0.072)	2.357	0.129 (0.094)	2.901	0.219 (0.128)	0.722
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.172	0.035 (0.029)	0.135	0.040 (0.041)	0.186	0.017 (0.041)	0.225	0.073 (0.074)	0.727

D. Census tract characteristics

Average census	0.453	-0.108*	0.460	-0.108*	0.448	-0.118*	0.452	-0.096*	0.502

tract poverty rate [ADDR]		(0.009)		(0.015)		(0.013)		(0.013)	
Male unemployment rate [ADDR]	0.207	-0.040* (0.008)	0.213	-0.046* (0.012)	0.197	-0.036* (0.011)	0.211	-0.036* (0.012)	0.786
Average share of tract minority [ADDR]	0.910	-0.033* (0.009)	0.906	-0.029 (0.015)	0.915	-0.049* (0.013)	0.909	-0.021 (0.013)	0.318
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.119	0.040* (0.005)	0.118	0.043* (0.009)	0.122	0.045* (0.008)	0.118	0.031* (0.008)	0.260
E. School characteristics									
Average share free lunch eligible, excluding IL [SCH]	0.733	-0.026* (0.012)	0.800	-0.056* (0.021)	0.744	-0.015 (0.020)	0.654	-0.011 (0.017)	0.232
Average share minority [SCH]	0.908	-0.015 (0.010)	0.922	0.001 (0.013)	0.895	-0.021 (0.019)	0.910	-0.026 (0.015)	0.107
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.158	0.015 (0.009)	0.145	0.010 (0.012)	0.161	0.034* (0.016)	0.181	-0.009 (0.018)	0.712

Average pupil-teacher ratio, excluding MA [SCH]	18.533	-0.108 (0.277)	18.456	0.600 (0.504)	18.419	-0.292 (0.491)	18.747	-0.571 (0.399)	0.037
Share magnet schools, excluding MD, NY [SCH]	0.244	-0.043 (0.027)	0.226	-0.060 (0.049)	0.175	-0.005 (0.041)	0.358	-0.067 (0.044)	0.988
Index of positive school climate[d] [SR]	0.639	0.022 (0.017)	0.677	-0.021 (0.030)	0.632	0.042 (0.024)	0.621	0.027 (0.031)	0.541
Gangs in child's school or neighborhood [SR]	0.517	-0.026 (0.032)	0.420	-0.049 (0.067)	0.557	-0.045 (0.051)	0.522	0.007 (0.048)	0.089
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.237	-0.007 (0.015)	0.236	-0.010 (0.024)	0.254	-0.013 (0.025)	0.219	-0.000 (0.024)	0.550
Ever repeated a grade in school [PR]	0.196	-0.049* (0.023)	0.174	-0.042 (0.042)	0.212	-0.096* (0.039)	0.200	-0.005 (0.038)	0.389
Suspended from school during past two years [PR]	0.105	-0.008 (0.018)	0.064	-0.024 (0.023)	0.148	-0.022 (0.033)	0.098	0.021 (0.030)	0.318
School asked to come in and talk about	0.228	-0.019 (0.027)	0.237	-0.062 (0.046)	0.249	0.011 (0.046)	0.184	-0.003 (0.046)	0.235

problems[f]

G. School engagement, ages 8 to 18								
Always pays attention in class [SR]	0.578	0.022 (0.034)	0.624	0.047 (0.065)	0.613	0.006 (0.049)	0.490	0.035 (0.058)	0.286
Works hard in school [SR]	0.610	0.022 (0.031)	0.739	0.022 (0.059)	0.612	0.023 (0.045)	0.508	0.022 (0.059)	0.335
Reads at least 5 hours/week excluding schoolwork [SR]	0.304	0.018 (0.032)	0.322	-0.018 (0.065)	0.268	0.051 (0.048)	0.346	0.002 (0.059)	0.913
Late for school less than once a month [SR]	0.483	0.010 (0.033)	0.668	-0.040 (0.065)	0.503	0.067 (0.048)	0.309	-0.026 (0.053)	0.596
H. Special classes during past 2 years, ages 8 to 18								
In class for gifted students or did advanced work [PR]	0.112	0.005 (0.020)	0.130	-0.017 (0.043)	0.132	0.011 (0.032)	0.068	0.015 (0.031)	0.566
Special ed or help with learning, behavioral or emotional problems [PR]	0.182	-0.004 (0.025)	0.208	-0.039 (0.051)	0.188	0.009 (0.039)	0.154	0.009 (0.040)	0.380

Notes: See notes for Appendix Table A1.

Appendix Table A14

Estimated Effects for Boys in the Section 8 Group

	Section 8 versus Control								Linear Age Interaction
	Boys All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.078 {N = 1504}	0.002 (0.041)	-0.940 {N = 499}	-0.029 (0.068)	0.217 {N = 523}	-0.046 (0.065)	0.545 {N = 482}	0.088 (0.080)	0.547
Broad reading score [WJR]	-0.096	0.033 (0.046)	-0.863	0.006 (0.077)	0.131	0.003 (0.072)	0.503	0.097 (0.084)	0.769
Broad math score [WJR]	-0.046	-0.038 (0.041)	-0.922	-0.052 (0.065)	0.291	-0.097 (0.065)	0.543	0.048 (0.081)	0.596
B. Unadjusted scores									
Broad reading score [WJR]	-0.096	0.021 (0.052)	-0.877	0.019 (0.082)	0.135	-0.011 (0.075)	0.515	0.062 (0.100)	0.994
Broad math score [WJR]	-0.051	-0.035 (0.045)	-0.924	-0.048 (0.067)	0.292	-0.112 (0.067)	0.530	0.072 (0.092)	0.452
C. Mobility and school									

changes

Moved using MTO voucher	0.000	0.602* (0.025)	0.000	0.627* (0.038)	0.000	0.646* (0.038)	0.000	0.525* (0.040)	0.017
Moved at least 10 miles from BL address [ADDR]	0.124	0.008 (0.028)	0.087	0.047 (0.044)	0.177	-0.049 (0.041)	0.101	0.033 (0.041)	0.521
Number of moves since RA [ADDR]	1.176	0.408* (0.074)	1.166	0.532* (0.104)	1.176	0.501* (0.122)	1.185	0.179 (0.114)	0.005
Average share of schools in main BL school districts[a] [SCH]	0.888	-0.063* (0.021)	0.899	-0.073* (0.033)	0.900	-0.052 (0.029)	0.862	-0.063 (0.038)	0.589
School closer to BL than 2002 address [ADDR] [SCH]	0.292	-0.085* (0.036)	0.285	-0.136* (0.044)	0.312	-0.097 (0.054)	0.254	0.086 (0.094)	0.023
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.145	0.018 (0.060)	1.472	0.033 (0.070)	2.465	0.073 (0.098)	2.991	-0.162 (0.194)	0.704
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.171	0.002 (0.025)	0.101	0.020 (0.034)	0.201	0.006 (0.040)	0.269	-0.060 (0.071)	0.245

D. Census tract characteristics

Average census	0.459	-0.101*	0.489	-0.123*	0.440	-0.093*	0.448	-0.090*	0.018

tract poverty rate [ADDR]		(0.009)		(0.015)		(0.013)		(0.014)	
Male unemployment rate [ADDR]	0.199	-0.024* (0.008)	0.198	-0.014 (0.013)	0.191	-0.029* (0.011)	0.209	-0.029* (0.014)	0.635
Average share of tract minority [ADDR]	0.900	-0.030* (0.012)	0.910	-0.017 (0.014)	0.899	-0.042* (0.018)	0.891	-0.027 (0.020)	0.886
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.126	0.021* (0.005)	0.118	0.030* (0.008)	0.128	0.022* (0.008)	0.132	0.012 (0.008)	0.083

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.746	-0.043* (0.013)	0.813	-0.066* (0.020)	0.765	-0.028 (0.020)	0.656	-0.037 (0.023)	0.237
Average share minority [SCH]	0.917	-0.038* (0.012)	0.941	-0.033* (0.015)	0.912	-0.025 (0.015)	0.896	-0.058* (0.025)	0.672
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.139	0.023* (0.009)	0.123	0.021 (0.012)	0.140	0.027* (0.014)	0.164	0.016 (0.019)	0.812

Average pupil-teacher ratio, excluding MA [SCH]	18.456	-0.265 (0.260)	18.429	-0.684 (0.459)	18.633	-0.093 (0.374)	18.291	-0.041 (0.433)	0.301
Share magnet schools, excluding MD, NY [SCH]	0.205	-0.022 (0.028)	0.183	-0.080 (0.042)	0.167	-0.033 (0.045)	0.274	0.054 (0.047)	0.004
Index of positive school climate[d] [SR]	0.653	-0.008 (0.015)	0.691	0.009 (0.026)	0.664	-0.013 (0.023)	0.599	-0.010 (0.034)	0.794
Gangs in child's school or neighborhood [SR]	0.570	-0.020 (0.034)	0.465	0.010 (0.073)	0.623	-0.076 (0.050)	0.580	0.026 (0.055)	0.728
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.301	0.025 (0.016)	0.331	0.029 (0.027)	0.312	0.046 (0.027)	0.257	-0.003 (0.026)	0.235
Ever repeated a grade in school [PR]	0.245	0.011 (0.024)	0.174	0.031 (0.038)	0.239	0.071 (0.046)	0.326	-0.072 (0.043)	0.050
Suspended from school during past two years [PR]	0.224	-0.006 (0.024)	0.159	0.022 (0.035)	0.265	0.047 (0.045)	0.250	-0.088* (0.040)	0.008
School asked to come in and talk about	0.369	0.047 (0.030)	0.347	0.087 (0.046)	0.412	0.021 (0.052)	0.337	0.031 (0.059)	0.813

problems[f]

G. School engagement, ages 8 to 18									
Always pays attention in class [SR]	0.522	0.016 (0.035)	0.577	0.020 (0.062)	0.513	-0.019 (0.053)	0.484	0.071 (0.062)	0.704
Works hard in school [SR]	0.542	-0.008 (0.035)	0.614	0.077 (0.064)	0.559	-0.065 (0.052)	0.449	0.012 (0.065)	0.514
Reads at least 5 hours/week excluding schoolwork [SR]	0.222	-0.015 (0.029)	0.200	-0.061 (0.049)	0.233	-0.033 (0.041)	0.225	0.060 (0.055)	0.101
Late for school less than once a month [SR]	0.482	0.021 (0.036)	0.531	0.060 (0.069)	0.504	0.044 (0.052)	0.403	-0.048 (0.065)	0.549
H. Special classes during past 2 years, ages 8 to 18									
In class for gifted students or did advanced work [PR]	0.118	0.003 (0.020)	0.112	0.028 (0.039)	0.103	0.009 (0.028)	0.147	-0.027 (0.039)	0.396
Special ed or help with learning, behavioral or emotional problems [PR]	0.322	0.038 (0.030)	0.286	0.132* (0.061)	0.340	0.045 (0.048)	0.324	-0.058 (0.051)	0.031

Notes: See notes for Appendix Table A1.

Appendix Table A15

Estimated Effects for Non-Hispanic African-Americans in the Section 8 Group

	African-Americans All Ages		Section 8 versus Control Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		Linear Age Interaction
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.031 {N = 1836}	0.019 (0.039)	-0.871 {N = 626}	0.031 (0.068)	0.274 {N = 625}	-0.057 (0.059)	0.561 {N = 585}	0.091 (0.072)	0.851
Broad reading score [WJR]	-0.058	0.069 (0.042)	-0.841	0.133 (0.073)	0.214	-0.024 (0.065)	0.509	0.103 (0.076)	0.350
Broad math score [WJR]	0.003	-0.045 (0.040)	-0.835	-0.056 (0.071)	0.328	-0.096 (0.059)	0.564	0.033 (0.072)	0.956
B. Unadjusted scores									
Broad reading score [WJR]	-0.059	0.069 (0.047)	-0.836	0.144 (0.075)	0.221	-0.053 (0.068)	0.493	0.129 (0.087)	0.553
Broad math score [WJR]	-0.002	-0.042 (0.044)	-0.831	-0.039 (0.070)	0.332	-0.124 (0.065)	0.538	0.059 (0.082)	0.804
C. Mobility and school									

changes

Moved using MTO voucher	0.000	0.672* (0.024)	-0.000	0.730* (0.031)	-0.000	0.690* (0.036)	-0.000	0.594* (0.038)	0.001
Moved at least 10 miles from BL address [ADDR]	0.098	0.004 (0.025)	0.101	0.009 (0.037)	0.080	0.009 (0.030)	0.116	-0.008 (0.038)	0.339
Number of moves since RA [ADDR]	1.318	0.638* (0.095)	1.360	0.770* (0.146)	1.323	0.740* (0.124)	1.265	0.387* (0.111)	0.003
Average share of schools in main BL school districts[a] [SCH]	0.905	-0.063* (0.018)	0.914	-0.081* (0.027)	0.896	-0.047 (0.028)	0.906	-0.059* (0.029)	0.489
School closer to BL than 2002 address [ADDR] [SCH]	0.273	-0.022 (0.033)	0.278	-0.067 (0.045)	0.251	-0.010 (0.045)	0.328	0.047 (0.080)	0.245
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.126	0.164* (0.060)	1.495	0.195* (0.070)	2.411	0.167 (0.097)	2.919	0.082 (0.150)	0.920
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.198	0.002 (0.024)	0.149	0.057 (0.039)	0.214	-0.029 (0.035)	0.278	-0.038 (0.069)	0.174

D. Census tract characteristics

Average census	0.484	-0.128*	0.505	-0.142*	0.473	-0.131*	0.474	-0.109*	0.035

tract poverty rate [ADDR]		(0.010)		(0.015)		(0.013)		(0.014)	
Male unemployment rate [ADDR]	0.221	-0.037* (0.009)	0.217	-0.038* (0.014)	0.215	-0.039* (0.011)	0.234	-0.036* (0.015)	0.970
Average share of tract minority [ADDR]	0.933	-0.038* (0.010)	0.937	-0.032* (0.012)	0.929	-0.046* (0.014)	0.931	-0.033* (0.016)	0.333
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.113	0.038* (0.005)	0.109	0.041* (0.008)	0.117	0.042* (0.007)	0.115	0.031* (0.008)	0.162

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.742	-0.043* (0.012)	0.816	-0.082* (0.020)	0.756	-0.033 (0.019)	0.653	-0.014 (0.018)	0.013
Average share minority [SCH]	0.932	-0.038* (0.011)	0.948	-0.025* (0.012)	0.923	-0.033* (0.015)	0.926	-0.058* (0.020)	0.208
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.134	0.020* (0.008)	0.124	0.022* (0.011)	0.145	0.029* (0.013)	0.133	-0.004 (0.014)	0.307

Average pupil-teacher ratio, excluding MA [SCH]	18.131	0.005 (0.219)	18.295	0.210 (0.326)	18.292	0.190 (0.368)	17.743	-0.404 (0.342)	0.101
Share magnet schools, excluding MD, NY [SCH]	0.255	-0.017 (0.032)	0.263	-0.079 (0.050)	0.196	-0.015 (0.045)	0.328	0.050 (0.048)	0.021
Index of positive school climate[d] [SR]	0.639	0.028 (0.015)	0.688	-0.019 (0.025)	0.629	0.057* (0.021)	0.613	0.021 (0.032)	0.679
Gangs in child's school or neighborhood [SR]	0.553	-0.028 (0.031)	0.504	-0.068 (0.065)	0.579	-0.079 (0.045)	0.554	0.054 (0.049)	0.010
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.290	-0.004 (0.015)	0.306	-0.002 (0.024)	0.306	0.004 (0.024)	0.252	-0.018 (0.025)	0.511
Ever repeated a grade in school [PR]	0.235	-0.027 (0.022)	0.189	-0.028 (0.037)	0.252	0.003 (0.041)	0.263	-0.052 (0.040)	0.446
Suspended from school during past two years [PR]	0.198	-0.012 (0.021)	0.144	-0.009 (0.030)	0.252	0.001 (0.040)	0.194	-0.033 (0.035)	0.293
School asked to come in and talk about	0.320	0.009 (0.027)	0.320	0.006 (0.045)	0.357	0.032 (0.046)	0.260	-0.020 (0.049)	0.699

problems[f]

G. School engagement, ages 8 to 18									
Always pays attention in class [SR]	0.570	-0.010 (0.032)	0.643	-0.025 (0.058)	0.578	-0.071 (0.047)	0.492	0.105 (0.058)	0.217
Works hard in school [SR]	0.623	-0.037 (0.030)	0.693	0.007 (0.055)	0.635	-0.080 (0.045)	0.541	-0.013 (0.057)	0.574
Reads at least 5 hours/week excluding schoolwork [SR]	0.293	0.003 (0.031)	0.281	-0.010 (0.056)	0.288	-0.016 (0.043)	0.310	0.041 (0.056)	0.389
Late for school less than once a month [SR]	0.465	0.034 (0.034)	0.604	-0.008 (0.062)	0.460	0.109* (0.048)	0.347	-0.045 (0.057)	0.470
H. Special classes during past 2 years, ages 8 to 18									
In class for gifted students or did advanced work [PR]	0.118	0.001 (0.019)	0.117	0.021 (0.040)	0.128	0.003 (0.028)	0.103	-0.015 (0.031)	0.711
Special ed or help with learning, behavioral or emotional problems [PR]	0.245	0.039 (0.025)	0.249	0.061 (0.050)	0.266	0.065 (0.040)	0.209	-0.014 (0.042)	0.458

Notes: See notes for Appendix Table A1.

Appendix Table A16

Estimated Effects for Non-Hispanic African-Americans in the Section 8 Group

	Section 8 versus Control								Linear Age Interaction
	Hispanics All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.010 {N = 965}	-0.037 (0.048)	-0.856 {N = 300}	-0.125 (0.091)	0.277 {N = 328}	0.032 (0.071)	0.566 {N = 337}	-0.030 (0.074)	0.381
Broad reading score [WJR]	0.035	-0.031 (0.052)	-0.680	-0.157 (0.108)	0.199	0.112 (0.080)	0.609	-0.068 (0.079)	0.618
Broad math score [WJR]	-0.060	-0.043 (0.048)	-0.961	-0.083 (0.090)	0.329	-0.055 (0.075)	0.471	0.008 (0.081)	0.314
B. Unadjusted scores									
Broad reading score [WJR]	0.037	-0.049 (0.051)	-0.682	-0.151 (0.104)	0.186	0.135 (0.078)	0.631	-0.146 (0.080)	0.864
Broad math score [WJR]	-0.046	-0.052 (0.046)	-0.930	-0.103 (0.085)	0.319	-0.028 (0.073)	0.492	-0.029 (0.079)	0.407
C. Mobility and school									

changes

Moved using MTO voucher	-0.000	0.540* (0.032)	-0.000	0.554* (0.049)	-0.000	0.554* (0.051)	0.000	0.520* (0.045)	0.731
Moved at least 10 miles from BL address [ADDR]	0.148	0.001 (0.038)	0.128	0.001 (0.053)	0.175	0.011 (0.052)	0.137	-0.006 (0.050)	0.448
Number of moves since RA [ADDR]	0.936	0.335* (0.084)	1.023	0.386* (0.139)	0.873	0.391* (0.118)	0.916	0.249* (0.125)	0.303
Average share of schools in main BL school districts[a] [SCH]	0.882	-0.011 (0.030)	0.885	0.035 (0.046)	0.869	-0.002 (0.044)	0.894	-0.068 (0.038)	0.082
School closer to BL than 2002 address [ADDR] [SCH]	0.278	-0.079 (0.043)	0.279	-0.126* (0.054)	0.297	-0.036 (0.064)	0.222	-0.070 (0.094)	0.284
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.089	-0.070 (0.066)	1.384	-0.147 (0.078)	2.411	0.022 (0.097)	3.027	-0.117 (0.209)	0.739
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.130	0.042 (0.029)	0.063	-0.015 (0.034)	0.159	0.063 (0.049)	0.223	0.104 (0.095)	0.165

D. Census tract characteristics

Average census	0.409	-0.057*	0.425	-0.060*	0.396	-0.056*	0.406	-0.057*	0.703

tract poverty rate [ADDR]		(0.010)		(0.014)		(0.014)		(0.015)	
Male unemployment rate [ADDR]	0.173	-0.026* (0.007)	0.188	-0.033* (0.012)	0.160	-0.028* (0.011)	0.171	-0.021* (0.010)	0.352
Average share of tract minority [ADDR]	0.881	-0.009 (0.014)	0.868	0.009 (0.019)	0.902	-0.029 (0.019)	0.872	-0.004 (0.019)	0.916
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.139	0.007 (0.007)	0.135	0.011 (0.010)	0.138	0.007 (0.011)	0.143	0.005 (0.011)	0.744

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.763	-0.006 (0.013)	0.810	0.006 (0.019)	0.772	0.010 (0.018)	0.699	-0.036 (0.020)	0.167
Average share minority [SCH]	0.919	-0.013 (0.013)	0.934	-0.004 (0.018)	0.908	-0.014 (0.021)	0.915	-0.022 (0.017)	0.780
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.162	0.014 (0.014)	0.148	-0.012 (0.019)	0.162	0.026 (0.022)	0.188	0.035 (0.022)	0.044

Average pupil-teacher ratio, excluding MA [SCH]	19.258	-0.204 (0.459)	18.672	-0.246 (0.834)	19.240	-0.905 (0.680)	19.943	0.400 (0.688)	0.487
Share magnet schools, excluding MD, NY [SCH]	0.193	-0.070* (0.031)	0.086	-0.090 (0.050)	0.137	-0.025 (0.036)	0.373	-0.100 (0.055)	0.751
Index of positive school climate[d] [SR]	0.658	-0.026 (0.020)	0.685	0.004 (0.034)	0.690	-0.062* (0.028)	0.583	0.004 (0.045)	0.814
Gangs in child's school or neighborhood [SR]	0.541	0.016 (0.041)	0.362	0.079 (0.083)	0.628	0.019 (0.062)	0.556	-0.008 (0.064)	0.552
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.244	0.034 (0.018)	0.266	0.011 (0.029)	0.235	0.033 (0.030)	0.230	0.052 (0.030)	0.387
Ever repeated a grade in school [PR]	0.194	0.013 (0.030)	0.154	0.053 (0.050)	0.179	0.026 (0.052)	0.260	-0.040 (0.050)	0.332
Suspended from school during past two years [PR]	0.109	0.015 (0.021)	0.072	0.006 (0.036)	0.123	0.035 (0.036)	0.137	0.000 (0.038)	0.541
School asked to come in and talk about	0.271	0.002 (0.034)	0.279	-0.022 (0.060)	0.288	-0.015 (0.057)	0.228	0.058 (0.061)	0.500

problems[f]

G. School engagement, ages 8 to 18								
Always pays attention in class [SR]	0.488	0.096* (0.044)	0.470	0.196* (0.081)	0.533	0.098 (0.061)	0.430	0.021 (0.080)	0.017
Works hard in school [SR]	0.483	0.069 (0.043)	0.587	0.118 (0.083)	0.482	0.083 (0.059)	0.389	0.016 (0.078)	0.065
Reads at least 5 hours/week excluding schoolwork [SR]	0.191	0.008 (0.033)	0.191	-0.086 (0.056)	0.182	0.040 (0.044)	0.204	0.027 (0.067)	0.268
Late for school less than once a month [SR]	0.504	-0.021 (0.040)	0.529	0.032 (0.079)	0.594	-0.014 (0.057)	0.337	-0.059 (0.071)	0.187
H. Special classes during past 2 years, ages 8 to 18								
In class for gifted students or did advanced work [PR]	0.103	0.021 (0.028)	0.136	-0.033 (0.054)	0.086	0.044 (0.036)	0.101	0.022 (0.052)	0.689
Special ed or help with learning, behavioral or emotional problems [PR]	0.254	-0.004 (0.036)	0.241	0.064 (0.075)	0.254	-0.037 (0.054)	0.264	-0.003 (0.056)	0.655

Notes: See notes for Appendix Table A1.

Appendix Table A17

Estimated Effects for the Baltimore Section 8 Group

	Section 8 versus Control								Linear Age Interaction
	Baltimore All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.054 {N = 467}	-0.013 (0.062)	-0.754 {N = 148}	-0.225* (0.105)	0.086 {N = 164}	0.008 (0.112)	0.397 {N = 155}	0.137 (0.111)	0.081
Broad reading score [WJR]	-0.060	-0.018 (0.073)	-0.724	-0.187 (0.121)	0.031	-0.004 (0.131)	0.425	0.094 (0.121)	0.198
Broad math score [WJR]	-0.071	-0.013 (0.060)	-0.817	-0.176 (0.097)	0.152	-0.015 (0.103)	0.339	0.128 (0.111)	0.161
B. Unadjusted scores									
Broad reading score [WJR]	-0.077	0.013 (0.073)	-0.746	-0.087 (0.120)	0.038	-0.066 (0.127)	0.386	0.161 (0.115)	0.196
Broad math score [WJR]	-0.053	-0.011 (0.059)	-0.822	-0.130 (0.099)	0.189	-0.074 (0.099)	0.356	0.157 (0.108)	0.159
C. Mobility and school									

changes

Moved using MTO voucher	-0.000	0.798* (0.034)	0.000	0.810* (0.054)	0.000	0.839* (0.044)	0.000	0.733* (0.052)	0.047
Moved at least 10 miles from BL address [ADDR]	0.024	0.007 (0.020)	0.035	0.020 (0.044)	0.008	0.012 (0.019)	0.036	-0.011 (0.031)	0.555
Number of moves since RA [ADDR]	1.568	0.693* (0.123)	1.539	0.791* (0.201)	1.493	0.886* (0.175)	1.688	0.339 (0.210)	0.081
Average share of schools in main BL school districts[a] [SCH]	0.928	-0.091* (0.034)	0.920	-0.092 (0.066)	0.908	-0.092 (0.052)	0.959	-0.080* (0.041)	0.719
School closer to BL than 2002 address, age <= 14 [ADDR] [SCH]	0.267	-0.122* (0.061)	0.197	-0.137 (0.073)	0.325	-0.104 (0.089)	NA	NA	0.868
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.602	-0.194 (0.124)	1.632	-0.027 (0.147)	3.003	-0.329 (0.186)	3.645	-0.176 (0.334)	0.946
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.254	-0.042 (0.048)	0.162	-0.034 (0.069)	0.297	-0.050 (0.076)	0.335	-0.059 (0.132)	0.755

D. Census tract characteristics

Average census tract poverty rate [ADDR]	0.408	-0.117* (0.013)	0.421	-0.144* (0.022)	0.400	-0.116* (0.019)	0.407	-0.091* (0.019)	0.081
Male unemployment rate [ADDR]	0.235	-0.084* (0.017)	0.262	-0.140* (0.030)	0.212	-0.053* (0.025)	0.239	-0.066* (0.025)	0.070
Average share of tract minority [ADDR]	0.882	-0.102* (0.025)	0.905	-0.138* (0.036)	0.877	-0.092* (0.036)	0.867	-0.072* (0.034)	0.050
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.125	0.028* (0.011)	0.114	0.059* (0.019)	0.131	0.025 (0.019)	0.127	0.004 (0.012)	0.014

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.748	-0.075* (0.020)	0.822	-0.137* (0.036)	0.763	-0.061* (0.029)	0.661	-0.035 (0.028)	0.018
Average share minority [SCH]	0.920	-0.084* (0.019)	0.933	-0.080* (0.033)	0.913	-0.089* (0.029)	0.915	-0.087* (0.027)	0.905
Average percentile rank on state exams [SCH], excluding age > 13 for MD	0.167	0.053* (0.020)	0.154	0.058* (0.026)	0.182	0.048 (0.026)	NA	NA	NA

and NY

Average pupil-teacher ratio, excluding MA [SCH]	16.496	-0.077 (0.230)	16.342	0.612 (0.373)	16.171	-0.104 (0.390)	17.019	-0.625 (0.390)	0.051
Share magnet schools, excluding MD, NY [SCH]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Index of positive school climate[d] [SR]	0.589	0.081* (0.030)	0.640	0.065 (0.054)	0.585	0.051 (0.040)	0.558	0.155* (0.058)	0.127
Gangs in child's school or neighborhood [SR]	0.254	0.006 (0.047)	0.327	-0.101 (0.112)	0.245	-0.003 (0.080)	0.225	0.072 (0.075)	0.176

F. School and behavior problems

Index of eleven behavior problems[e] [PR]	0.337	-0.048 (0.030)	0.326	-0.025 (0.051)	0.348	0.028 (0.049)	0.333	-0.160* (0.049)	0.022
Ever repeated a grade in school [PR]	0.407	-0.092 (0.049)	0.346	-0.021 (0.091)	0.388	-0.026 (0.082)	0.482	-0.225* (0.084)	0.052
Suspended from school during past two years [PR]	0.305	-0.114* (0.046)	0.268	-0.190* (0.076)	0.402	-0.128 (0.082)	0.226	-0.030 (0.076)	0.521
School asked to come in and	0.405	-0.038 (0.056)	0.481	-0.230* (0.086)	0.442	0.051 (0.090)	0.257	0.088 (0.097)	0.003

talk about problems[f]

G. School engagement, ages 8 to 18								
Always pays attention in class [SR]	0.452	0.085 (0.067)	0.491	0.200 (0.119)	0.432	0.035 (0.098)	0.456	0.076 (0.106)	0.290
Works hard in school [SR]	0.534	0.062 (0.060)	0.640	0.123 (0.121)	0.569	-0.007 (0.085)	0.403	0.156 (0.110)	0.728
Reads at least 5 hours/week excluding schoolwork [SR]	0.202	-0.084 (0.046)	0.219	-0.098 (0.097)	0.123	-0.071 (0.062)	0.315	-0.095 (0.093)	0.678
Late for school less than once a month [SR]	0.405	0.066 (0.066)	0.649	0.007 (0.125)	0.336	0.132 (0.089)	0.335	0.013 (0.105)	0.673
H. Special classes during past 2 years, ages 8 to 18								
In class for gifted students or did advanced work [PR]	0.128	0.071 (0.044)	0.216	0.110 (0.106)	0.104	0.068 (0.063)	0.099	0.022 (0.078)	0.799
Special ed or help with learning, behavioral or emotional	0.251	0.070 (0.057)	0.177	0.158 (0.109)	0.323	0.047 (0.084)	0.198	0.050 (0.087)	0.584

problems [PR]

Notes: See notes for Appendix Table A1.

Appendix Table A18

Estimated Effects for the Boston Section 8 Group

	Section 8 versus Control								Linear Age Interaction
	Boston All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	0.041 {N = 686}	0.061 (0.062)	-0.692 {N = 215}	-0.313* (0.121)	0.261 {N = 251}	0.172* (0.083)	0.503 {N = 220}	0.254* (0.114)	0.001
Broad reading score [WJR]	0.106	0.031 (0.067)	-0.533	-0.372* (0.150)	0.271	0.188* (0.090)	0.545	0.210 (0.110)	0.002
Broad math score [WJR]	-0.035	0.078 (0.061)	-0.812	-0.205 (0.113)	0.212	0.137 (0.087)	0.427	0.252* (0.119)	0.009
B. Unadjusted scores									
Broad reading score [WJR]	0.097	0.030 (0.065)	-0.546	-0.341* (0.150)	0.271	0.173 (0.091)	0.529	0.194 (0.105)	0.004
Broad math score [WJR]	-0.046	0.077 (0.061)	-0.829	-0.170 (0.113)	0.211	0.115 (0.087)	0.411	0.241* (0.119)	0.014
C. Mobility and school									

changes

Moved using MTO voucher	0.000	0.504* (0.040)	-0.000	0.487* (0.055)	-0.000	0.505* (0.056)	0.000	0.510* (0.064)	0.835
Moved at least 10 miles from BL address [ADDR]	0.095	0.017 (0.033)	0.066	0.020 (0.044)	0.129	-0.003 (0.052)	0.082	0.039 (0.053)	0.857
Number of moves since RA [ADDR]	1.082	0.392* (0.106)	1.173	0.442* (0.169)	1.072	0.413* (0.160)	1.004	0.303* (0.145)	0.317
Average share of schools in main BL school districts[a] [SCH]	0.794	-0.035 (0.036)	0.811	-0.078 (0.062)	0.800	-0.038 (0.053)	0.766	0.024 (0.054)	0.416
School closer to BL than 2002 address, age <=14 [ADDR] [SCH]	0.284	0.038 (0.057)	0.371	-0.128 (0.071)	0.211	0.180* (0.077)	NA	NA	0.003
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.136	0.012 (0.085)	1.370	0.073 (0.101)	2.474	-0.025 (0.133)	3.014	-0.027 (0.212)	0.789
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.146	-0.023 (0.034)	0.079	0.012 (0.047)	0.161	-0.024 (0.052)	0.270	-0.122 (0.099)	0.386

D. Census tract characteristics

Average census tract poverty rate [ADDR]	0.354	-0.066* (0.010)	0.370	-0.081* (0.015)	0.345	-0.054* (0.015)	0.348	-0.062* (0.016)	0.168
Male unemployment rate [ADDR]	0.126	-0.007 (0.006)	0.127	-0.002 (0.008)	0.125	-0.011 (0.008)	0.126	-0.004 (0.009)	0.690
Average share of tract minority [ADDR]	0.750	-0.012 (0.021)	0.738	0.009 (0.031)	0.768	-0.010 (0.025)	0.740	-0.041 (0.037)	0.522
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.181	0.039* (0.012)	0.172	0.044* (0.015)	0.184	0.028 (0.015)	0.187	0.045* (0.021)	0.967

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.639	-0.038 (0.020)	0.694	-0.059 (0.034)	0.657	-0.023 (0.032)	0.552	-0.031 (0.029)	0.703
Average share minority [SCH]	0.772	-0.020 (0.021)	0.798	-0.005 (0.028)	0.772	-0.025 (0.035)	0.742	-0.026 (0.035)	0.421
Average percentile rank on state exams [SCH], excluding age > 13 for MD	0.195	0.029 (0.016)	0.186	0.001 (0.024)	0.184	0.061* (0.027)	0.219	0.016 (0.029)	0.357

and NY

Average pupil-teacher ratio, excluding MA [SCH]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Share magnet schools, excluding MD, NY [SCH]	0.023	-0.012 (0.011)	0.034	-0.019 (0.019)	0.030	-0.018 (0.014)	0.001	-0.001 (0.009)	0.229
Index of positive school climate[d] [SR]	0.667	-0.015 (0.023)	0.677	-0.026 (0.044)	0.673	0.005 (0.033)	0.647	-0.045 (0.049)	0.216
Gangs in child's school or neighborhood [SR]	0.392	0.030 (0.050)	0.274	0.029 (0.097)	0.432	0.013 (0.076)	0.407	0.050 (0.086)	0.174
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.240	0.003 (0.021)	0.229	0.045 (0.035)	0.266	-0.005 (0.036)	0.218	-0.027 (0.034)	0.101
Ever repeated a grade in school [PR]	0.230	-0.023 (0.035)	0.187	-0.007 (0.065)	0.187	-0.004 (0.053)	0.326	-0.056 (0.067)	0.415
Suspended from school during past two years [PR]	0.145	-0.031 (0.026)	0.086	-0.025 (0.039)	0.151	0.000 (0.047)	0.200	-0.072 (0.049)	0.390
School asked to come in and	0.343	-0.025 (0.043)	0.258	0.079 (0.066)	0.397	-0.063 (0.066)	0.372	-0.112 (0.082)	0.076

talk about problems[f]

G. School engagement, ages 8 to 18								
Always pays attention in class [SR]	0.516	0.054 (0.054)	0.588	-0.032 (0.092)	0.482	0.102 (0.076)	0.519	0.026 (0.108)	0.972
Works hard in school [SR]	0.555	0.006 (0.051)	0.792	-0.197* (0.087)	0.528	0.078 (0.066)	0.403	0.034 (0.111)	0.604
Reads at least 5 hours/week excluding schoolwork [SR]	0.236	0.017 (0.045)	0.183	0.013 (0.076)	0.247	0.033 (0.060)	0.260	-0.028 (0.089)	0.814
Late for school less than once a month [SR]	0.593	-0.015 (0.051)	0.742	-0.051 (0.088)	0.588	0.019 (0.072)	0.473	-0.042 (0.096)	0.958
H. Special classes during past 2 years, ages 8 to 18								
In class for gifted students or did advanced work [PR]	0.097	0.048 (0.029)	0.076	0.033 (0.059)	0.094	0.111* (0.044)	0.120	-0.058 (0.054)	0.186
Special ed or help with learning, behavioral or emotional	0.363	-0.126* (0.044)	0.360	-0.075 (0.092)	0.339	-0.134* (0.060)	0.410	-0.151* (0.070)	0.784

problems [PR]

Notes: See notes for Appendix Table A1.

Appendix Table A19

Estimated Effects for the Chicago Section 8 Group

	Section 8 versus Control								Linear Age Interaction
	Chicago All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.144 {N = 558}	0.035 (0.073)	-1.058 {N = 217}	0.170 (0.112)	0.362 {N = 174}	-0.190 (0.099)	0.684 {N = 167}	0.114 (0.135)	0.208
Broad reading score [WJR]	-0.202	0.101 (0.078)	-1.080	0.259* (0.123)	0.258	-0.097 (0.102)	0.608	0.117 (0.148)	0.125
Broad math score [WJR]	-0.033	-0.079 (0.076)	-0.912	0.057 (0.117)	0.480	-0.276* (0.102)	0.703	0.006 (0.135)	0.225
B. Unadjusted scores									
Broad reading score [WJR]	-0.205	0.099 (0.090)	-1.087	0.245 (0.134)	0.272	-0.083 (0.118)	0.590	0.114 (0.182)	0.243
Broad math score [WJR]	-0.021	-0.067 (0.090)	-0.894	0.064 (0.116)	0.514	-0.274* (0.124)	0.680	0.036 (0.167)	0.357
C. Mobility and school									

changes

Moved using MTO voucher	-0.000	0.721* (0.038)	-0.000	0.830* (0.043)	0.000	0.763* (0.052)	-0.000	0.542* (0.063)	0.000
Moved at least 10 miles from BL address [ADDR]	0.143	0.030 (0.045)	0.102	0.096 (0.056)	0.142	0.042 (0.053)	0.208	-0.069 (0.080)	0.022
Number of moves since RA [ADDR]	1.623	0.777* (0.180)	1.587	0.964* (0.267)	1.711	0.786* (0.211)	1.575	0.513* (0.259)	0.060
Average share of schools in main BL school districts[a] [SCH]	0.932	-0.081* (0.026)	0.940	-0.084* (0.037)	0.909	-0.022 (0.033)	0.952	-0.149* (0.051)	0.299
School closer to BL than 2002 address, age <= 16 [ADDR] [SCH]	0.282	-0.126* (0.058)	0.296	-0.096 (0.071)	0.259	-0.165* (0.081)	0.290	-0.142 (0.149)	0.710
Number of schools attended since year after RA[b], age <= 16 [SCH]	1.881	0.323* (0.109)	1.445	0.308* (0.121)	2.166	0.391* (0.174)	2.464	0.197 (0.242)	0.512
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.183	0.053 (0.046)	0.146	0.127 (0.074)	0.229	0.003 (0.067)	0.171	0.004 (0.137)	0.543

D. Census tract characteristics

Average census tract poverty rate [ADDR]	0.562	-0.166* (0.019)	0.578	-0.191* (0.030)	0.552	-0.171* (0.023)	0.547	-0.127* (0.029)	0.103
Male unemployment rate [ADDR]	0.251	-0.035 (0.019)	0.235	-0.034 (0.025)	0.253	-0.043* (0.021)	0.273	-0.029 (0.035)	0.971
Average share of tract minority [ADDR]	0.976	-0.029* (0.013)	0.978	-0.028* (0.014)	0.985	-0.041* (0.015)	0.960	-0.013 (0.021)	0.268
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.107	0.047* (0.009)	0.097	0.052* (0.013)	0.109	0.054* (0.011)	0.120	0.027 (0.014)	0.153
E. School characteristics								
Average share free lunch eligible, excluding IL [SCH]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Average share minority [SCH]	0.978	-0.037* (0.015)	0.978	-0.008 (0.013)	0.974	-0.033 (0.020)	0.984	-0.076* (0.031)	0.032
Average percentile rank on state exams [SCH], excluding age > 13 for MD	0.094	0.007 (0.008)	0.093	0.004 (0.009)	0.105	0.015 (0.013)	0.083	-0.002 (0.014)	0.877

and NY

Average pupil-teacher ratio, excluding MA [SCH]	18.327	0.252 (0.269)	19.026	0.364 (0.381)	18.924	0.350 (0.376)	16.371	-0.035 (0.512)	0.327
Share magnet schools, excluding MD, NY [SCH]	0.309	-0.029 (0.048)	0.343	-0.150* (0.068)	0.230	0.014 (0.071)	0.364	0.061 (0.074)	0.017
Index of positive school climate[d] [SR]	0.682	0.016 (0.029)	0.718	-0.073 (0.042)	0.682	0.053 (0.039)	0.644	0.048 (0.061)	0.186
Gangs in child's school or neighborhood [SR]	0.691	-0.049 (0.055)	0.584	-0.080 (0.109)	0.753	-0.141 (0.084)	0.696	0.092 (0.078)	0.039

F. School and behavior problems

Index of eleven behavior problems[e] [PR]	0.292	-0.009 (0.026)	0.330	-0.020 (0.041)	0.302	-0.021 (0.040)	0.223	0.019 (0.046)	0.681
Ever repeated a grade in school [PR]	0.237	-0.056 (0.040)	0.195	-0.067 (0.066)	0.341	-0.054 (0.080)	0.179	-0.034 (0.060)	0.767
Suspended from school during past two years [PR]	0.192	-0.040 (0.034)	0.106	0.033 (0.048)	0.293	-0.059 (0.070)	0.195	-0.098 (0.062)	0.107
School asked to come in and	0.282	0.017 (0.046)	0.282	0.078 (0.078)	0.345	0.047 (0.085)	0.185	-0.103 (0.075)	0.430

talk about problems[f]

G. School engagement, ages 8 to 18									
Always pays attention in class [SR]	0.681	0.004 (0.053)	0.741	-0.041 (0.093)	0.739	-0.107 (0.078)	0.524	0.191 (0.098)	0.236
Works hard in school [SR]	0.721	-0.062 (0.048)	0.779	0.005 (0.089)	0.747	-0.155 (0.079)	0.616	-0.002 (0.109)	0.736
Reads at least 5 hours/week excluding schoolwork [SR]	0.420	0.005 (0.058)	0.401	0.030 (0.099)	0.484	-0.071 (0.081)	0.336	0.090 (0.112)	0.309
Late for school less than once a month [SR]	0.547	0.056 (0.061)	0.595	0.091 (0.101)	0.596	0.104 (0.084)	0.415	-0.079 (0.104)	0.198
H. Special classes during past 2 years, ages 8 to 18									
In class for gifted students or did advanced work [PR]	0.092	-0.018 (0.028)	0.041	0.019 (0.049)	0.132	-0.072 (0.048)	0.083	0.023 (0.050)	0.366
Special ed or help with learning, behavioral or emotional	0.195	0.013 (0.041)	0.255	-0.043 (0.086)	0.201	0.089 (0.072)	0.123	-0.034 (0.068)	0.816

problems [PR]

Notes: See notes for Appendix Table A1.

Appendix Table A20

Estimated Effects for the Los Angeles Section 8 Group

	Los Angeles All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		Linear Age Interaction
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	0.020	0.068 (0.057)	-0.735	0.103 (0.105)	0.173	0.121 (0.089)	0.455	0.004 (0.088)	0.405
	{N = 568}		{N = 168}		{N = 188}		{N = 212}		
Broad reading score [WJR]	0.009	0.121 (0.063)	-0.603	0.158 (0.113)	0.091	0.197* (0.095)	0.409	0.034 (0.099)	0.390
Broad math score [WJR]	0.019	0.012 (0.059)	-0.819	0.026 (0.113)	0.239	0.032 (0.097)	0.456	-0.016 (0.093)	0.594
B. Unadjusted scores									
Broad reading score [WJR]	0.030	0.081 (0.064)	-0.592	0.175 (0.114)	0.112	0.170 (0.094)	0.438	-0.053 (0.103)	0.185
Broad math score [WJR]	0.035	-0.011 (0.061)	-0.797	0.004 (0.111)	0.244	0.028 (0.094)	0.480	-0.053 (0.097)	0.490
C. Mobility and school									

Section 8 versus Control

changes

Moved using MTO voucher	0.000	0.764* (0.038)	0.000	0.875* (0.051)	0.000	0.707* (0.057)	0.000	0.733* (0.046)	0.134
Moved at least 10 miles from BL address [ADDR]	0.184	0.040 (0.054)	0.198	-0.043 (0.074)	0.154	0.126 (0.073)	0.203	0.031 (0.072)	0.773
Number of moves since RA [ADDR]	1.179	0.407* (0.123)	1.252	0.512* (0.199)	1.046	0.389* (0.188)	1.254	0.351* (0.136)	0.523
Average share of schools in main BL school districts[a] [SCH]	0.880	-0.035 (0.032)	0.875	-0.020 (0.049)	0.883	-0.058 (0.053)	0.880	-0.029 (0.040)	0.691
School closer to BL than 2002 address, age <= 16 [ADDR] [SCH]	0.276	-0.129* (0.058)	0.221	0.012 (0.081)	0.261	-0.185* (0.076)	0.412	-0.272* (0.119)	0.010
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.328	-0.027 (0.110)	1.446	-0.129 (0.116)	2.545	0.117 (0.189)	3.413	-0.092 (0.218)	0.925
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.202	-0.001 (0.046)	0.134	-0.098* (0.049)	0.194	0.070 (0.078)	0.337	0.029 (0.120)	0.443

D. Census tract characteristics

Average census tract poverty rate [ADDR]	0.461	-0.116* (0.016)	0.476	-0.121* (0.024)	0.456	-0.119* (0.024)	0.456	-0.112* (0.020)	0.623
Male unemployment rate [ADDR]	0.179	-0.044* (0.009)	0.184	-0.058* (0.014)	0.175	-0.042* (0.012)	0.178	-0.036* (0.012)	0.086
Average share of tract minority [ADDR]	0.943	-0.011 (0.013)	0.940	-0.002 (0.020)	0.949	-0.021 (0.018)	0.940	-0.010 (0.014)	0.686
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.082	0.024* (0.009)	0.078	0.020 (0.012)	0.084	0.025* (0.012)	0.084	0.027* (0.011)	0.691

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.807	-0.009 (0.014)	0.898	-0.008 (0.019)	0.830	-0.004 (0.024)	0.701	-0.015 (0.023)	0.616
Average share minority [SCH]	0.966	-0.014 (0.010)	0.975	-0.012 (0.013)	0.959	-0.004 (0.018)	0.965	-0.024 (0.013)	0.552
Average percentile rank on state exams [SCH], excluding age > 13 for MD	0.167	0.013 (0.014)	0.137	0.014 (0.020)	0.153	0.009 (0.028)	0.208	0.017 (0.019)	0.690

and NY

Average pupil-teacher ratio, excluding MA [SCH]	2.957	0.110 (0.192)	19.595	-0.133 (0.327)	2.858	-0.008 (0.302)	22.273	0.390 (0.334)	0.196
Share magnet schools, excluding MD, NY [SCH]	0.333	-0.086* (0.038)	0.162	-0.084 (0.061)	0.260	-0.131* (0.050)	0.565	-0.052 (0.062)	0.352
Index of positive school climate[d] [SR]	0.587	0.012 (0.026)	0.650	0.039 (0.047)	0.593	-0.002 (0.039)	0.539	0.014 (0.052)	0.583
Gangs in child's school or neighborhood [SR]	0.739	-0.055 (0.050)	0.644	-0.122 (0.127)	0.805	-0.155* (0.078)	0.720	0.046 (0.070)	0.285

F. School and behavior problems

Index of eleven behavior problems[e] [PR]	0.298	-0.052* (0.025)	0.335	-0.060 (0.043)	0.321	-0.107* (0.039)	0.247	-0.005 (0.037)	0.133
Ever repeated a grade in school [PR]	0.101	0.014 (0.029)	0.078	0.023 (0.050)	0.067	-0.004 (0.047)	0.154	0.021 (0.049)	0.961
Suspended from school during past two years [PR]	0.188	0.000 (0.036)	0.171	-0.023 (0.062)	0.191	0.027 (0.064)	0.198	-0.005 (0.058)	0.837
School asked to come in and	0.318	-0.029 (0.049)	0.383	-0.099 (0.089)	0.300	-0.054 (0.071)	0.265	0.075 (0.088)	0.237

talk about problems[f]

G. School engagement, ages 8 to 18									
Always pays attention in class [SR]	0.487	0.035 (0.057)	0.537	0.022 (0.113)	0.525	0.046 (0.081)	0.406	0.029 (0.092)	0.707
Works hard in school [SR]	0.510	0.019 (0.047)	0.683	0.102 (0.097)	0.472	0.043 (0.079)	0.455	-0.061 (0.092)	0.135
Reads at least 5 hours/week excluding schoolwork [SR]	0.179	0.066 (0.047)	0.205	0.086 (0.106)	0.129	0.097 (0.059)	0.229	0.013 (0.080)	0.809
Late for school less than once a month [SR]	0.516	-0.052 (0.054)	0.551	0.066 (0.110)	0.586	-0.115 (0.086)	0.398	-0.031 (0.092)	0.499
H. Special classes during past 2 years, ages 8 to 18									
In class for gifted students or did advanced work [PR]	0.183	-0.027 (0.043)	0.200	-0.031 (0.077)	0.201	-0.049 (0.064)	0.146	-0.000 (0.066)	0.844
Special ed or help with learning, behavioral or emotional	0.275	-0.102* (0.045)	0.262	-0.097 (0.096)	0.290	-0.125 (0.066)	0.260	-0.076 (0.072)	0.787

problems [PR]

Notes: See notes for Appendix Table A1.

Appendix Table A21

Estimated Effects for the New York Section 8 Group

	Section 8 versus Control								Linear Age Interaction
	New York All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	0.121 {N = 728}	-0.214* (0.068)	-0.873 {N = 237}	-0.212 (0.120)	0.453 {N = 239}	-0.299* (0.109)	0.809 {N = 252}	-0.125 (0.102)	0.746
Broad reading score [WJR]	0.137	-0.215* (0.067)	-0.748	-0.190 (0.113)	0.399	-0.327* (0.122)	0.774	-0.125 (0.107)	0.981
Broad math score [WJR]	0.091	-0.191* (0.075)	-0.933	-0.213 (0.136)	0.465	-0.223* (0.102)	0.769	-0.130 (0.108)	0.687
B. Unadjusted scores									
Broad reading score [WJR]	0.139	-0.240* (0.063)	-0.714	-0.248* (0.104)	0.361	-0.330* (0.116)	0.783	-0.146 (0.101)	0.723
Broad math score [WJR]	0.063	-0.178* (0.075)	-0.902	-0.248 (0.130)	0.402	-0.194 (0.104)	0.714	-0.094 (0.108)	0.364
C. Mobility and school									

changes

Moved using MTO voucher	0.000	0.398* (0.038)	-0.000	0.392* (0.052)	-0.000	0.437* (0.062)	-0.000	0.363* (0.053)	0.652
Moved at least 10 miles from BL address [ADDR]	0.115	-0.011 (0.035)	0.137	-0.033 (0.056)	0.152	-0.039 (0.054)	0.055	0.037 (0.046)	0.983
Number of moves since RA [ADDR]	0.609	0.435* (0.090)	0.745	0.427* (0.148)	0.640	0.431* (0.131)	0.443	0.428* (0.132)	0.446
Average share of schools in main BL school districts[a] [SCH]	0.898	0.016 (0.031)	0.899	0.030 (0.045)	0.903	0.029 (0.050)	0.893	-0.004 (0.046)	0.720
School closer to BL than 2002 address, age <= 16 [ADDR] [SCH]	0.247	0.008 (0.051)	0.258	-0.036 (0.068)	0.274	0.012 (0.075)	0.153	0.097 (0.096)	0.554
Number of schools attended since year after RA[b], age <= 16 [SCH]	1.877	0.149 (0.082)	1.420	-0.045 (0.101)	2.091	0.298* (0.129)	2.479	0.236 (0.217)	0.212
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.109	0.038 (0.033)	0.077	-0.004 (0.043)	0.121	0.043 (0.051)	0.160	0.123 (0.103)	0.179

D. Census tract characteristics

Average census tract poverty rate [ADDR]	0.462	-0.052* (0.013)	0.458	-0.058* (0.017)	0.454	-0.057* (0.020)	0.473	-0.041* (0.017)	0.270
Male unemployment rate [ADDR]	0.223	-0.026* (0.011)	0.220	-0.034* (0.014)	0.207	-0.021 (0.017)	0.241	-0.023 (0.015)	0.551
Average share of tract minority [ADDR]	0.950	-0.000 (0.012)	0.938	0.008 (0.015)	0.949	-0.008 (0.018)	0.963	0.001 (0.013)	0.861
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.120	0.009 (0.007)	0.127	0.007 (0.011)	0.118	0.011 (0.009)	0.114	0.009 (0.010)	0.858
E. School characteristics									
Average share free lunch eligible, excluding IL [SCH]	0.771	-0.004 (0.016)	0.832	-0.012 (0.024)	0.788	-0.007 (0.026)	0.695	0.010 (0.026)	0.356
Average share minority [SCH]	0.923	0.021 (0.016)	0.945	0.019 (0.026)	0.916	0.026 (0.025)	0.909	0.017 (0.025)	0.811
Average percentile rank on state exams [SCH], excluding age > 13 for MD	0.133	0.010 (0.019)	0.126	0.010 (0.026)	0.142	0.016 (0.026)	NA	NA	NA

and NY

Average pupil-teacher ratio, excluding MA [SCH]	17.844	0.040 (0.636)	17.888	0.000 (1.122)	17.610	-0.286 (0.977)	18.025	0.445 (0.887)	0.944
Share magnet schools, excluding MD, NY [SCH]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Index of positive school climate[d] [SR]	0.677	-0.047 (0.025)	0.699	-0.037 (0.036)	0.685	-0.051 (0.036)	0.648	-0.038 (0.049)	0.952
Gangs in child's school or neighborhood [SR]	0.536	0.015 (0.051)	0.349	0.091 (0.107)	0.617	0.058 (0.076)	0.571	-0.055 (0.078)	0.307

F. School and behavior problems

Index of eleven behavior problems[e] [PR]	0.218	0.073* (0.024)	0.228	0.078 (0.040)	0.213	0.127* (0.040)	0.212	0.008 (0.034)	0.153
Ever repeated a grade in school [PR]	0.188	0.021 (0.038)	0.119	0.005 (0.054)	0.188	0.083 (0.067)	0.263	-0.032 (0.063)	0.927
Suspended from school during past two years [PR]	0.066	0.063* (0.024)	0.036	0.069* (0.033)	0.074	0.115* (0.050)	0.091	0.006 (0.040)	0.383
School asked to come in and	0.213	0.091* (0.041)	0.191	0.122* (0.061)	0.212	0.112 (0.071)	0.249	0.015 (0.073)	0.250

talk about problems[f]

G. School engagement, ages 8 to 18									
Always pays attention in class [SR]	0.549	-0.021 (0.054)	0.544	0.065 (0.093)	0.571	-0.046 (0.075)	0.524	-0.036 (0.094)	0.212
Works hard in school [SR]	0.521	0.008 (0.053)	0.473	0.188* (0.094)	0.584	-0.020 (0.072)	0.474	-0.075 (0.095)	0.029
Reads at least 5 hours/week excluding schoolwork [SR]	0.227	-0.044 (0.041)	0.198	-0.107 (0.082)	0.205	0.010 (0.056)	0.284	-0.074 (0.075)	0.988
Late for school less than once a month [SR]	0.347	0.066 (0.051)	0.482	-0.016 (0.103)	0.367	0.145* (0.069)	0.202	0.012 (0.076)	0.856
H. Special classes during past 2 years, ages 8 to 18									
In class for gifted students or did advanced work [PR]	0.093	-0.005 (0.027)	0.139	-0.044 (0.065)	0.063	0.005 (0.034)	0.097	0.009 (0.049)	0.959
Special ed or help with learning, behavioral or emotional	0.209	0.083* (0.041)	0.191	0.145 (0.083)	0.204	0.105 (0.064)	0.230	0.005 (0.071)	0.334

problems [PR]

Notes: See notes for Appendix Table A1.

Appendix Table A22

Estimated Effects for Section 8 Group Children with BL Characteristics Predictive of Low Test Scores

	Section 8 versus Control								Linear Age Interaction
	Low Predicted Scores All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.282 {N = 972}	0.019 (0.053)	-1.040 {N = 328}	-0.045 (0.077)	0.115 {N = 310}	-0.158 (0.088)	0.197 {N = 334}	0.265* (0.100)	0.117
Broad reading score [WJR]	-0.283	0.070 (0.057)	-0.946	0.022 (0.090)	0.055	-0.116 (0.099)	0.153	0.307* (0.099)	0.184
Broad math score [WJR]	-0.263	-0.032 (0.055)	-1.062	-0.083 (0.078)	0.175	-0.184* (0.082)	0.231	0.176 (0.107)	0.223
B. Unadjusted scores									
Broad reading score [WJR]	-0.257	0.010 (0.060)	-0.903	-0.068 (0.091)	0.060	-0.138 (0.100)	0.179	0.242* (0.106)	0.115
Broad math score [WJR]	-0.231	-0.071 (0.056)	-1.003	-0.143 (0.073)	0.193	-0.223* (0.083)	0.244	0.158 (0.114)	0.112
C. Mobility and school									

changes

Moved using MTO voucher	-0.000	0.573* (0.031)	0.000	0.642* (0.044)	0.000	0.589* (0.046)	0.000	0.486* (0.048)	0.008
Moved at least 10 miles from BL address [ADDR]	0.093	0.059 (0.030)	0.066	0.083 (0.045)	0.093	0.040 (0.044)	0.125	0.052 (0.047)	0.289
Number of moves since RA [ADDR]	1.223	0.519* (0.107)	1.326	0.667* (0.169)	1.115	0.607* (0.140)	1.212	0.275 (0.153)	0.007
Average share of schools in main BL school districts[a] [SCH]	0.873	-0.047 (0.028)	0.916	-0.101* (0.043)	0.826	0.032 (0.047)	0.869	-0.063 (0.042)	0.518
School closer to BL than 2002 address [ADDR] [SCH]	0.251	-0.032 (0.041)	0.272	-0.133* (0.057)	0.218	0.041 (0.058)	0.263	0.065 (0.104)	0.006
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.036	0.085 (0.077)	1.434	0.024 (0.086)	2.350	0.105 (0.124)	2.775	0.194 (0.213)	0.307
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.172	0.038 (0.035)	0.124	0.005 (0.046)	0.156	0.095 (0.054)	0.316	-0.015 (0.091)	0.555

D. Census tract characteristics

Average census	0.460	-0.107*	0.477	-0.118*	0.455	-0.105*	0.445	-0.097*	0.150

tract poverty rate [ADDR]		(0.011)		(0.015)		(0.017)		(0.018)	
Male unemployment rate [ADDR]	0.211	-0.047* (0.009)	0.223	-0.062* (0.014)	0.215	-0.051* (0.015)	0.193	-0.029 (0.015)	0.102
Average share of tract minority [ADDR]	0.897	-0.025 (0.013)	0.912	-0.028 (0.019)	0.902	-0.038 (0.021)	0.875	-0.008 (0.020)	0.162
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.124	0.028* (0.007)	0.111	0.044* (0.010)	0.126	0.024* (0.010)	0.138	0.014 (0.011)	0.042
E. School characteristics									
Average share free lunch eligible, excluding IL [SCH]	0.748	-0.040* (0.015)	0.816	-0.065* (0.024)	0.756	-0.027 (0.026)	0.650	-0.024 (0.026)	0.156
Average share minority [SCH]	0.912	-0.023 (0.013)	0.948	-0.022 (0.017)	0.887	-0.027 (0.026)	0.890	-0.018 (0.020)	0.999
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.140	0.023* (0.011)	0.121	0.031* (0.015)	0.144	0.036* (0.018)	0.177	-0.019 (0.024)	0.337

Average pupil-teacher ratio, excluding MA [SCH]	18.374	-0.495 (0.327)	18.552	-0.551 (0.554)	18.515	-0.373 (0.567)	17.935	-0.683 (0.543)	0.742
Share magnet schools, excluding MD, NY [SCH]	0.236	-0.075* (0.035)	0.242	-0.120* (0.053)	0.181	-0.050 (0.067)	0.282	-0.045 (0.051)	0.088
Index of positive school climate[d] [SR]	0.637	0.006 (0.019)	0.686	-0.022 (0.035)	0.650	0.010 (0.029)	0.584	0.024 (0.035)	0.652
Gangs in child's school or neighborhood [SR]	0.530	-0.027 (0.042)	0.401	-0.030 (0.094)	0.605	-0.109 (0.064)	0.530	0.058 (0.066)	0.184
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.304	-0.008 (0.020)	0.349	-0.089* (0.031)	0.283	0.049 (0.035)	0.273	0.020 (0.032)	0.033
Ever repeated a grade in school [PR]	0.230	0.015 (0.028)	0.147	0.010 (0.043)	0.209	0.078 (0.051)	0.348	-0.035 (0.050)	0.568
Suspended from school during past two years [PR]	0.171	-0.004 (0.025)	0.146	-0.085* (0.037)	0.178	0.089 (0.045)	0.194	-0.008 (0.046)	0.348
School asked to come in and talk about	0.282	0.048 (0.035)	0.293	-0.000 (0.056)	0.269	0.087 (0.058)	0.280	0.062 (0.066)	0.296

problems[f]

G. School engagement, ages 8 to 18								
Always pays attention in class [SR]	0.552	0.035 (0.039)	0.600	0.041 (0.071)	0.575	0.031 (0.058)	0.487	0.035 (0.065)	0.616
Works hard in school [SR]	0.547	0.004 (0.040)	0.608	0.091 (0.072)	0.597	-0.029 (0.061)	0.442	-0.026 (0.071)	0.337
Reads at least 5 hours/week excluding schoolwork [SR]	0.254	0.001 (0.035)	0.262	-0.033 (0.070)	0.253	0.015 (0.052)	0.248	0.007 (0.062)	0.862
Late for school less than once a month [SR]	0.441	0.086* (0.042)	0.525	0.008 (0.078)	0.421	0.187* (0.062)	0.404	0.008 (0.074)	0.979
H. Special classes during past 2 years, ages 8 to 18								
In class for gifted students or did advanced work [PR]	0.073	0.026 (0.023)	0.101	-0.016 (0.043)	0.072	0.022 (0.037)	0.052	0.074 (0.041)	0.127
Special ed or help with learning, behavioral or emotional problems [PR]	0.315	0.036 (0.037)	0.266	0.027 (0.073)	0.282	0.138* (0.055)	0.395	-0.099 (0.064)	0.149

Notes: See notes for Appendix Table A1.

Appendix Table A23

Estimated Effects for Section 8 Group Children with BL Characteristics Predictive of Middle Test Scores

	Section 8 versus Control								Linear Age Interaction
	Middle Predicted Scores All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	-0.051 {N = 1024}	-0.052 (0.047)	-0.832 {N = 394}	-0.119 (0.085)	0.275 {N = 346}	0.035 (0.070)	0.655 {N = 284}	-0.076 (0.078)	0.819
Broad reading score [WJR]	-0.050	-0.042 (0.050)	-0.761	-0.075 (0.094)	0.224	0.050 (0.078)	0.633	-0.116 (0.077)	0.495
Broad math score [WJR]	-0.048	-0.057 (0.051)	-0.830	-0.134 (0.090)	0.300	0.002 (0.074)	0.622	-0.033 (0.089)	0.936
B. Unadjusted scores									
Broad reading score [WJR]	-0.054	-0.046 (0.053)	-0.777	-0.003 (0.094)	0.222	0.019 (0.081)	0.640	-0.193* (0.087)	0.105
Broad math score [WJR]	-0.053	-0.064 (0.052)	-0.832	-0.099 (0.085)	0.295	-0.024 (0.081)	0.615	-0.069 (0.094)	0.694
C. Mobility and school									

changes

Moved using MTO voucher	0.000	0.658* (0.029)	-0.000	0.638* (0.042)	-0.000	0.708* (0.044)	-0.000	0.618* (0.049)	0.502
Moved at least 10 miles from BL address [ADDR]	0.123	-0.018 (0.033)	0.118	0.001 (0.048)	0.113	-0.030 (0.040)	0.143	-0.028 (0.051)	0.265
Number of moves since RA [ADDR]	1.278	0.461* (0.120)	1.259	0.524* (0.172)	1.299	0.567* (0.164)	1.278	0.227 (0.152)	0.026
Average share of schools in main BL school districts[a] [SCH]	0.917	-0.076* (0.024)	0.903	-0.048 (0.036)	0.943	-0.102* (0.033)	0.899	-0.079 (0.040)	0.215
School closer to BL than 2002 address [ADDR] [SCH]	0.315	-0.142* (0.045)	0.281	-0.156* (0.059)	0.347	-0.145* (0.064)	0.326	-0.085 (0.115)	0.786
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.010	0.191* (0.067)	1.377	0.179* (0.076)	2.360	0.243* (0.113)	2.961	0.039 (0.207)	0.900
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.147	0.039 (0.031)	0.119	0.033 (0.043)	0.160	0.060 (0.048)	0.196	-0.013 (0.091)	0.720

D. Census tract characteristics

Average census	0.457	-0.103*	0.488	-0.120*	0.434	-0.097*	0.445	-0.088*	0.217

tract poverty rate [ADDR]		(0.011)		(0.018)		(0.015)		(0.019)	
Male unemployment rate [ADDR]	0.201	-0.018 (0.011)	0.209	-0.017 (0.017)	0.183	-0.015 (0.013)	0.215	-0.022 (0.018)	0.960
Average share of tract minority [ADDR]	0.906	-0.034* (0.012)	0.917	-0.031 (0.016)	0.911	-0.043* (0.015)	0.885	-0.024 (0.023)	0.595
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.120	0.027* (0.006)	0.114	0.027* (0.008)	0.123	0.027* (0.009)	0.125	0.027* (0.013)	0.960

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.768	-0.055* (0.015)	0.823	-0.063* (0.025)	0.785	-0.056* (0.020)	0.669	-0.044 (0.028)	0.653
Average share minority [SCH]	0.928	-0.030* (0.012)	0.929	-0.005 (0.016)	0.927	-0.029 (0.018)	0.926	-0.066* (0.024)	0.007
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.139	0.025* (0.011)	0.132	0.012 (0.014)	0.137	0.043* (0.019)	0.160	0.020 (0.022)	0.398

Average pupil-teacher ratio, excluding MA [SCH]	18.590	0.088 (0.333)	18.430	0.672 (0.560)	18.786	-0.370 (0.453)	18.567	-0.088 (0.520)	0.345
Share magnet schools, excluding MD, NY [SCH]	0.215	0.018 (0.037)	0.215	-0.018 (0.058)	0.145	0.007 (0.050)	0.309	0.086 (0.066)	0.212
Index of positive school climate[d] [SR]	0.647	0.011 (0.019)	0.683	-0.001 (0.032)	0.647	0.015 (0.026)	0.604	0.016 (0.041)	0.954
Gangs in child's school or neighborhood [SR]	0.585	0.007 (0.036)	0.519	0.018 (0.070)	0.609	-0.019 (0.056)	0.606	0.035 (0.060)	0.543

F. School and behavior problems

Index of eleven behavior problems[e] [PR]	0.271	-0.007 (0.018)	0.275	0.016 (0.028)	0.295	-0.022 (0.032)	0.231	-0.018 (0.034)	0.295
Ever repeated a grade in school [PR]	0.256	-0.064* (0.030)	0.217	-0.062 (0.050)	0.303	-0.100 (0.061)	0.245	-0.020 (0.056)	0.796
Suspended from school during past two years [PR]	0.175	0.004 (0.027)	0.109	0.021 (0.035)	0.231	0.041 (0.055)	0.195	-0.069 (0.050)	0.161
School asked to come in and talk about	0.335	-0.014 (0.033)	0.341	-0.044 (0.052)	0.376	0.028 (0.061)	0.247	-0.034 (0.071)	0.632

problems[f]

G. School engagement, ages 8 to 18								
Always pays attention in class [SR]	0.573	-0.010 (0.042)	0.628	-0.024 (0.067)	0.573	-0.050 (0.064)	0.506	0.081 (0.081)	0.447
Works hard in school [SR]	0.608	-0.020 (0.038)	0.696	-0.017 (0.062)	0.587	-0.020 (0.058)	0.543	-0.031 (0.082)	0.408
Reads at least 5 hours/week excluding schoolwork [SR]	0.250	0.007 (0.037)	0.234	-0.030 (0.064)	0.242	0.038 (0.056)	0.285	-0.007 (0.077)	0.903
Late for school less than once a month [SR]	0.497	0.011 (0.044)	0.594	-0.023 (0.073)	0.483	0.094 (0.065)	0.405	-0.099 (0.079)	0.194
H. Special classes during past 2 years, ages 8 to 18								
In class for gifted students or did advanced work [PR]	0.133	-0.034 (0.025)	0.147	-0.020 (0.051)	0.115	-0.008 (0.035)	0.148	-0.095 (0.052)	0.323
Special ed or help with learning, behavioral or emotional problems [PR]	0.249	-0.007 (0.032)	0.268	0.060 (0.067)	0.277	-0.047 (0.056)	0.174	0.004 (0.055)	0.641

Note: See notes for Notes: See notes for Appendix Table A1.

Appendix Table A24

Estimated Effects for Section 8 Group Children with BL Characteristics Predictive of High Test Scores

	Section 8 versus Control								Linear Age Interaction
	High Predicted Scores All Ages		Ages 6 to 10		Ages 11 to 14		Ages 15 to 20		
	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	Control Mean	Intent-to-Treat	P-value
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A. Scores adjusted for interviewer effects									
Combined broad reading and math score [WJR]	0.376 {N = 1011}	-0.062 (0.045)	-0.586 {N = 263}	-0.062 (0.092)	0.450 {N = 360}	-0.095 (0.078)	0.902 {N = 388}	-0.044 (0.074)	0.827
Broad reading score [WJR]	0.371	-0.043 (0.048)	-0.513	-0.018 (0.100)	0.386	-0.048 (0.080)	0.899	-0.076 (0.081)	0.315
Broad math score [WJR]	0.350	-0.090 (0.048)	-0.617	-0.113 (0.100)	0.492	-0.141 (0.084)	0.817	-0.027 (0.073)	0.616
B. Unadjusted scores									
Broad reading score [WJR]	0.347	-0.014 (0.050)	-0.546	-0.005 (0.106)	0.384	-0.055 (0.078)	0.862	-0.007 (0.086)	0.655
Broad math score [WJR]	0.319	-0.039 (0.050)	-0.660	-0.077 (0.099)	0.482	-0.117 (0.083)	0.774	0.055 (0.079)	0.365
C. Mobility and school									

changes

Moved using MTO voucher	-0.000	0.627* (0.030)	-0.000	0.697* (0.047)	0.000	0.626* (0.045)	0.000	0.588* (0.043)	0.163
Moved at least 10 miles from BL address [ADDR]	0.144	0.003 (0.035)	0.175	-0.058 (0.048)	0.163	0.021 (0.051)	0.105	0.022 (0.047)	0.517
Number of moves since RA [ADDR]	1.024	0.631* (0.080)	1.084	0.647* (0.144)	1.092	0.644* (0.118)	0.924	0.620* (0.120)	0.783
Average share of schools in main BL school districts[a] [SCH]	0.862	-0.030 (0.025)	0.830	0.004 (0.049)	0.857	-0.030 (0.034)	0.889	-0.051 (0.038)	0.347
School closer to BL than 2002 address [ADDR] [SCH]	0.249	0.059 (0.043)	0.279	0.053 (0.067)	0.205	0.060 (0.057)	0.317	0.074 (0.094)	0.824
Number of schools attended since year after RA[b], age <= 16 [SCH]	2.332	-0.045 (0.071)	1.588	-0.064 (0.100)	2.522	0.004 (0.104)	3.145	-0.121 (0.170)	0.766
Any mid-grade school change since RA[c], age <= 16 [SCH]	0.201	-0.039 (0.031)	0.100	0.016 (0.046)	0.261	-0.091* (0.046)	0.210	0.011 (0.081)	0.778

D. Census tract characteristics

Average census	0.451	-0.110*	0.451	-0.105*	0.443	-0.111*	0.458	-0.110*	0.843

tract poverty rate [ADDR]		(0.011)		(0.019)		(0.016)		(0.015)
Male unemployment rate [ADDR]	0.196	-0.039* (0.009)	0.169	-0.023 (0.015)	0.186	-0.038* (0.012)	0.223	-0.046* (0.014)	0.180
Average share of tract minority [ADDR]	0.913	-0.042* (0.014)	0.888	0.001 (0.022)	0.907	-0.052* (0.021)	0.934	-0.054* (0.019)	0.264
Average share of tract with at least an associate or bachelor's degree [ADDR]	0.123	0.035* (0.006)	0.134	0.026* (0.013)	0.128	0.040* (0.010)	0.113	0.035* (0.008)	0.938

E. School characteristics

Average share free lunch eligible, excluding IL [SCH]	0.699	-0.011 (0.015)	0.763	-0.038 (0.031)	0.716	0.013 (0.023)	0.650	-0.012 (0.021)	0.689
Average share minority [SCH]	0.895	-0.022 (0.015)	0.893	-0.003 (0.024)	0.894	-0.008 (0.020)	0.896	-0.048 (0.027)	0.270
Average percentile rank on state exams [SCH], excluding age > 13 for MD and NY	0.171	0.006 (0.012)	0.163	-0.002 (0.020)	0.172	0.012 (0.018)	0.180	0.000 (0.022)	0.793

Average pupil-teacher ratio, excluding MA [SCH]	18.488	-0.172 (0.386)	18.086	-0.757 (0.988)	18.268	0.537 (0.570)	18.904	-0.379 (0.435)	0.999
Share magnet schools, excluding MD, NY [SCH]	0.217	-0.062* (0.029)	0.111	-0.056 (0.058)	0.188	-0.069 (0.044)	0.348	-0.062 (0.048)	0.999
Index of positive school climate[d] [SR]	0.657	0.006 (0.020)	0.686	-0.034 (0.037)	0.652	0.032 (0.032)	0.646	0.003 (0.041)	0.678
Gangs in child's school or neighborhood [SR]	0.520	-0.013 (0.040)	0.396	-0.031 (0.080)	0.563	-0.023 (0.063)	0.527	-0.000 (0.060)	0.273
F. School and behavior problems									
Index of eleven behavior problems[e] [PR]	0.232	0.018 (0.019)	0.196	0.114* (0.034)	0.273	-0.002 (0.028)	0.214	-0.023 (0.031)	0.038
Ever repeated a grade in school [PR]	0.174	-0.001 (0.026)	0.144	0.030 (0.050)	0.163	0.031 (0.041)	0.203	-0.045 (0.044)	0.274
Suspended from school during past two years [PR]	0.151	-0.035 (0.022)	0.067	0.045 (0.040)	0.211	-0.078* (0.037)	0.144	-0.046 (0.037)	0.111
School asked to come in and talk about	0.282	-0.025 (0.034)	0.215	0.048 (0.059)	0.343	-0.074 (0.055)	0.255	-0.027 (0.060)	0.858

problems[f]

G. School engagement, ages 8 to 18								
Always pays attention in class [SR]	0.515	0.069 (0.042)	0.547	0.074 (0.083)	0.531	0.051 (0.066)	0.471	0.114 (0.072)	0.892
Works hard in school [SR]	0.565	-0.016 (0.041)	0.710	-0.006 (0.077)	0.569	-0.047 (0.062)	0.465	0.026 (0.073)	0.798
Reads at least 5 hours/week excluding schoolwork [SR]	0.279	-0.043 (0.039)	0.274	-0.126 (0.071)	0.254	-0.035 (0.051)	0.323	-0.026 (0.067)	0.218
Late for school less than once a month [SR]	0.512	-0.035 (0.041)	0.679	-0.041 (0.086)	0.603	-0.043 (0.055)	0.262	-0.023 (0.066)	0.322
H. Special classes during past 2 years, ages 8 to 18								
In class for gifted students or did advanced work [PR]	0.142	0.009 (0.029)	0.105	0.059 (0.067)	0.161	-0.001 (0.043)	0.135	-0.003 (0.042)	0.488
Special ed or help with learning, behavioral or emotional problems [PR]	0.199	-0.003 (0.032)	0.204	0.051 (0.067)	0.241	-0.045 (0.049)	0.131	0.019 (0.048)	0.677

Note: See notes for Notes: See notes for Appendix Table A1.

Appendix Table A25

Estimated Effects on School Characteristics for Years 1 to 4 after Baseline

	Control Mean	Experimental-Control Intent-to-Treat	Section 8-Control Intent-to-Treat
	(i)	(ii)	(iii)
A. Share of schools in main baseline school districts[a] (Experimental-Control N = 1348; Section 8-Control N = 1101) [SCH]			
1 year after baseline	0.938	-0.067*	-0.031
		(0.019)	(0.019)
2 years after baseline	0.929	-0.093*	-0.054*
		(0.020)	(0.023)
3 years after baseline	0.907	-0.101*	-0.055*
		(0.023)	(0.024)
4 years after baseline	0.887	-0.090*	-0.040
		(0.025)	(0.028)
B. Percentile rank of schools on state exams (Experimental-Control N = 1173; Section 8-Control N = 959) [SCH]			
1 year after baseline	0.130	0.040*	0.007
		(0.009)	(0.009)
2 years after baseline	0.139	0.049*	0.019
		(0.010)	(0.012)
3 years after baseline	0.145	0.055*	0.016
		(0.011)	(0.012)
4 years after baseline	0.157	0.047*	0.015
		(0.011)	(0.012)
C. Share of minority students (Experimental-Control N = 1339; Section 8-Control N = 1096) [SCH]			
1 year after baseline	0.930	-0.031*	-0.007
		(0.010)	(0.011)
2 years after baseline	0.923	-0.045*	-0.026
		(0.010)	(0.014)
3 years after baseline	0.914	-0.054*	-0.028
		(0.012)	(0.015)
4 years after baseline	0.905	-0.050*	-0.030
		(0.012)	(0.015)

Sources: Data sources are indicated in square brackets. SCH = school history data linked by school name to school demographics from the National Center for Education Statistics and to average scores on state exams from the National School-Level State Assessment Score Database. School characteristics were available only for public schools.

Note: Sample is restricted to individuals who were eleven years old or younger at baseline and would have had at least four more years of compulsory education after baseline. Baseline grade was defined as the response to the baseline survey question "What grade has this child just completed?" Intent-to-treat (Intent-to-Treat) estimates for "all ages" from equation (1) using covariates as described in Table 1 and weights described in section V. Standard errors, adjusted for heteroskedasticity, are in parentheses.

*Statistically significant at the five percent level.

a. The main five baseline school district are Baltimore City, Boston, Chicago, Los Angeles Unified, and New York City school districts.