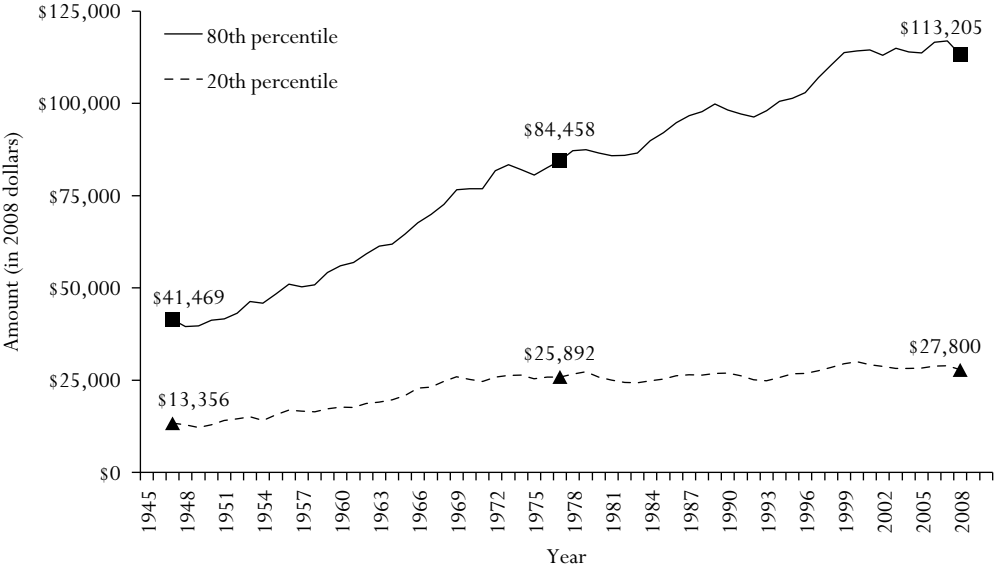
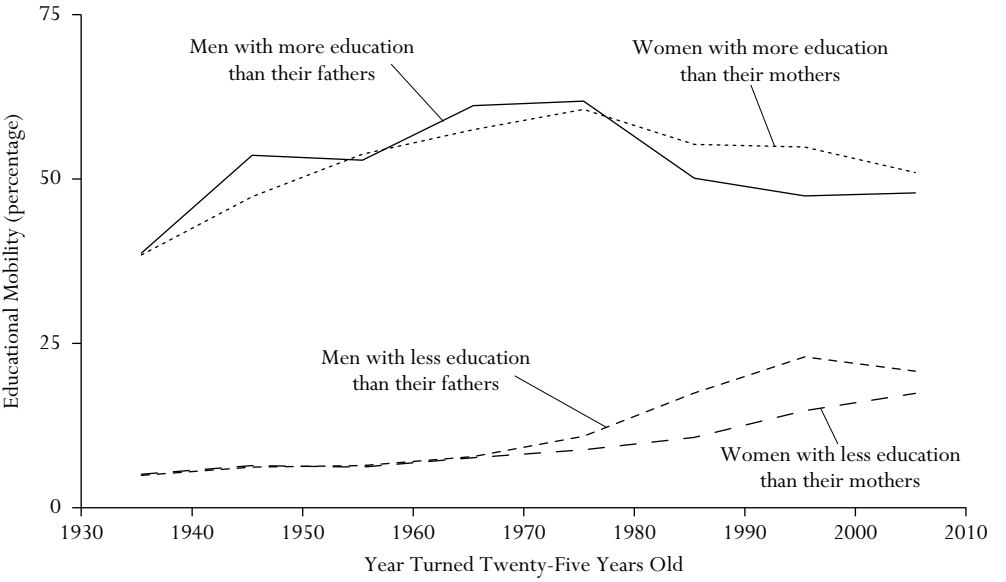
FIGURE 1.1 *High and Low Family Incomes, 1947 to 2008*



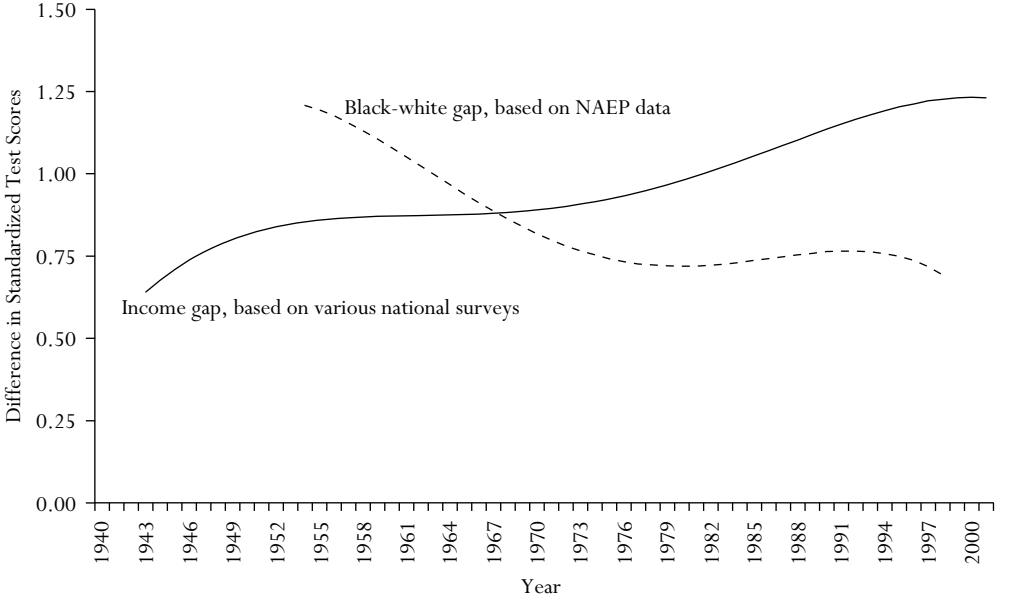
Source: Authors' calculations based on U.S. Bureau of the Census (n.d.).

FIGURE 1.2 *Upward and Downward Intergenerational Mobility, 1933 to 2005*



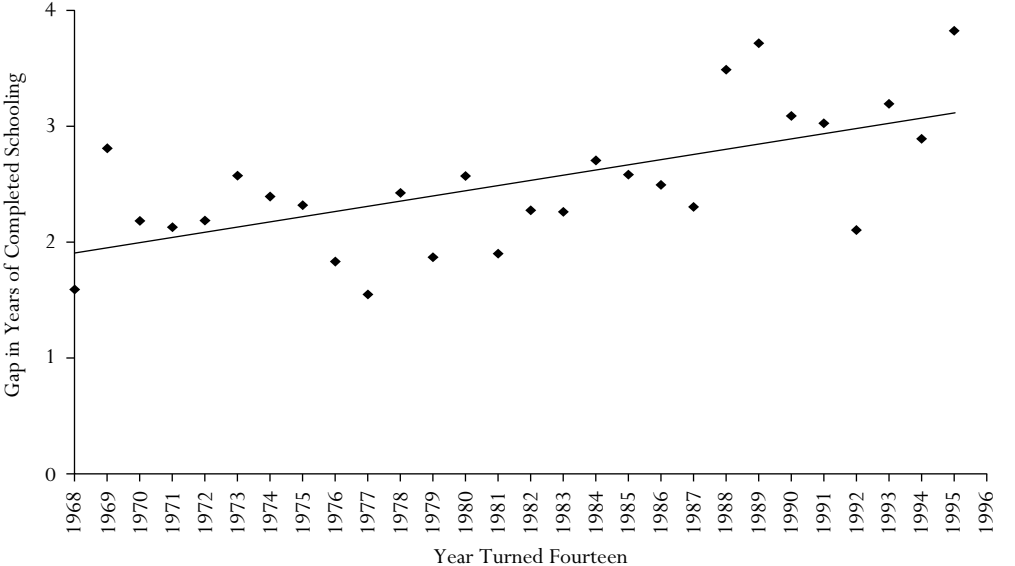
Source: Hout and Janus (this volume, figure 8.3); their calculations of General Social Surveys (Smith et al. 1972–2008).

FIGURE 1.3 *Estimated Gaps in Reading Achievement Between High- and Low-Income and Black and White Students, by Birth Year*



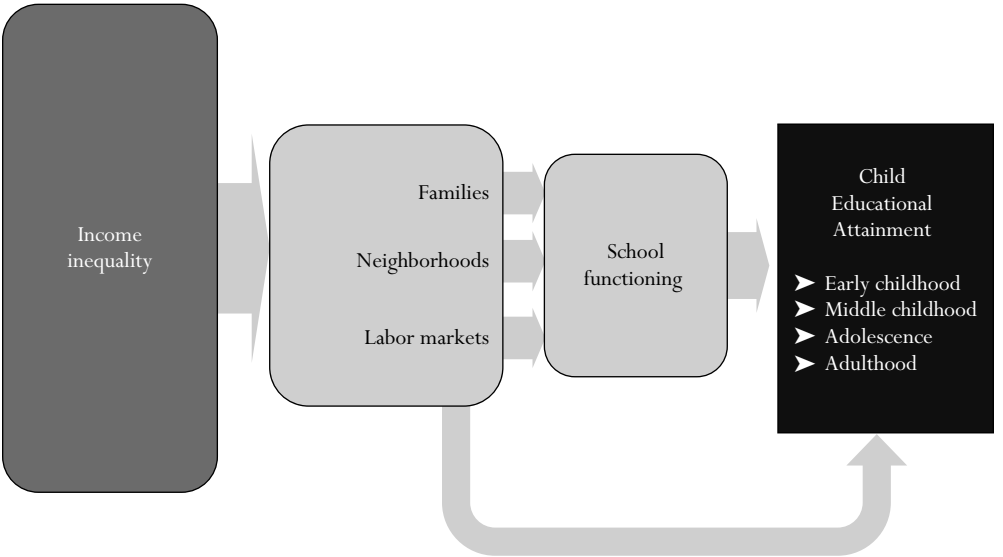
Source: Authors' adaptation of Reardon (this volume, figures 5.4 and 5.7).

FIGURE 1.4 *Gap in Years of Completed Schooling Between Students with Family Income in the Top and Bottom Quintiles, by Year Turned Fourteen*



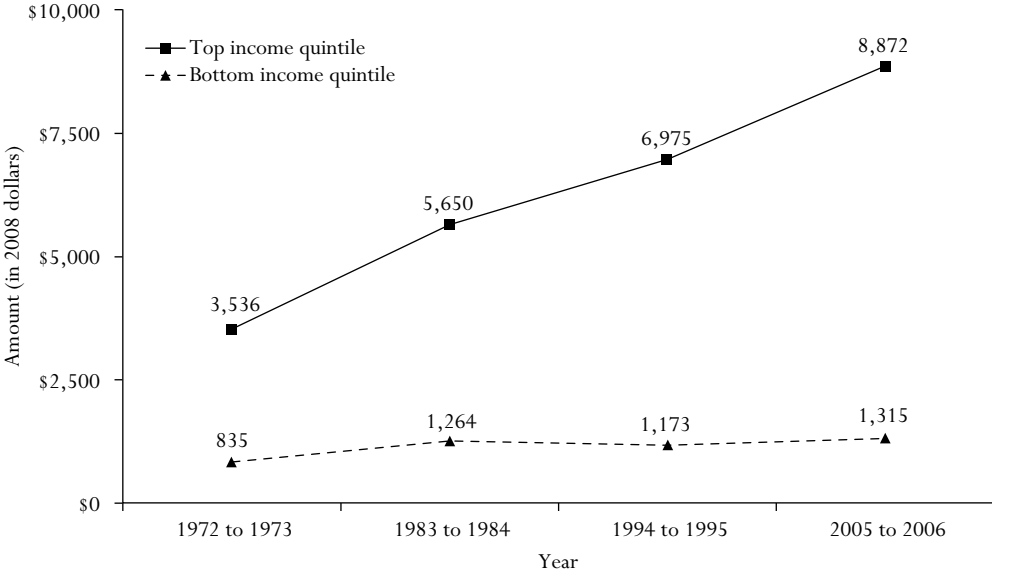
Source: Authors' calculations based on Panel Study of Income Dynamics (1968–2006).

FIGURE 1.5 *Inequality and Children's Attainments*



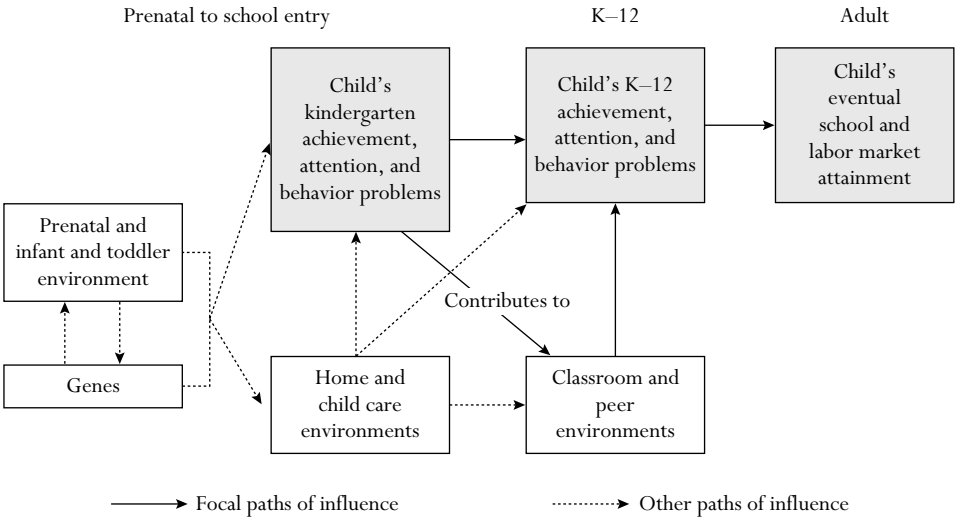
Source: Authors' figure.

FIGURE 1.6 *Enrichment Expenditures on Children, 1972 to 2006*



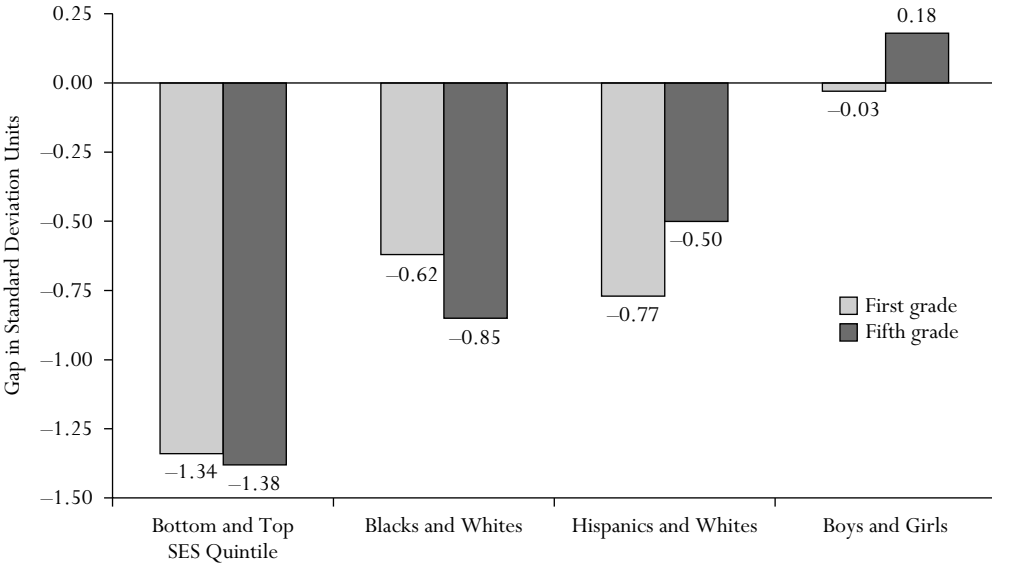
Source: Authors' calculations based on Consumer Expenditure Surveys (U.S. Bureau of Labor Statistics, various years).

FIGURE 3.1 *Skills, Behaviors, and Attainment Across Childhood*



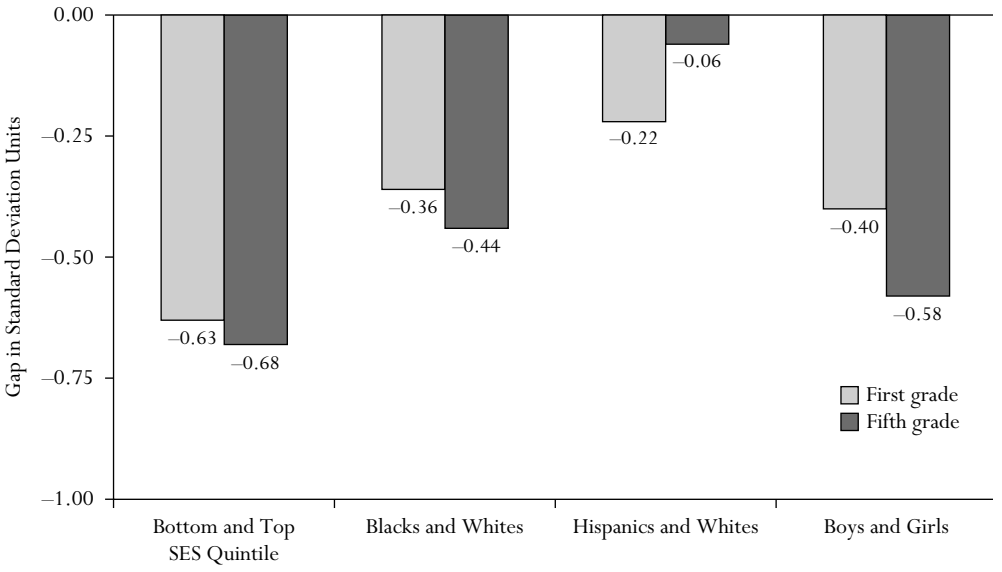
Source: Authors' figure.

FIGURE 3.2 *Math Gaps in Kindergarten and Fifth Grade*



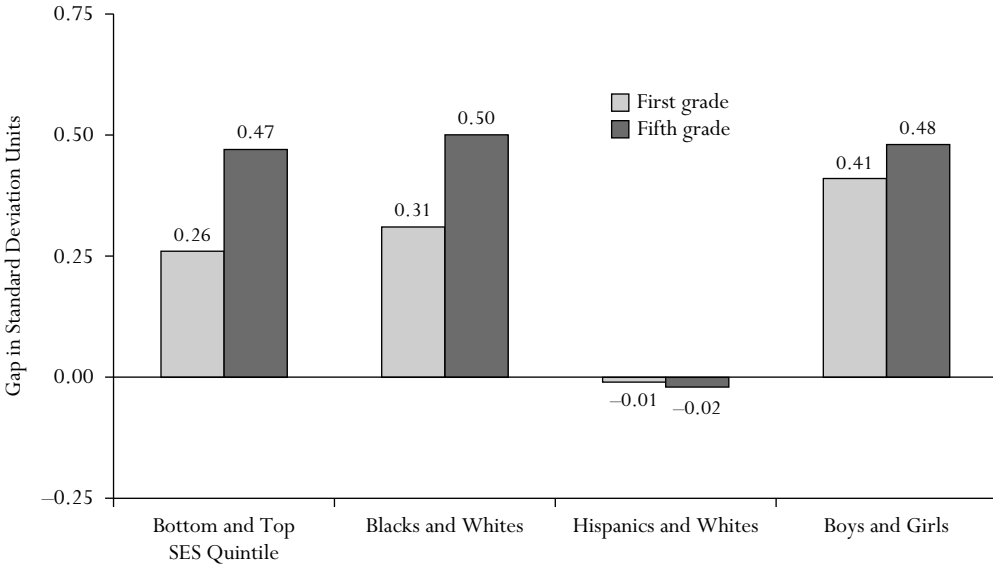
Source: Authors' calculations based on Early Childhood Longitudinal Study, Kindergarten Cohort (National Center for Education Statistics n.d.).

FIGURE 3.3 *Attention and Engagement Gaps in Kindergarten and Fifth Grade*



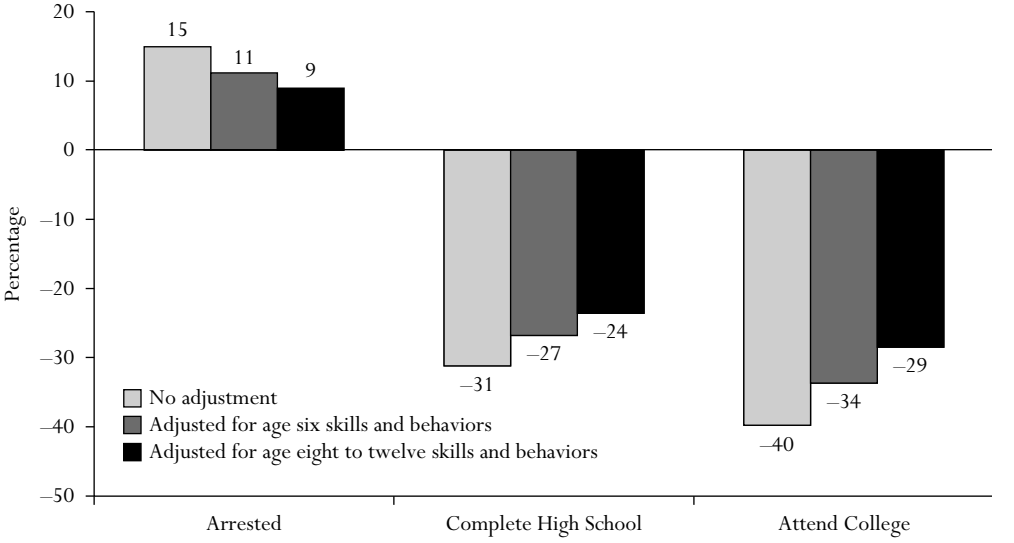
Source: Authors' calculations based on Early Childhood Longitudinal Study, Kindergarten Cohort (National Center for Education Statistics n.d.).

FIGURE 3.4 *Antisocial Behavior Differences in Kindergarten and Fifth Grade*



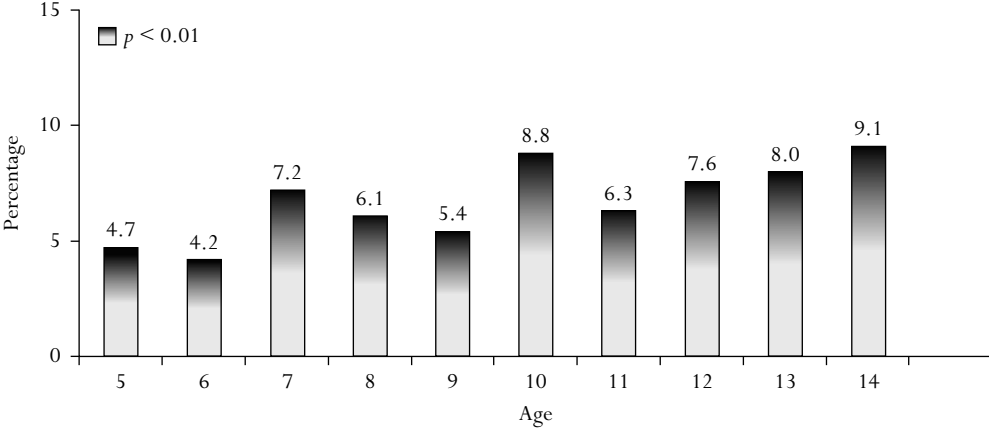
Source: Authors' calculations based on Early Childhood Longitudinal Study, Kindergarten Cohort (National Center for Education Statistics n.d.).

FIGURE 3.5 *Accounting for the Association Between Bottom and Top SES Quintiles in Early-Adult Outcomes*



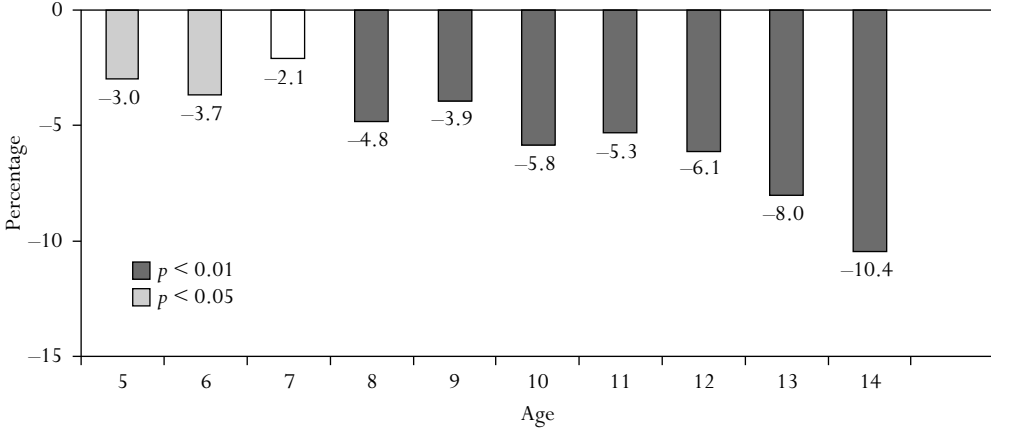
Source: Authors' calculations based on National Longitudinal Survey of Youth, Child and Young Adult (U.S. Bureau of Labor Statistics n.d.).

FIGURE 3.6 *Effect of an Increase of One Standard Deviation in Composite Achievement at Various Ages on the Probability of High School Graduation, Full Controls*



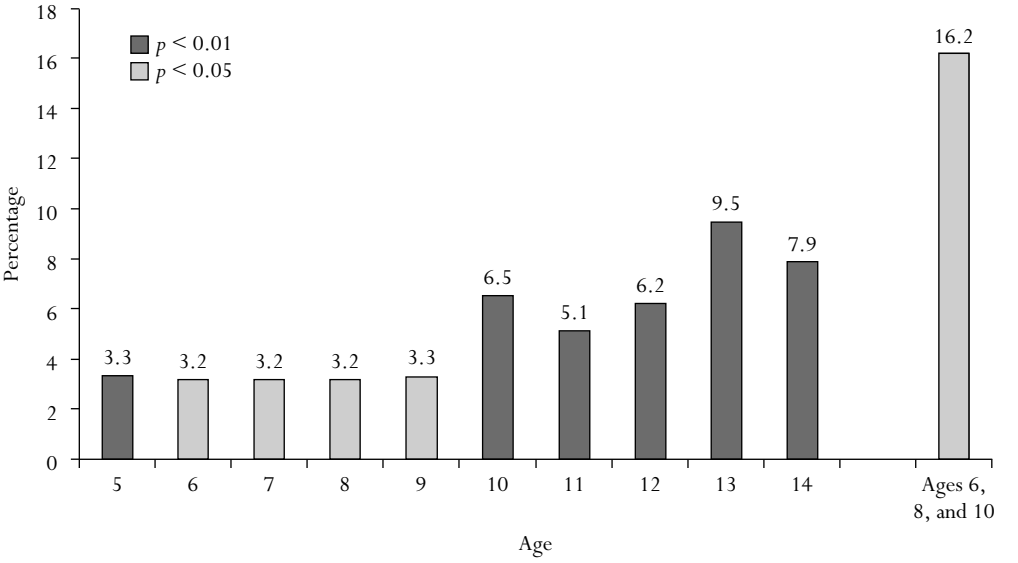
Source: Authors' calculations based on National Longitudinal Survey of Youth, Child and Young Adult (U.S. Bureau of Labor Statistics n.d.).

FIGURE 3.7 *Effect of an Increase of One Standard Deviation in Antisocial Behavior at Various Ages on the Probability of High School Graduation, Full Controls*



Source: Authors' calculations based on National Longitudinal Survey of Youth, Child and Young Adult (U.S. Bureau of Labor Statistics n.d.).

FIGURE 3.8 *Effect of an Increase of One Standard Deviation in Antisocial Behavior at Various Ages on the Probability of Ever Having Been Arrested, Full Controls*



Source: Authors' calculations based on National Longitudinal Survey of Youth, Child and Young Adult (U.S. Bureau of Labor Statistics n.d.).

TABLE 3.1 *Taxonomy of Skill and Behavior Domains*

	Achievement	Attention	Behavior Problems	Mental Health
Description	Concrete academic skills	Ability to control impulses and focus on tasks	Ability to get along with others	Sound mental health
Example test areas or question wording	Knowing letters and numbers; beginning word sounds, word problems	Can't sit still; can't concentrate; score from a computer test of impulse control	Cheats or tells lies, bullies, is disobedient at school	Is sad, depressed, moody
Commonly used index names	IRT (in ECLS-K) or PIAT (in NLSY) composite reading and math scores	"Approaches to learning" index (in ECLS-K) and attention problems (NLSY)	Externalizing behavior problems (in ECLS-K and NLSY)	Internalizing behavior problems (in ECLS-K and NLSY)

Source: Authors' table.

TABLE 3.2 *Effect Sizes of School-Entry Skills and Behaviors on Later Achievement, Meta-Analysis of 236 Coefficients*

	Grades One to Eight	
At School Entry	Math Achievement	Reading Achievement
Reading	0.09*	0.24*
Math	0.41*	0.26*
Attention	0.10*	0.08*
Externalizing behavior (–expected)	0.01 ns	0.01 ns
Internalizing behavior (–expected)	0.01 ns	–0.01 ns

Source: Authors' adaptation of Duncan et al. (2007, table 3).
Note: n = 236 estimated coefficients. Meta-analytic estimates control for time to test, test and teacher outcome, and study fixed effects; coefficients are weighted by inverse of their variances.
*$p < 0.05$; ns $p > 0.05$

TABLE 3.3 *Effect of Persistent and Intermittent Problems at Ages Six, Eight, and Ten on the Probabilities of High School Graduation and College Attendance*

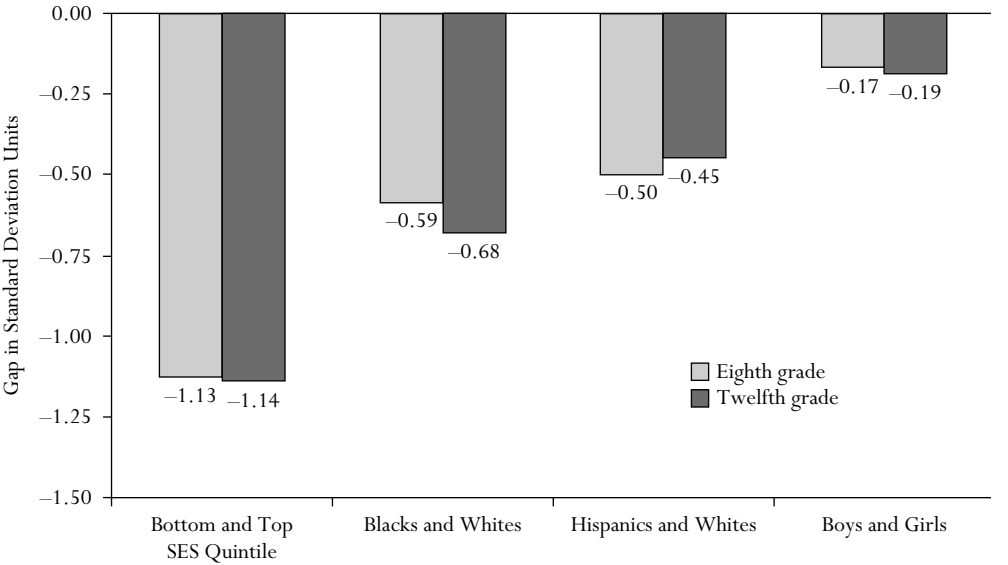
Problem Area	Problem Frequency	High School Completion	College Attendance
Reading	Intermittent	−0.08* (0.04)	−0.12* (0.05)
	Persistent	−0.08 (0.07)	−0.09 (0.10)
Math	Intermittent	−0.06† (0.03)	−0.10* (0.05)
	Persistent	−0.13* (0.07)	−0.34** (0.08)
Antisocial behavior	Intermittent	−0.07 (0.04)	−0.05 (0.05)
	Persistent	−0.16* (0.07)	−0.17† (0.10)
Inattention	Intermittent	−0.02 (0.03)	−0.05 (0.05)
	Persistent	0.03 (0.05)	−0.01 (0.09)
Anxiety	Intermittent	−0.02 (0.03)	−0.05 (0.05)
	Persistent	−0.08 (0.07)	−0.11 (0.09)

Source: Authors' calculations based on National Longitudinal Survey of Youth, Child and Young Adult (U.S. Bureau of Labor Statistics n.d.).

Note: A "problem" is defined as being in the worst quartile of distribution at a given age; N = 1,437 for high school completion and N = 1,081 for college attendance.

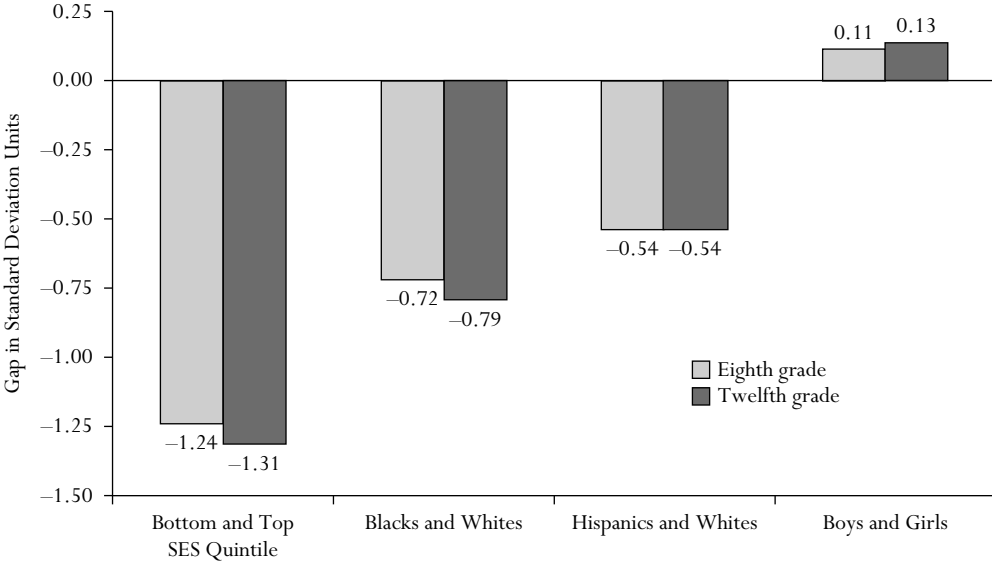
**$p < 0.01$; *$p < 0.05$; †$p < 0.10$

FIGURE 4.1 *Reading Gaps in Eighth and Twelfth Grades*



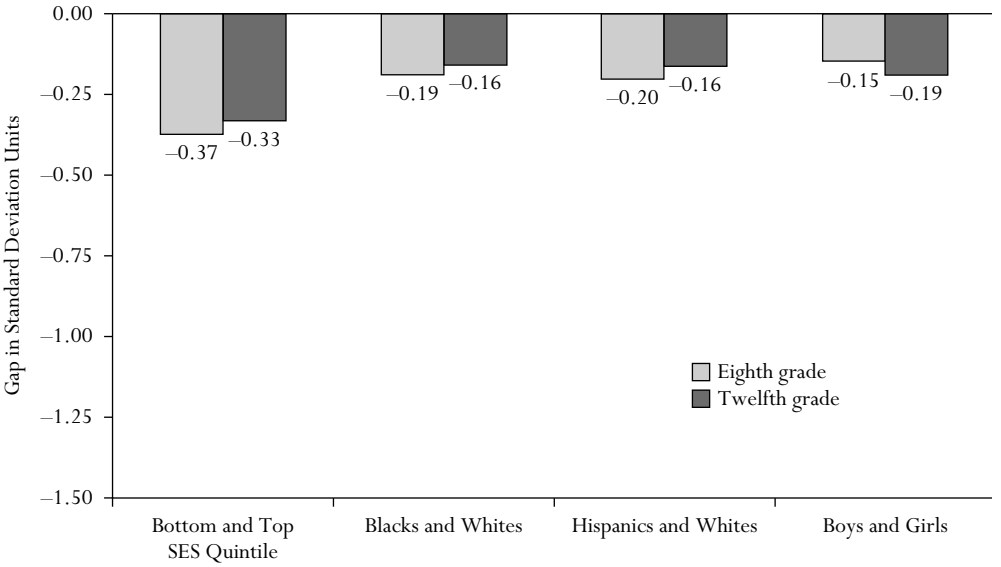
Source: Authors' calculations based on NELS88 (National Center for Education Statistics n.d.).

FIGURE 4.2 *Math Gaps in Eighth and Twelfth Grades*



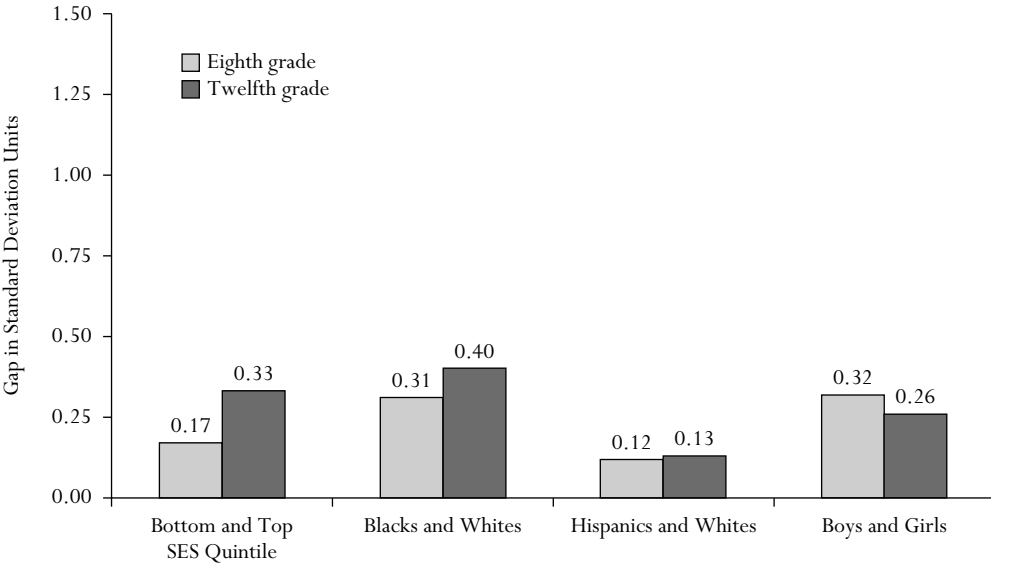
Source: Authors' calculations based on NELS88 (National Center for Education Statistics n.d.).

FIGURE 4.3 *Learning Behavior Gaps in Eighth and Twelfth Grades*



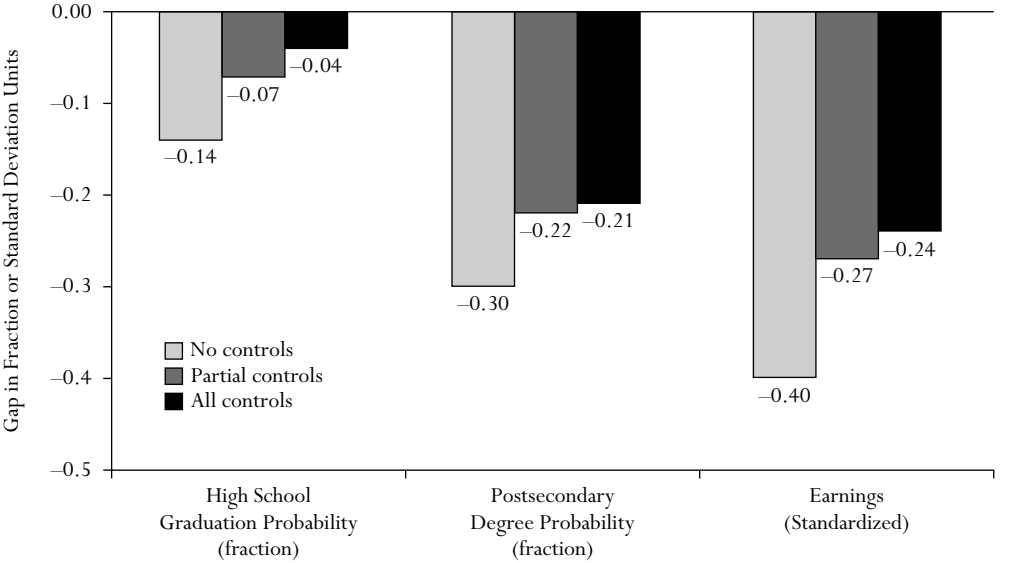
Source: Authors' calculations based on NELS88 (National Center for Education Statistics n.d.).

FIGURE 4.4 *Externalizing Behavior Problem Gaps in Eighth and Twelfth Grades*



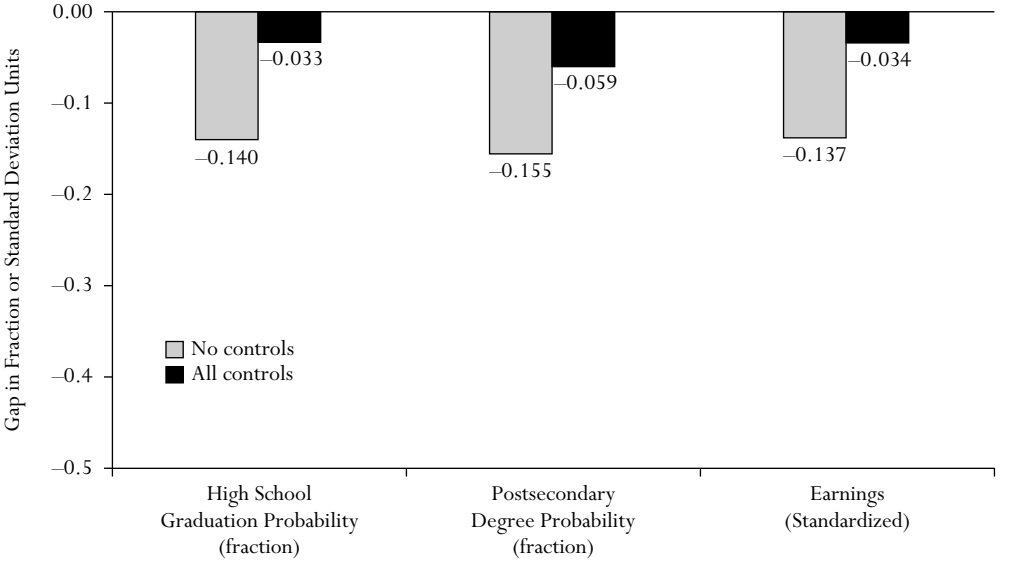
Source: Authors' calculations based on NELS88 (National Center for Education Statistics n.d.).

FIGURE 4.5 *SES Gaps (First Quintile Versus Fifth Quintile) in High School Graduation, Postsecondary Degree Attainment, and Earnings*



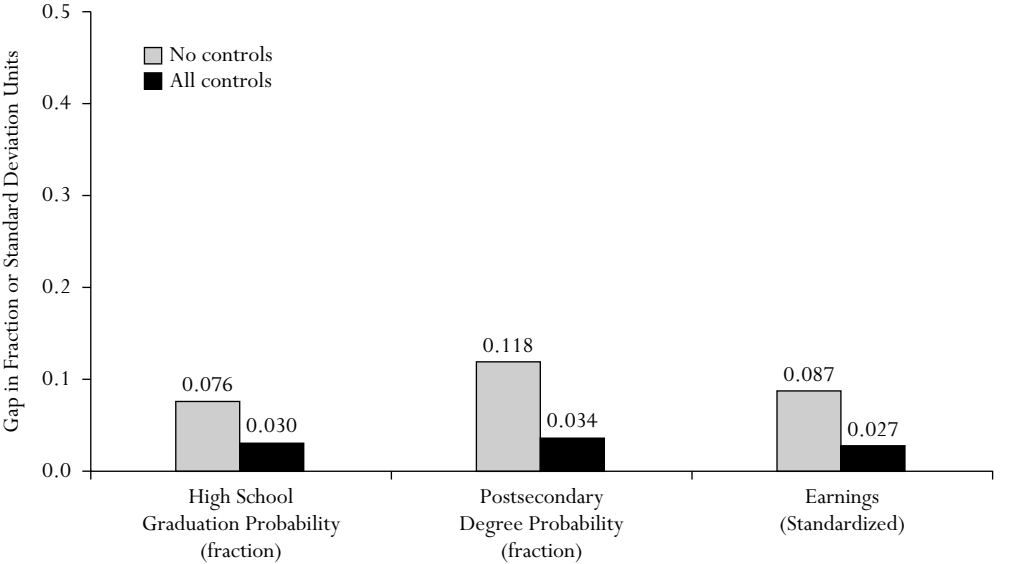
Source: Authors' calculations based on NELS88 (National Center for Education Statistics n.d.).

FIGURE 4.6 *Effect of Nonacademic-Curriculum-Track Placement on High School Graduation, Postsecondary Degree Attainment, and Earnings*



Source: Authors' calculations based on NELS88 (National Center for Education Statistics n.d.).

FIGURE 4.7 *Effect of a One-Standard-Deviation Increase in Educational Expectations on High School Graduation, Postsecondary Degree Attainment, and Earnings*



Source: Authors' calculations based on NELS88 (National Center for Education Statistics n.d.).

TABLE 4.1 *School-Level Concentrations of Eighth-Grade Achievement and Learning Behavior Problems*

	School Characteristics						
	All	High-Poverty Schools[b]	High-Minority Schools[c]	High-SES Schools[a]	Urban Schools	Suburban Schools	Rural Schools
Children with low test scores	20%	41%	43%	11%	24%	17%	21%
Children with low learning behaviors	20	27	26	17	23	20	19
Children with both problems	7	15	13	4	9	6	8

Source: Authors' calculations based on the 1988 National Educational Longitudinal Study (National Center for Education Statistics n.d.).

Notes: All means are weighted.

[a]Low SES is defined as the bottom 20 percent; high SES is defined as the top 20 percent.

[b]High-poverty schools are those with more than 50 percent of the students on free or reduced lunch.

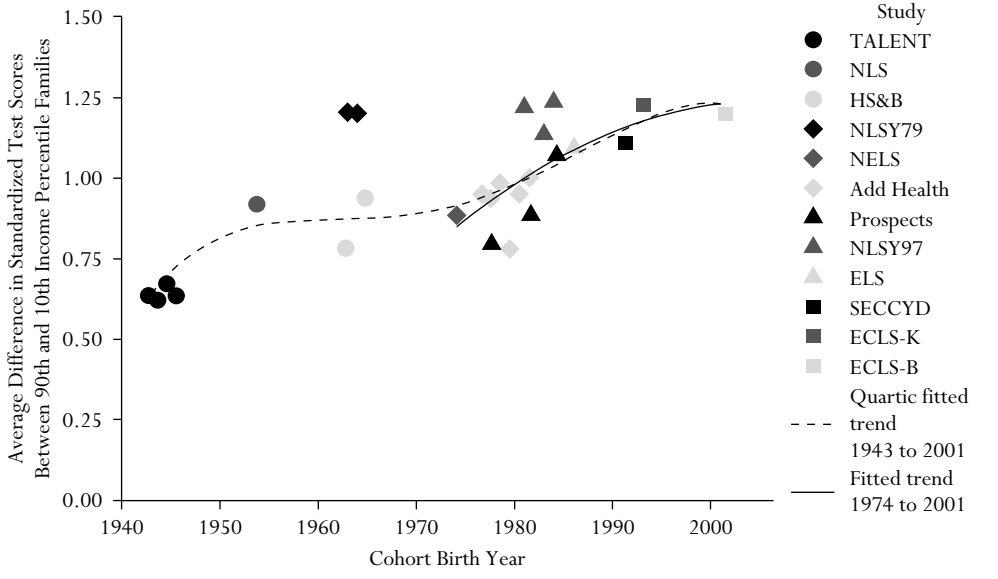
[c]High-minority schools are those where more than 60 percent of the students are minorities.

TABLE 4.2 *Eighth and Tenth Grade Persistent and Intermittent Problems and Later Outcomes, After Controlling Other Variables*

Problem Area	Problem Frequency	High School Degree (N = 8,198)	Postsecondary Degree (N = 6,576)	Earnings (N = 6,776)
Reading	Intermittent	−0.01 (0.01)	−0.04* (0.02)	0.02 (0.04)
	Persistent	−0.02** (0.01)	−0.06** (0.02)	0.05 (0.04)
Math	Intermittent	−0.01 (0.01)	−0.04 (0.02)	−0.06 (0.04)
	Persistent	−0.07*** (0.01)	−0.08*** (0.02)	−0.13*** (0.04)
Learning behaviors	Intermittent	−0.01*** (0.003)	−0.02*** (0.01)	−0.04* (0.01)
	Persistent	−0.05*** (0.003)	−0.06*** (0.01)	−0.03* (0.02)
Externalizing behavior	Intermittent	0.001 (0.002)	−0.03*** (0.01)	0.003 (0.01)
	Persistent	−0.003 (0.002)	−0.01 (0.01)	0.03* (0.01)
Internalizing behavior	Intermittent	−0.003 (0.002)	−0.02** (0.01)	−0.03* (0.01)
	Persistent	−0.004* (0.002)	−0.01* (0.01)	−0.03* (0.01)

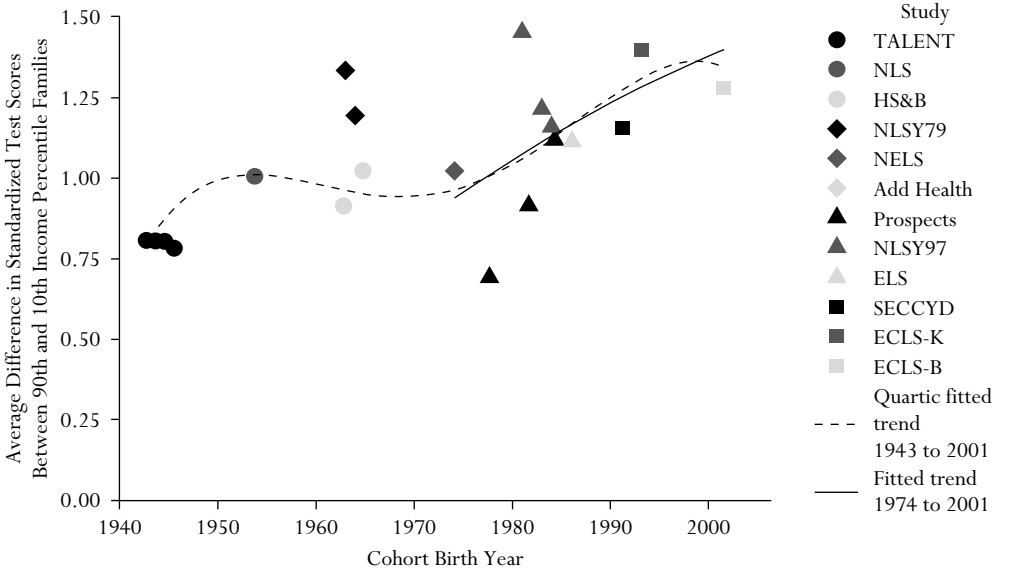
Source: Authors' calculations based on NELS88 (National Center for Education Statistics n.d.).
Notes: Standard errors in parentheses. "Problem" is defined as being in the worst quartile of a distribution at a given age.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

FIGURE 5.1 *Trend in 90/10 Income Achievement Gap in Reading, by Birth Cohort (1943 to 2001 Cohorts)*



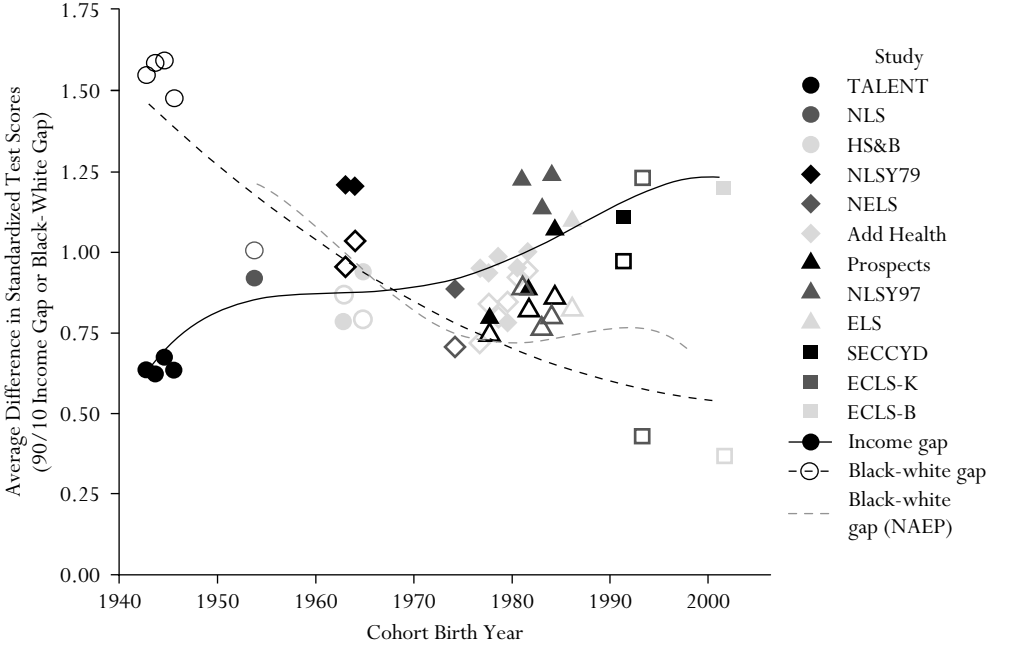
Source: Authors' compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); SECCYD (National Institute of Child Health and Human Development 2010); and Add Health (Harris 2009, reading only).
Note: See note 4 and online appendix for further details.

FIGURE 5.2 *Trend in 90/10 Income Achievement Gap in Math, by Birth Cohort (1943 to 2001 Cohorts)*



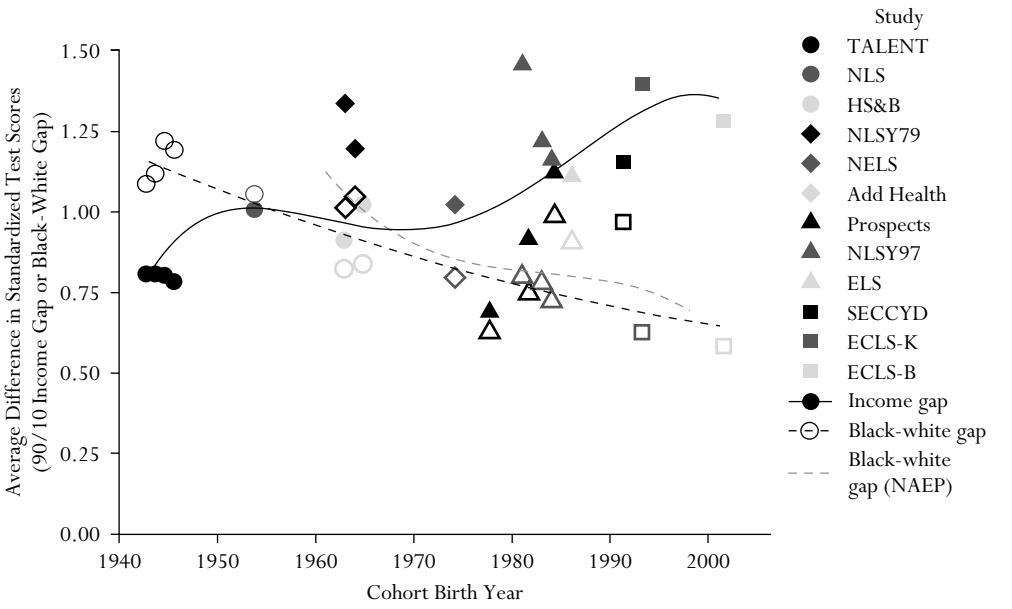
Source: Authors' compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); and SECCYD (National Institute of Child Health and Human Development 2010).
Note: See note 4 and online appendix for further details.

FIGURE 5.3 *Comparison of Income and Black-White Reading-Gap Trends, 1943 to 2001 Cohorts*



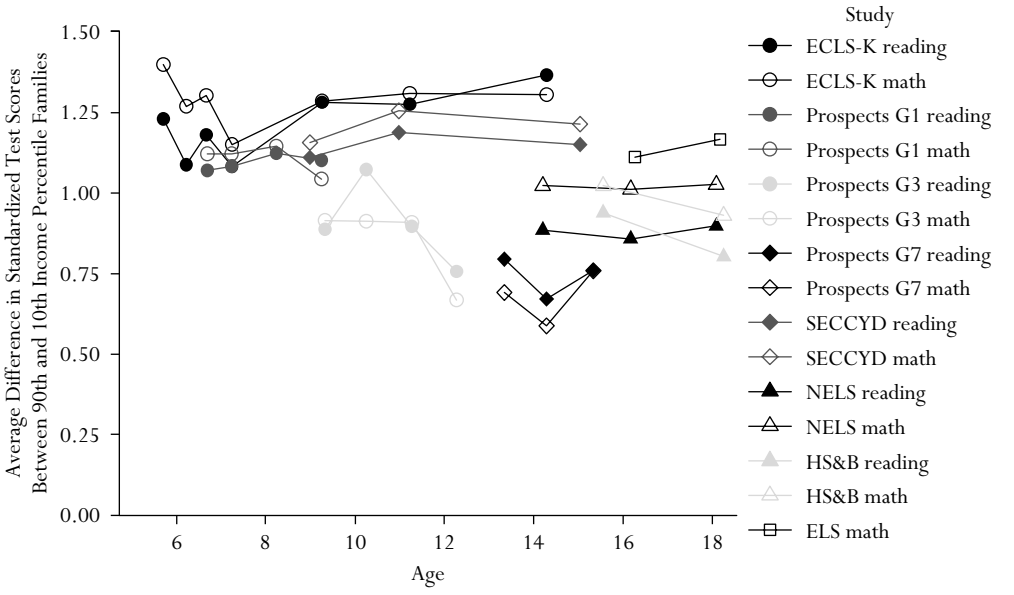
Source: Authors' compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, NAEP, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics n.d., 1999, 2000, 2001, 2004, 2005, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); SECCYD (National Institute of Child Health and Human Development 2010); and Add Health (Harris 2009, reading only).
Note: Solid symbols represent 90/10 income achievement gaps; hollow symbols denote black-white achievement gaps. See note 6 and online appendix section 5.A5 for further details.

FIGURE 5.4 *Comparison of Income and Black-White Math-Gap Trends, 1943 to 2001 Cohorts*



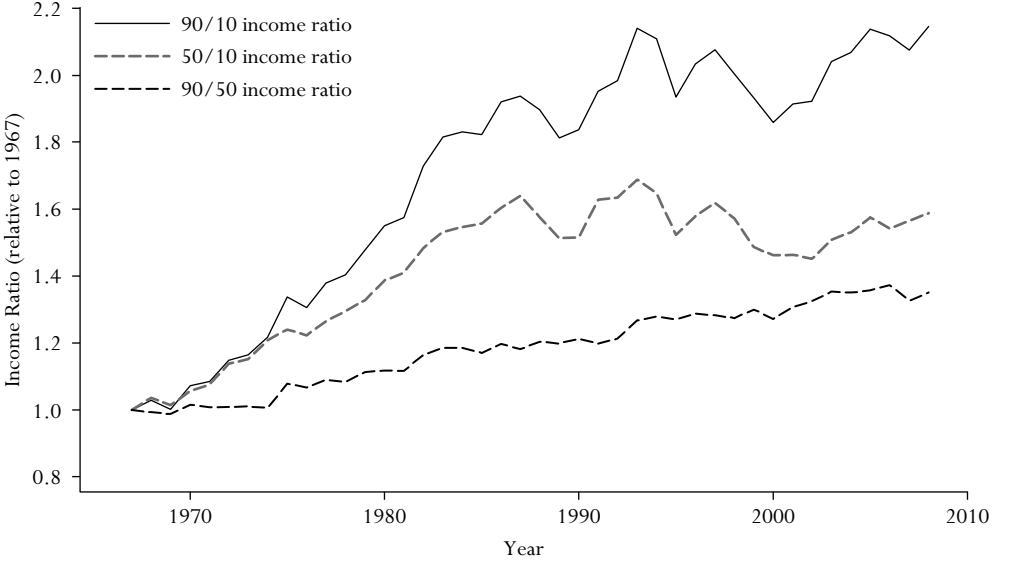
Source: Authors' compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, NAEP, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics n.d., 1999, 2000, 2001, 2004, 2005, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); SECCYD (National Institute of Child Health and Human Development 2010); and Add Health (Harris 2009, reading only).
Note: Solid symbols represent 90/10 income achievement gaps; hollow symbols denote black-white achievement gaps. See note 6 and online appendix section 5.A5 for further details.

FIGURE 5.5 *Income-Achievement Gradient, by Age and Subject, All Longitudinal Studies*



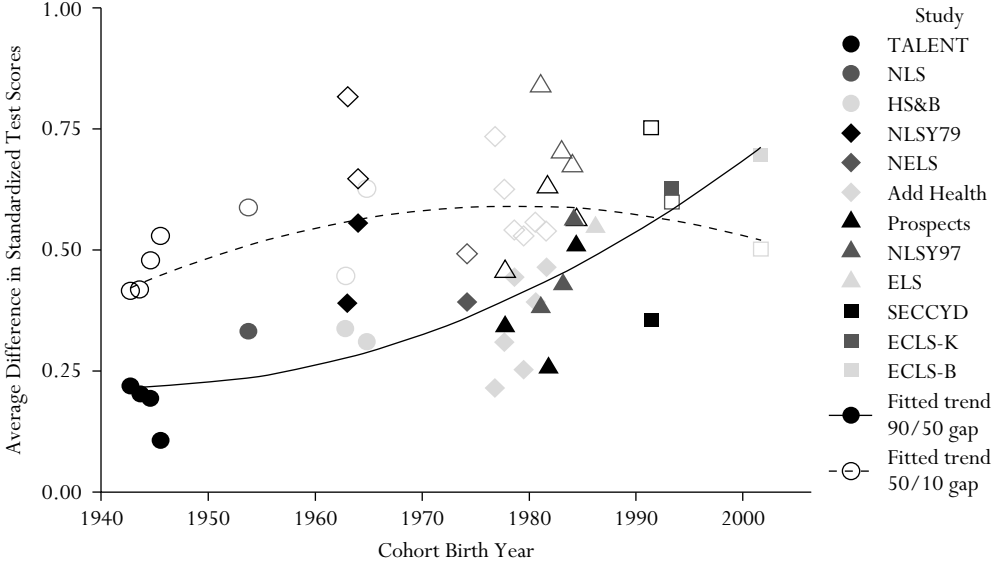
Source: Authors' compilation based on data from HS&B, NELS, ELS, ECLS-K (U.S. Department of Education, Center for Education Statistics 2000, 2001, 2004, 2010); Prospects (U.S. Department of Education 1995); and SECCYD (National Institute of Child Health and Human Development 2010).

FIGURE 5.6 *Trends in Family-Income Inequality Among School-Age Children, 1967 to 2008 (Weighted by Number of School-Age Children)*



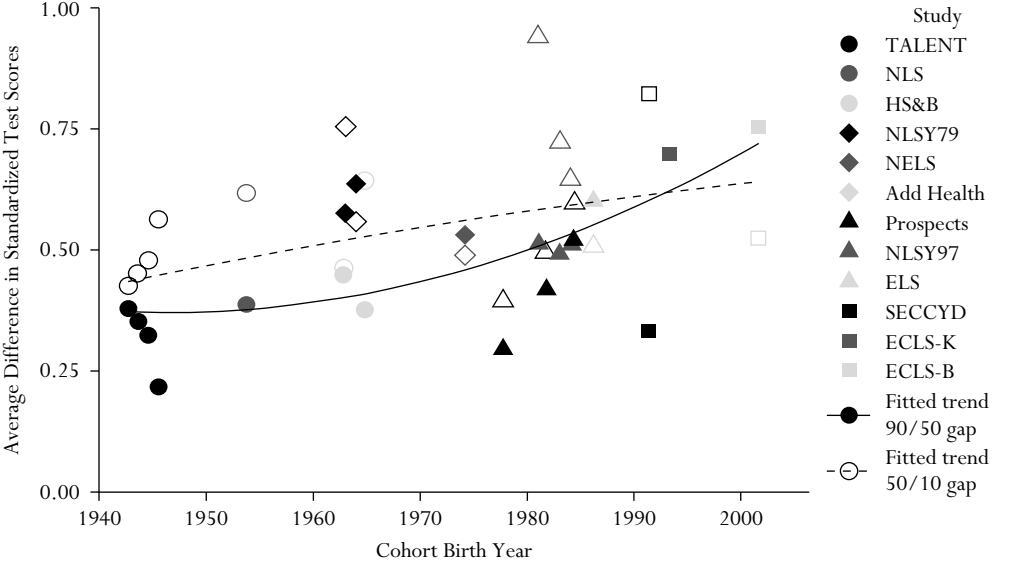
Source: Authors' calculations, based on U.S. Bureau of the Census (King et al. 2010).
Note: Each line shows the trends in the ratio of household incomes at two percentiles of the income distribution. All trends are divided by their value in 1967 in order to put the trends on a common scale.

FIGURE 5.7 *Trend in 90/50 and 50/10 Income Achievement Gap, Reading, by Birth Year (1943 to 2001 Cohorts)*



Source: Authors' compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); SECCYD (National Institute of Child Health and Human Development 2010); and Add Health (Harris 2009, reading only).
Note: Solid symbols represent 90/50 income achievement gaps; hollow symbols represent 50/10 income achievement gaps.

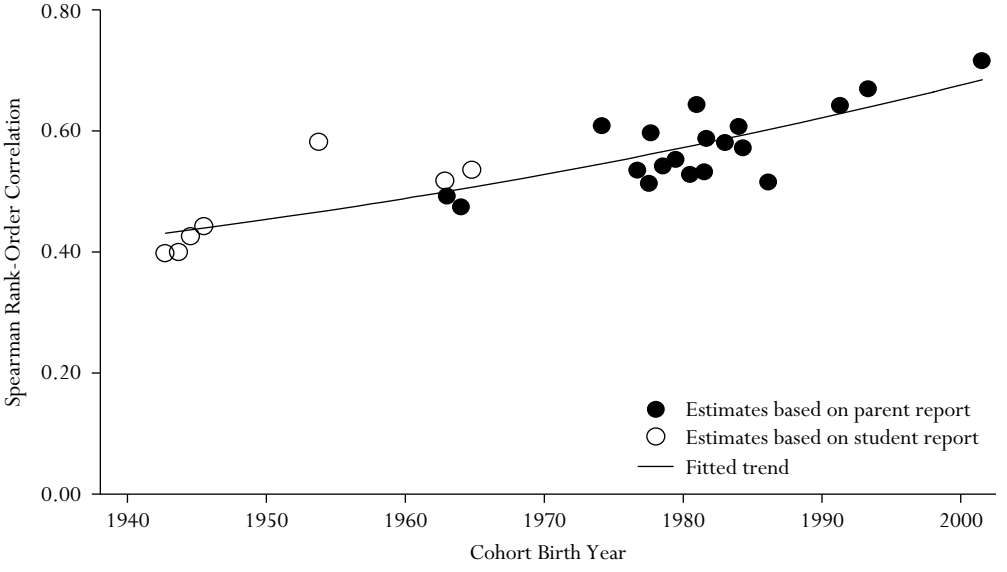
FIGURE 5.8 *Trends in 90/50 and 50/10 Income Achievement Gap in Math, by Birth Year (1943 to 2001 Cohorts)*



Source: Authors' compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); and SECCYD (National Institute of Child Health and Human Development 2010).

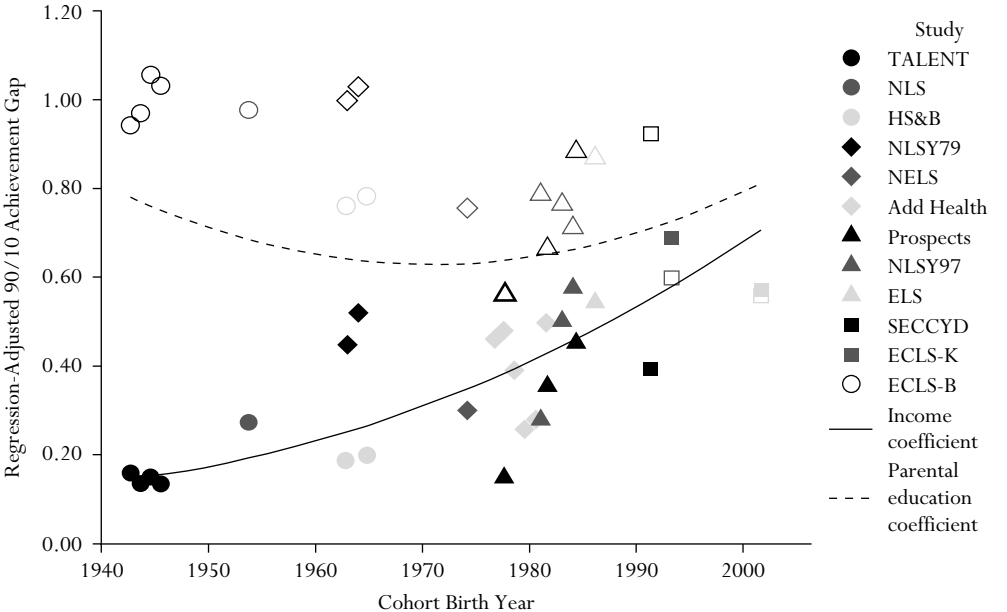
Note: Solid symbols represent 90/50 income achievement gaps; hollow symbols represent 50/10 income achievement gaps.

FIGURE 5.9 *Trend in Correlation Between Parental Education and Family Income (1943 to 2001 Cohorts)*



Source: Authors' compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); SECCYD (National Institute of Child Health and Human Development 2010); and Add Health (Harris 2009, reading only).
Note: See note 12 for further details.

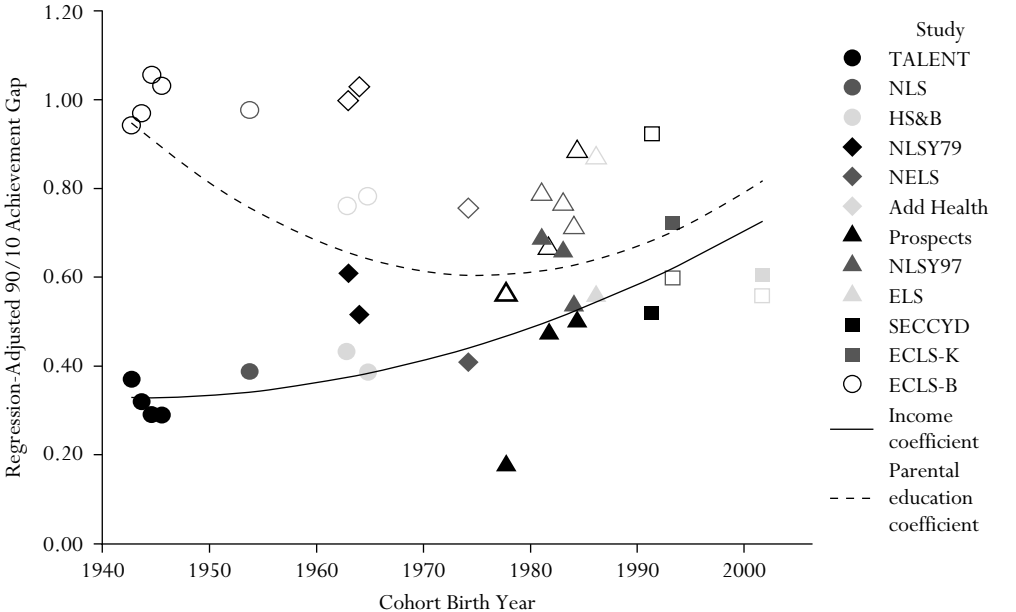
FIGURE 5.10 *Estimated Partial Associations Between Reading Test Scores and Both Income and Parental Education, by Birth Cohort (1943 to 2001 Cohorts)*



Source: Authors' compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); and SECCYD (National Institute of Child Health and Human Development 2010).

Note: Solid symbols represent regression-adjusted 90/10 income coefficients; hollow symbols represent regression-adjusted parental education coefficients. See note 12 for further details.

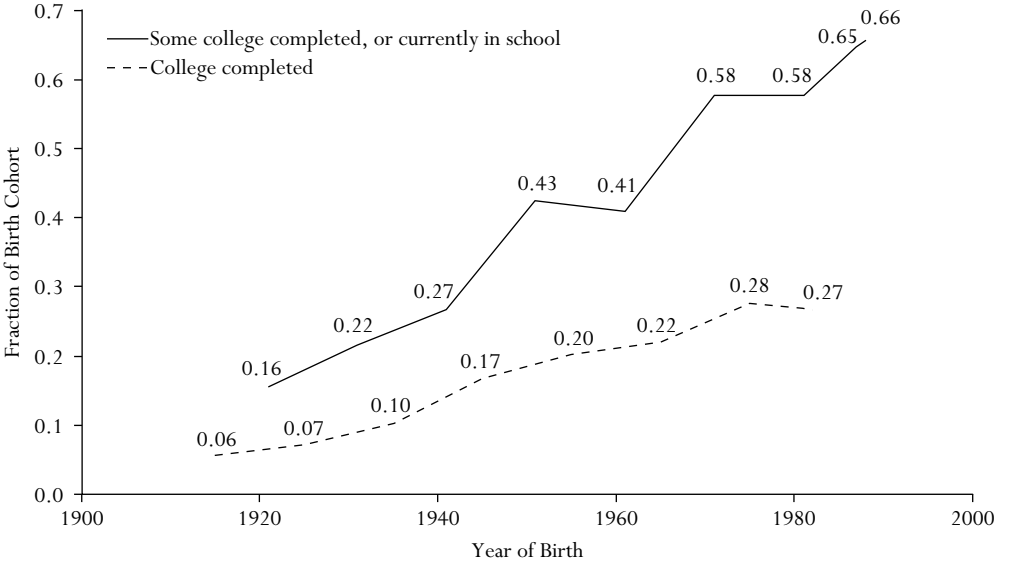
FIGURE 5.11 *Estimated Partial Associations Between Math Test Scores and Both Income and Parental Education, by Birth Cohort (1943 to 2001 Cohorts)*



Source: Authors' compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); and SECCYD (National Institute of Child Health and Human Development 2010).

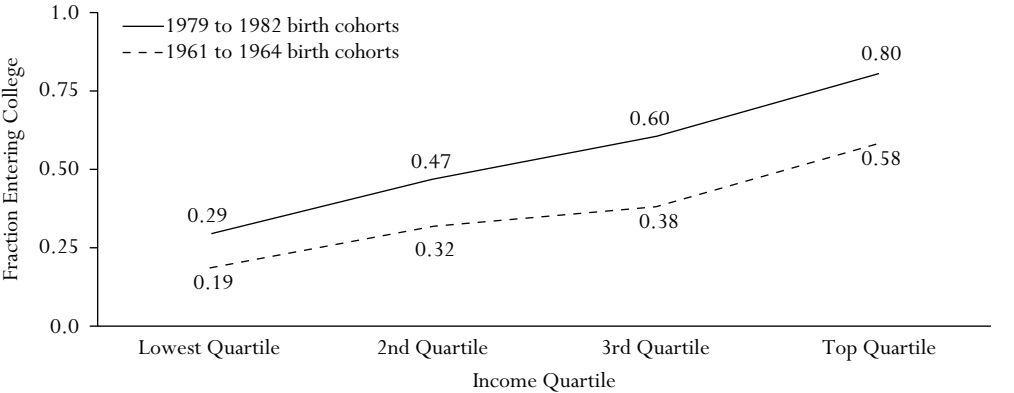
Note: Solid symbols represent regression-adjusted 90/10 income coefficients; hollow symbols represent regression-adjusted parental education coefficients. See note 12 for further details.

FIGURE 6.1 *Trends in College Entry and Completion*



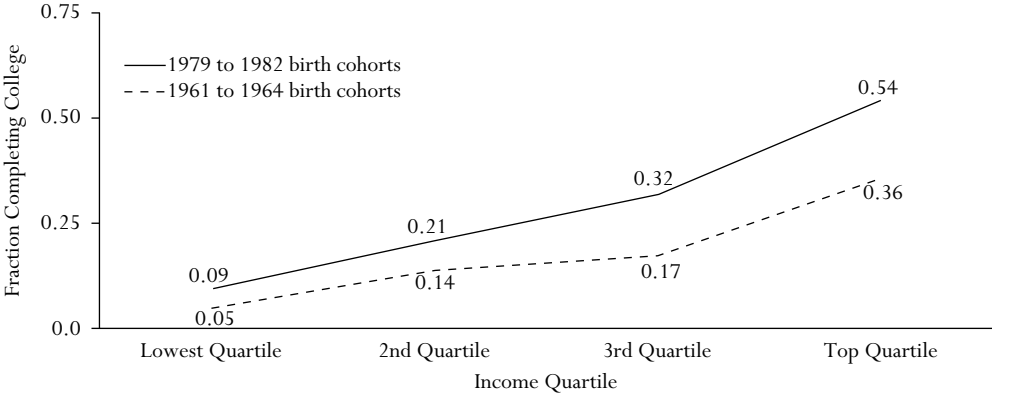
Source: Authors' calculations based on U.S. Census and the American Community Survey (Ruggles et al. 2009).

FIGURE 6.2 *Fraction of Students Entering College, by Income Quartile and Birth Year*



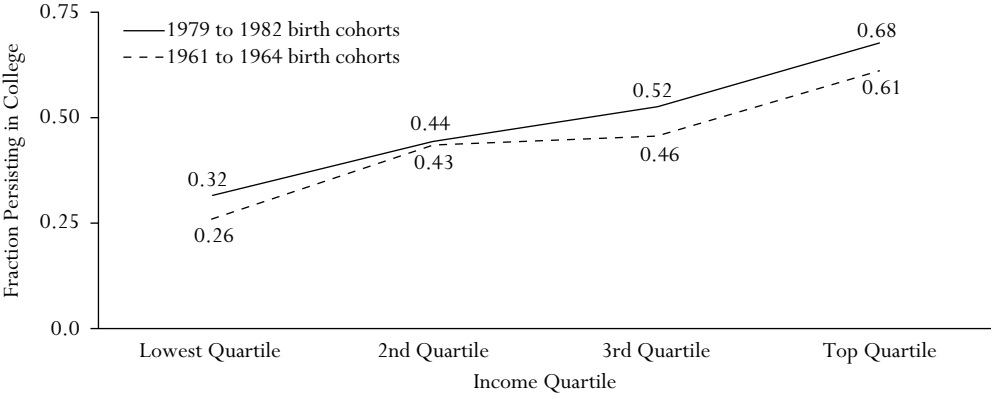
Source: Authors' calculations based on data from National Longitudinal Survey of Youth, 1979 and 1997 (U.S. Bureau of Labor Statistics 2010a, 2010b).

FIGURE 6.3 *Fraction of Students Completing College, by Income Quartile and Birth Year*



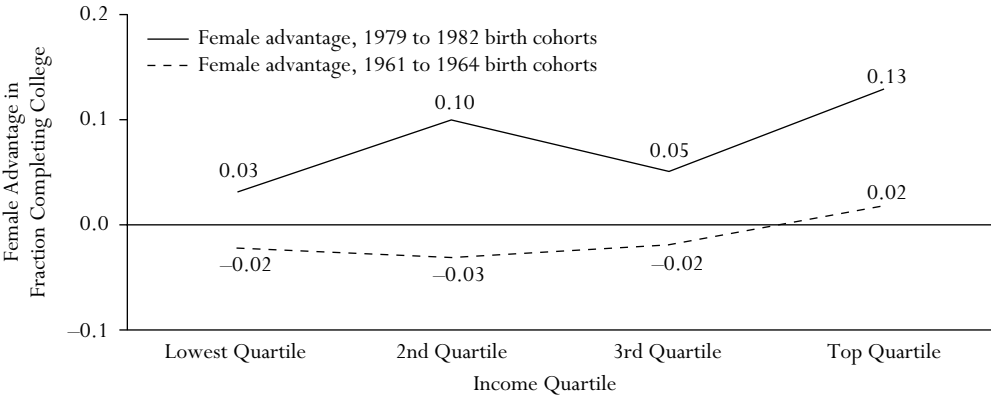
Source: Authors' calculations based on data from National Longitudinal Survey of Youth, 1979 and 1997 (U.S. Bureau of Labor Statistics 2010a, 2010b).

FIGURE 6.4 *Fraction of Students Persisting in College, by Income Quartile and Birth Year*



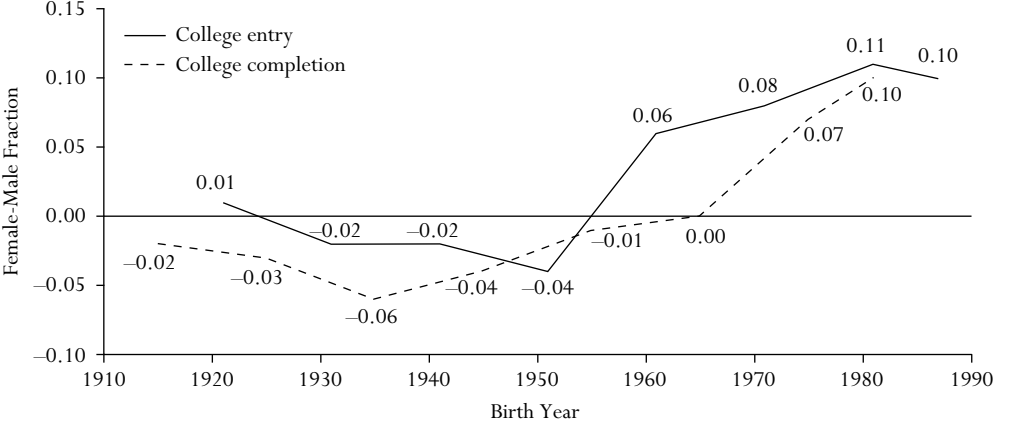
Source: Authors' calculations based on data from National Longitudinal Survey of Youth, 1979 and 1997 (U.S. Bureau of Labor Statistics 2010a, 2010b).

FIGURE 6.5 *Female Advantage in Completing College, by Income Quartile and Birth Year*



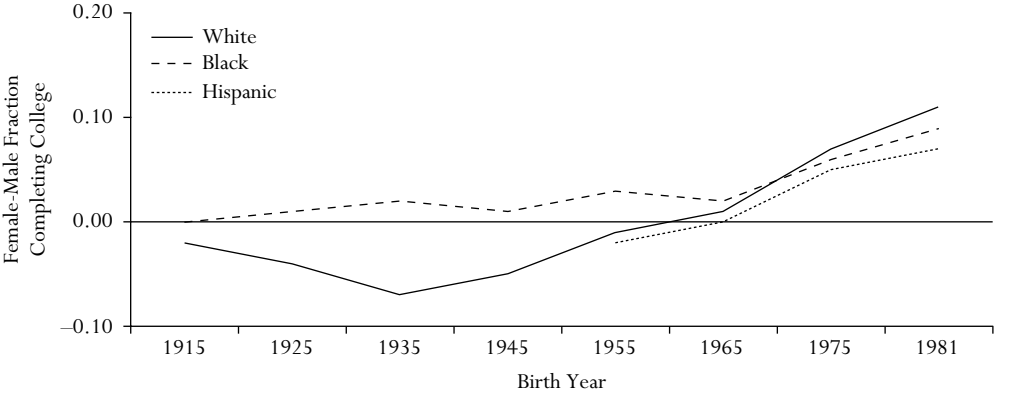
Source: Authors' calculations based on data from National Longitudinal Survey of Youth, 1979 and 1997 (U.S. Bureau of Labor Statistics 2010a, 2010b).

FIGURE 6.6 *Female Advantage in College Entry and Completion, by Birth Year*



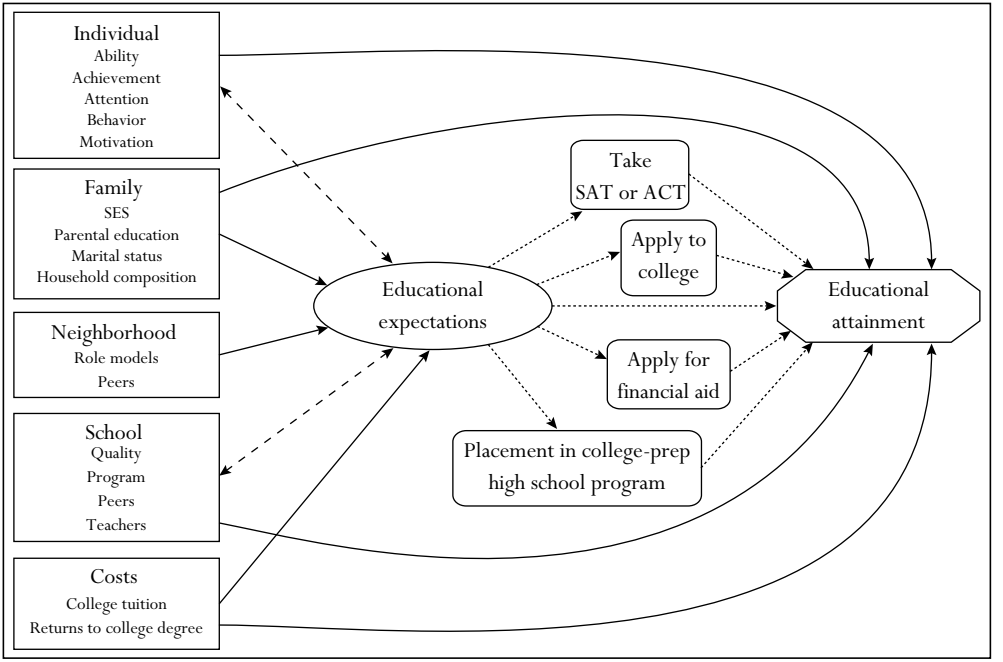
Source: Authors' calculations based on data from the U.S. Census and American Community Survey (Ruggles et al. 2009).

FIGURE 6.7 *Female Advantage in Completing College, by Race and Birth Year*



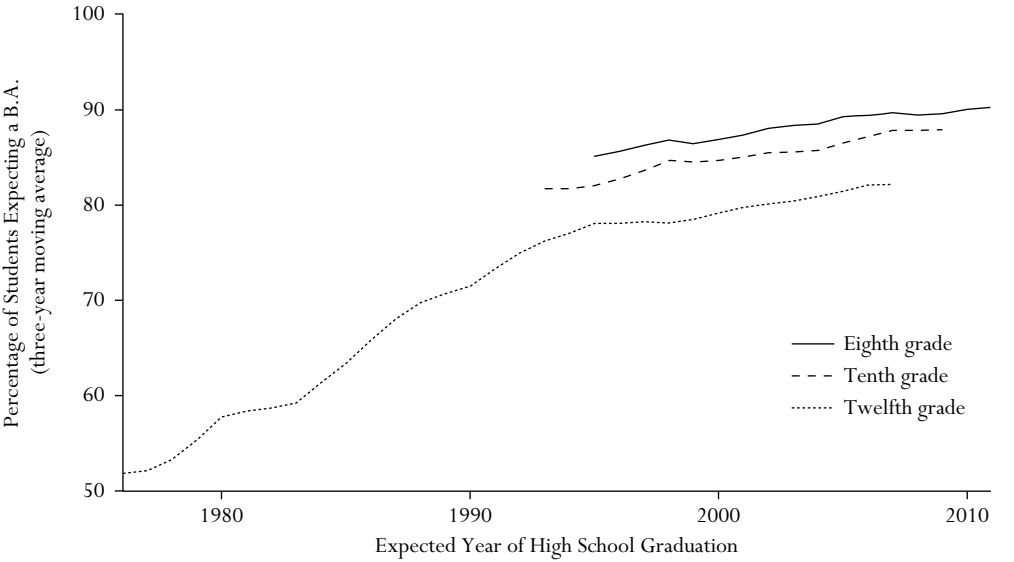
Source: Authors' calculations based on data from the U.S. Census and American Community Survey (Ruggles et al. 2009).

FIGURE 7.1 *Relationship Between Educational Expectations and Educational Attainment*



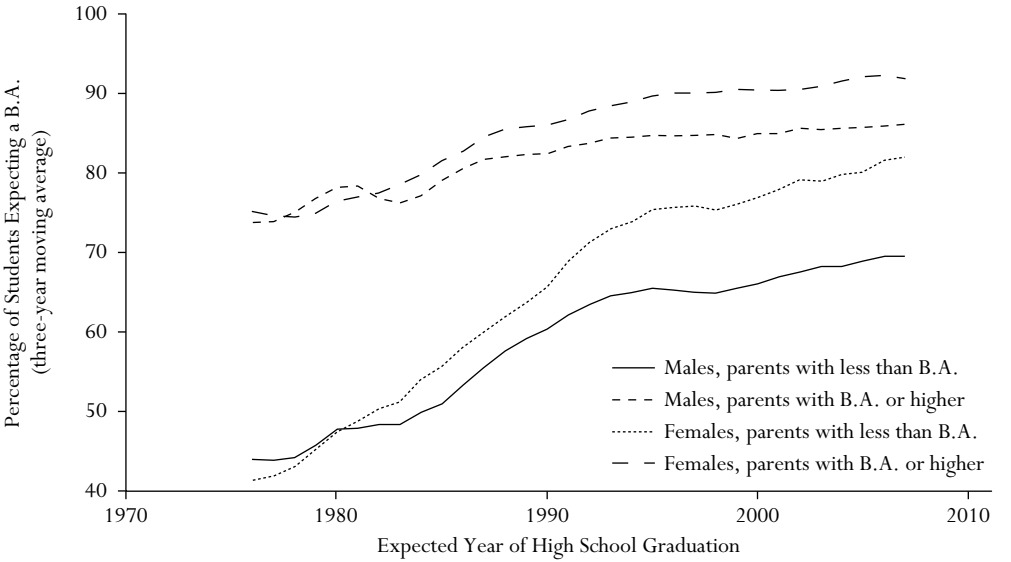
Source: Authors' figure.

FIGURE 7.2 *Students Expecting a B.A., by Grade and Year*



Source: Authors' calculations based on the Monitoring the Future study (Johnston et al. n.d.).

FIGURE 7.3 *Twelfth-Graders Expecting a B.A., by Gender and Parents' Education*

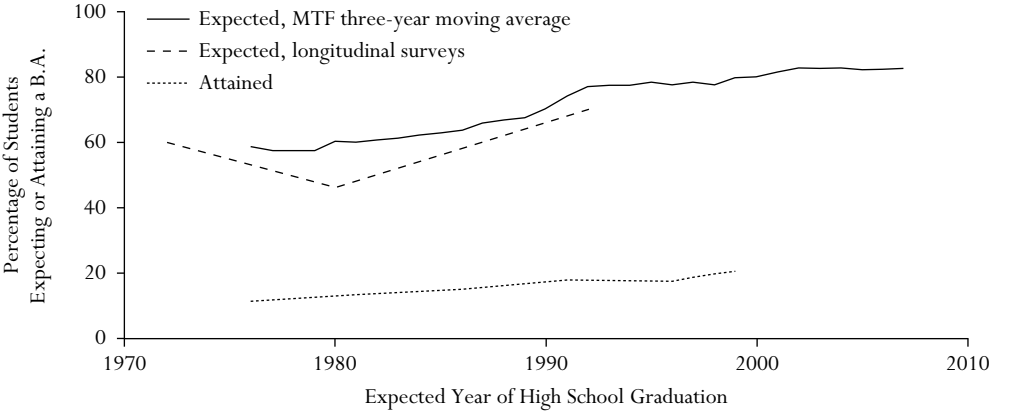


Source: Authors' calculations based on the Monitoring the Future study (Johnston et al. n.d.).

FIGURE 7.4 *Tenth-Graders Expecting a B.A., by Gender and SES*

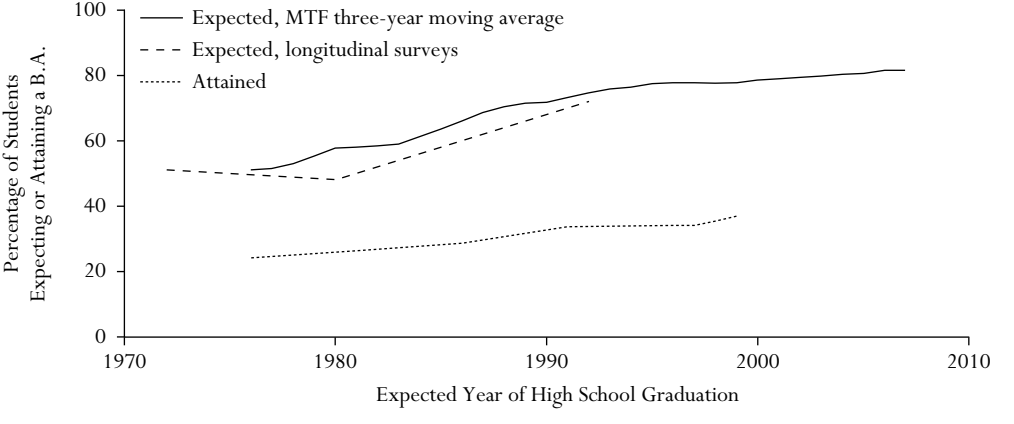
Source: Authors' calculations based on the National Education Longitudinal Study, High School and Beyond, and Education Longitudinal Study (National Center for Education Statistics 2003, 1995, 2007).

FIGURE 7.5A *Blacks' Expectations and Attainment of B.A.*



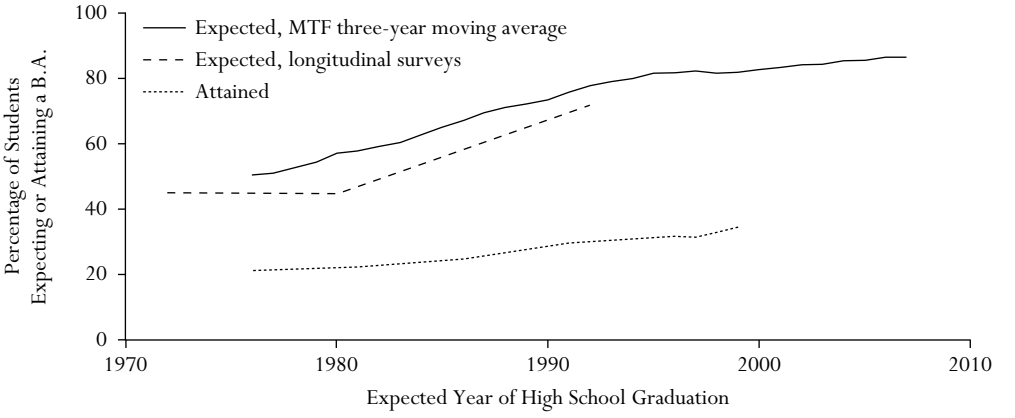
Source: Authors' calculations based on the National Education Longitudinal Study (National Center for Education Statistics 2003).

FIGURE 7.5B *Whites' Expectations and Attainment of B.A.*



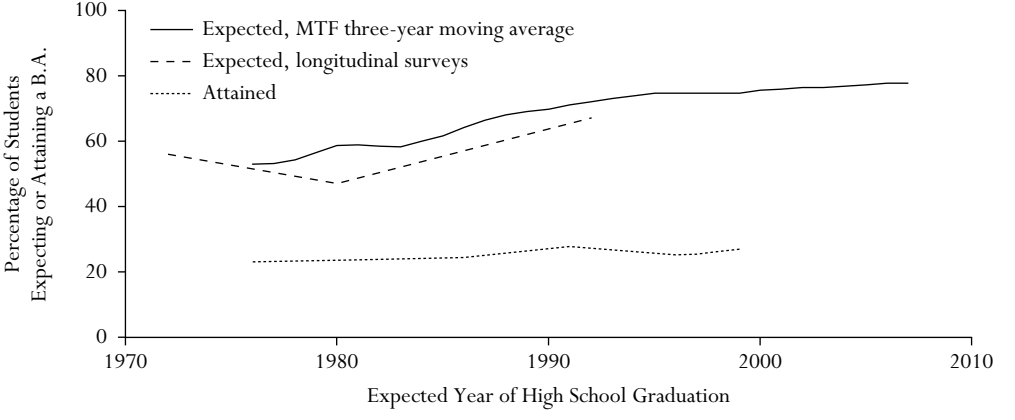
Source: Authors' calculations based on the National Education Longitudinal Study (National Center for Education Statistics 2003).

FIGURE 7.5C *Females' Expectations and Attainment of B.A.*



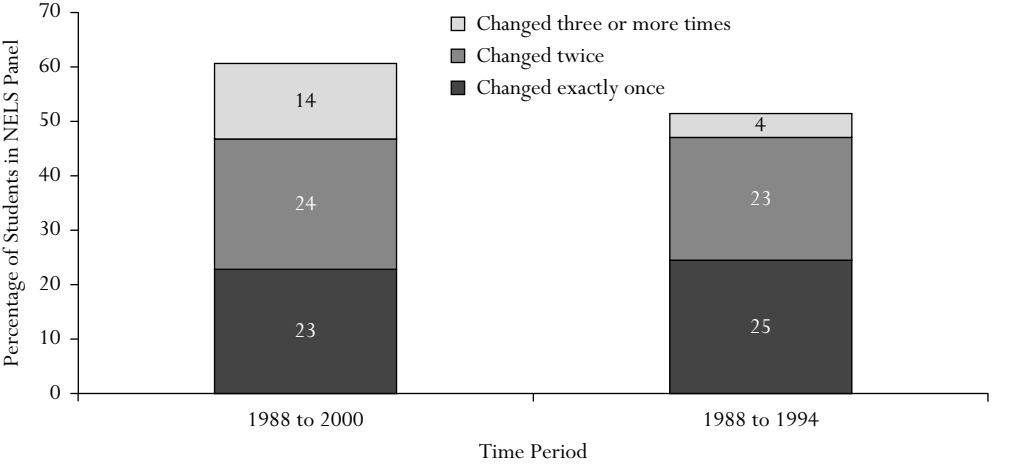
Source: Authors' calculations based on the National Education Longitudinal Study (National Center for Education Statistics 2003).

FIGURE 7.5D *Males' Expectations and Attainment of B.A.*



Source: Authors' calculations based on the National Education Longitudinal Study (National Center for Education Statistics 2003).

FIGURE 7.6 *Students Changing Expectations over Time, NELS Data, 1988 to 2000*



Source: Authors' calculations based on the National Education Longitudinal Study (National Center for Education Statistics 2003).

TABLE 7.1 *OLS Estimates of the Relationship Between Educational Expectations and Actual Enrollment, Sophomore Cohorts*

	Dependent Variable: Enrollment in any Postsecondary Institution Within Two Years of Expected High School Graduation					
	Sophomores in 1980	Sophomores in 1990	Sophomores in 2002	Sophomores in 1980	Sophomores in 1990	Sophomores in 2002
	(1)	(2)	(3)	(4)	(5)	(6)
Expectation of some college or more, grade ten	0.309***	0.294***	0.231***	0.193***	0.201***	0.142***
	(0.016)	(0.019)	(0.025)	(0.016)	(0.019)	(0.023)
Expectation of B.A. or more, grade ten	0.297***	0.325***	0.326***	0.144***	0.157***	0.144***
	(0.013)	(0.014)	(0.018)	(0.014)	(0.015)	(0.018)
Variance of expectation of at least some college, grade ten	0.183	0.082	0.067	0.183	0.082	0.067
Variance in linear measure of educational expectations	2.907	2.138	1.969	2.907	2.138	1.969
Controls	No	No	No	Yes	Yes	Yes
N	11,498	11,857	12,174	11,498	11,857	12,174
R^2	0.247	0.205	0.155	0.336	0.311	0.320
Mean of dependent variable	0.632	0.712	0.76	0.632	0.712	0.76
Mean of dependent variable for students with expectations of less than college	0.25	0.241	0.273	0.25	0.241	0.273
	Dependent Variable: Enrollment in a Four-Year College Within Two Years of Expected High School Graduation					
	Sophomores in 1980	Sophomores in 1990	Sophomores in 2002	Sophomores in 1980	Sophomores in 1990	Sophomores in 2002
	(1)	(2)	(3)	(4)	(5)	(6)
Expectation of some college or more, grade ten	0.139***	0.098***	0.066***	0.032***	0.019	−0.19
	(0.010)	(0.010)	(0.015)	(0.010)	(0.010)	(0.015)
Expectation of B.A. or more, grade ten	0.411***	0.398***	0.414***	0.223***	0.176***	0.163***
	(0.013)	(0.012)	(0.014)	(0.014)	(0.012)	(0.015)

Variance of expectation of at least some college, grade ten	0.248	0.235	0.142	0.248	0.235	0.142
Variance in linear measure of educational expectations	2.907	2.138	1.969	2.907	2.138	1.969
Controls	No	No	No	Yes	Yes	Yes
N	11,498	11,857	12,174	11,498	11,857	12,174
R^2	0.264	0.186	0.127	0.381	0.353	0.374
Mean of dependent variable	0.364	0.379	0.513	0.364	0.379	0.513
Mean of dependent variable for students with expectations of less than college	0.054	0.031	0.072	0.054	0.031	0.072

Source: Authors' calculations based on High School and Beyond, National Education Longitudinal Study, and Educational Longitudinal Study (National Center for Education Statistics 1995, 2003, 2007).

Notes: Standard errors clustered at the school level.

Data are weighted to be nationally representative.

Data on applying and enrolling in college are based on self-reports.

To be enrolled in a postsecondary institution, students had to finish high school with either a regular diploma or a GED.

Data on tenth-graders in 1980 are from High School and Beyond.

Data on tenth-graders in 1990 are from National Education Longitudinal Study.

Data on tenth-graders in 2002 are from Education Longitudinal Study.

Control variables include SES, gender, race-ethnicity, siblings, tenth-grade test score quartile, tenth-grade GPA, number of students per guidance counselor, high school program, percentage of high school's previous graduating class going on to college, percentage of students eligible for free and reduced-priced lunch at high school, county unemployment rate, county per capita income, county minimum in-state tuition, and county minimum room and board.

$***p < 0.001$

TABLE 7.2 *OLS Estimates of the Relationship Between Educational Expectations and Enrollment, 1990 Sophomore Cohort*

	Enrolled in Any Postsecondary Institution Within Two Years of Expected High School Graduation				
	(1)	(2)	(3)	(4)	(5)
Expectation of some college or more, grade ten	0.233***	0.227***	0.183***	0.178***	0.157***
	(0.018)	(0.018)	(0.018)	(0.018)	(0.014)
Expectation of B.A. or more, grade ten	0.244***	0.192***	0.104***	0.104***	0.084***
	(0.014)	(0.015)	(0.016)	(0.016)	(0.010)
Student characteristics		X	X	X	X
Family characteristics		X	X	X	X
Academic achievement characteristics			X	X	X
Nonachievement characteristics				X	X
School characteristics					
County characteristics					
Tenth-grade school fixed effects					X
R^2	0.108	0.136	0.169	0.173	0.373
N	15,803				
F-statistic for fixed effect					3.112
Degrees of freedom for absorbed fixed effect					1,466
Residual degrees of freedom					14,294
Probability for *F*-statistic of joint significance					0.000
Mean of dependent variable	0.539				
Mean of dependent variable for students with expectations of less than college	0.215				

Source: Authors' calculations based on data from the National Education Longitudinal Study (National Center for Education Statistics 2003).

Notes: Standard errors clustered at the school level.

Data are weighted to be nationally representative.

Data on applying and enrolling in college are based on self-reports.

To be enrolled in a postsecondary institution, students had to finish high school with either a regular diploma or a GED.

Student characteristics are SES quartile in grade eight, gender, and race-ethnicity.

Family characteristics are siblings in grade eight, household composition in grade eight, and number of sibling dropouts as of grade ten.

Academic achievement characteristics are combined grade-eight math and reading test score quartiles, high school program, and grade-ten GPA.

Nonachievement characteristics are locus of control in grade ten, school suspensions in grade ten, days absent in grade ten, hours of TV per week in grade ten, and hours of homework per week in grade ten.

School characteristics are private school in grade ten, school size in grade ten, percent of previous year's graduates attending college, percent of students eligible for free and reduced-priced lunch in grade ten, and number of students per guidance counselor.

County characteristics are percentage of population unemployed in grade ten, county per capita income in grade ten, minimum postsecondary education in-state tuition in grade twelve, and minimum postsecondary education room and board costs in grade twelve.

X indicates that this set of variables was included in the model.

***$p < 0.001$

		Enrolled in a Four-Year College Within Two Years of Expected High School Graduation						
(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
0.178***	0.169***	0.068***	0.051***	0.006	0.003	0.010	0.007	0.005
(0.018)	(0.017)	(0.009)	(0.008)	(0.009)	(0.009)	(0.013)	(0.009)	(0.009)
0.096***	0.096***	0.310***	0.240***	0.125***	0.124***	0.122***	0.113***	0.113***
(0.016)	(0.016)	(0.011)	(0.011)	(0.011)	(0.011)	(0.009)	(0.011)	(0.011)
X	X		X	X	X	X	X	X
X	X		X	X	X	X	X	X
X	X			X	X	X	X	X
X	X				X	X	X	X
X	X						X	X
	X							X
						X		
0.185	0.193	0.127	0.171	0.244	0.246	0.429	0.265	0.268
		15,803						
						3.13		
						1,466		
						14,294		
						0.000		
		0.286						
		0.041						

TABLE 7.3 *OLS Estimates of the Relationship Between Educational Expectations and Attainment, 1990 Sophomore Cohort*

	Dependent Variable: Attainment of at Least Some College				
	(1)	(2)	(3)	(4)	(5)
Expectation of some college or more, grade ten	0.114***	0.100***	0.057***	0.053***	0.045**
	(0.015)	(0.015)	(0.016)	(0.016)	(0.014)
Expectation of B.A. or more, grade ten	0.209***	0.147***	0.058***	0.055***	0.040***
	(0.013)	(0.012)	(0.013)	(0.013)	(0.010)
Student characteristics		X	X	X	X
Family characteristics		X	X	X	X
Academic achievement characteristics			X	X	X
Nonachievement characteristics				X	X
School characteristics					
County characteristics					
Tenth-grade school fixed effects					X
R^2	0.065	0.106	0.143	0.146	0.341
N	15,803				
F-statistic for fixed effects					2.875
Degrees of freedom for absorbed fixed effect					1,466
Residual degrees of freedom					14,294
Probability for *F*-statistic of joint significance					0.000
Mean of dependent variable	0.337				
Mean of dependent variable for students with expectations of less than college	0.113				

Source: Authors' calculations based on National Education Longitudinal Study (National Center for Education Statistics 2003).

Notes: Standard errors clustered at the school level.

Data are weighted to be nationally representative.

Data on applying and enrolling in college are based on self-reports.

To be enrolled in a postsecondary institution, students had to finish high school with either a regular diploma or GED.

Student characteristics are SES quartile in grade eight, gender, and race-ethnicity.

Family characteristics are siblings in grade eight, household composition in grade eight, and number of sibling dropouts as of grade ten.

Academic achievement characteristics are combined grade-eight math and reading test score quartiles, high school program, and grade-ten GPA.

Nonachievement characteristics are locus of control in grade ten, school suspensions in grade ten, days absent in grade ten, hours of TV per week in grade ten, and hours of homework per week in grade ten.

School characteristics are private school in grade ten, school size in grade ten, percent of previous year's graduates attending college, percent of students eligible for free and reduced-priced lunch in grade ten, and number of students per guidance counselor.

County characteristics are percent of population unemployed in grade ten, county per capita income, in grade ten, minimum postsecondary education in-state tuition in grade twelve, and minimum postsecondary education room and board costs in grade twelve.

X indicates that this set of variables was included in the model.

***$p < 0.001$

		Dependent Variable: Attainment of a B.A. or More						
(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
0.055***	0.051***	0.048***	0.030***	−0.008	−0.010	−0.014	−0.005	−0.006
(0.015)	(0.015)	(0.007)	(0.006)	(0.007)	(0.008)	(0.012)	(0.008)	(0.008)
0.048***	0.048***	0.281***	0.203***	0.103***	0.102***	0.096***	0.092***	0.092***
(0.013)	(0.013)	(0.010)	(0.009)	(0.009)	(0.009)	(0.008)	(0.009)	(0.009)
X	X		X	X	X	X	X	X
X	X		X	X	X	X	X	X
X	X			X	X	X	X	X
X	X				X	X	X	X
X	X						X	X
	X							X
						X		
0.155	0.159	0.115	0.180	0.240	0.242	0.416	0.252	0.254
		15,803						
						2.903		
						1,466		
						14,294		
						0.000		
		0.240						
		0.027						

TABLE 7.4 *Determinants of Aligned Educational Expectations in Twelfth Grade, NELS Eighth-Grade Cohort*

	Student Predictors, School Random Effects	Student and School Predictors, School Random Effects	Student, School, County Predictors, School Random Effects	Student, School, County, School Average GPA Predictors, School Random Effects
	(1)	(2)	(3)	(4)
Student characteristics				
Alignment of eighth-grade educational expectations[a]	0.376***	0.366***	0.366***	0.363***
	(0.014)	(0.014)	(0.014)	(0.014)
Expectation of less than high school, grade eight	0.041*	0.044*	0.045*	0.046*
	(0.021)	(0.021)	(0.021)	(0.021)
Expectation of high school, grade eight	−0.083***	−0.078***	−0.077***	−0.075***
	(0.010)	(0.010)	(0.010)	(0.010)
Expectation of B.A. or more, grade eight	−0.021***	−0.022***	−0.021***	−0.022***
	(0.004)	(0.004)	(0.004)	(0.004)
Academic GPA, grade eight (0–4 scale)	0.032***	0.035***	0.036***	0.036***
	(0.003)	(0.003)	(0.003)	(0.003)
Living with two parents, grade eight	0.024***	0.018***	0.019***	0.018***
	(0.004)	(0.003)	(0.003)	(0.003)
Locus of control, grade eight (standardized)	0.007*	0.006*	0.006*	0.006
	(0.003)	(0.003)	(0.003)	(0.003)
Self-concept, grade eight (standardized)	0.000	−0.001	−0.001	−0.000
	(0.003)	(0.003)	(0.003)	(0.003)
Lowest SES quintile female, grade eight	−0.067***	−0.055***	−0.054***	−0.050***
	(0.009)	(0.009)	(0.009)	(0.009)
Second SES quintile female, grade eight	−0.088***	−0.078***	−0.077***	−0.075***
	(0.008)	(0.008)	(0.008)	(0.008)
Third SES quintile female, grade eight	−0.060***	−0.052***	−0.051***	−0.049***
	(0.007)	(0.007)	(0.007)	(0.007)
Fourth SES quintile female, grade eight	−0.022**	−0.016*	−0.015*	−0.013
	(0.007)	(0.007)	(0.007)	(0.007)
Highest SES quintile female, grade eight	0.067***	0.067***	0.067***	0.068***
	(0.007)	(0.006)	(0.006)	(0.006)
Lowest SES quintile male, grade eight	−0.096***	−0.084***	−0.083***	−0.080***
	(0.009)	(0.009)	(0.009)	(0.009)
Second SES quintile male, grade eight	−0.103***	−0.095***	−0.094***	−0.092***
	(0.008)	(0.008)	(0.008)	(0.008)
Third SES quintile male, grade eight	−0.091***	−0.083***	−0.083***	−0.080***
	(0.008)	(0.008)	(0.008)	(0.008)
Fourth SES quintile male, grade eight	−0.063***	−0.058***	−0.057***	−0.056***
	(0.007)	(0.007)	(0.007)	(0.007)
Hispanic, grade eight	−0.010	0.004	0.001	0.002
	(0.006)	(0.006)	(0.006)	(0.006)
Black, grade eight	−0.024***	−0.015*	−0.016**	−0.012*
	(0.006)	(0.006)	(0.006)	(0.006)
Other, grade eight	0.015*	0.023***	0.021***	0.021***
	(0.006)	(0.006)	(0.006)	(0.006)
One sibling, grade eight	0.026***	0.028***	0.029***	0.029***
	(0.006)	(0.006)	(0.006)	(0.006)

(Table continues on p. 154.)

TABLE 7.4 *Continued*

	Student Predictors, School Random Effects	Student and School Predictors, School Random Effects	Student, School, County Predictors, School Random Effects	Student, School, County, School Average GPA Predictors, School Random Effects
	(1)	(2)	(3)	(4)
Two siblings, grade eight	−0.012	−0.010	−0.009	−0.009
	(0.007)	(0.007)	(0.007)	(0.006)
Three or more siblings, grade eight	−0.013*	−0.011	−0.011	−0.011
	(0.007)	(0.007)	(0.006)	(0.006)
Lowest-quartile combined math and reading test score, grade eight	−0.101***	−0.097***	−0.097***	−0.092***
	(0.006)	(0.006)	(0.006)	(0.006)
Second-quartile combined math and reading test score, grade eight	−0.112***	−0.109***	−0.109***	−0.105***
	(0.006)	(0.005)	(0.005)	(0.005)
Third-quartile combined math and reading test score, grade eight	−0.075***	−0.073***	−0.073***	−0.071***
	(0.005)	(0.005)	(0.005)	(0.005)
High school academic program	0.024***	0.020***	0.019**	0.019***
	(0.004)	(0.006)	(0.006)	(0.006)
High school vocational program	−0.015**	−0.021*	−0.019*	−0.019*
	(0.005)	(0.009)	(0.009)	(0.009)
School characteristics				
Private school, grade twelve		0.072***	0.006	−0.001
		(0.007)	(0.011)	(0.011)
School size, grade twelve		−0.001***	−0.001***	−0.001***
		(0.000)	(0.000)	(0.000)
Percentage of previous year's graduates in four-year college, grade ten		0.048***	0.037**	0.018
		(0.012)	(0.012)	(0.012)
Percentage of students eligible for free- and reduced-price lunch students, grade ten		−0.094***	−0.087***	−0.074***
		(0.012)	(0.013)	(0.013)
Students per guidance counselor, grade ten, in hundreds		−0.003	−0.002	−0.002
		(0.001)	(0.001)	(0.001)
Students per guidance counselor * high school academic program		0.000	0.000	0.000
		(0.001)	(0.001)	(0.001)
Students per guidance counselor * high school vocational program		0.002	0.002	0.002
		(0.002)	(0.002)	(0.002)
School average combined test score, grade twelve				0.035***
				(0.006)
County characteristics				
Percentage of county population unemployed, grade ten			0.386**	0.411***
			(0.126)	(0.124)
County per capita income, in thousands, grade ten			0.003***	0.002***
			(0.001)	(0.001)
County minimum postsecondary education in-state tuition, in thousands, grade twelve			0.002*	0.002*
			(0.001)	(0.001)
County minimum postsecondary education room and board costs, in thousands, grade twelve			0.001	0.001
			(0.002)	(0.002)
Variance explained by schools	0.005	0.003	0.003	0.002

TABLE 7.4 *Continued*

	Student Predictors, School Random Effects	Student and School Predictors, School Random Effects	Student, School, County Predictors, School Random Effects	Student, School, County, School Average GPA Predictors, School Random Effects
	(1)	(2)	(3)	(4)
Residual variance	0.030	0.029	0.029	0.029
Proportion of total variance explained at school level	0.070	0.038	0.036	0.034
N	14,403			
Mean of dependent variable	0.415			
Variance of dependent variable	0.075			

Source: Authors' calculations based on the National Education Longitudinal Study (National Center for Education Statistics 2003).

Notes: Data are weighted to be nationally representative. Multilevel models with random effects at school level.

[a]Predicted probability of eventually attaining eighth grade self-reported educational expectations.

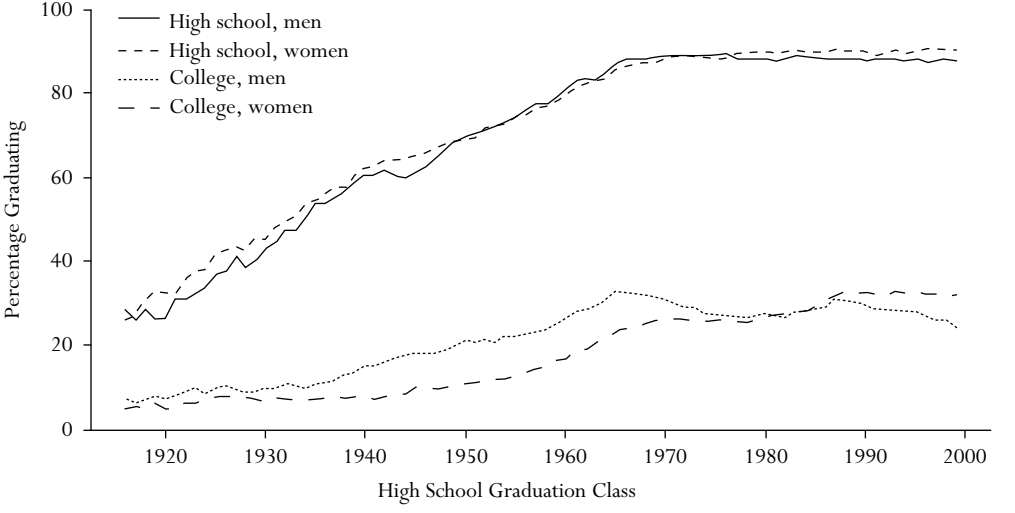
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

TABLE 7.5 *Changing Expectations, NELS Panel Data*

	Linear Expectations as Dependent Variable				Expectation of Four-Year College as Codependent Variable			
	1988 to 1990	1990 to 1992	1988 to 1992	1988 to 1994	1988 to 1990	1990 to 1992	1988 to 1992	1988 to 1994
Standardized academic GPA	0.093**	0.041*	0.058*	0.066***	0.047**	0.032**	0.034**	0.034***
	(0.030)	(0.017)	(0.025)	(0.018)	(0.016)	(0.011)	(0.011)	(0.009)
Standardized combined test score	0.051	0.023	0.039	0.015	0.047	0.031	0.038**	0.022*
	(0.057)	(0.031)	(0.025)	(0.013)	(0.034)	(0.023)	(0.015)	(0.010)
Standardized SES	−0.681	4.575	−0.860	0.009	−0.673	2.066	−0.748	−0.005
	(1.619)	(5.313)	(1.265)	(0.011)	(1.018)	(3.178)	(0.745)	(0.008)
Have children				−0.155***				−0.112***
				(0.036)				(0.022)
1990	−0.090*		−0.093*	−0.168*	−0.072**		−0.073***	−0.106
	(0.044)		(0.042)	(0.082)	(0.022)		(0.017)	(0.067)
1992		0.140	−0.003	−0.059		0.080	−0.027**	−0.050
		(0.109)	(0.020)	(0.074)		(0.067)	(0.011)	(0.067)
1994				0.000				0.016
			(0.000)					(0.067)
N	21,322	19,710	30,387	40,932	21,322	19,710	30,387	40,932
R^2	0.771	0.860	0.715	0.662	0.752	0.821	0.689	0.633
Mean of dependent variable	2.530	2.561	2.565	2.583	0.648	0.654	0.665	0.679

Source: Authors' calculations based on the National Education Longitudinal Study (National Center for Education Statistics 2003).
Notes: Models include student fixed effects.
Standard errors clustered at the school level.
Data are weighted to be nationally representative.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

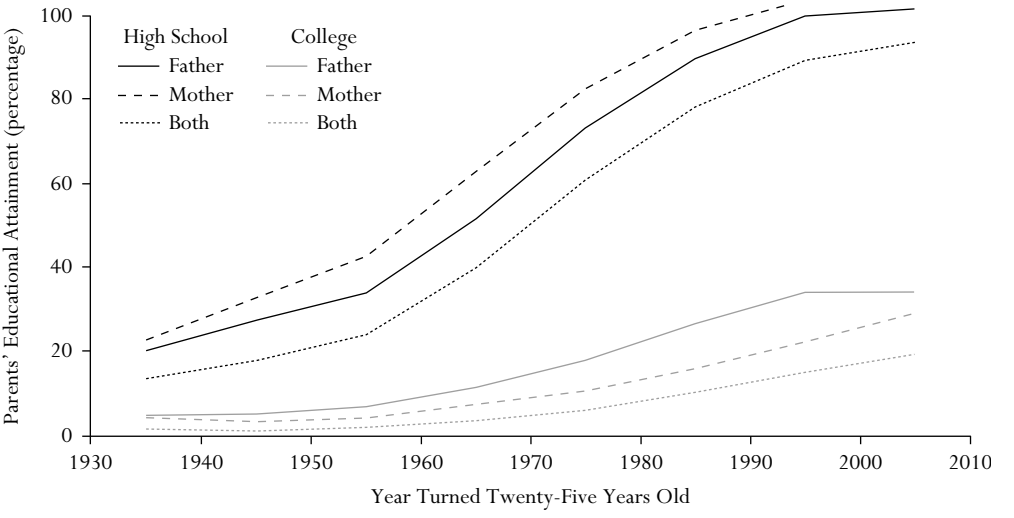
FIGURE 8.1 *Percentage Graduating from High School and College, by High School Graduating Class and Gender; Persons Twenty-Seven to Sixty-Four Years Old at Time of Interview*



Source: Authors' calculations based on King et al. (2010).

Notes: High school graduating class is year of birth plus eighteen for all persons, regardless of when they actually left high school. The data refer to percentage of each cohort that graduated from high school or college; college graduation is for the entire cohort and is not restricted to those completing high school. The CPS does not interview people in institutions, so the data cover household residents only.

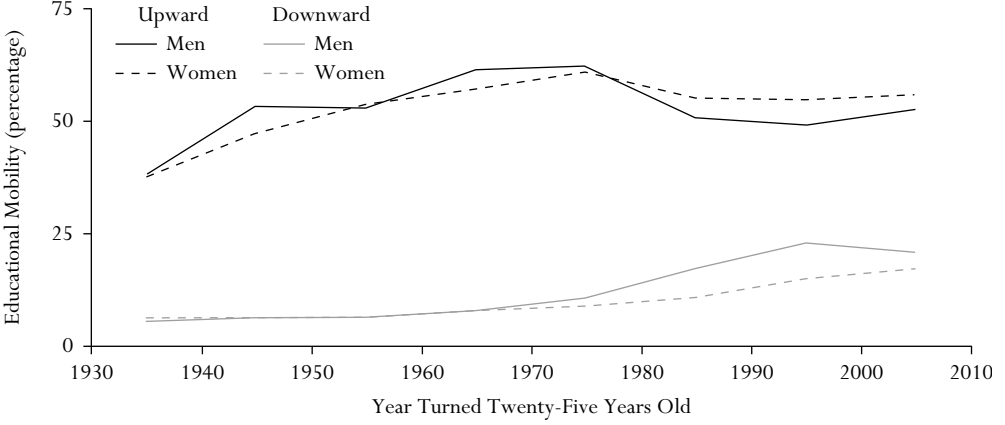
FIGURE 8.2 *Trends in Family Background as Indicated by Percentage of Parents Graduating from High School and College, by Respondent's Year Turned Twenty-Five and Parent's Gender: U.S.-Educated Persons, Twenty-Seven to Sixty-Four Years Old at Time of Interview*



Source: Authors' calculations based on Smith et al. (2008).

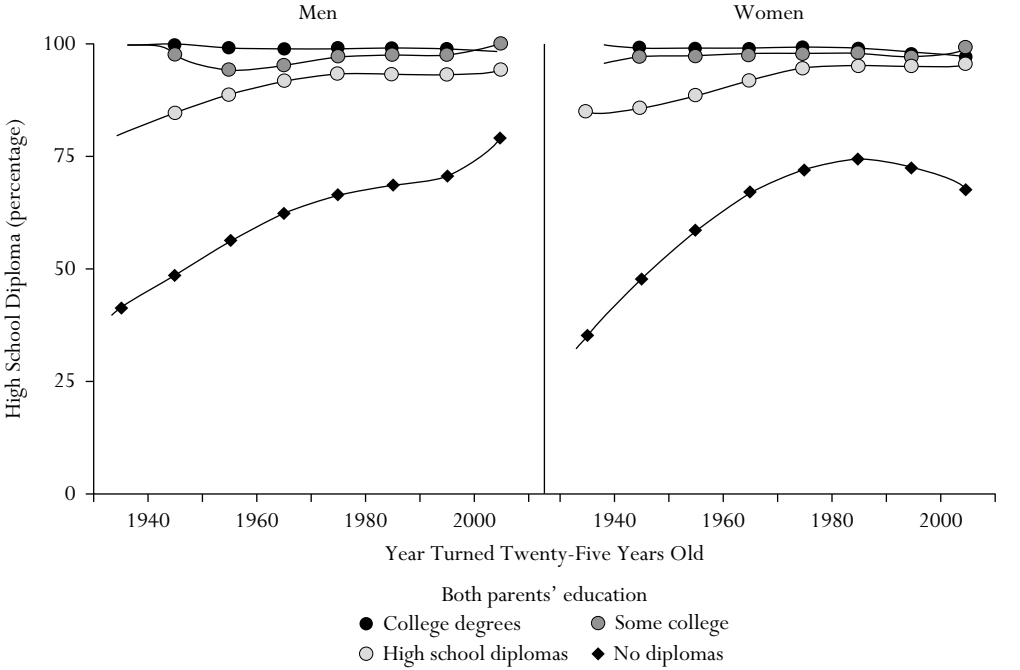
Notes: U.S.-educated is defined as living in the United States at age sixteen. The educational attainments are those of parents, but they are used to indicate the family backgrounds of the cohorts in question. So, for example, among young people leaving high school around 2005, 77 percent had a high school–educated mother, 75 percent had a high school–educated father, 24 percent had a college–educated mother, and 23 percent had a college–educated father.

FIGURE 8.3 *Percentage Upwardly and Downwardly Mobile by Year Turned Twenty-Five and Gender: U.S.-Educated Persons, Twenty-Seven to Sixty-Four Years Old at Time of Interview*



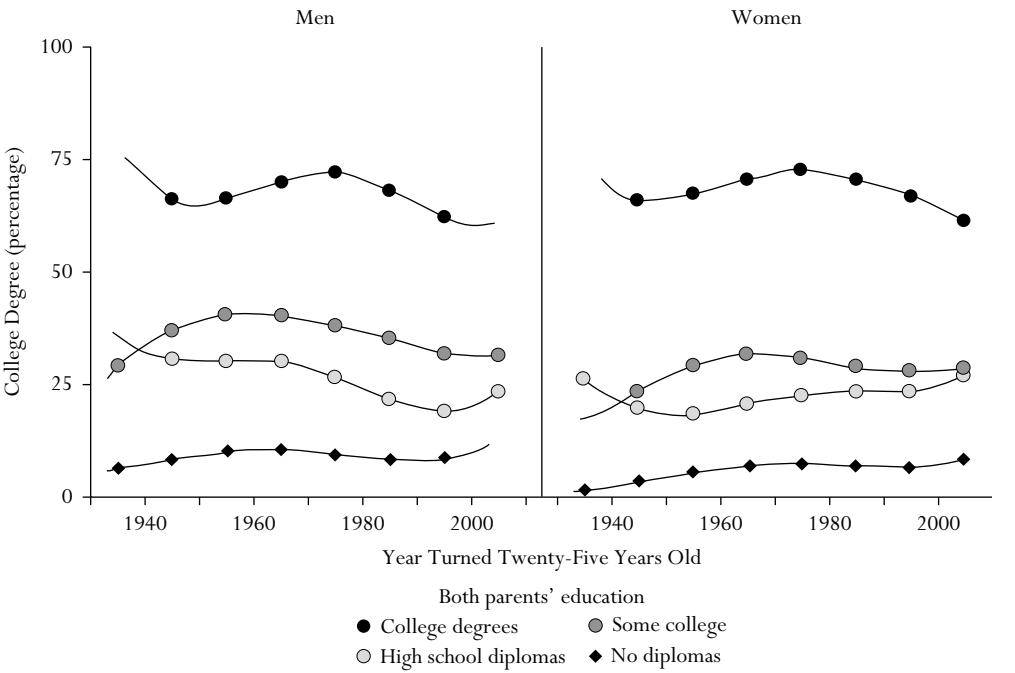
Source: Authors' calculations, based on Smith et al. (2008).

FIGURE 8.4A *Percentage Graduating from High School, by Year Turned Twenty-Five, Parental Education, and Gender: U.S.-Educated Persons, Twenty-Seven to Sixty-Four Years Old at Time of Interview*



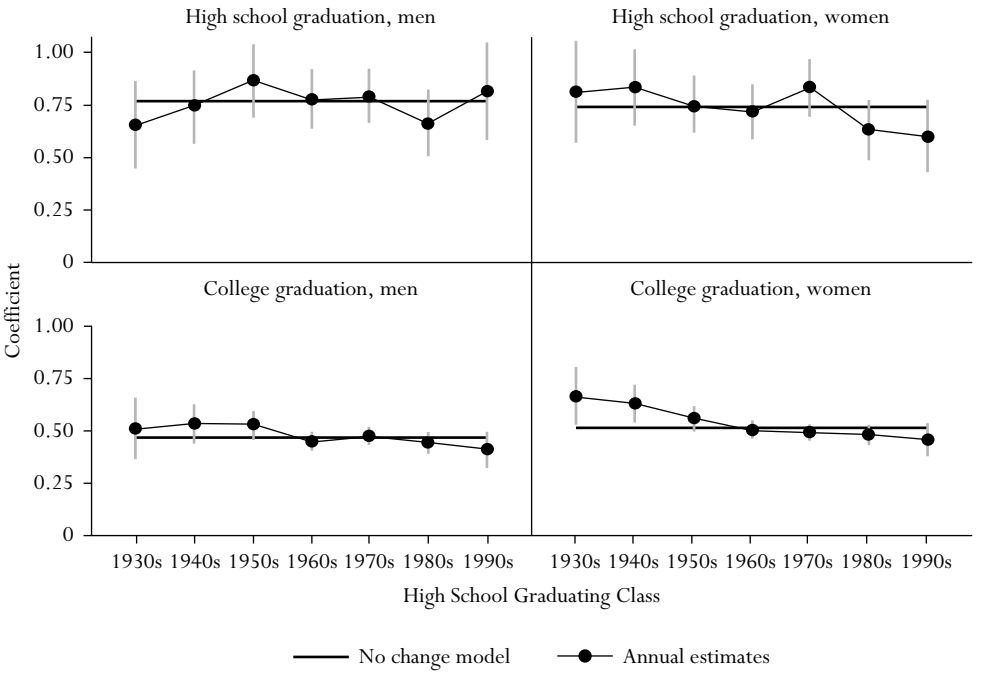
Source: Authors' calculations, based on Smith et al. (2008).
Notes: Data smoothed by locally esimated (loess) regression.

FIGURE 8.4B *Percentage Graduating from College, by Year Turned Twenty-Five, Parental Education, and Gender: U.S.-Educated Persons, Twenty-Seven to Sixty-Four Years Old at Time of Interview*



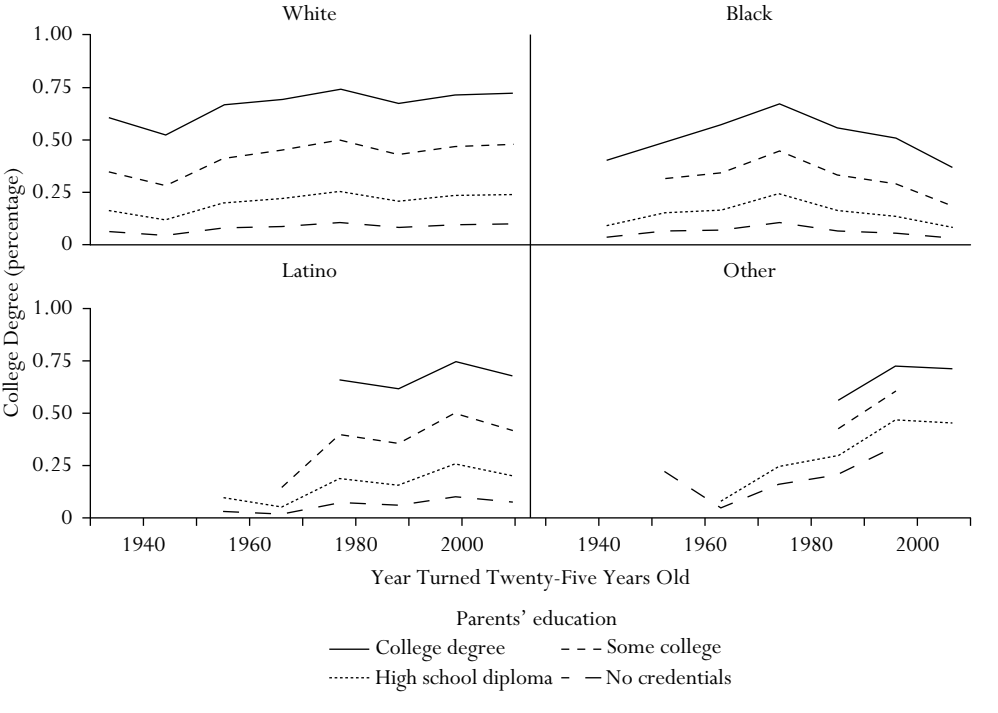
Source: Authors' calculations, based on Smith et al. (2008).
Notes: Data smoothed by locally esimated (loess) regression.

FIGURE 8.5 *Coefficients for Parental Education, by Year Turned Twenty-Five and Gender: U.S.-Educated Persons, Twenty-Seven to Sixty-Four Years Old at Time of Interview*



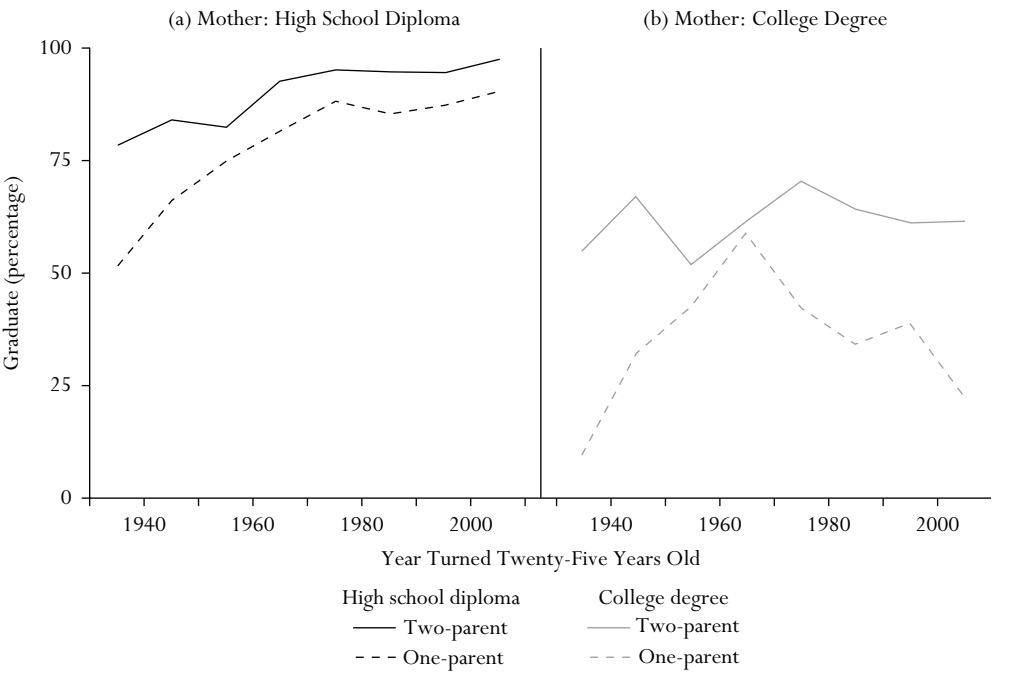
Source: Authors' calculations, based on Smith et al. (2008).
Notes: No change model fit to all data with dummies for high school graduating class; annual estimates fit to each class separately. Vertical lines show 95 percent confidence intervals of annual estimates.

FIGURE 8.6 *Percentage of All Young People Graduating from College, by Year Turned Twenty-Five and Racial Ancestry: U.S.-Educated Women, Twenty-Seven to Sixty-Four Years Old at Time of Interview*



Source: Authors' calculations, based on Smith et al. (2008).
Notes: Data smoothed by locally estimated (loess) regression. Data refer to all members of a cohort whether they graduated from high school or not.

FIGURE 8.7 *Percentage Completing as Much or More Education as Mother, by Year Turned Twenty-Five, Level of Education, Mother's Highest Degree, and Family Structure at Age Sixteen: Men Twenty-Seven to Sixty-Four Years Old at Time of Interview*



Source: Authors' calculations, based on Smith et al. (2008).
Notes: Men whose mothers either dropped out of high school or completed some college are not shown; women are not shown.

TABLE 8.1 *Logistic Regression Coefficients for Selected Variables in Three Models of High School Graduation, by High School Graduating Class*

	High School Class of 1992		
	Model 0	Model 1	Model 2
Father's education[a]	0.465*	0.265	0.034
	(0.071)	(0.152)	(0.114)
Mother's education[a]	0.174*	−0.120	0.091
	(0.064)	(0.165)	(0.118)
Intact family[b]	—	1.905*	0.840*
		(0.435)	(0.363)
Educational expectations[a]	—	0.605*	0.318*
		(0.169)	(0.106)
Other individual-level variables[b]	No	Yes	Yes
School-level variables	No	No	Yes

Source: Authors' calculations based on U.S. Department of Education, National Center for Education Statistics (1996).
Note: Standard errors in parentheses.
[a]Centered: high school graduate.
[b]Centered: grand mean.
*$p \leq 0.05$

TABLE 8.2 *Logistic Regression Coefficients for Selected Variables in Three Models of College Graduation by Model*

	High School Class of 1972			High School Class of 1992		
	Model 0	Model 1	Model 2	Model 0	Model 1	Model 2
Father's education[a]	0.209*	0.067*	0.060*	0.265*	0.101*	0.080*
	(0.012)	(0.021)	(0.019)	(0.018)	(0.024)	(0.018)
Mother's education[a]	0.186*	0.085*	0.072*	0.173*	0.047	0.052*
	(0.014)	(0.023)	(0.021)	(0.019)	(0.026)	(0.019)
Intact family[b]	—	0.267*	0.276*	No	0.584*	0.537*
		(0.097)	(0.086)		(0.094)	(0.069)
Educational expectations[b]	—	0.593*	0.590*		0.423*	0.396*
		(0.032)	(0.026)		(0.029)	(0.023)
Other individual-level variables[b]	No	Yes	Yes	No	Yes	Yes
School-level variables	No	No	Yes	No	No	Yes

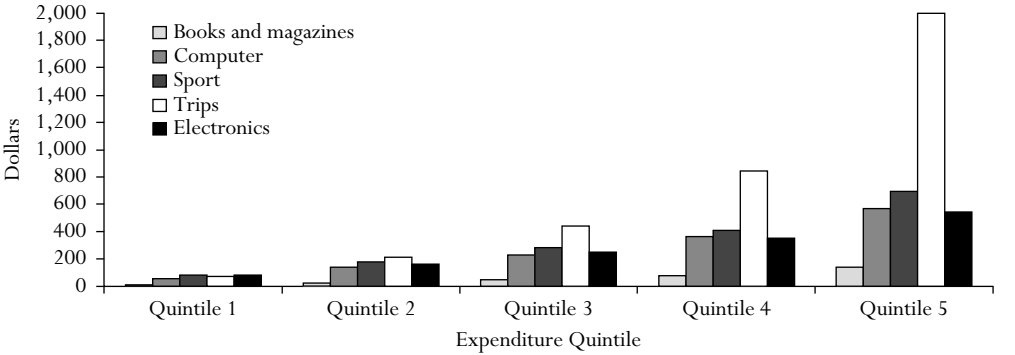
Sources: Authors' calculations based on U.S. Department of Education, National Center for Education Statistics (1992, 1996).

[a]Centered: high school graduate.

[b]Centered: grand mean.

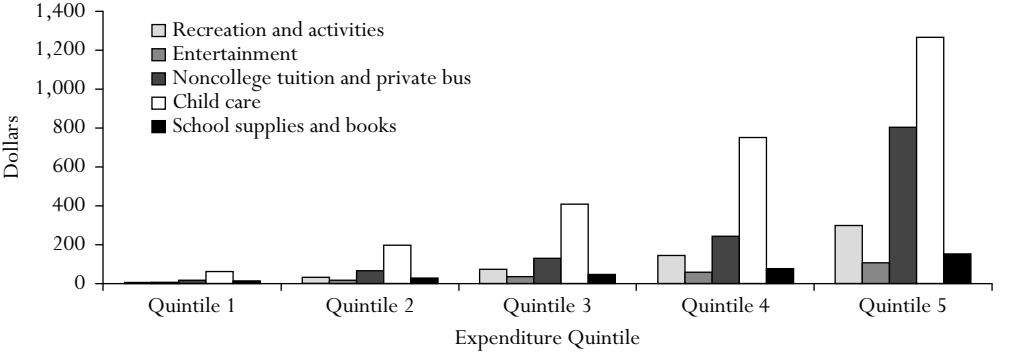
*$p < 0.05$

FIGURE 9.1 *Expenditures on Enrichment Items, by Expenditure Quintiles (Mean Annualized Expenditure, Equivalized for Family Size)*



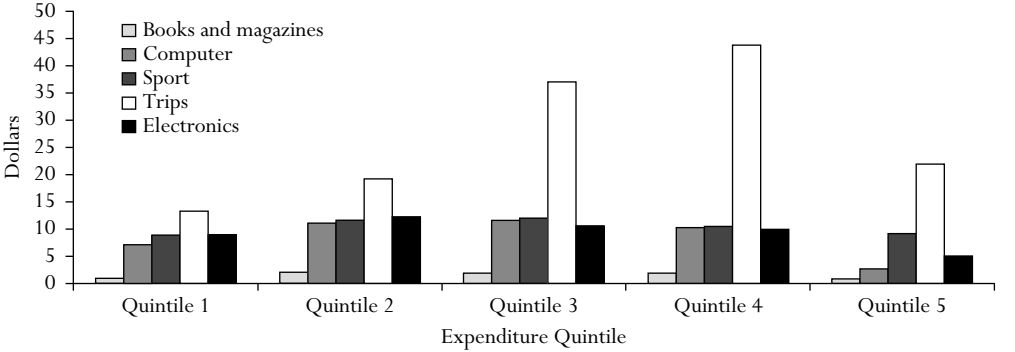
Source: Authors' estimates based on data from the Consumer Expenditure Survey (U.S. Bureau of Labor Statistics 1997–2006).

FIGURE 9.2 *Expenditures on Children's Enrichment, by Expenditure Quintiles (Mean Annualized Expenditure per Child)*



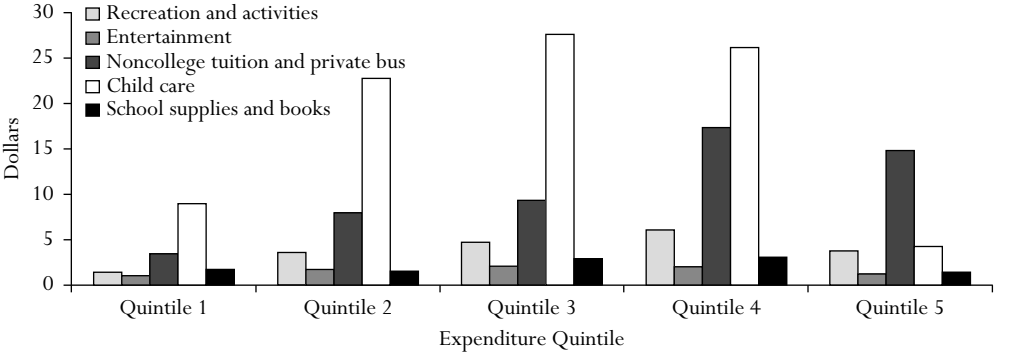
Source: Authors' estimates based on data from the Consumer Expenditure Survey (U.S. Bureau of Labor Statistics 1997–2006).

FIGURE 9.3 *Change in Spending on Enrichment Items as Family Budgets Increase by $1,000, by Expenditure Quintile*



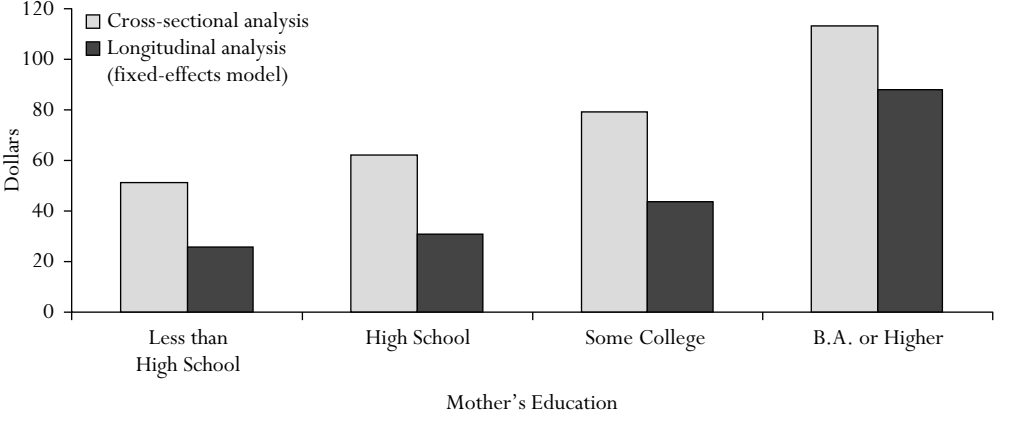
Source: Authors' estimates based on regression analysis in online appendix table 9.A5, adjusting for demographic characteristics, using data from the Consumer Expenditure Survey (U.S. Bureau of Labor Statistics 1997–2006).

FIGURE 9.4 *Changes in Spending on Children's Enrichment Items as Family Budgets Increase by $1,000, by Expenditure Quintile*



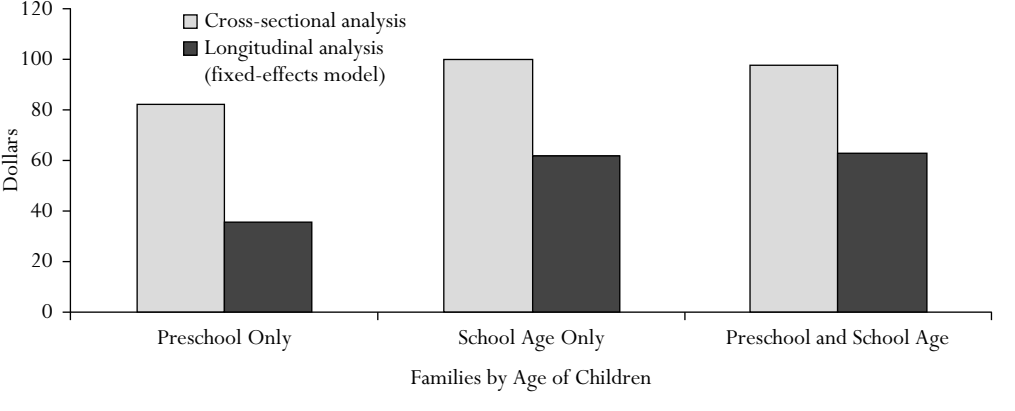
Source: Authors' estimates based on regression analysis in online appendix table 9.A5, adjusting for demographic characteristics, using data from the Consumer Expenditure Survey (U.S. Bureau of Labor Statistics 1997–2006).

FIGURE 9.5 *Change in Spending on Enrichment Items as Family Budgets Increase by $1,000, by Mother's Education Group*



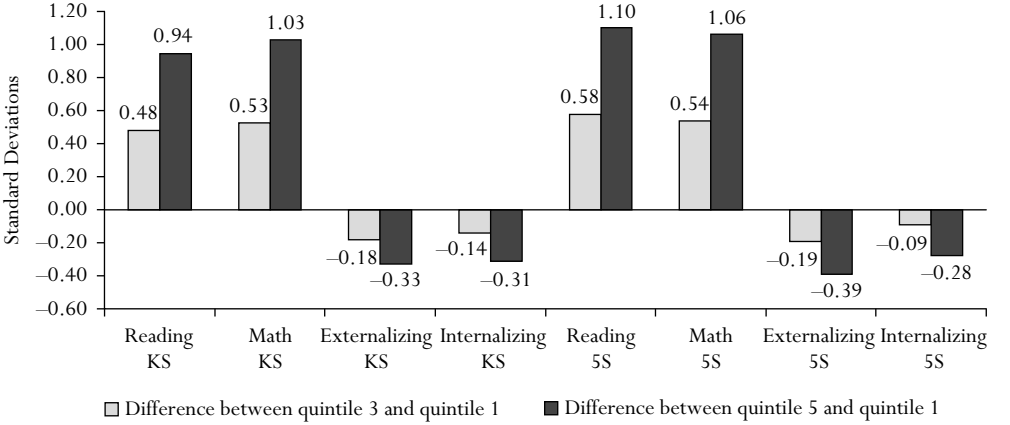
Source: Authors' estimates based on regression analysis in online appendix table 9.A5, adjusting for demographic characteristics, using data from the Consumer Expenditure Survey (U.S. Bureau of Labor Statistics 1997–2006).

FIGURE 9.6 *Change in Spending on Enrichment Items as Family Budgets Increase by $1,000, by Age of Children*



Source: Authors' estimates based on regression analysis cross-sectional models in online appendix table 9.A5, and longitudinal models in online appendix table 9.A8, using data from the Consumer Expenditure Survey (U.S. Bureau of Labor Statistics 1997–2006).

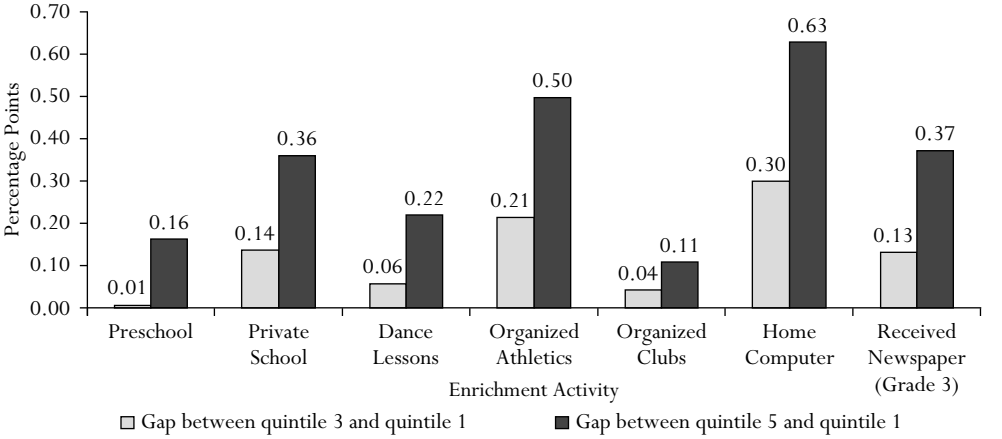
FIGURE 9.7 *Income-Related Differences in Children's Achievement and Behavior*



Source: Authors' estimates based on data from the Early Childhood Longitudinal Study, Kindergarten Cohort (U.S. Department of Education n.d.).

Notes: Quintile 1 includes families with the lowest incomes, and quintile 5 includes families with the highest incomes. KS = kindergarten spring; 5S = fifth-grade spring.

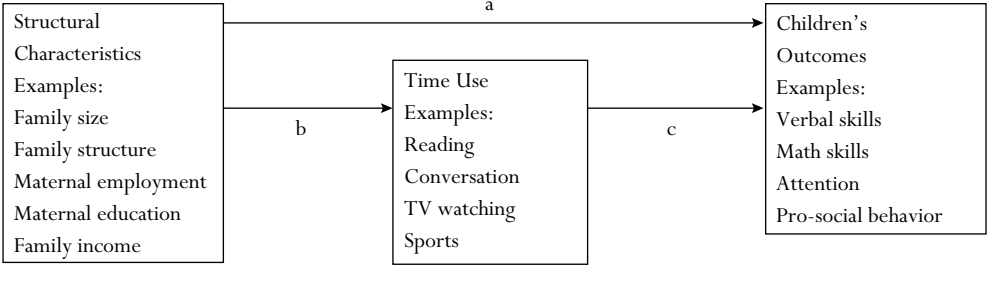
FIGURE 9.8 *Income-Related Differences in the Percentage of Children Experiencing Enrichment Activities*



Source: Authors' estimates based on data from the Early Childhood Longitudinal Study, Kindergarten Cohort (U.S. Department of Education n.d.).

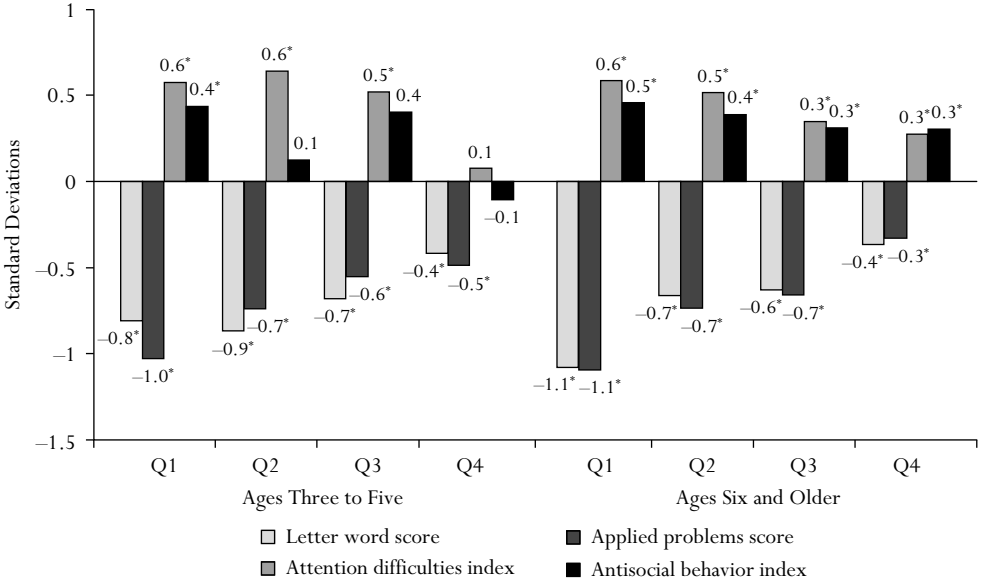
Notes: Quintile 1 includes families with the lowest incomes, and quintile 5 includes families with the highest incomes. All items are measured during kindergarten unless otherwise noted.

FIGURE 10.1 *Associations Among Structural Characteristics of Families, Time Use, and Children's Outcomes*



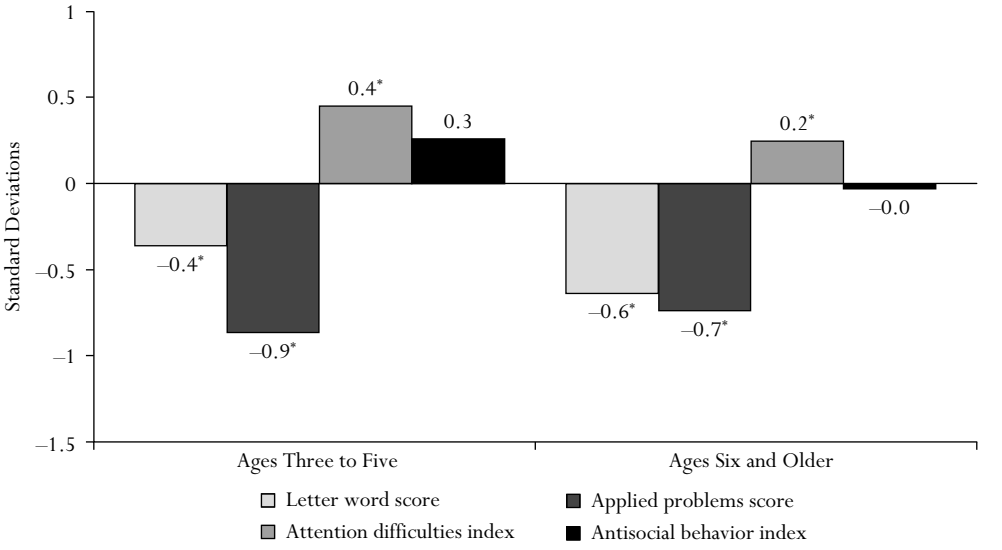
Source: Authors' diagram.

FIGURE 10.2 *Income Disparities in Academic Skills and Behaviors, by Age*



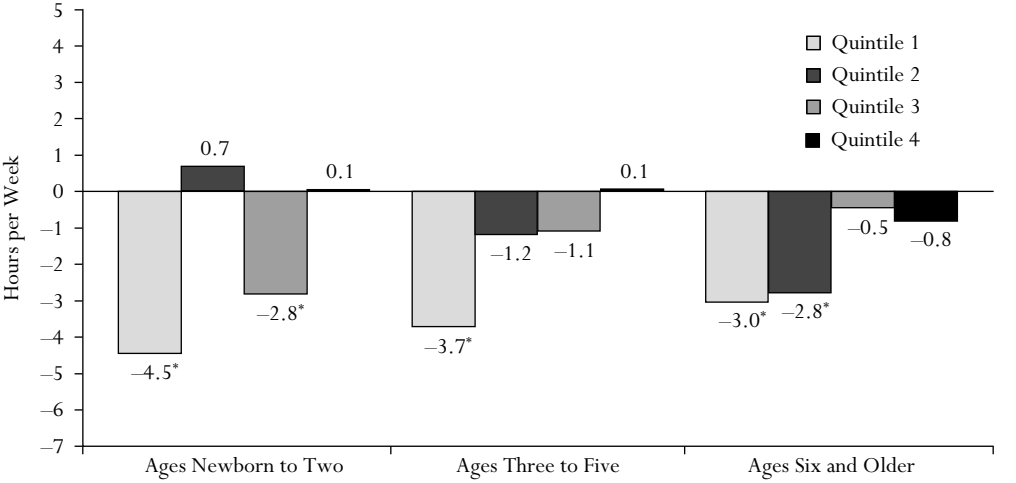
Source: Authors' calculations based on Panel Study of Income Dynamics (2009).
Notes: Estimates are adjusted for child's age in month and gender. Bars show difference relative to children whose family income is in the top quintile.
*Denotes statistically significant difference at $p < 0.05$ level.

FIGURE 10.3 *Black-White Disparities in Academic Skills and Behaviors, by Age*



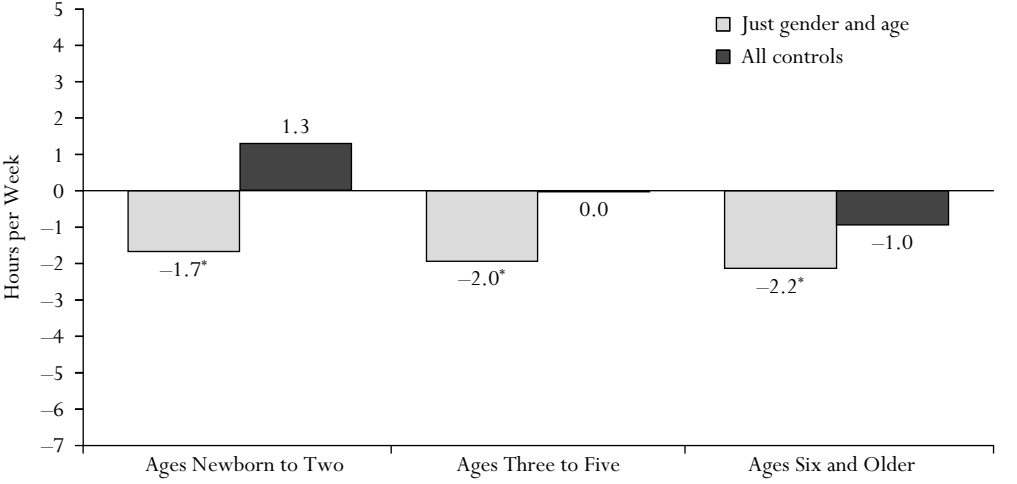
Source: Authors' calculations based on Panel Study of Income Dynamics (2009).
Notes: Estimates are adjusted for child's age in month and gender.
*Denotes statistically significant difference at $p < 0.05$ level.

FIGURE 10.4 *Income Disparities in Weekly Time Spent in Novel Places, by Age*



Source: Authors' calculations based on Panel Study of Income Dynamics (2009).
Notes: Estimates are adjusted for child's age in month and gender. Bars show difference relative to children whose family income is in the top quintile.
*Denotes statistically significant difference at $p < 0.05$ level.

FIGURE 10.5 *Black-White Disparities in Weekly Time Spent in Novel Places, by Age*

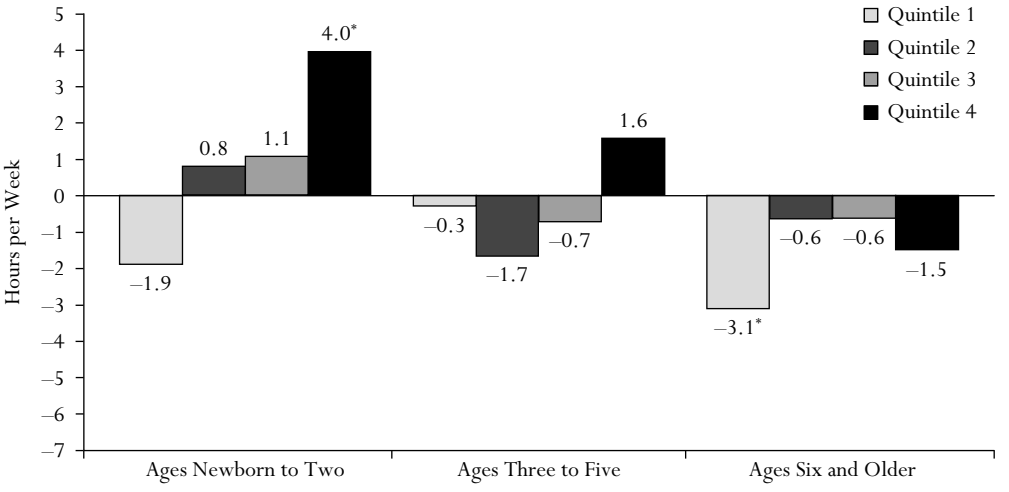


Source: Authors' calculations based on Panel Study of Income Dynamics (2009).

Notes: Controls include measures of child health, parent health, and socioeconomic status. See text and online appendix for more details.

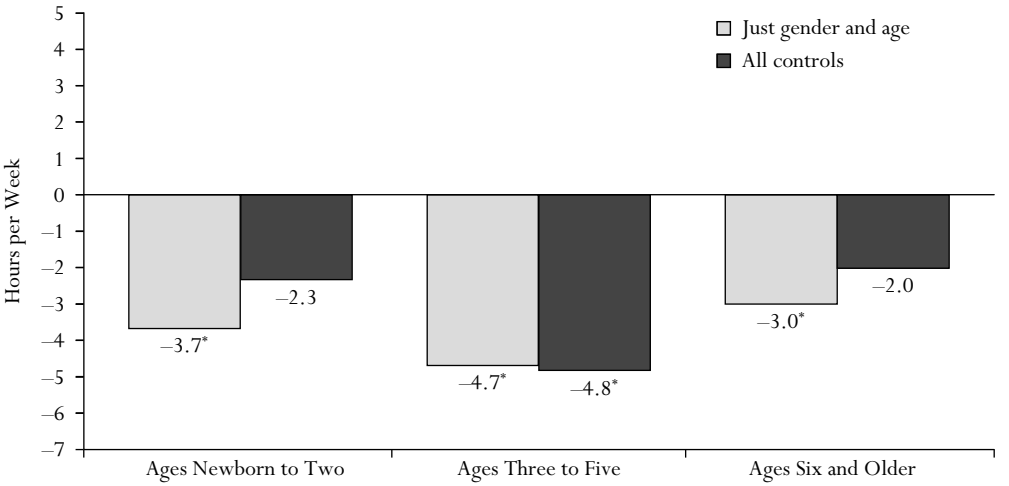
*Denotes statistically significant difference at the $p < 0.05$ level.

FIGURE 10.6 *Income Disparities in Weekly Time Spent in Conversation with Adults, by Age*



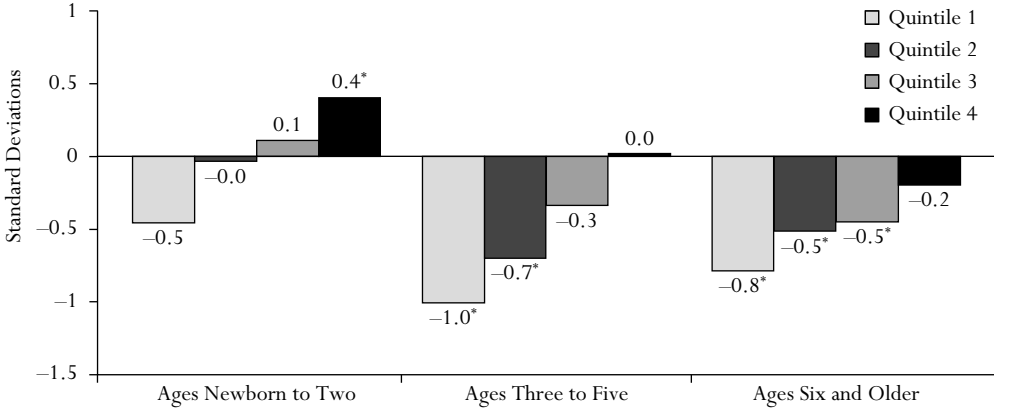
Source: Authors' calculations based on Panel Study of Income Dynamics (2009).
Notes: Estimates are adjusted for child's age in month and gender. Bars show difference relative to children whose family income is in the top quintile.
*Denotes statistically significant difference at the $p < 0.05$ level.

FIGURE 10.7 *Black-White Disparities in Weekly Time Spent in Conversation with Adults, by Age*



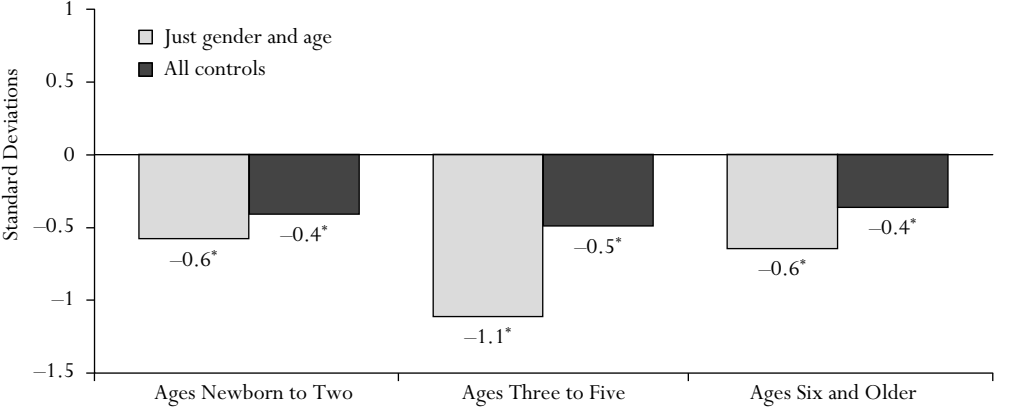
Source: Authors' calculations based on Panel Study of Income Dynamics (2009).
Notes: Controls include measures of child health, parent health, and socioeconomic status. See text and online appendix for more details.
*Denotes statistically significant difference at the $p < 0.05$ level.

FIGURE 10.8 *Income Disparities in Primary Caregivers' Verbal Responsiveness, by Age*



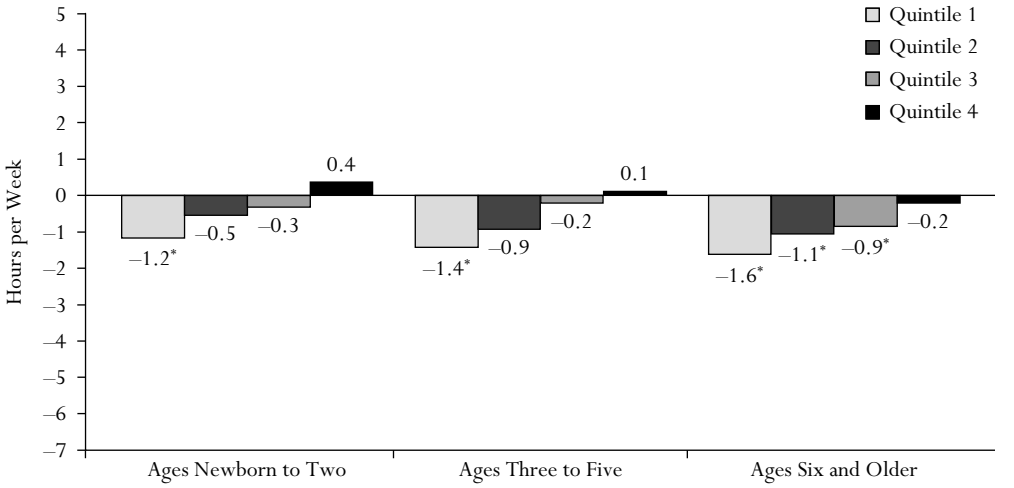
Source: Authors' calculations based on Panel Study of Income Dynamics (2009).
Notes: Estimates are adjusted for child's age in month and gender. Bars show difference relative to children whose family income is in the top quintile.
*Denotes statistically significant difference at the $p < 0.05$ level.

FIGURE 10.9 *Black-White Disparities in Primary Caregivers' Verbal Responsiveness, by Age*



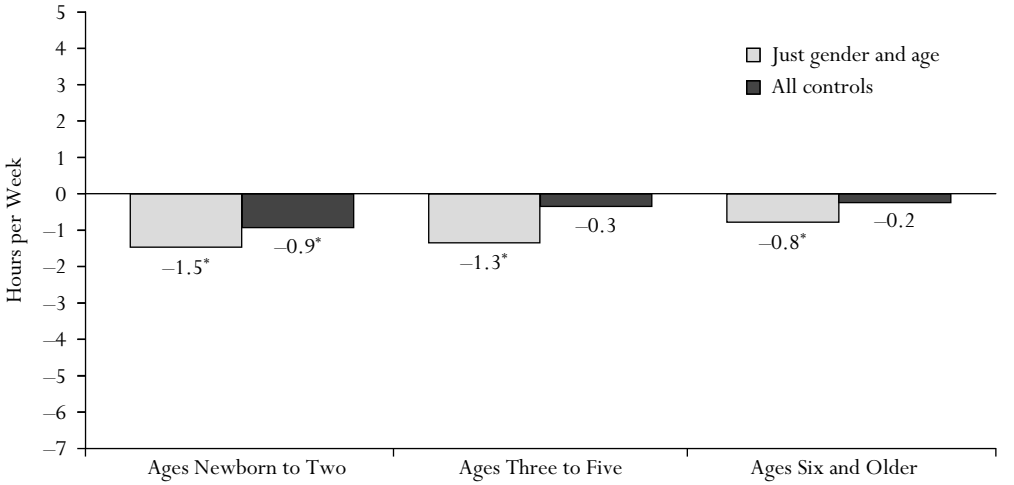
Source: Authors' calculations based on Panel Study of Income Dynamics (2009).
Notes: Controls include measures of child health, parent health, and socioeconomic status. See text and online appendix for more details.
*Denotes statistically significant difference at the $p < 0.05$ level.

FIGURE 10.10 *Income Disparities in Weekly Time Spent in Literacy Activities, by Age*



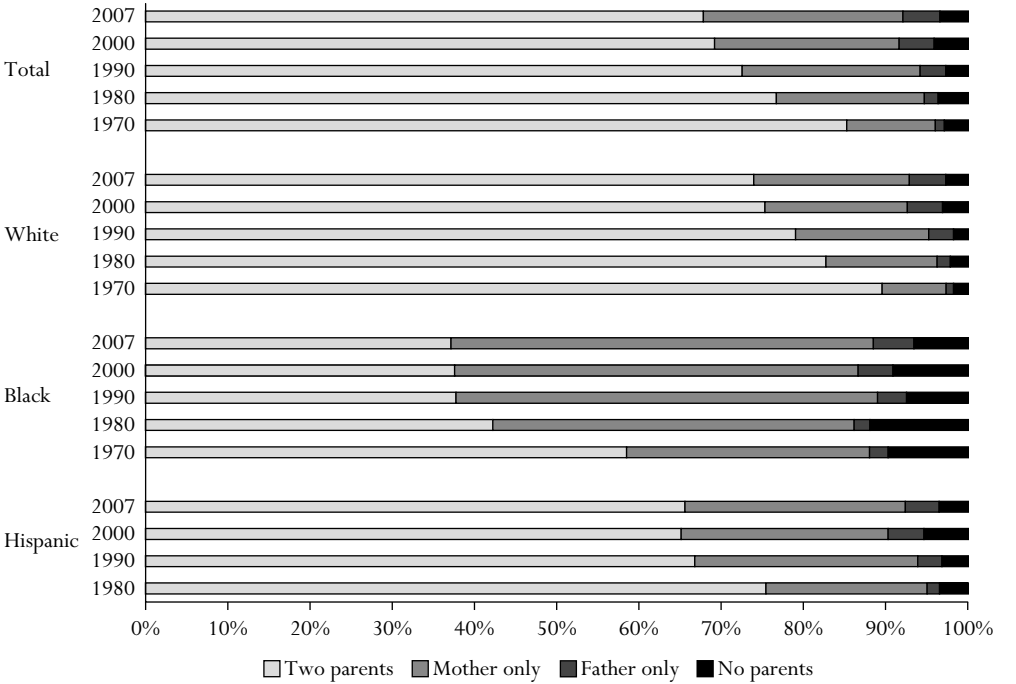
Source: Authors' calculations based on Panel Study of Income Dynamics (2009).
Notes: Estimates are adjusted for child's age in month and gender. Bars show difference relative to children whose family income is in the top quintile.
*Denotes statistically significant difference at the $p < 0.05$ level.

FIGURE 10.11 *Black-White Disparities in Weekly Time Spent in Literacy Activities, by Age*



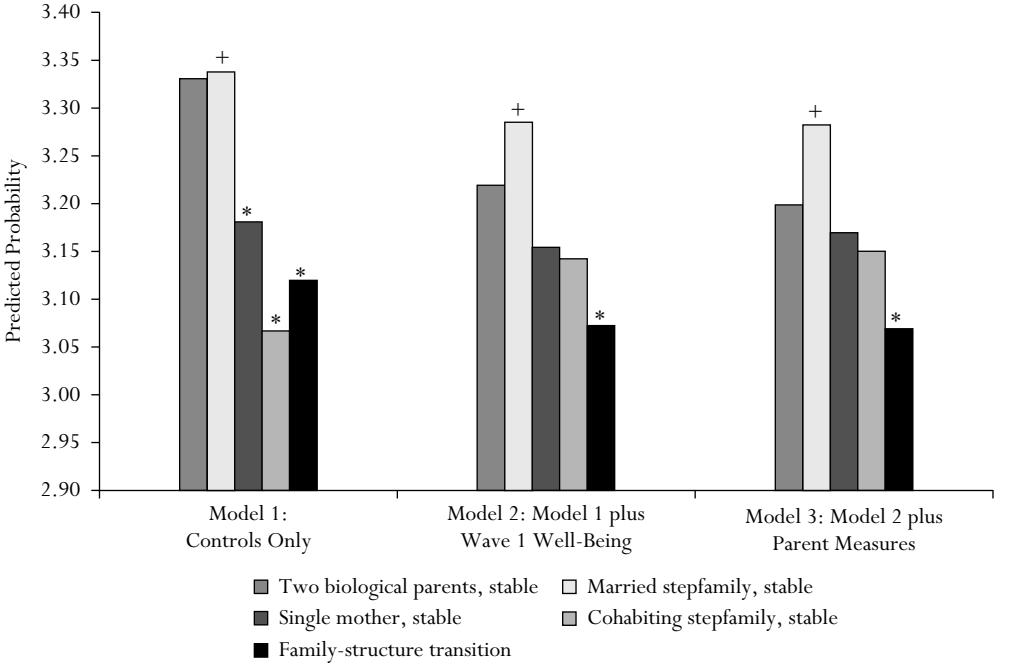
Source: Authors' calculations based on Panel Study of Income Dynamics (2009).
Notes: Controls include measures of child health, parent health, and socioeconomic status. See text and online appendix for more details.
*Denotes statistically significant difference at the $p < 0.05$ level.

FIGURE 11.1 *Percentage of U.S. Children Under Eighteen Years Old Living in Various Family Types, by Year and Race-Ethnicity*



Source: Authors' calculations based on U.S. Bureau of the Census (2009, tables ch-1, ch-2, ch-3, ch-4).

FIGURE 11.2 *Predicted Level of School Engagement (Wave 2), by Family Type*

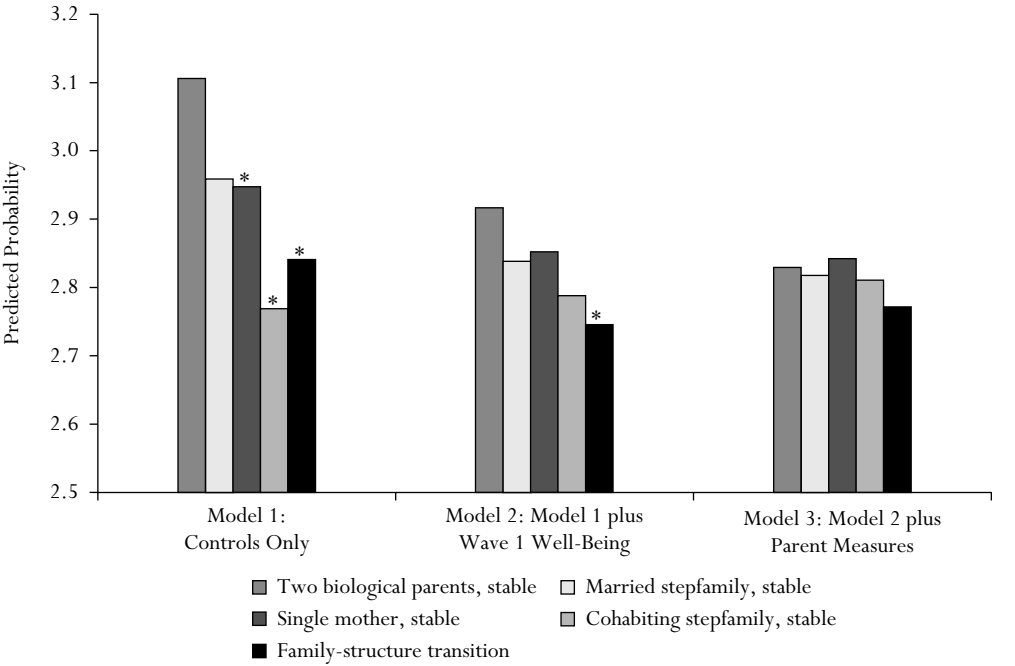


Source: Authors' calculations based on regression models shown in online appendix table 11.A3, based on data from the National Longitudinal Study of Adolescent Health (Harris 2009).

* Differs significantly from two biological parents ($p < 0.05$).

+ Differs significantly from transition group ($p < 0.05$).

FIGURE 11.3 *Predicted GPA (1996 to 1997), by Family Type*

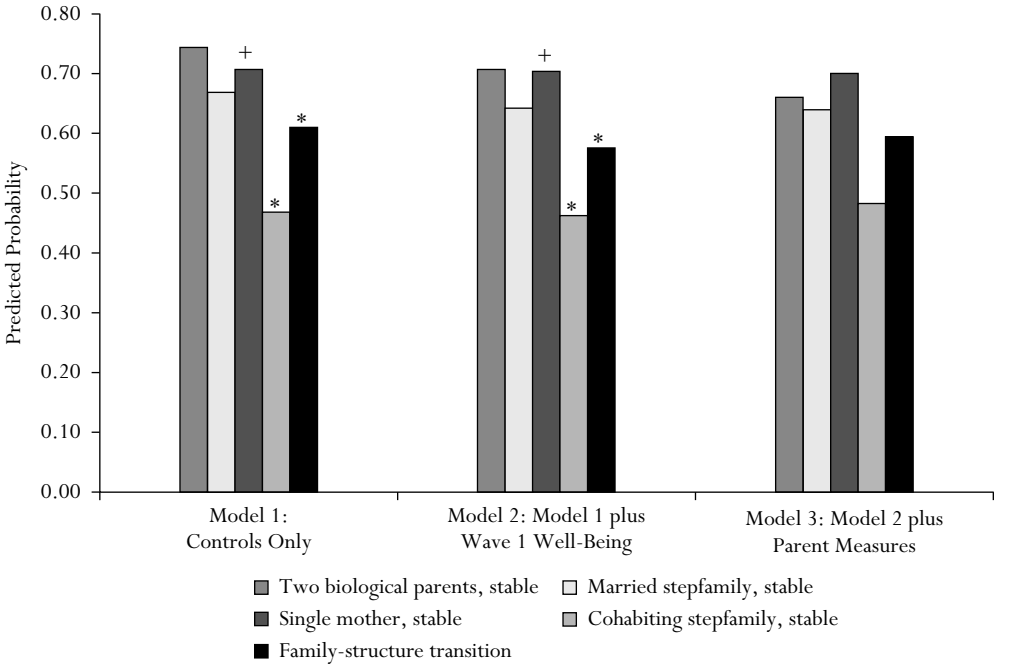


Source: Authors' calculations based on regression models shown in online appendix table 11.A4, based on data from the National Longitudinal Study of Adolescent Health (Harris 2009).

* Differs significantly from two biological parents ($p < 0.05$).

+ Differs significantly from transition group ($p < 0.05$).

FIGURE 11.4 *Predicted Probability of Completing an Advanced Math Course, by Family Type*

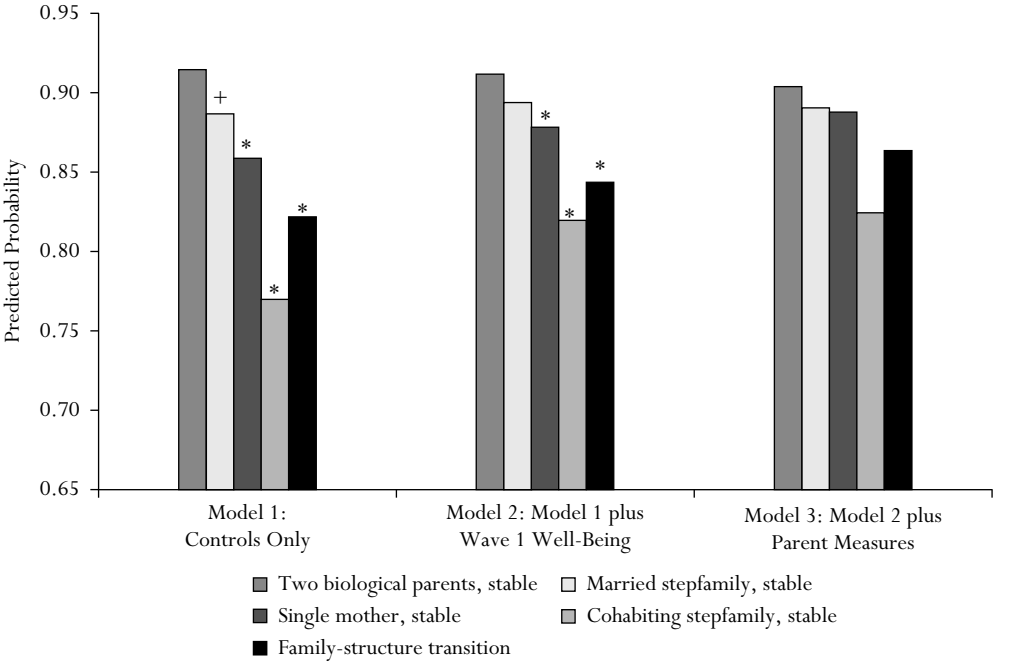


Source: Authors' calculations based on regression models shown in online appendix table 11.A5, based on data from the National Longitudinal Study of Adolescent Health (Harris 2009).

* Differs significantly from two biological parents ($p < 0.05$).

+ Differs significantly from transition group ($p < 0.05$).

FIGURE 11.5 *Predicted Probability of High School Graduation, by Family Type*

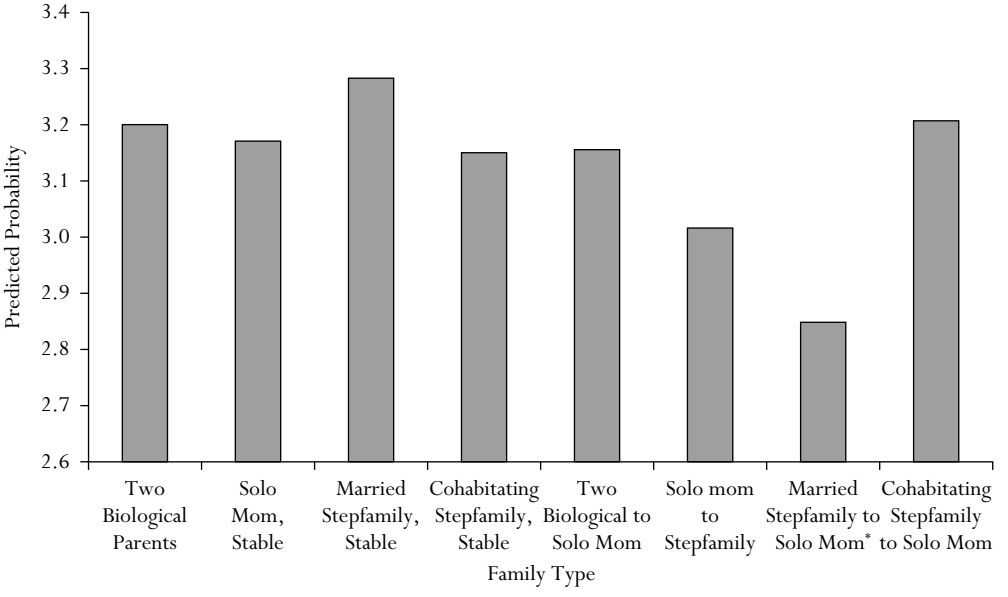


Source: Authors' calculations based on regression models shown in online appendix table 11.A6, based on data from the National Longitudinal Study of Adolescent Health (Harris 2009).

* Differs significantly from two biological parents ($p < 0.05$).

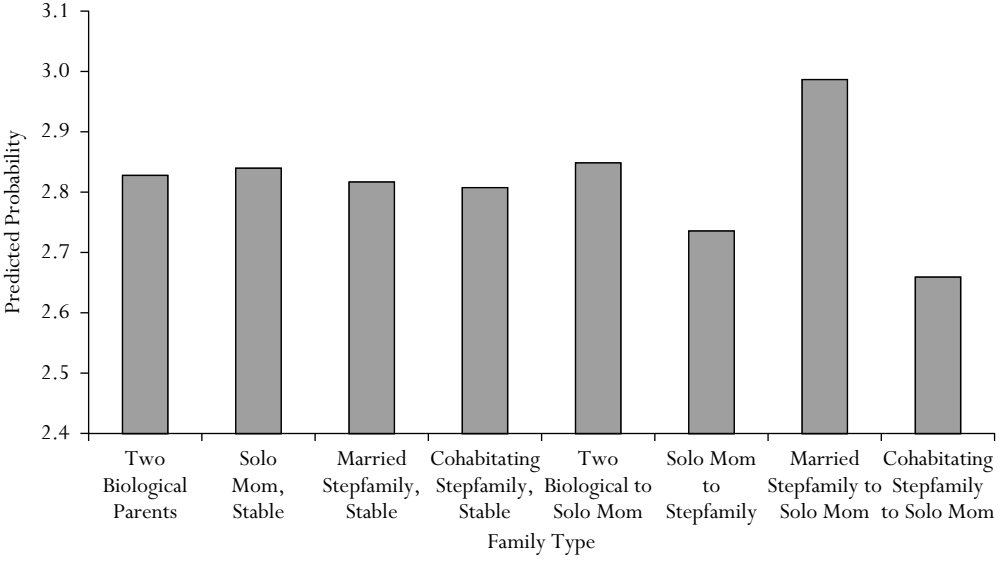
+ Differs significantly from transition group ($p < 0.05$).

FIGURE 11.6 *Predicted Level of School Engagement (Wave 2), by Detailed Family Type*



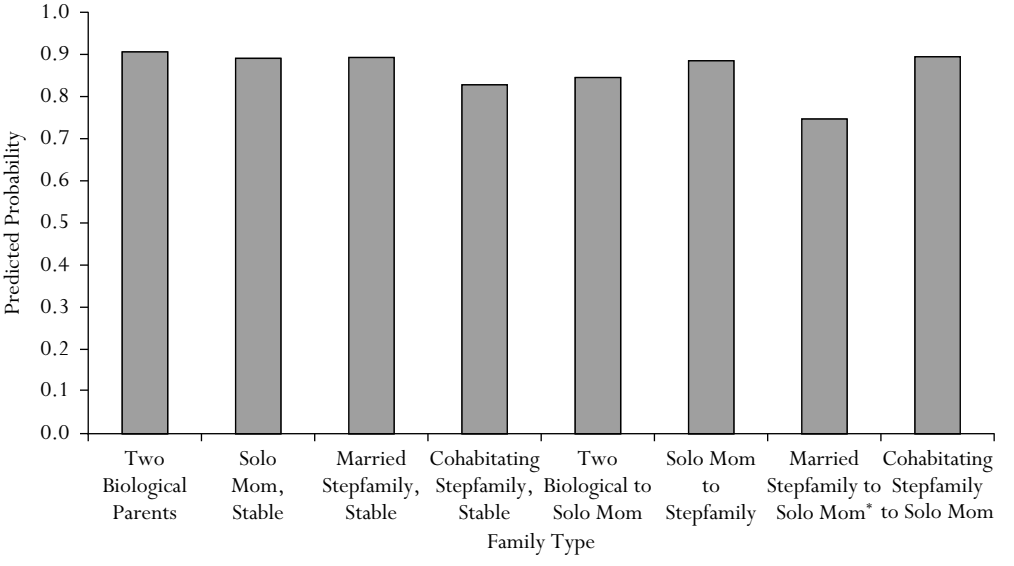
Source: Authors' calculations based on regression models shown in online appendix table 11.A7, based on data from the National Longitudinal Study of Adolescent Health (Harris 2009).
Note: Models include Wave 1 well-being and parent selectivity (see online appendix table 11.A7).
*Transition from married stepfamily to solo mom differs significantly from stable married stepfamily ($p < 0.5$).

FIGURE 11.7 *Predicted Grade-Point Average (1996 to 1997), by Detailed Family Type*



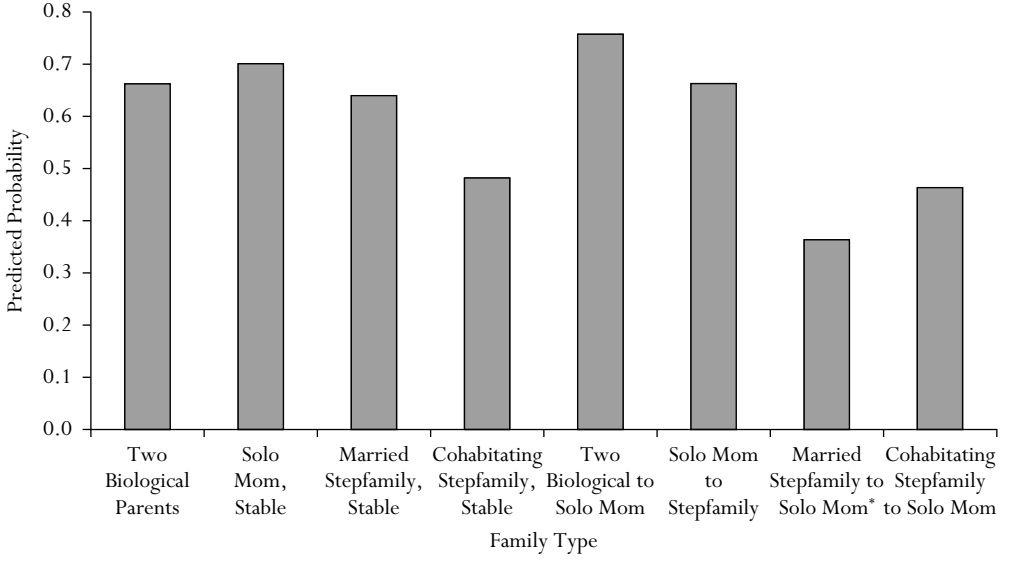
Source: Authors' calculations based on regression models shown in online appendix table 11.A7, based on data from the National Longitudinal Study of Adolescent Health (Harris 2009).
Note: Models include Wave 1 well-being and parent selectivity (see online appendix table 11.A7).

FIGURE 11.8 *Predicted Probability of Advanced Math Course Completion, by Detailed Family Type*



Source: Authors' calculations based on regression models shown in online appendix table 11.A7, based on data from the National Longitudinal Study of Adolescent Health (Harris 2009).
Note: Models include Wave 1 well-being and parent selectivity (see online appendix table 11.A7).
*Transition from married stepfamily to solo mom differs significantly from stable married stepfamily ($p < 0.5$).

FIGURE 11.9 *Predicted Probability of High School Graduation, by Detailed Family Type*



Source: Authors' calculations based on regression models shown in online appendix table 11.A7, based on data from the National Longitudinal Study of Adolescent Health (Harris 2009).
Note: Models include Wave 1 well-being and parent selectivity (see online appendix table 11.A7).
*Transition from married stepfamily to solo mom differs significantly from stable married stepfamily ($p < 0.5$).

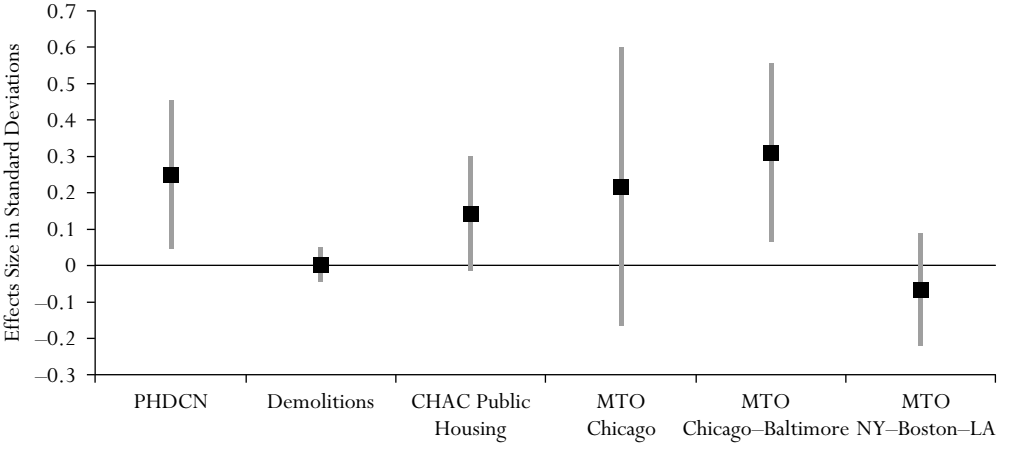
TABLE 11.1 *Family-Structure Patterns Between Add Health Wave 1 (1995) and Wave 2 (1996)*

	N	Percentage
Transition	252	6.0
Two biological parents to single mother	65	1.4
Single mother to stepfamily (either type)	109	2.6
Married stepfamily to single mother	33	0.7
Cohabiting stepfamily to single mother	45	1.3
No transition	3,999	94.0
Two biological parents	2,751	66.0
Single mother	796	16.8
Married stepfamily	345	8.6
Cohabiting stepfamily	107	2.6
Total	4,251	100.0

Source: Authors' calculations based on data from the National Longitudinal Study of Adolescent Health (Add Health; Harris 2009).

Note: Frequency counts are unweighted and percentages are weighted. Percentages do not sum to 100 because of rounding. Sample is limited to Add Health Wave 3 respondents who were between the ages of twelve and fifteen at the Wave 1 interview, as described in the text.

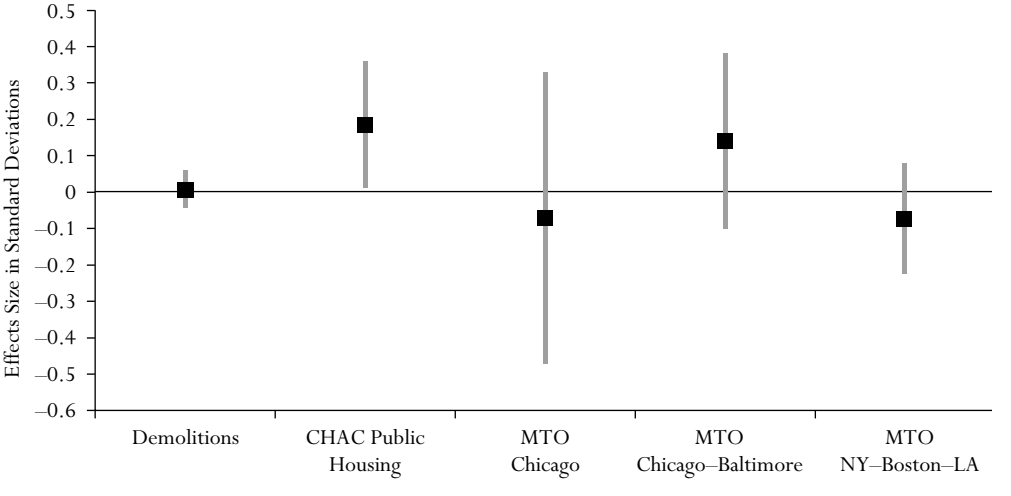
FIGURE 12.1 *Summary of Effects of Different Studies on Children's Verbal Test Scores*



Source: Authors' compilations based on data from Jacob (2004), Ludwig et al. (2010), Sampson, Sharkey, and Raudenbush (2008), and Sanbonmatsu et al. (2006).

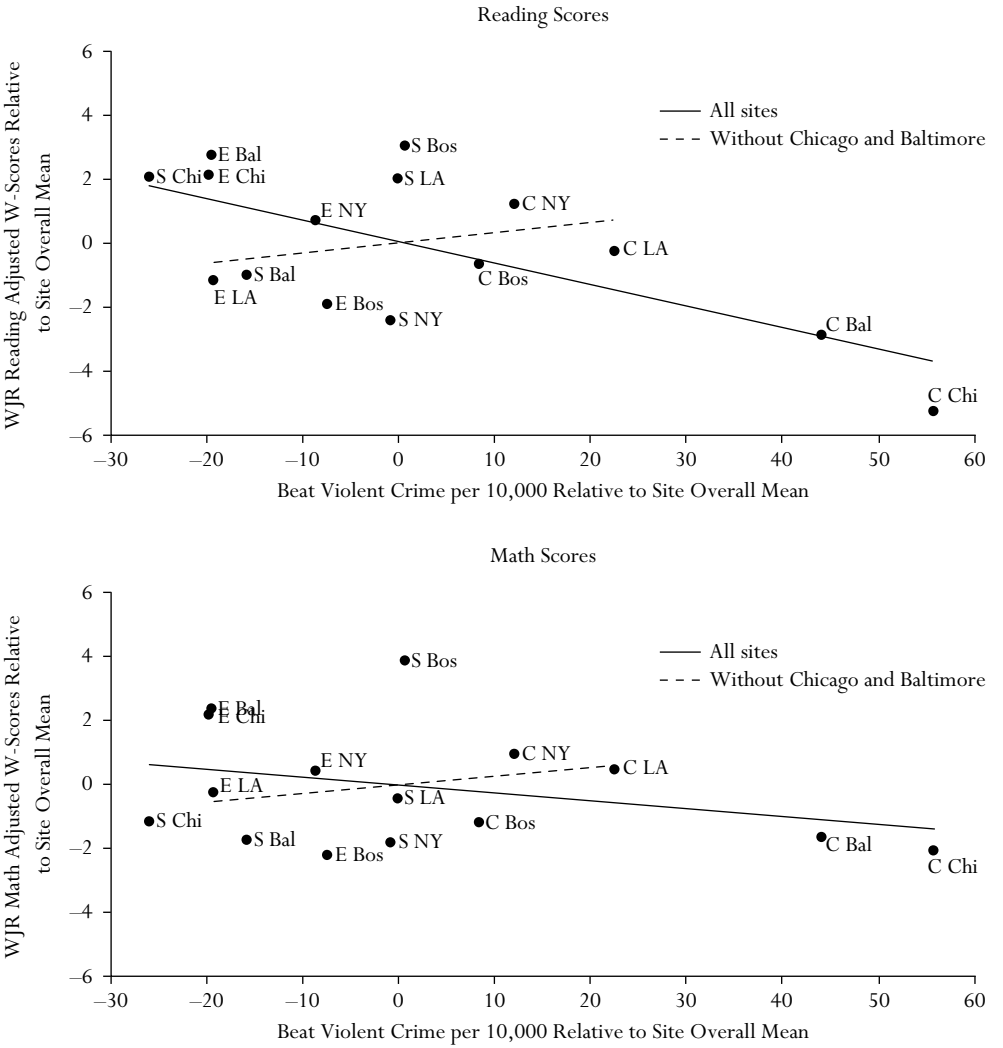
Notes: The X-axis lists the name of each study: Project on Human Development in Chicago Neighborhoods (PHDCN) (Sampson, Sharkey, and Raudenbush 2008); Chicago public-housing demolition study (Jacob 2004); Chicago CHAC voucher study for families living in public housing at baseline (Ludwig et al. 2010); and results from the Moving to Opportunity (MTO) study for different cities (Sanbonmatsu et al. 2006). The Y-axis shows the estimated effect of changing neighborhoods on children's verbal test scores in each of the studies, expressed as an effect size (share of a standard deviation in the test score distribution, so that an effect size of 0.2 means children living in less distressed areas have average scores about one-fifth of a standard deviation higher than children living in more distressed areas). For the mobility studies, we are presenting effects of actually moving through the program (the effects of treatment on the treated, or TOT).

FIGURE 12.2 *Summary of Effects of Different Studies on Children's Math Test Scores*



Source: Authors' compilations based on data from Jacob (2004), Ludwig et al. (2010), and Sanbonmatsu et al. (2006).
Notes: The X-axis lists the name of each study: Chicago public-housing demolition study (Jacob 2004); Chicago CHAC voucher study for families living in public housing at baseline (Ludwig et al. 2010); and results from the Moving to Opportunity (MTO) study for different cities (Sanbonmatsu et al. 2006). The Y-axis shows the estimated effect of changing neighborhoods on children's math test scores in each of the studies, expressed as an effect size (share of a standard deviation in the test score distribution, so that an effect size of 0.2 means children living in less distressed areas have average scores about one-fifth of a standard deviation higher than children living in more distressed areas). For the mobility studies, we are presenting effects of actually moving through the program (the effects of treatment on the treated, or TOT).

FIGURE 12.3 *Relationship Between Beat-Level Violent Crime and Children's Reading and Math Test Scores in MTO Demonstration Cities and Randomized Mobility Groups*



Source: Authors' compilations based on Sanbonmatsu (2006), and Ludwig and Klein (2007).

Notes: The figures plot the average beat- or district-level violent crime rate (X-axis) and average Woodcock-Johnson Revised reading score (top panel) or math score (bottom panel) for MTO families broken out by whether families were assigned to the MTO experimental, Section 8 only, or control groups, and by site (Baltimore, Boston, Chicago, Los Angeles, and New York City). We rescale each group's test score and beat violent crime rate by subtracting off the average values for test scores and beat violent crime rates within that MTO site. The solid lines in each figure show the correlation between beat violent crime rates and test scores implied by the fifteen data points (that is, the regression line fit through these points), while the dashed line in each figure shows what happens to this relationship when we drop the data points for the Baltimore and Chicago sites.

TABLE 12.1 *Comparing Study Samples' Baseline Characteristics*

	Gautreaux	Public-Housing Demolitions	PHDCN: African American	PHDCN: Hispanic	CHAC: Public Housing	CHAC: in MTO Tract at Baseline	MTO: Full Sample	MTO: Chicago Only	MTO: Chicago, Baltimore Only	MTO: NY, LA, Boston
Child age	8.47	10.34	9.01	8.93	7.76	7.67				
		(4.01)	(2.52)	(2.49)	(2.21)	(2.25)				
Household Head Characteristics										
Age	36.06		36.83	35.34	30.51	30.05	34.09	32.49	32.91	34.81
			(9.30)	(6.93)	(6.64)	(6.33)	(9.08)	(8.78)	(8.78)	(9.18)
African American	1.00	1.00	0.98	0.01	0.98	0.99	0.67	0.99	0.99	0.47
			(0.13)	(0.09)	(0.13)	(0.08)	(0.40)	(0.09)	(0.12)	(0.50)
Hispanic			0.00	0.95	0.01	0.00	0.29	0.01	0.01	0.46
			(0.04)	(0.22)	(0.09)	(0.03)	(0.45)	(0.08)	(0.11)	(0.50)
Employed			0.53	0.52	0.35	0.33	0.27	0.27	0.26	0.27
			(0.50)	(0.50)	(0.48)	(0.47)	(0.43)	(0.43)	(0.43)	(0.44)
Receiving welfare	50.03		0.48	0.23	0.83	0.85	0.74	0.81	0.81	0.71
			(0.50)	(0.42)	(0.38)	(0.36)	(0.43)	(0.39)	(0.39)	(0.45)
Neighborhood Characteristics										
Tract poverty rate		0.84	0.27	0.22	0.61	0.71	0.50	0.66	0.58	0.45
		(0.11)	(0.13)	(0.10)	(0.19)	(0.11)	(0.14)	(0.10)	(0.15)	(0.12)
Tract-share black			0.76	0.13	0.89	0.99	0.59	0.99	0.90	0.39
			(0.29)	(0.18)	(0.24)	(0.06)	(0.33)	(0.04)	(0.23)	(0.21)
Concentrated-disadvantage index			2.20	0.70	3.00	3.39	2.18	3.16	2.74	1.84
			(1.11)	(0.85)	(0.77)	(0.33)	(0.72)	(0.29)	(0.71)	(0.46)
Concentrated-disadvantage index (without percentage black)			1.93	0.84	2.25	2.56	1.69	2.34	1.99	1.51
			(1.18)	(0.87)	(0.61)	(0.31)	(0.51)	(0.27)	(0.55)	(0.38)

Sources: Authors' compilation based on data from Jacob (2004), Ludwig et al. (2010), Rubinowitz and Rosenbaum (2000), Sampson, Sharkey, and Raudenbush (2008); and Sanbonmatsu et al. (2006).

Notes: This table reports baseline household and neighborhood characteristics for the different studies that we review: Gautreaux (Rubinowitz and Rosenbaum 2000); Chicago public-housing demolition study (Jacob 2004); Project on Human Development in Chicago Neighborhoods (PHDCN) (Sampson, Sharkey, and Raudenbush 2008); Chicago CHAC voucher study for families living in public housing at baseline (Ludwig et al. 2010); and results from the Moving to Opportunity (MTO) study for different cities (Sanbonmatsu et al. 2006). The concentrated-disadvantage index is a weighted average of several different census tract-level characteristics, including tract-share poor, tract-share black, tract-share unemployed, tract-share households headed by a female, tract-share on welfare, and share of the tract's population that is under age eighteen.

TABLE 12.2 *Control Means and Effects of Voucher-Assisted Residential Mobility at Follow-Up on Average School Characteristics*

	CHAC: Public Housing at Baseline	CHAC: In MTO Census Tract at Baseline	MTO: Full Sample	MTO: Chicago Only	MTO: Chicago and Baltimore Only	MTO: NY, LA, and Boston
Percent black						
Control mean	0.899	0.954	0.557	0.914	0.902	0.343
Impact of voucher move	−0.048	−0.022	−0.049*	−0.082	−0.096*	−0.032
	(0.025)	(0.027)	(0.022)	(0.062)	(0.041)	(0.023)
Percent Hispanic						
Control mean	0.075	0.031	0.307	0.042	0.029	0.479
Impact of voucher move	0.034	0.009	−0.053*	0.013	0.004	−0.076*
	(0.020)	(0.016)	(0.017)	(0.035)	(0.020)	(0.023)
Percent receiving free lunch						
Control mean	0.929	0.936	0.726	NA	0.699	0.733
Impact of voucher move	−0.373*	−0.035*	−0.093*	NA	−0.191*	−0.068*
	(0.008)	(0.010)	(0.021)	NA	(0.041)	(0.023)
Percent at or above national norms (CHAC) and state percentile rankings (MTO)						
Control mean	0.304	0.282	0.169	0.104	0.128	0.194
Impact of voucher move	−0.021	0.014	0.075*	0.080*	0.066*	0.085*
	(0.013)	(0.021)	(0.018)	(0.038)	(0.029)	(0.022)

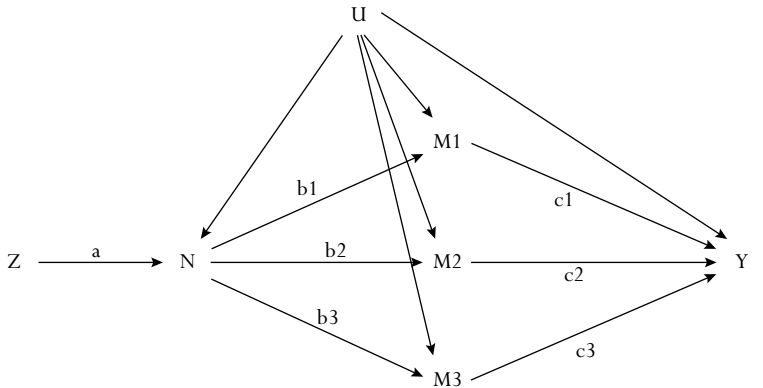
Source: Authors' compilation based on data from Ludwig et al. (2010) and Sanbonmatsu et al. (2006).
Notes: This table reports the effects of relocating using a housing voucher on different school characteristics reported at left; that is, each cell in the table represents the difference in average school characteristics for children who moved with a voucher versus the average for children in the control group who would have moved had their families been assigned a voucher (the effect of treatment on the treated, or TOT). The voucher effect cells report the difference in average characteristics with the standard error underneath reported in parentheses. Each column reports results for a different study or sample within a study: Chicago CHAC voucher study for families living in public housing at baseline (Ludwig et al. 2010); and results from the Moving to Opportunity (MTO) study for different cities (Sanbonmatsu et al. 2006).
*Statistically significant at the 5 percent level.

TABLE 12.3 *Control Means and Effects of Voucher-Assisted Mobility at Follow-Up—Neighborhood Characteristics*

	CHAC: Public Housing at Baseline	CHAC: In MTO Census Tract at Baseline	MTO: Full Sample	MTO: Chicago Only	MTO: Chicago and Baltimore Only	MTO: NY, LA, and Boston
Tract poverty rate						
Control mean	0.481	0.467	0.392	0.419	0.387	0.394
Impact of voucher move	−0.274*	−0.336	−0.190*	−0.183*	−0.140*	−0.213*
	(0.094)	(0.259)	(0.019)	(0.069)	(0.041)	(0.018)
Tract share black						
Control mean	0.837	0.912	0.548	0.857	0.848	0.371
Impact of voucher move	0.028	−0.112	−0.022	0.038	−0.059	−0.009
	(0.091)	(0.287)	(0.028)	(0.086)	(0.057)	(0.029)
Concentrated-disadvantage index						
Control mean	2.057	2.170	1.869	2.307	2.192	1.678
Impact of voucher move	−0.548*	−1.012	−0.488*	−0.404	−0.397*	−0.528*
	(0.258)	(0.809)	(0.067)	(0.240)	(0.143)	(0.064)
Concentrated-disadvantage index (without percentage black)						
Control mean	1.357	1.408	1.409	1.59	1.482	1.366
Impact of voucher move	−0.572*	−0.918	−0.465*	−0.436	−0.348*	−0.516*
	(0.215)	(0.648)	(0.052)	(0.189)	(0.110)	(0.051)

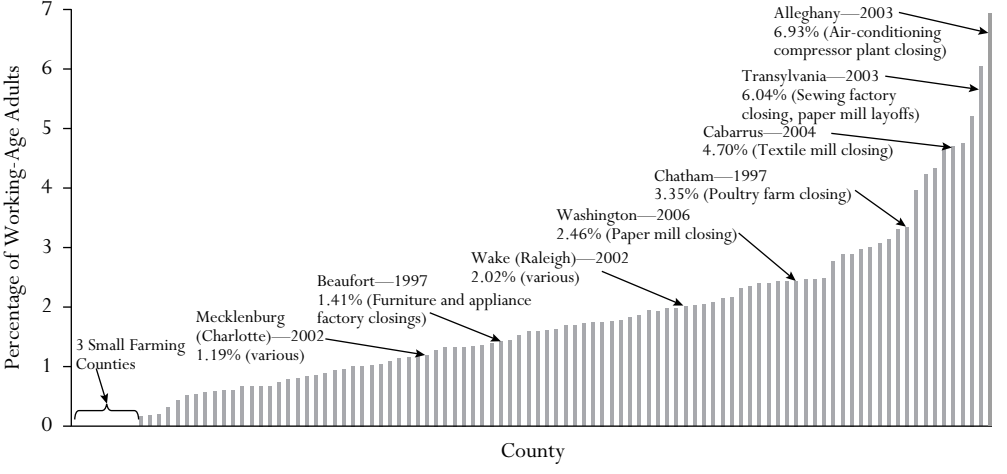
Source: Authors' compilation based on data from Ludwig et al. (2010) and Sanbonmatsu et al. (2006).
Notes: This table reports the effects of relocating using a housing voucher on different neighborhood characteristics reported at left; that is, each cell in the table represents the difference in average neighborhood characteristics for children who moved with a voucher versus the average for those children in the control group who would have moved had their families been assigned a voucher (the effect of treatment on the treated, or TOT). The voucher effect cells report the difference in average characteristics with the standard error underneath reported in parentheses. Each column reports results for a different study and/or sample within a study: Chicago CHAC voucher study for families living in public housing at baseline (Ludwig et al. 2010); and results from the Moving to Opportunity (MTO) study for different cities (Sanbonmatsu et al. 2006). The concentrated-disadvantage index is a weighted average of several different census tract-level characteristics including tract-share poor, tract-share black, tract-share unemployed, tract-share households headed by a female, tract-share on welfare, and share of the tract's population that is under age eighteen.
*Statistically significant at the 5 percent level.

FIGURE 13.1 *Identifying the Effects of Multiple Mechanisms*



Source: Authors' figure.

FIGURE 14.1 *Maximum Share of Workers Affected by Closings or Layoffs in a Month, by County, 1997 to 2007*



Source: Authors' calculations based on data from North Carolina Employment Security Commission (n.d.).

FIGURE 14.2 *Quarterly Residual Unemployment and Percentage of Affected Workers for North Carolina, 1997 to 2007*

Source: Authors' calculations based on data from North Carolina Employment Security Commission (n.d.).

TABLE 14.1 *Student Demographics*

	Eighth Grade (N = 1,054,642)	Fourth Grade (N = 1,075,670)
	Percentage of Total	Percentage of Total
Ethnicity		
Black	29.12	28.99
White	62.26	60.27
Hispanic	4.14	5.34
American Indian	1.39	1.44
Asian	1.79	1.81
Multiracial or other	1.30	2.15
Gender		
Female	49.65	49.36
Male	50.35	50.64
Parents' education (SES proxy)		
Neither parent has more than a high school diploma	56.46	56.26
At least one parent has some higher education	43.54	43.74
Reading score	Mean	Mean
Overall	212.3	197.4
Parent low-education subgroup	209.5	192.5
Parent high-education subgroup	215.9	203.6
Math score		
Overall	256.2	236.8
Parent low-education subgroup	252.2	231.8
Parent high-education subgroup	261.5	243.2

Source: Authors' calculations based on data from North Carolina Education Research Data Center (n.d.).

TABLE 14.2 *Regressions on Math and Reading Scores*

Sample universe	Eighth-Graders		Fourth-Graders	
	Reading Coefficient (Standard Error)	Math Coefficient (Standard Error)	Reading Coefficient (Standard Error)	Math Coefficient (Standard Error)
All				
$Losses_q$	−0.0054	−0.0065	−0.0100†	−0.0051
	(0.0052)	(0.0060)	(0.0053)	(0.0068)
$Losses_{q-1}$	−0.0114†	−0.014	−0.0049	−0.0043
	(0.0061)	(0.0091)	(0.0065)	(0.0064)
By education[a]				
High school or less				
$Losses_q$	−0.0135*	−0.0133*	−0.0110†	−0.0066
	(0.0059)	(0.0061)	(0.0065)	(0.0068)
$Losses_{q-1}$	−0.0108†	−0.013	−0.0026	0.0007
	(0.0058)	(0.0090)	(0.0066)	(0.0078)
More than high school				
$Losses_q$	0.0056	0.0012	−0.0075	−0.0005
	(0.0073)	(0.0088)	(0.0068)	(0.0097)
$Losses_{q-1}$	−0.0151†	−0.0218	−0.0054	−0.0082
	(0.0087)	(0.0133)	(0.0084)	(0.0090)

Source: Authors' calculations based on North Carolina Education Research Data Center (n.d.) and North Carolina Employment Security Commission (n.d.).

Note: Losses defined as number of workers who lost jobs among population ages twenty-five to sixty-four.

q refers to the quarter when test was taken.

All regressions include controls for losses in q−2 and q−3; coefficients are suppressed.

[a]Refers to the educational attainment of the student's parents.

†$p < 0.10$, *$p < 0.05$

TABLE 14.3 *Calibration: Combinations of Direct and Indirect Effects Consistent with a Population Average Effect of 0.013 Standard Deviation*

Spillover[a]	Direct Effect on 1 Percent of Population	Indirect Effect on 99 Percent of Population	Measured Direct Effect When Assuming Spillover = 0	Share of Population Effect Missed When Assuming Spillover = 0
0.00	1.300	0.000	1.300	0.000
0.01	0.653	0.007	0.647	0.503
0.05	0.218	0.011	0.208	0.840
0.10	0.119	0.012	0.107	0.917
0.15	0.082	0.012	0.070	0.946
0.20	0.063	0.013	0.050	0.962
0.50	0.026	0.013	0.013	0.990
0.80	0.016	0.013	0.003	0.998
1.00	0.013	0.013	0.000	1.000

Source: Authors' calculations.

[a]Spillover defined as percentage of measured direct effect that is due to effects on children of unaffected workers.

TABLE 15.1 *Time Spent with Children (Youngest Child Under Age Thirteen), by Labor-Market Category and Demographic Characteristics*

	Employed Full-Time	Employed Part-Time	Unemployed	Out of the Labor Force
Married women (N = 4,602)				
Total time	90	140	121	184
Basic care	27	49	36	61
Recreation	46	67	56	90
Education-related	12	20	22	27
Health-related	4	5	7	5
Sample size	1,926	1,106	143	1,427
Unmarried women (N = 1,863)				
Total time	76	101	97	145
Basic care	25	32	32	39
Recreation	36	49	50	78
Education-related	12	13	14	24
Health-related	3	7	1	4
Sample size	1,077	325	131	330
Married men (N = 4,000)				
Total time	54	67	98	111
Basic care	24	33	37	42
Recreation	23	22	41	47
Education-related	7	12	20	18
Health-related	1	1	1	4
Sample size	3,615	139	110	136

Source: Authors' calculations based on data from the 2003–2007 American Time Use Survey (Abraham et al. 2008).
Notes: Cell entries represent minutes per day on a weekday. Each subsample is restricted to those between the ages of twenty-five and fifty-four with a child in the house younger than age thirteen. Full-time employment is defined as thirty-five or more hours per week. There are too few unmarried men in some of these categories to be reported. All estimates represent weighted means. Time categories are defined as follows: basic care (physical care, looking after children, caring for children, organizing and planning for children); recreation (playing, sports, arts and crafts, talking and listening, attending events, waiting, picking up and dropping off); education-related (reading, homework, meetings and school conferences, homeschooling, waiting associated with education, other education-related activities); health-related (providing and obtaining medical care, waiting associated with health, other health-related activities).

TABLE 15.2 *Time Spent with Children (Youngest Child Under Age Six), by Labor-Market Category and Demographic Characteristics*

	Employed Full-Time	Employed Part-Time	Unemployed	Out of the Labor Force
Married women (N = 2,579)				
Total time	118	180	150	218
Basic care	35	63	47	74
Recreation	67	94	75	114
Education-related	11	17	15	25
Health-related	4	7	13	6
Sample size	962	588	79	950
Unmarried women (N = 819)				
Total time	94	124	126	173
Basic care	33	38	42	47
Recreation	50	65	71	106
Education-related	8	9	11	16
Health-related	3	11	2	4
Sample size	419	157	62	181
Married men (N = 2,365)				
Total time	67	71	109	122
Basic care	29	35	48	49
Recreation	31	24	48	55
Education-related	6	11	12	13
Health-related	1	1	1	5
Sample size	2,141	90	65	69

Source: Authors' calculations based on data from the 2003–2007 American Time Use Survey (Abraham et al. 2008).
Notes: Cell entries represent minutes per day on a weekday. Each subsample is restricted to those between the ages of twenty-five and fifty-four with a child in the house younger than age thirteen. Full-time employment is defined as thirty-five or more hours per week. There are too few unmarried men in some of these categories to be reported. All estimates represent weighted means. Time categories are defined as follows: basic care (physical care, looking after children, caring for children, organizing and planning for children); recreation (playing, sports, arts and crafts, talking and listening, attending events, waiting, picking up and dropping off); education-related (reading, homework, meetings and school conferences, homeschooling, waiting associated with education, other education-related activities); health-related (providing and obtaining medical care, waiting associated with health, other health-related activities).

TABLE 15.3 *Regression-Adjusted Estimates of Time Spent with Children, by Labor-Market Category and Demographic Characteristics*

	Married Women	Unmarried Women	Married Men
No covariates			
Employed full-time	−93.99	−69.42	−57.53
	(4.20)	(6.66)	(7.16)
Employed part-time	−43.03	−43.85	−44.52
	(4.89)	(8.15)	(9.74)
Unemployed	−62.43	−47.99	−12.92
	(9.95)	(10.73)	(7.02)
Full set of covariates			
Employed full-time	−85.79	−70.01	−66.63
	(3.94)	(6.53)	(6.93)
Employed part-time	−42.20	−45.80	−51.90
	(4.53)	(7.72)	(9.40)
Unemployed	−42.02	−45.08	−17.22
	(9.05)	(10.11)	(10.24)

Source: Authors' calculations based on data from the 2003–2007 American Time Use Survey (Abraham et al. 2008).
Notes: All estimates reflect differences from time use of individuals out of the labor force in the relevant demographic group and are reported in minutes per day on a weekday. Each three-cell column block represents the results from a separate regression. Covariates include educational attainment, race, ethnicity, parent's age and age squared, and the age of the youngest child in the household. Each subsample is restricted to those between the ages of twenty-five and fifty-four with a child in the house younger than age thirteen. Full-time employment is defined as thirty-five or more hours per week. There are too few unmarried men in some of these categories to be reported. Sample weights are used in all regression models. Standard errors in parentheses.

TABLE 15.4 *Impact of Labor-Market Conditions on Time Spent with Children, by Demographic Characteristics*

	Married Women	Unmarried Women	Married Men
Unemployment rate	5.19	−1.39	3.88
	(5.12)	(7.25)	(3.98)

Source: Authors' calculations based on data from the 2003–2007 American Time Use Survey (Abraham et al. 2008).
Notes: All estimates reflect coefficients on the state and year unemployment rate. Other covariates include educational attainment, race, ethnicity, parent's age and age squared, the age of the youngest child in the household, and state and year fixed effects. Each subsample is restricted to those between the ages of twenty-five and fifty-four with a child in the house younger than age thirteen. There are too few unmarried men in some of these categories to be reported. Sample weights are used in all regression models. Standard errors in parentheses.

TABLE 15.5 *Mean Child Test Scores by Maternal Labor-Force Status in Past Year*

Fraction of Weeks	Percentage of Mothers or Spouses or Partners	PIAT Math Percentile	PIAT Reading Comprehension Percentile	PIAT Reading Recognition Percentile	PPVT Percentile	BPI Percentile
Mother's unemployment experience in past year						
None	87.1	57.9	58.1	63.1	45.7	57.3
Positive but less than 0.2	8.2	49.9	51.7	55.8	36.2	65.2
Between 0.2 and 1	4.7	46.8	49.6	53.5	32.2	65.6
Sample size		30,548	25,728	30,420	18,473	34,418
Mother's employment experience in past year						
None	22.8	53.2	55.5	59.3	40.4	58.4
Between 0 and 1 (exclusive)	28.1	54.7	56.1	60.2	42.4	60.8
Full year	49.1	59.5	58.5	64.5	47.4	56.9
Sample size		30,548	25,728	30,420	18,473	34,418
Spouse's or partner's unemployment experience (if available) in last calendar year						
None	90.0	59.9	60.1	65.0	48.8	55.8
Positive but less than 0.2	3.6	54.9	57.8	60.7	42.9	65.1
Between 0.2 and 1	5.4	53.0	54.6	58.1	37.1	62.8
Sample size		21,214	17,824	21,121	12,824	24,324
Spouse's or partner's employment experience (if available) in last calendar year						
None	1.8	44.5	46.2	48.7	31.3	64.5
Between 0 and 1 (exclusive)	24.8	58.3	59.8	63.3	46.8	59.4
Full year	73.4	60.4	60.4	65.6	48.9	55.1
Sample size		20,632	17,348.0	20,580	12,632	23,744

Source: Authors' calculations, based on data from the 1986–2006 extracts from the 1979 National Longitudinal Surveys of Youth (U.S. Bureau of Labor Statistics 2010).

Notes: Percentage of mothers is based on women whose children have available PIAT math scores. These data are available for 30,548 mother or child test score observations. Sample sizes are somewhat smaller for other test scores.

TABLE 15.6 *Estimated Relationship Between Parental Labor-Force Status in Past Year and Children's Test Scores (Standard Errors in Parentheses)*

Variable	PIAT Math	PIAT Reading Comprehension	PIAT Reading Recognition	PPVT	BPI
Sample size	29,315	24,699	29,199	17,689	32,838
Ordinary least squares					
Mother's unemployment	−0.978	1.154	0.320	−3.273	6.203
in past year	(1.356)	(1.495)	(1.468)	(1.605)	(1.503)
Mother's employment	1.608	0.840	1.412	0.378	0.131
in past year	(0.579)	(0.598)	(0.626)	(0.679)	(0.661)
Father's unemployment	−1.025	−3.346	−0.601	−5.290	0.069
in past calendar year	(2.036)	(2.046)	(2.050)	(2.599)	(2.041)
Father's employment	4.146	2.577	4.683	4.924	−6.013
in past calendar year	(1.551)	(1.578)	(1.668)	(1.800)	(1.466)
Mother fixed effects					
Mother's unemployment	0.091	1.477	3.196	−0.019	−0.309
in past year	(1.260)	(1.607)	(1.311)	(1.653)	(1.144)
Mother's employment	−0.340	−1.121	−0.903	−0.909	0.813
in past year	(0.597)	(0.630)	(0.557)	(0.797)	(0.524)
Father's unemployment	−0.152	−2.146	−0.778	−0.866	0.316
in past calendar year	(1.779)	(1.729)	(1.559)	(2.320)	(1.545)
Father's employment	1.980	0.564	1.298	2.502	0.894
in past calendar year	(1.501)	(1.522)	(1.357)	(1.882)	(1.197)
Child fixed effects					
Mother's unemployment	−0.390	1.600	2.857	0.457	−0.376
in past year	(1.418)	(1.907)	(1.421)	(2.161)	(1.319)
Mother's employment	0.073	−0.677	−0.492	−0.425	0.819
in past year	(0.661)	(0.744)	(0.593)	(1.092)	(0.583)
Father's unemployment	0.468	−0.433	−0.897	−0.583	1.170
in past calendar year	(1.978)	(1.956)	(1.582)	(3.200)	(1.727)
Father's employment	1.906	0.711	0.641	1.027	0.920
in past calendar year	(1.653)	(1.680)	(1.319)	(2.527)	(1.367)

Source: Authors' calculations based on data from the 1986–2006 extracts from the 1979 National Longitudinal Surveys of Youth (U.S. Bureau of Labor Statistics 2010).

Notes: Regressions are weighted and include the following covariates (some of which drop out in the fixed-effects models): the mother's age, race, ethnicity, marital status, educational attainment, and AFQT score; child's age, birth order, and an indicator for being firstborn; and missing variable indicators for spouse's or partner's labor force status. Standard errors are clustered on the child identifier.

TABLE 15.7 *Estimated Relationship Between Parental Labor-Force Status in Past Year, Mother's Labor-Force History Since Child's Birth, and Children's Test Scores*

Variable	PIAT Math	PIAT Reading Comprehension	PIAT Reading Recognition	PPVT	BPI
Sample size	29,315	24,699	29,199	17,689	32,838
Ordinary least squares					
Mother's unemployment	0.351	2.564	2.123	0.056	2.022
in past year	(1.527)	(1.693)	(1.603)	(1.928)	(1.606)
Mother's unemployment	−5.612	−6.304	−7.396	−10.545	15.686
since child's birth	(3.994)	(4.183)	(4.372)	(4.333)	(4.354)
Mother's employment	1.395	0.858	1.372	1.365	−0.176
in past year	(0.729)	(0.750)	(0.770)	(0.915)	(0.808)
Mother's employment	0.378	−0.031	0.078	−1.589	0.488
since child's birth	(1.066)	(1.070)	(1.146)	(1.288)	(1.234)
Father's unemployment	−0.874	−3.200	−0.404	−5.097	−0.345
in past calendar year	(2.030)	(2.049)	(2.055)	(2.597)	(2.055)
Father's employment	4.101	2.536	4.642	4.943	−5.942
in past calendar year	(1.553)	(1.579)	(1.671)	(1.770)	(1.476)
Mother fixed effects					
Mother's unemployment	0.280	1.334	2.149	0.242	0.611
in past year	(1.340)	(1.711)	(1.411)	(1.810)	(1.249)
Mother's unemployment	−1.675	1.476	9.464	−1.633	−7.069
since child's birth	(5.477)	(5.902)	(5.906)	(5.169)	(4.679)
Mother's employment	−0.222	−0.884	−0.349	−0.805	1.245
in past year	(0.652)	(0.671)	(0.609)	(0.890)	(0.591)
Mother's employment	−0.740	−1.954	−4.180	−0.427	−2.245
since child's birth	(1.779)	(1.950)	(1.941)	(2.028)	(1.636)
Father's unemployment	−0.132	−2.155	−0.787	−0.857	0.387
in past calendar year	(1.778)	(1.728)	(1.567)	(2.322)	(1.542)
Father's employment	1.986	−2.155	1.381	2.498	0.910
in past calendar year	(1.503)	(1.728)	(1.359)	(1.883)	(1.195)

Source: Authors' calculations based on data from the 1986–2006 extracts from the 1979 National Longitudinal Surveys of Youth (U.S. Bureau of Labor Statistics 2010).

Notes: Standard errors in parentheses. Regressions are weighted and include the following covariates (some of which drop out in the fixed-effects models): the mother's age, race, ethnicity, marital status, educational attainment, and AFQT score; child's age, birth order, and an indicator for being firstborn; and missing variable indicators for spouse's/partner's labor force status. Standard errors are clustered on the child identifier.

TABLE 15.8 *Estimated Relationship Between Unemployment Rate and Children's Test Scores*

Variable	PIAT Math	PIAT Reading Comprehension	PIAT Reading Recognition	PPVT	BPI
All children					
Local unemployment rate	−0.0426	−0.0259	−0.096	0.035	−0.032
	(0.100)	(0.105)	(0.120)	(0.142)	(0.177)
Sample size	29,635	29,521	24,970	17,776	33,183
Children of mothers who dropped out of high school					
Local unemployment rate	−0.464	−0.208	−0.694	−0.137	0.373
	(0.218)	(0.312)	(0.324)	(0.295)	(0.317)
Sample size	5,076	5,065	4,125	3,326	5,616
Children of mothers who are high school graduates					
Local unemployment rate	−0.129	−0.422	−0.261	−0.067	−0.050
	(0.211)	(0.175)	(0.114)	(0.190)	(0.259)
Sample size	13,337	13,264	11,243	8,115	14,917
Children of mothers who attended college					
Local unemployment rate	−0.021	0.085	0.258	0.058	−0.094
	(0.158)	(0.137)	(0.146)	(0.220)	(0.342)
Sample size	11,222	11,192	9,602	6,335	12,650

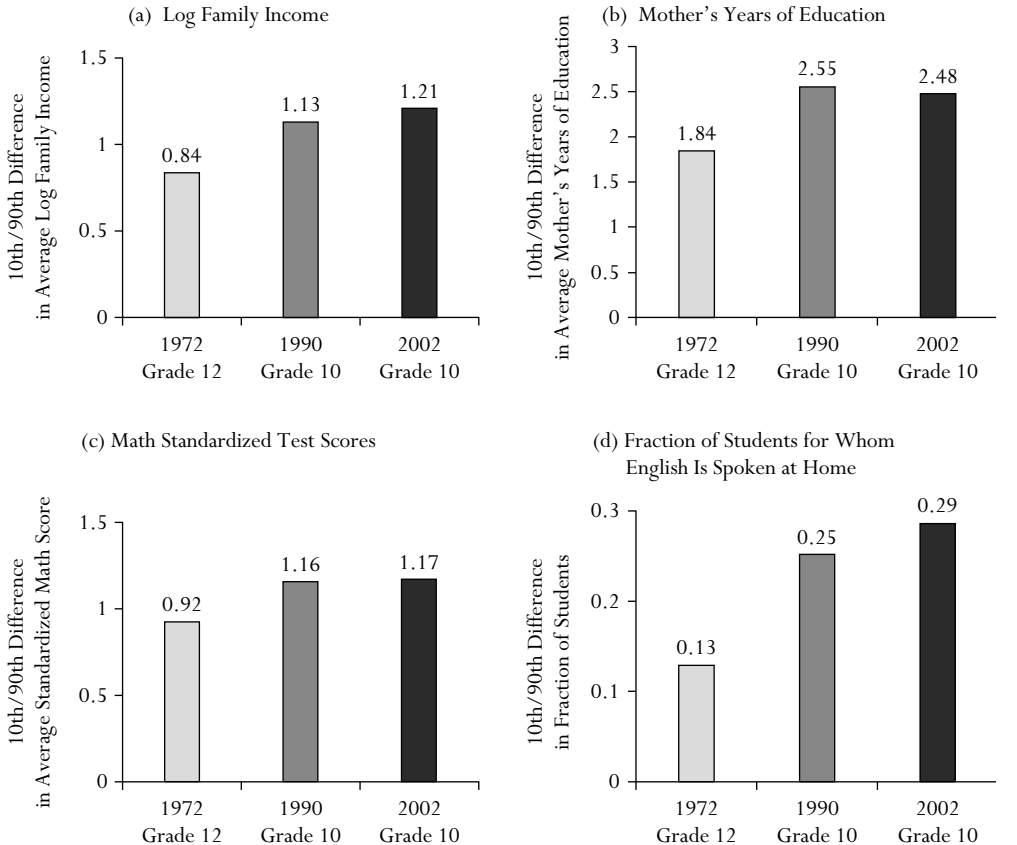
Source: Authors' calculations based on 1986–2006 extracts from the 1979 National Longitudinal Surveys of Youth.
Notes: Regressions are weighted and include the following covariates: the mother's age, race, ethnicity, marital status, educational attainment, and AFQT score; child's age, birth order, and an indicator for being firstborn; and state and year fixed effects. Standard errors are clustered on the state of residence.

TABLE 15.9 *Reasons Workers Are Unemployed at Peaks and Troughs of the Business Cycle*

	2000	2003	2006	2009
On layoff	15.0%	12.8%	13.2%	11.4%
Permanent job loss	19.6	32.4	24.1	43.0
Temporary job ended	9.6	9.9	10.2	9.8
Job leaver	13.7	9.3	11.8	6.2
Reentrant	34.5	28.2	32.0	22.3
New entrant	7.6	7.3	8.8	7.3
Unemployment rate	4.0	6.0	4.6	9.3

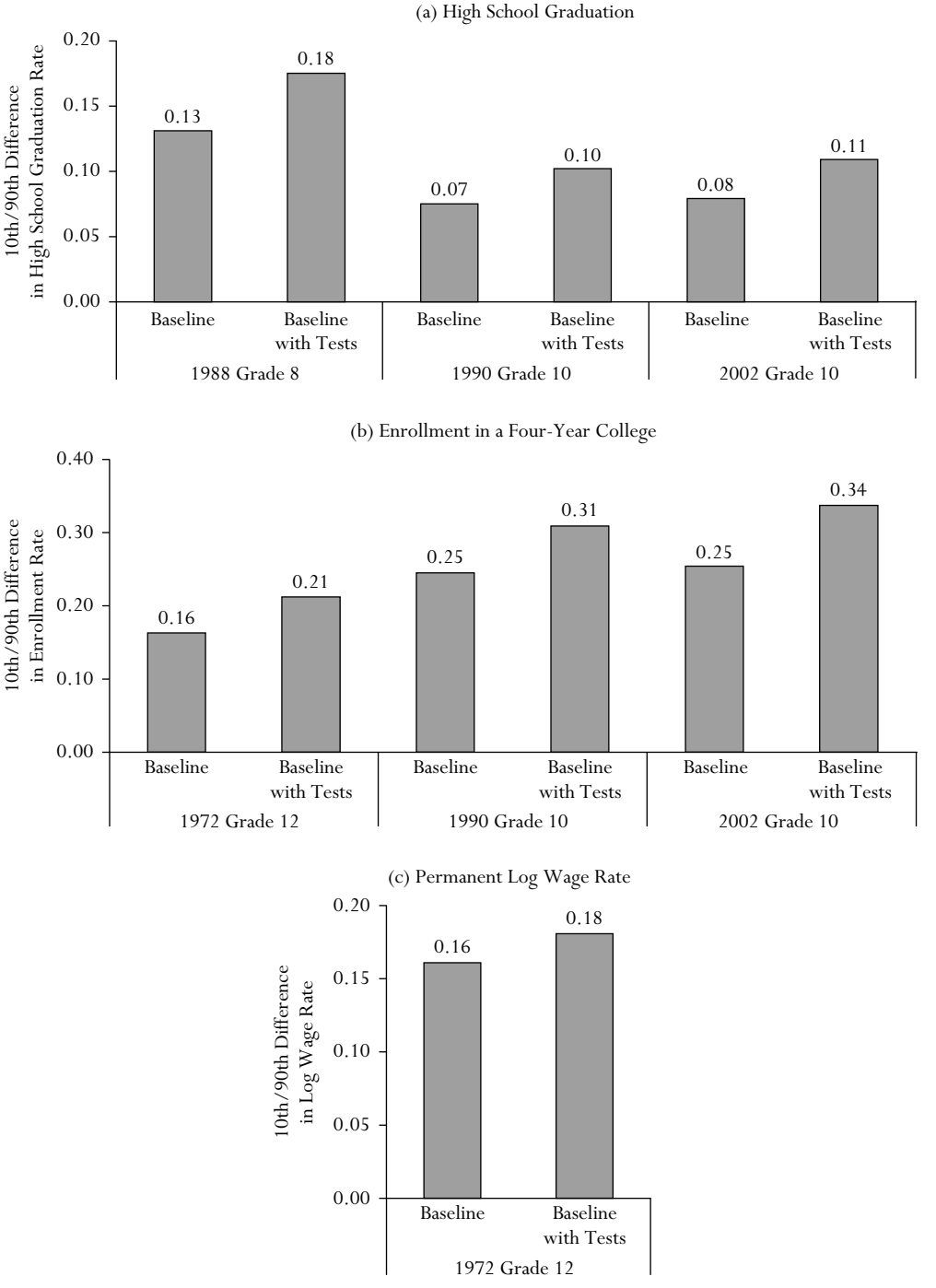
Source: Authors' compilation based on data from U.S. Bureau of Labor Statistics (various years).

FIGURE 16.1 *Estimated Difference Between the 10th and 90th Percentiles of School Averages of Student Characteristics*



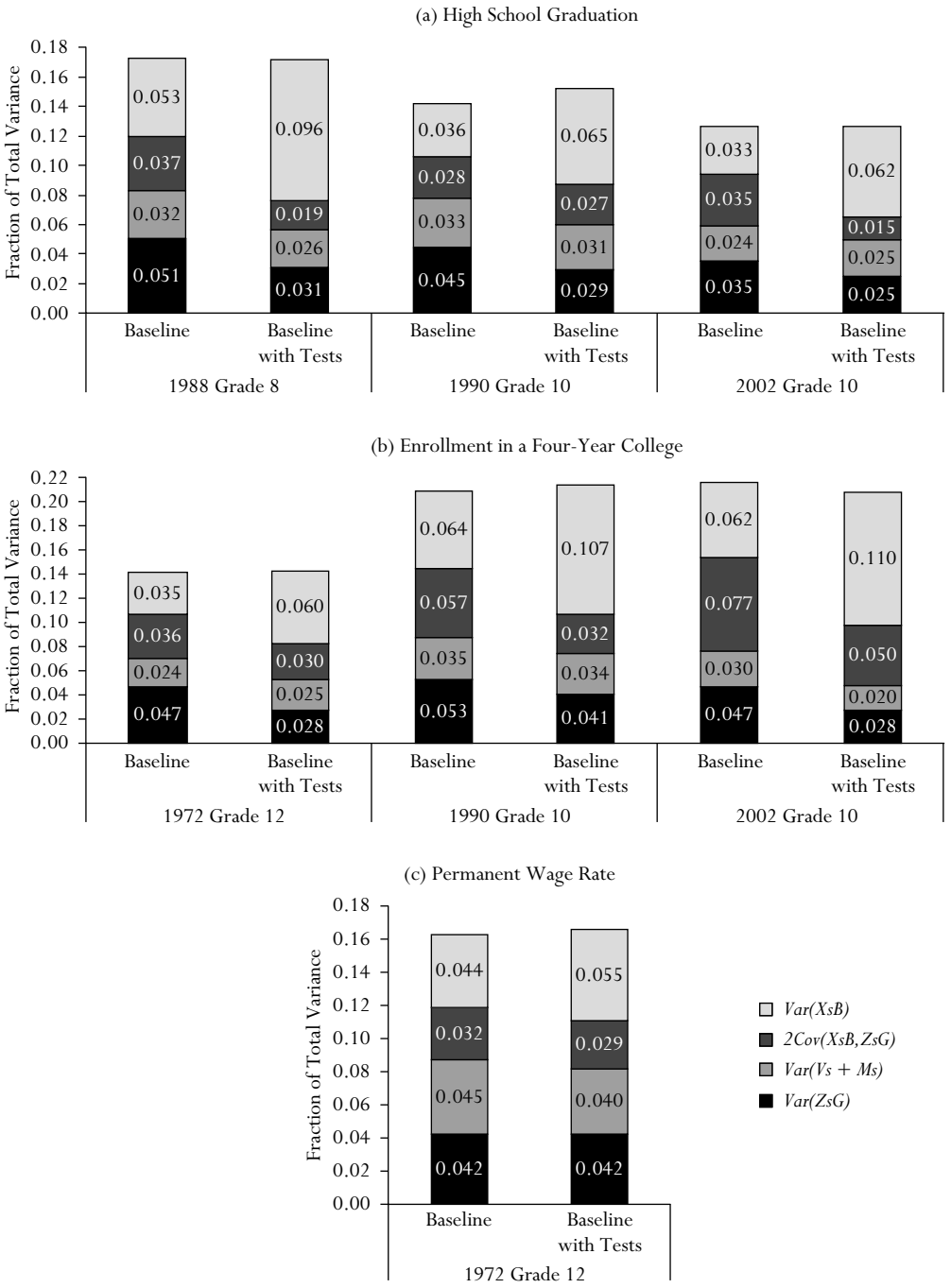
Source: Authors' calculations based on NLS72, NELS88, and ELS02 (National Center for Education Statistics 1994, 1996, 2007).

FIGURE 16.2 *Effect on School Outcomes of a Shift of the School Average of the Student Background Index (X_sB) from the 10th to the 90th Percentile*



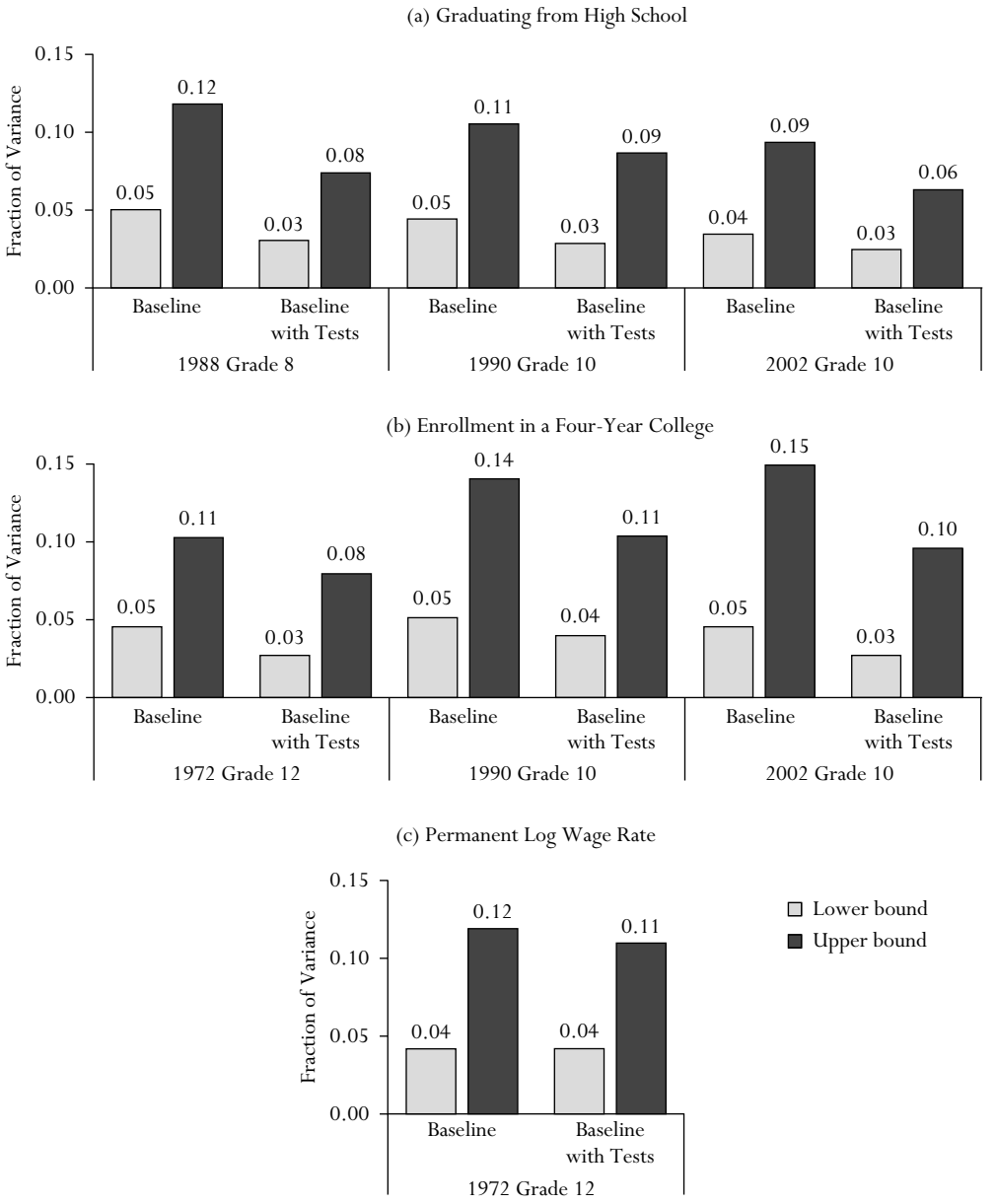
Source: Authors' calculations based on NLS72, NELS88, and ELS02 (National Center for Education Statistics 1994, 1996, 2007).

FIGURE 16.3 *Decomposition of the Between-School Variance, by Outcome*



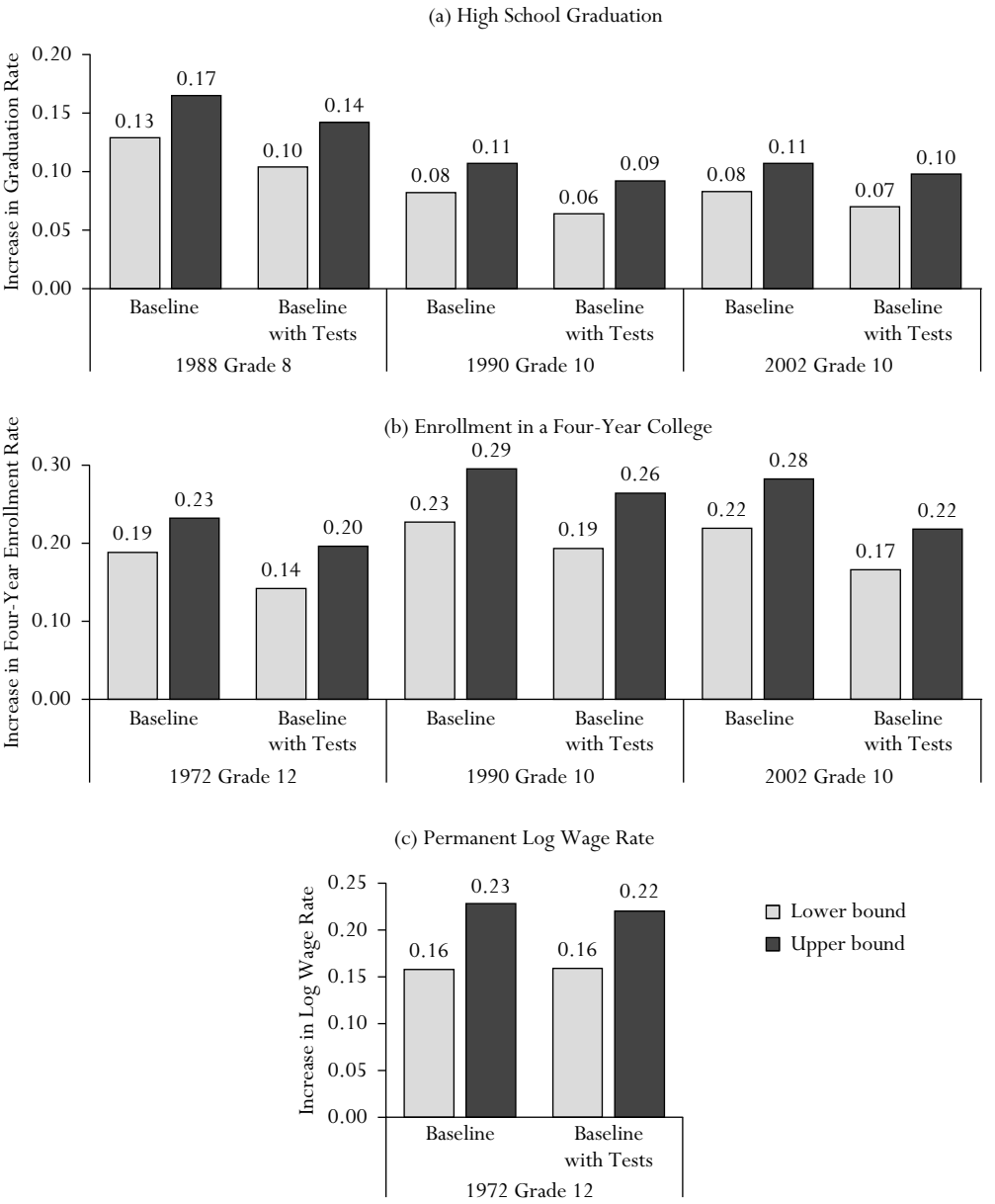
Source: Authors' calculations based on NLS72, NELS88, and ELS02 (National Center for Education Statistics 1994, 1996, 2007).

FIGURE 16.4 *Fraction of Variance of Education and Log Wages Attributable to School or Community Environment*



Source: Authors' calculations based on NLS72, NELS88, and ELS02 (National Center for Education Statistics 1994, 1996, 2007).

FIGURE 16.5 *Effect of a Shift from the 10th to 90th Percentile of School or Community Quality ($Z_sG + M_s$) on Education and Log Wages*



Source: Authors' calculations based on NLS72, NELS88, and ELS02 (National Center for Education Statistics 1994, 1996, 2007).

TABLE 16.1 *Variables Used in Baseline and Full Specifications**

	Variables
Student characteristics	Female, black, Hispanic, Asian, *immigrant*
Student ability	*Math standardized score**, *reading standardized score**
Student behavior	*Hours per week spent on homework, parents often check homework, hours per week spent on leisure reading, hours per week spent watching TV, often arrives at class without a pencil, physical fight this year*
Family background	Standardized SES number of siblings, both biological parents present, mother and male guardian present, father and female guardian present, mother only present, father only present, father's years of education, mother's years of education, mother's years of education missing, English spoken at home, log(family income), *immigrant mother, immigrant father, employed mother, employed father, parents are married*
Parental expectations	*Mother's desired years of education, father's desired years of education*
School characteristics	School is Catholic, school is private non-Catholic, student-teacher ratio, percentage teacher turnover since last year, percentage on college prep. track, percentage of teachers with master's degrees or more, average percentage daily attendance, school percentage minority, school teacher percentage minority, total school enrollment, *log(minimum teacher salary), school percentage free–reduced price lunch, school percentage LEP, school percentage special education, school percentage remedial reading, school percentage remedial math*
Neighborhood characteristics	School in urban area, school in suburban area, school in rural area, school in northeast region of United States, school in south region of United States, school in midwest region of United States, school in west region of United States

Source: Authors' compilation.

Note: Italics represent full specifications.

*Standardized test scores are also included in the tests specifications, along with all of the baseline variables.

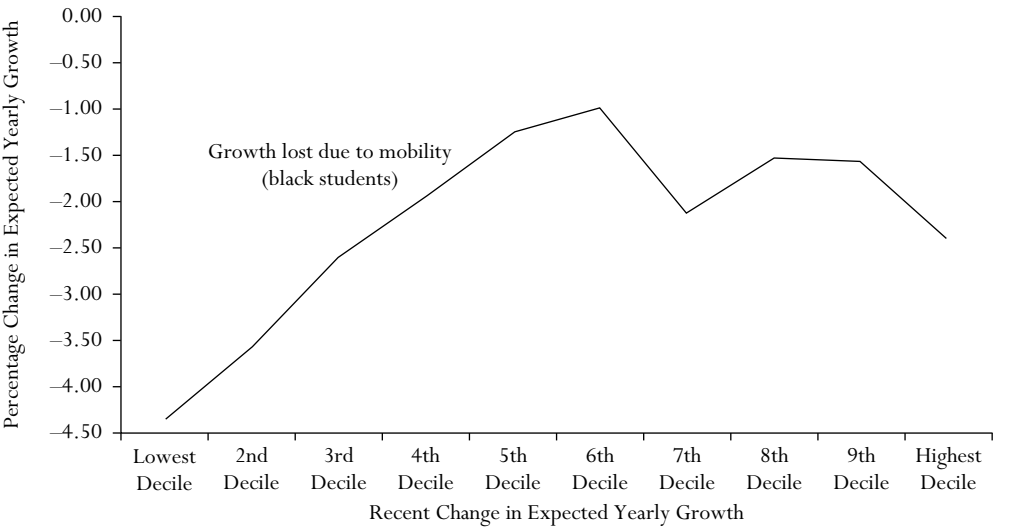
TABLE 16.2 *Summary Statistics for Selected Demographic Characteristics by Data Source*

Variable Name	Sample Mean (1)	Standard Deviation (2)	Between Variance/ Total Variance (3)	Between-School Standard Deviation (4)
	1972 12th Grade (National Longitudinal Study of the High School Class of 1972)			
Black	0.08	0.28	0.73	–
Hispanic	0.03	0.18	0.61	–
Math standard score	0.02	1.00	0.13	0.36
Log(family income)	10.90	0.71	0.21	0.33
Mother's years of education	12.33	2.05	0.12	0.72
Both biological parents present	0.77	0.42	0.07	–
English spoken at home	0.92	0.27	0.12	–
	1988 8th Grade (National Educational Longitudinal Study, 1988)			
Black	0.10	0.30	0.70	–
Hispanic	0.09	0.29	0.61	–
Math standard score	0.15	1.00	0.20	0.45
Log(family income)	10.94	0.85	0.27	0.44
Mother's years of education	13.05	2.21	0.20	1.00
Both biological parents present	0.69	0.46	0.08	–
English spoken at home	0.92	0.28	0.49	–
	2002 10th Grade (Education Longitudinal Study, 2002)			
Black	0.14	0.35	0.53	–
Hispanic	0.15	0.36	0.44	–
Math standard score	0.05	1.00	0.21	0.46
Log(family income)	10.92	0.96	0.24	0.47
Mother's years of education	13.52	2.28	0.18	0.97
Both biological parents present	0.59	0.49	0.09	–
English spoken at home	0.90	0.30	0.49	–

Source: Authors' calculations based on NLS72, NELS88, and ELS02 (National Center for Education Statistics 1994, 1996, 2007).

Note: Between school variances group using the grade 10 school (NELS88 and ELS02) or grade 12 school (NLS72). Between variance/Total variance is the fraction of the variance of the variable that is between schools. This value is also known as the intraclass correlation.

FIGURE 17.1 *Estimated Effect of Grade-Level Mobility for African American Students as a Function of Initial Mathematics Achievement; Low Achievers Experience the Largest Negative Effects, Though Effects for the Highest Achievers Are Also Negative*



Source: Authors' calculations based on data from the Consortium of Chicago School Research (de la Torre and Gwynne 2009).

TABLE 17.1 *Analytic Sample, 1995 to 2005*

Variable	African American (N = 175,132) M (SD)	European American (N = 31,281) M (SD)	Asian American (N = 9,105) M (SD)	Hispanic American (N = 97,140) M (SD)	Overall (N = 313,310[a]) M (SD)
Math achievement age eight	−1.364	−0.4363	−0.0274	−1.029	−1.128
	(1.09)	(1.20)	(1.12)	(1.04)	(1.14)
Math achievement age nine	−0.7496	0.1965	0.6351	−0.3436	−0.4872
	(1.03)	(1.14)	(1.02)	(0.971)	(1.08)
Math achievement age ten	−0.1810	0.7908	1.270	0.2888	0.0920
	(1.03)	(1.15)	(1.04)	(0.980)	(1.092)
School-level mobility	0.1082	0.0676	0.0688	0.0817	0.0950
	(0.049)	(0.039)	(0.042)	(0.040)	(0.048)
Grade-level mobility	0.0996	0.0635	0.0640	0.0757	0.0877
	(0.057)	(0.046)	(0.046)	(0.047)	(0.055)
Neighborhood concentrated disadvantage	1.630	0.7693	0.8376	1.012	1.335
	(0.534)	(0.286)	(0.266)	(0.293)	(0.568)

Source: Authors' compilation of data provided by the Consortium on Chicago School Research (de la Torre and Gwynne 2009).

[a]Overall statistics include 652 students coded as Native American.

TABLE 17.2 *Analytic Sample for 1998 Cohort*

	African American (N = 16,350) M (SD)	European American (N = 2,731) M (SD)	Asian American (N = 709) M (SD)	Hispanic American (N = 5,033) M (SD)
Math achievement age eight, 1998	−2.22 (0.96)	−1.59 (1.05)	−1.20 (1.05)	−2.10 (0.91)
Math achievement age nine, 1999	−1.59 (1.06)	−0.77 (1.67)	−0.32 (1.12)	−1.34 (0.97)
Math achievement age ten, 2000	−0.89 (1.11)	−0.03 (1.14)	0.49 (1.05)	−0.52 (1.01)
School-level mobility, 1998	0.114 (0.046)	0.072 (0.039)	0.072 (0.043)	0.089 (0.038)
School-level mobility, 1999	0.111 (0.047)	0.073 (0.040)	0.074 (0.041)	0.093 (0.044)
School-level mobility, 2000	0.109 (0.046)	0.074 (0.041)	0.074 (0.044)	0.093 (0.041)
Neighborhood disadvantage, 1998	1.64 (0.052)	0.79 (0.29)	0.84 (0.26)	1.02 (0.30)
School mean of neighborhood disadvantage, 1998	1.62 (0.044)	0.87 (0.22)	0.92 (0.22)	1.04 (0.23)
School percentage black	89.6 (23.0)	16.1 (18.4)	18.0 (17.5)	13.1 (18.5)
School percentage white	2.6 (8.5)	38.5 (21.8)	22.5 (17.0)	15.2 (16.7)
Percentage Hispanic	6.9 (16.9)	37.4 (25.3)	30.9 (19.8)	68.1 (25.7)
School percentage eligible for free or reduced lunch	89.5 (13.3)	65.3 (23.8)	72.7 (20.9)	86.6 (14.2)
School percentage limited English proficiency	3.6 (9.4)	21.6 (15.6)	26.8 (14.5)	32.8 (16.0)
School mean math achievement, 1998	−2.69 (0.46)	−2.26 (0.59)	−2.32 (0.66)	−2.59 (0.47)

Source: Authors' compilation of data provided by the Consortium on Chicago School Research (de la Torre and Gwynne 2009).

TABLE 17.3 *Neighborhood and School Correlates of Exposure to School-Level Mobility*

	Correlation with School-Level Mobility	Correlation with Mean Math Achievement
Neighborhood disadvantage, 1998	0.25	−0.49
School mean of neighborhood disadvantage, 1998	0.29	−0.57
School percentage black	0.26	−0.44
School percentage eligible for free or reduced lunch	0.48	−0.69

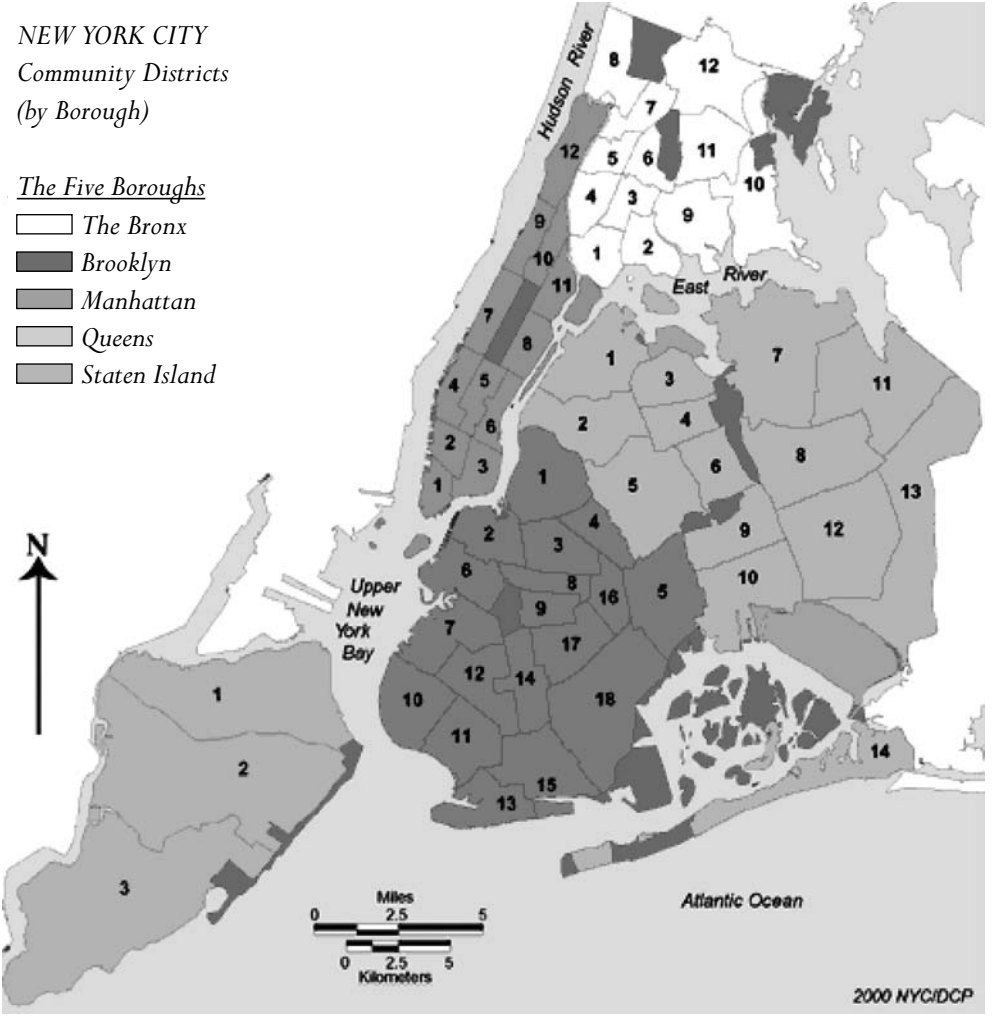
Source: Authors' calculations based on data presented in table 17.1, provided by the Consortium on Chicago School Research (de la Torre and Gwynne 2009).

TABLE 17.4 *Estimated Average Effects of School-Level Mobility, 1998 to 2000*

Year	Age of Child	Coefficient Estimate	*T*-Ratio	Fraction of a Year's Growth
1998	Eight years old	−0.572	−2.02	0.089
1999	Nine years old	−0.529	−2.22	0.083
2000	Ten years old	−0.729	−3.06	0.113

Source: Authors' calculations of data presented in table 17.2, provided by the Consortium on Chicago School Research (de la Torre and Gwynne 2009).

FIGURE 18.1 *New York City Community Districts*



Source: New York City Department of City Planning (2008).

FIGURE 18.2 *Neighborhoods Within Community Districts*

Source: New York City Department of City Planning (2011).

TABLE 18.1 *Descriptive Statistics on Active Teachers*

	Full Sample		By Population Density	
	Observations	Overall	Low Population Density	High Population Density
Proportion black	75,364	0.19	0.18	0.20
Proportion Hispanic	75,364	0.13	0.09	0.16
Proportion other, nonwhite	75,364	0.06	0.05	0.07
Proportion white	75,364	0.62	0.68	0.57
Proportion female	77,751	0.76	0.76	0.75
Age	77,755	41.27	41.79	40.76
Proportion college-recommending	71,748	0.43	0.48	0.39
Proportion teaching fellows	71,748	0.12	0.09	0.14
Proportion Teach for America	71,748	0.02	0.01	0.03
Proportion temporary license	71,748	0.22	0.20	0.23
Proportion "other" path	71,748	0.21	0.21	0.22
LAST score	53,023	248.00	246.77	249.12
Years of experience	77,755	7.51	7.97	7.06
Proportion competitive college	58,991	0.33	0.31	0.36

Source: Authors' calculations based on data from New York City Department of Education (2006–2008), not publicly available.

TABLE 18.2 *Descriptive Statistics on Schools*

	Full Sample		By Population Density	
	Observations	Overall	Low Population Density	High Population Density
Proportion elementary schools	1,363	0.54	0.61	0.48
Proportion middle schools	1,363	0.20	0.17	0.22
Proportion high schools	1,363	0.26	0.22	0.30
Percentage black	1,357	36.25	36.98	35.62
Percentage Hispanic	1,357	40.11	31.36	47.75
Percentage Asian	1,357	10.89	13.65	8.48
Percentage English language learners (ELLs)	1,295	13.24	9.98	16.24
Percentage female	1,357	49.82	49.42	50.18
Percentage qualifying for free or reduced-price lunch	1,301	69.58	63.16	75.46
Percentage level 1 (lowest) math achievement	901	14.51	12.78	16.38
Enrollment	1,357	745.65	827.78	674.05
Attendance rate	1,301	90.38	90.87	89.93
Percentage of faculty with five-plus years' experience	1,347	47.44	51.56	43.82
Suspension and enrollment	1,347	0.05	0.04	0.06
Proportion high violent crime (top quartile)	1,236	0.25	0.22	0.28

Source: Authors' calculations based on data from New York City Department of Education (2006–2008), not publicly available.

TABLE 18.3 *Descriptive Statistics on Neighborhoods*

School Neighborhood Features	Full Sample		By Population Density	
	Observation	Overall	Low Population Density	High Population Density
Median family income ($10,000)	1,320	4.35	4.64	4.07
Population density (10,000)	1,320	5.41	3.10	7.75
Percentage of population who are nonwhite	1,320	61.18	57.28	65.13
Percentage of households married couple with kids under eighteen	1,320	17.83	20.38	15.23
Percentage of housing units vacant	1,320	5.88	5.58	6.18
Percentage of population living in same house five years ago	1,320	61.40	62.97	59.80
Percentage of population age twenty-five with B.A.	1,320	9.38	8.73	10.04
Distance from school to nearest subway (miles)	1,320	0.56	0.86	0.26
High violent-crime rate (top quartile)	1,424	0.24	0.18	0.30
General amenities factor—centered	1,346	0.00	−0.56	0.52
Sum of amenities within 0.5 miles	1,347	49.16	35.00	62.49

Source: Authors' calculations based on data from U.S. Bureau of the Census (2000) and WalkScore (2011).

TABLE 18.4 *Modeling Log (Applicants per Vacancy) as a Function of School Characteristics, at the School Level*

Variables	Model 1	Model 2	Model 3	Model 4
Proportion middle schools	−0.480***	−0.454***	−0.471***	−0.472***
Proportion high schools	−0.021	0.093	0.069	0.078
Proportion "other," nonelementary schools	−0.925*	−0.787*	−0.663~	−0.695~
Enrollment (per 1,000)	−0.011*	−0.014**	−0.014**	−0.016**
Percentage qualifying for free or reduced-price lunch	−0.004*	0.001	0.001	0.002
Attendance rate	0.010	0.011	0.010	0.009
Percentage black	−0.006**	−0.006*	−0.008**	−0.004
Percentage Hispanic	−0.004~	−0.003	−0.006*	−0.002
Percentage Asian	0.004~	−0.001	0.000	0.000
Percentage ELL	−0.001	−0.003	−0.002	−0.003
Percentage female	0.002	−0.002	−0.000	−0.002
Percentage of faculty with five-plus years' experience	0.000	−0.000	0.001	0.001
Suspensions/enrollment	0.291	0.081	0.132	0.012
High-violent-crime school (top quartile)	−0.100	−0.134~	−0.102	−0.120~
Observations	1015	1013	980	980
R-squared	0.188	0.285	0.217	0.295
District indicators		x		x
Neighborhood controls			x	x

Source: Authors' calculations based on data from the New York City Department of Education (2006–2008), not publicly available.
Note: x indicates the item in the left column was included in the regression.
***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, ~$p < 0.1$

TABLE 18.5 *The Odds Ratios That a Teacher Applies for Transfer as a Function of the Neighborhood Characteristics Surrounding His or Her Current School*

	Multivariate Models			Univariate Models		
	Full Sample	Low Density	High Density	Full Sample	Low Density	High Density
Median family income/$10,000	0.917**	0.948	0.891*	0.963**	0.945*	0.977
Population density/10,000	1.050	1.093	1.232~	1.051	1.076	1.122
Population density squared	0.998	0.996	0.989	0.997	0.999	0.994
Percentage nonwhite	0.999	0.997	0.999	1.003	1.001	1.002
Percentage households married with kids	0.994	0.989	0.998	0.995	0.987~	0.999
Percentage lots vacant	1.010	1.011	1.014	1.003	1.005	1.000
Percentage same house for five years	1.004	1.001	1.009	1.006	1.004	1.011
Percentage education B.A. or more	1.016~	0.998	1.034*	0.994	0.993	0.997
Subway distance	1.143	1.270	0.942	1.065	1.114	1.054
Subway distance squared	0.972	0.953	0.878	0.976	0.968	0.779
High violent crime	0.975	0.992	1.004	1.055	1.065	1.010
Amenity factor	0.918	0.995	0.753**	0.975	1.019	0.858~
Amenity factor squared	0.985	0.999	1.081	0.982	0.994	1.073
Observations	76300	39535	36765			
χ^2	1117.685	641.2161	615.4564			

Source: Authors' calculations based on data from U.S. Bureau of the Census (2000) and WalkScore (2011) and the data in table 18.1.

Note: All models include controls for teacher and school characteristics. For univariate models, each neighborhood characteristic is estimated separately. Standard errors clustered by current school. Complete results presented in online appendix tables 18.A2a to 18.A2c.

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, ~$p < 0.1$

TABLE 18.6 *The Odds Ratios That a Teacher Applies for Transfer to a School as a Function of the Neighborhood Characteristics Around That School*

	Multivariate Models			Univariate Models		
	Full Sample	Low Density	High Density	Full Sample	Low Density	High Density
Median family income/ $10,000	1.069*	1.116*	0.978	1.081***	1.111***	1.059*
Population density/10,000	0.984	0.978	1.343***	0.943	0.969	1.354***
Population density squared	1.002	0.993	0.986***	1.005*	0.980	0.986***
Percentage nonwhite	0.998	1.002	0.993	0.993**	0.995	0.991**
Percentage households married with kids	1.000	1.001	1.000	0.997	1.015*	0.978**
Percentage lots vacant	1.000	1.020	0.995	1.007	1.010	1.000
Percentage same house for five years	0.988~	0.989	0.993	0.983***	0.988~	0.975**
Percentage education B.A. or more	0.995	1.001	1.010	1.015***	1.009	1.024***
Subway distance	1.234	0.995	5.779*	1.042	1.123	3.103
Subway distance squared	0.981	1.023	0.312	1.010	1.003	0.479
High violent crime	0.971	0.691*	1.192	0.821*	0.614***	0.9685
Amenity factor	1.029	0.816~	0.996	1.066*	0.886	1.1678*
Amenity factor squared	1.021	0.916*	1.188*	1.047*	0.976	1.142*
Observations	1540257	852171	756066			
χ^2	22307.050~	889.3649	1984.586***			

Source: Authors' calculations based on data from U.S. Bureau of the Census (2000) and WalkScore (2011) and the data in table 18.1.

Note: Only elementary-level, nonspecialist teachers are included in these analyses. All models include controls for teacher and school characteristics. For univariate models, each neighborhood characteristic is estimated separately. Standard errors clustered by school to which teachers applied. Complete results are presented in appendix tables 18.A3a to 18.A3c.

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, ~$p < 0.1$

TABLE 18.7 *Modeling Whether and Where a Teacher Applies to Transfer as a Function of Different Kinds of Amenities (Odds Ratios Presented)*

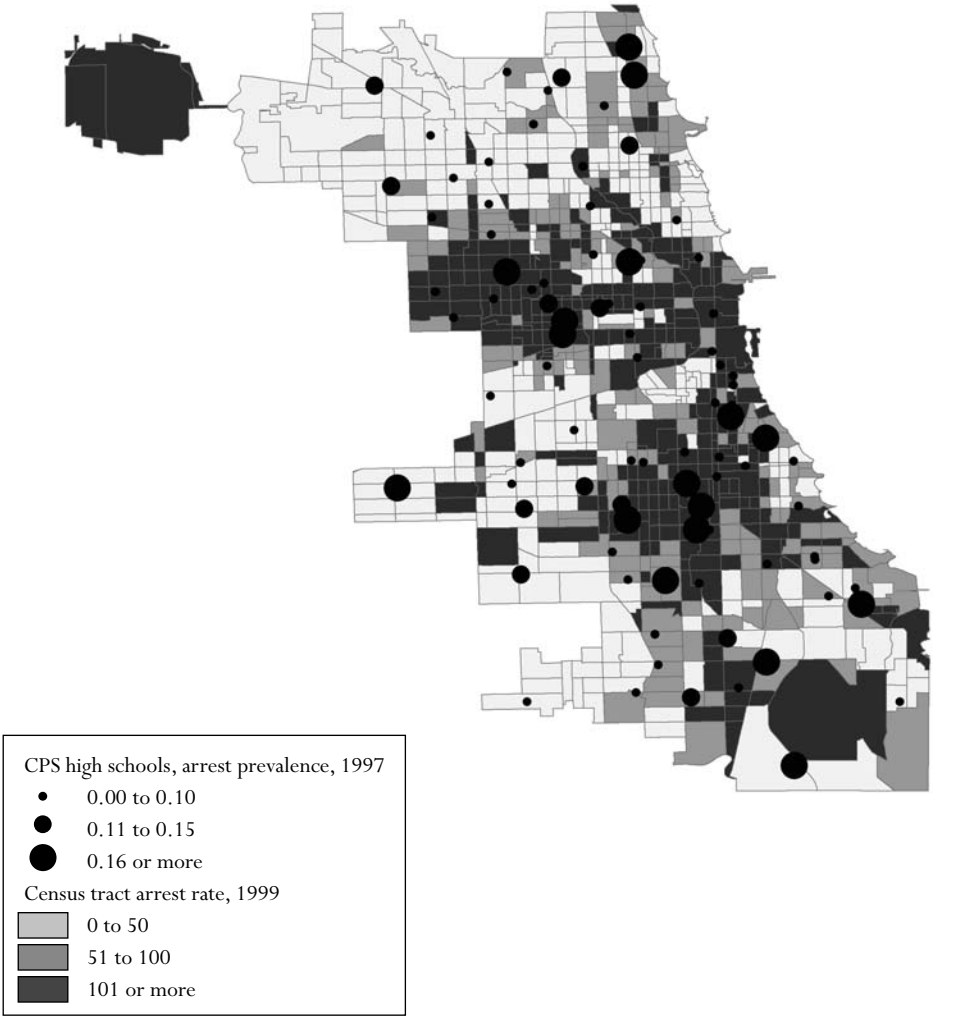
	Whether Teacher Applies for Transfer			Where Teacher Applies for Transfer		
Kinds of Amenities	Overall	Low Density	High Density	Overall	Low Density	High Density
Leisure	0.940	0.954	0.889~	1.046	0.921	1.154*
	(0.040)	(0.050)	(0.063)	(0.050)	(0.068)	(0.072)
Practical	0.947	1.023	0.784**	0.962	0.992	0.886~
	(0.038)	(0.045)	(0.068)	(0.046)	(0.057)	(0.059)
Residential	1.008	0.997	1.072	1.013	1.001	0.965
	(0.028)	(0.026)	(0.089)	(0.039)	(0.046)	(0.090)
Community	0.930*	0.947	0.911~	1.090*	0.988	1.076
	(0.029)	(0.040)	(0.045)	(0.041)	(0.062)	(0.053)
Neighborhood controls	x	x	x	x	x	x
School controls	x	x	x	x	x	x
Teacher controls	x	x	x	x	x	x

Source: Authors' calculations based on data from U.S. Bureau of the Census (2000) and WalkScore (2011) and the data in table 18.1.

Note: x indicates item in left column was included in the regression.

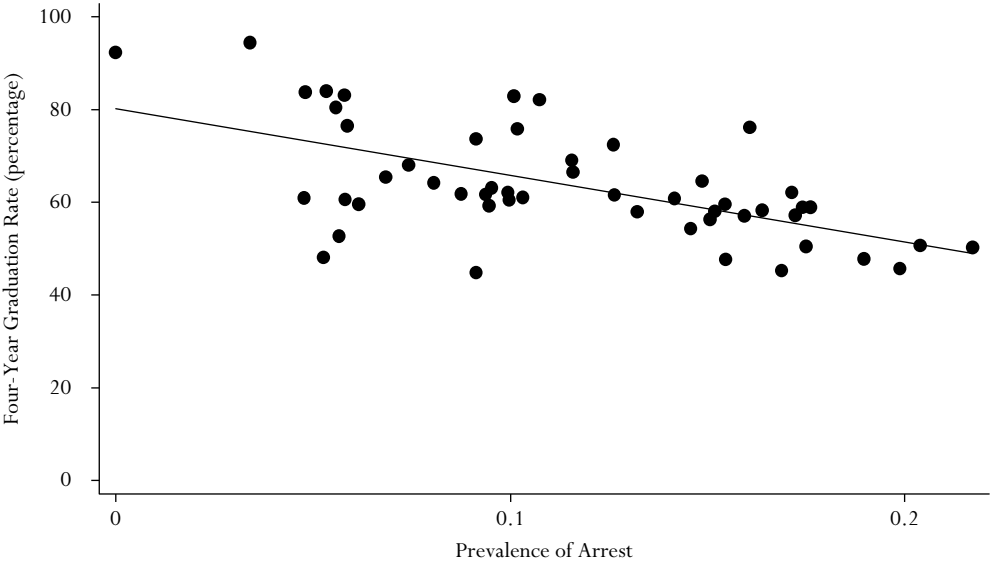
***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, ~$p < 0.1$

FIGURE 19.1 *The Distribution of Arrests in Chicago Neighborhoods and Chicago Public Schools*



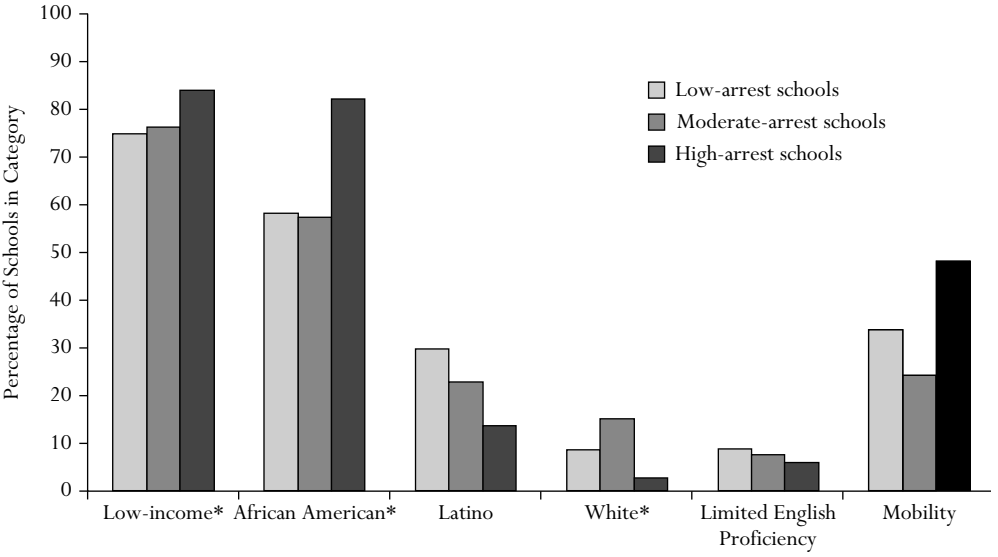
Source: Authors' compilation, based on data from the Consortium on Chicago School Research (1997a) and Chicago Police Department (2008).

FIGURE 19.2 *Association Between Chicago Public Schools High School Graduation Rates and Prevalence of Arrest, 1997*



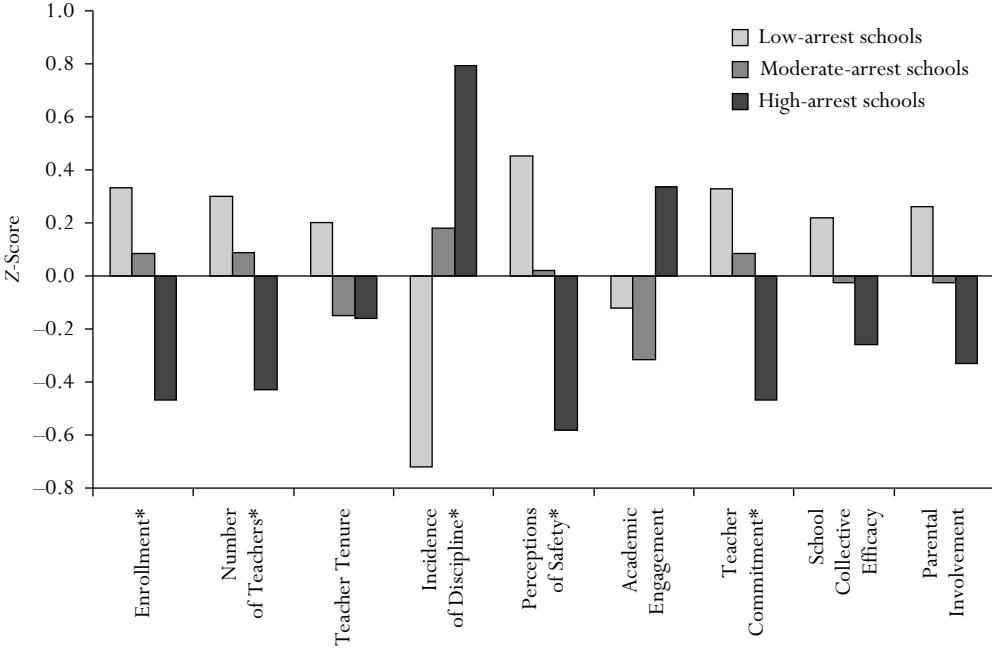
Source: Authors' compilation, based on data from Chicago Public Schools (1998) and Consortium on Chicago School Research (1997a).

FIGURE 19.3 *Demographic Characteristics of Chicago Public Schools High Schools, by Prevalence of Arrest*



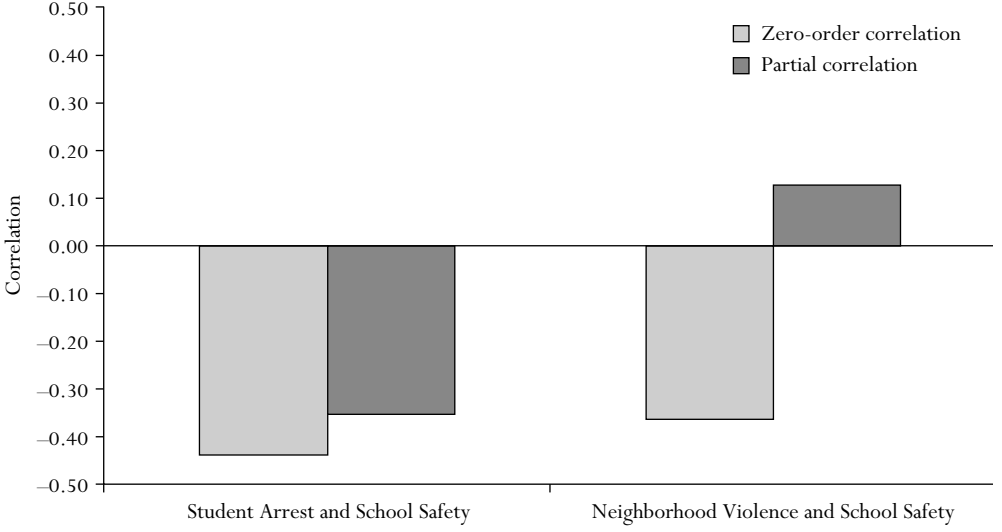
Source: Authors' compilation based on data from Consortium on Chicago School Research (1997a).
*Differences between schools are statistically significant.

FIGURE 19.4 *Structural and Social Organizational Characteristics of Chicago Public Schools High Schools, by Prevalence of Arrest*



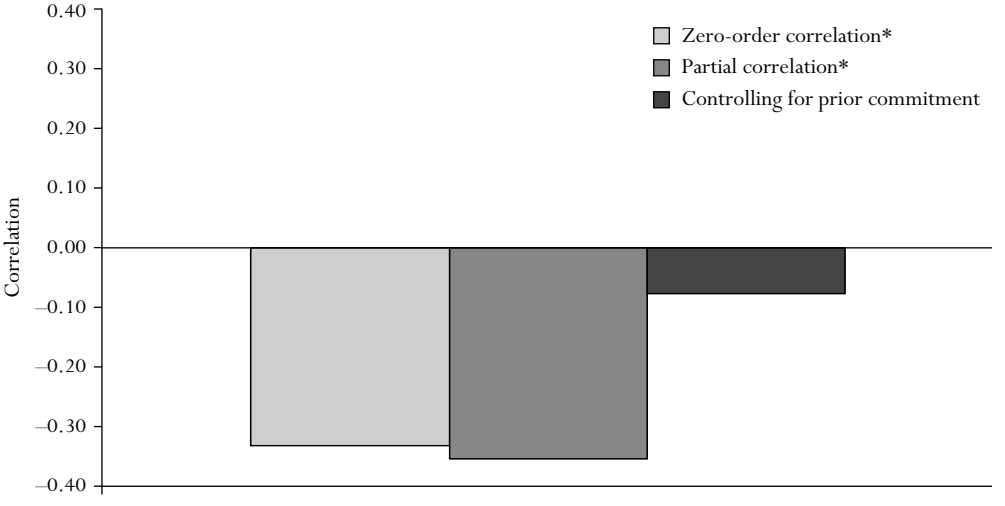
Source: Authors' compilation based on data from Consortium on Chicago School Research (1997a, 1997b).
*Differences between schools are statistically significant.

FIGURE 19.5 *Correlation Between Prevalence of Student Arrest and School Safety, and Neighborhood Violence and School Safety*



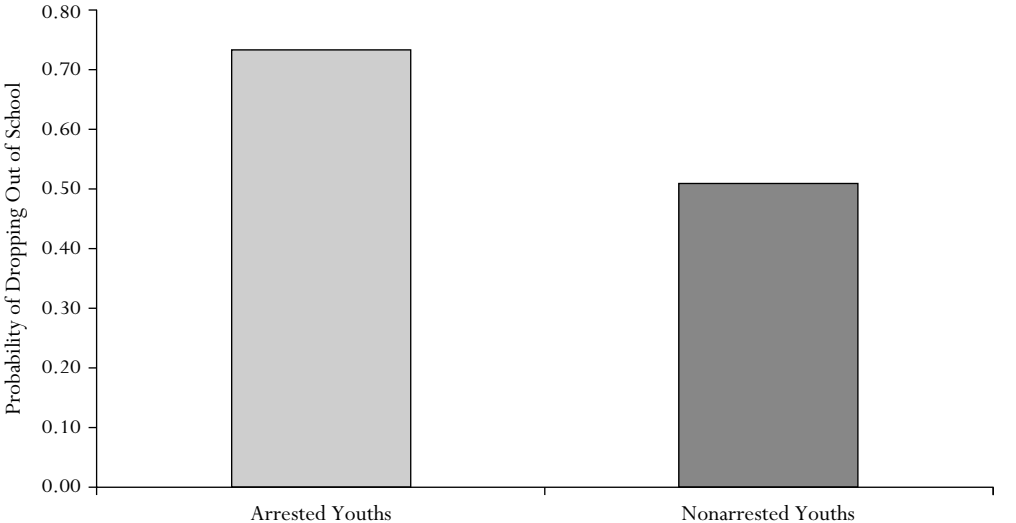
Source: Authors' compilation based on data from Consortium on Chicago School Research (1997a, 1997b); Project on Human Development in Chicago Neighborhoods (1995a, 1995b); and Chicago Police Department (1998).
Note: All associations are significantly different from zero ($p < 0.01$) except for the partial correlation between neighborhood violence and school safety.

FIGURE 19.6 *Correlation Between Prevalence of Student Arrest and Teacher Commitment*



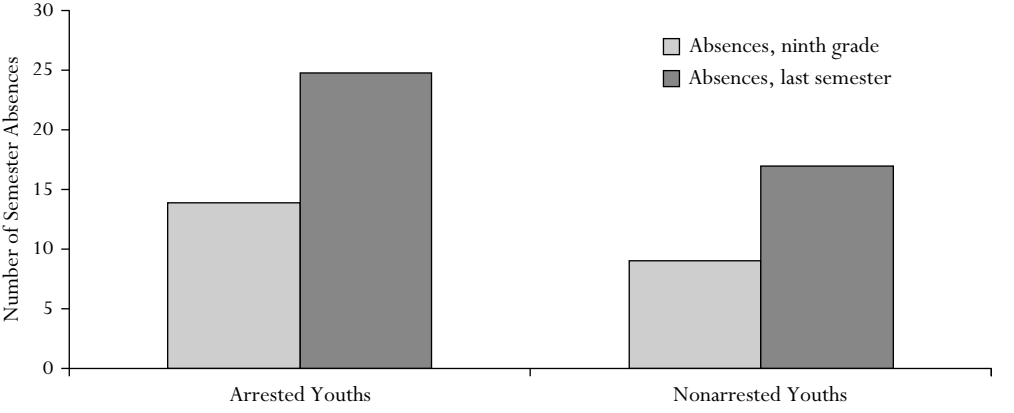
Source: Authors' compilation based on data from Consortium on Chicago School Research (1997a, 1997b).
*Correlation between teacher commitment and arrest is significantly different from zero.

FIGURE 19.7 *Probability of Dropping Out of Chicago Public Schools Following Arrest, Individually Matched Arrested and Nonarrested Youths*



Source: Authors' compilation based on data from Project on Human Development in Chicago Neighborhoods (1995a, 1995b); Illinois State Police (2003); Chicago Police Department (2003); and Chicago Public Schools (1998, 2006).
Note: Differences in dropout between groups are statistically significant.

FIGURE 19.8 *Changes in Groups' School Absences, Ninth Grade to the Last Semester of Enrollment*



Source: Authors' compilation based on data from Project on Human Development in Chicago Neighborhoods (1995b); Illinois State Police (2003); Chicago Police Department (2003); and Chicago Public Schools (2006).
Note: The increases in the average number of absences from ninth grade to the last semester of enrollment between arrested and nonarrested youths are not statistically different.

TABLE 19.1 *Descriptive Characteristics of Arrested and Nonarrested Youths, 1995*

Youth Characteristics	Means		*T*-Statistic of Difference
	Arrested	Nonarrested	
Male	0.71	0.41	5.26***
Race-ethnicity			
African American	0.72	0.40	5.58***
Mexican	0.18	0.32	−2.74**
Puerto Rican or other Latino	0.08	0.13	−1.34
White	0.01	0.11	−2.80**
Other race-ethnicity	0.01	0.03	−1.13
Cohort 12 (versus 15)	0.54	0.51	0.62
Age (Wave 1)	13.52	13.63	−0.61
IQ	96.59	99.39	−1.68
Student mobility	2.79	2.60	1.25
Truancy	0.02	0.03	−0.13
Ever retained in grade	0.27	0.14	3.34***
Ever special education	0.50	0.26	4.84***
Temperament			
Lack of control	2.74	2.42	2.87**
Lack of persistence	2.66	2.39	2.66**
Decision time	3.13	2.97	1.63
Sensation seeking	2.94	2.73	2.26*
Activity	3.70	3.59	1.09
Emotionality	2.88	2.69	1.54
Sociability	3.71	3.68	0.33
Shyness	2.41	2.48	−0.66
Problem behavior			
Withdrawal	3.56	3.68	−0.43
Somatic problems	3.89	4.08	−0.52
Anxiety or depression	4.87	5.92	−1.87
Aggression	9.79	8.94	1.17
Internalization	12.08	13.28	−1.24
Externalization	14.04	12.46	1.62
Violent offending	0.70	0.12	5.28***
Property offending	0.23	0.07	2.28*
Drug distribution	0.21	−0.06	3.72***
Marijuana use	1.30	1.14	1.81

Source: Authors' compilation based on data from Project on Human Development in Chicago Neighborhoods (1995b); Illinois State Police (2003); and Chicago Police Department (2003).
Note: Sample from wave 1 of the PHDCN-LCS.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

TABLE 19.2 *Family and Peer Characteristics of Arrested and Nonarrested Youths, 1995*

Characteristics	Means		*T*-Statistic of Difference
	Arrested	Nonarrested	
Family characteristics			
Immigrant generation			
First	0.07	0.13	−1.66
Second	0.15	0.30	−2.81**
Third or higher	0.78	0.57	3.72***
Family socioeconomic status	−0.02	−0.10	0.53
Married parents	0.31	0.48	−2.96**
Length of residence	5.45	5.60	−0.28
Extended family in household	0.28	0.20	1.77
Num. of children in household	3.73	3.41	1.54
Family supervision	−0.07	−0.09	0.19
Family control	60.19	58.30	1.97*
Family conflict	49.51	47.76	1.50
Family religiosity	61.82	60.82	1.25
Family support	−0.11	−0.04	−0.62
Paternal criminal record	0.11	0.11	−0.19
Paternal substance use	0.19	0.14	1.14
Maternal substance use	0.13	0.03	4.00***
Maternal depression	0.15	0.17	−0.33
Parent-child conflict	0.25	−0.08	3.78***
Home environment			
Access to reading	−0.26	−0.08	−0.88
Developmental stimulation	−0.02	−0.07	0.39
Parental warmth	−0.16	−0.09	−0.35
Hostility	0.18	0.52	−0.64
Parental verbal ability	0.07	−0.01	0.40
Family outings	0.02	−0.14	1.78
Home interior	−0.14	−0.19	0.24
Home exterior	−0.19	−0.10	−0.61
Peer characteristics			
Friend support	0.02	0.04	−0.29
Peer attachment	−0.10	0.03	−1.57
Peer school attachment	0.13	0.04	1.79
Peer pressure	0.21	0.08	0.96
Deviance of peers	0.46	0.04	4.63***

Source: Authors' compilation based on data from Project on Human Development in Chicago Neighborhoods (1995b); Illinois State Police (2003); and Chicago Police Department (2003).
Note: Sample from wave 1 of PHDCN-LCS.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

TABLE 19.3 *Neighborhood and School Characteristics of Arrested and Nonarrested Youths, 1995*

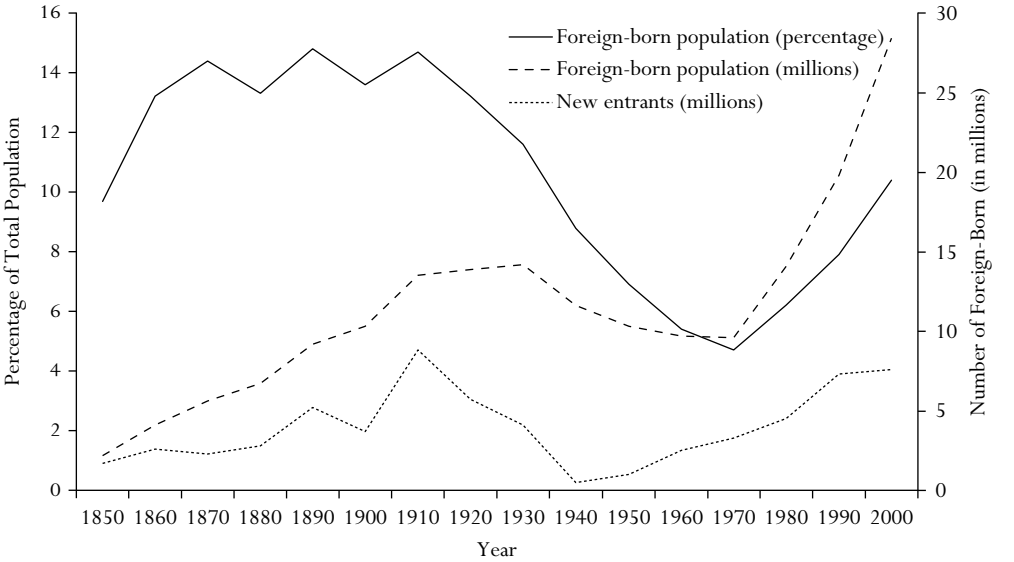
	Means		*T*-Statistic of Difference
	Arrested	Nonarrested	
Neighborhood			
Percentage African American	54.89	36.80	3.99***
Percentage Latino	25.66	32.08	−1.89
Concentrated poverty	0.35	−0.06	4.87***
Concentrated affluence	−0.33	−0.28	−0.72
Immigrant concentration	0.12	0.38	−2.08*
Residential stability	−0.08	0.02	−0.88
Neighborhood organizations	−0.28	−0.43	2.29*
Neighborhood youth services	−1.65	−1.81	1.87
Legal cynicism	2.54	2.52	1.63
Neighborhood disorder	1.95	1.87	2.48*
Tolerance of deviance	4.21	4.24	−1.76
Collective efficacy	3.81	3.88	−2.63**
Resident victimization	0.44	0.42	0.58
LN (1995 violent crime rate)	9.29	8.94	5.26***
School			
Percentage African American	65.72	48.20	4.22***
Percentage Latino	25.42	36.03	−2.99**
Enrollment	1,462.64	1,879.60	−4.51***
Poverty	79.54	76.74	1.57
School mobility	59.29	31.04	2.74**
Percentage with English proficiency	9.55	12.27	−1.82

Source: Authors' compilation based on data from Project on Human Development in Chicago Neighborhoods (1995a, 1995b); Illinois State Police (2003); Chicago Police Department (2003); Chicago Public Schools (1998); and U.S. Bureau of the Census (1990).

Note: Sample from wave 1 of PHDCN-LCS.

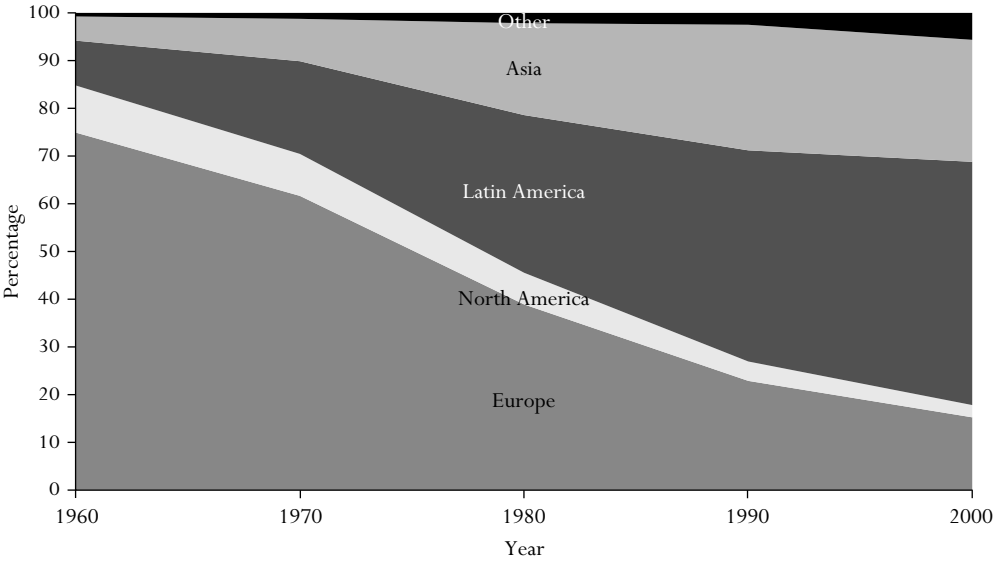
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

FIGURE 20.1 *Trends in U.S. Immigration, 1850 to 2000*



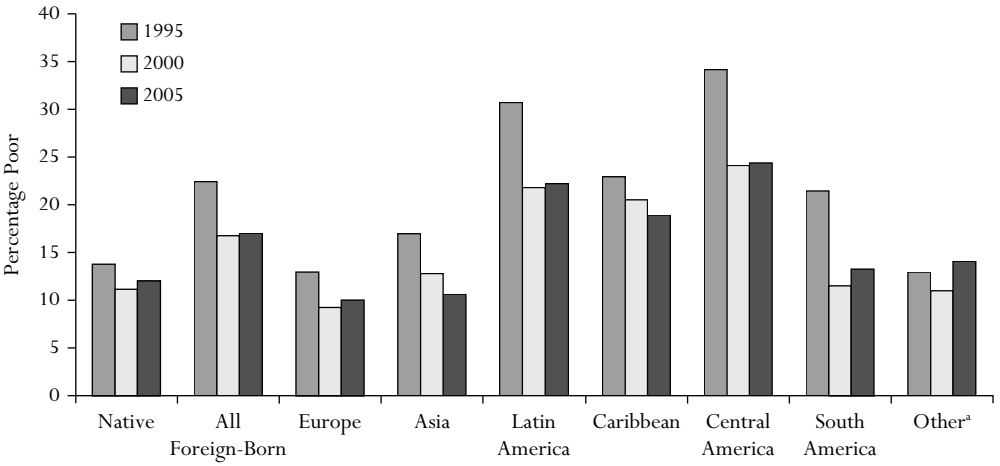
Source: Authors' adaptation of Schmidley (2001, figures 1.1 and 1.2).

FIGURE 20.2 *Immigrants' Region of Origin, 1960 to 2000*



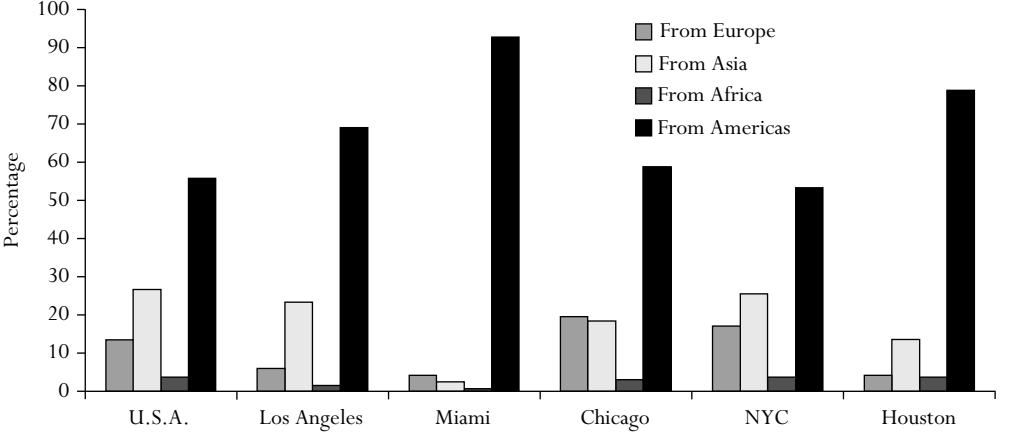
Source: Authors' adaptation of Schmidley (2001, figure 2.2).

FIGURE 20.3 *Poverty Rates, by Region of Origin, 1995, 2000, and 2005*



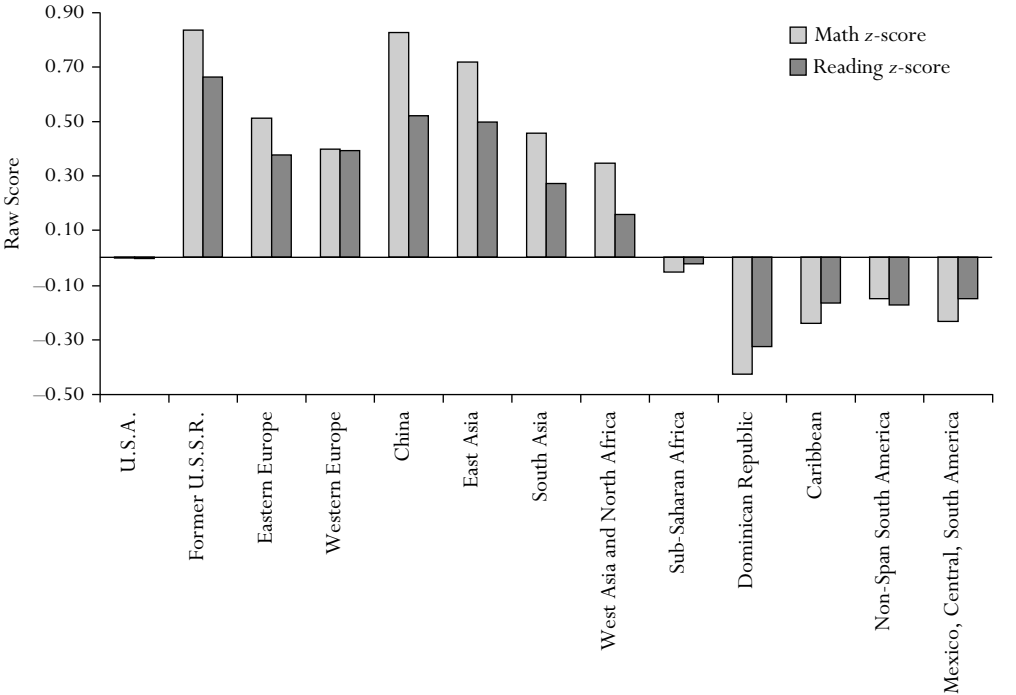
Source: Authors' compilation, based on U.S. Bureau of the Census (1995, 2000, 2005).
[a]Includes immigrants from Africa, Oceania, and North America.

FIGURE 20.4 *Immigrant Concentrations, Nationally and for Five Large School Districts, 2006 Estimates*



Source: Authors' compilation, based on U.S. Bureau of the Census (2006, school-district-level estimates).

FIGURE 20.5 *Raw Scores, NYC Third- Through Eighth-Graders, 2000*



Source: Authors' calculations, based on data from the year 2000 from NYC Department of Education (1997–2002).
Note: See online appendix table 20.A8 for sample sizes among test takers from each subgroup. Raw test scores for students from the United States are slightly negative but essentially zero.

TABLE 20.1 *NYC Third-Through Eighth-Grade Student Characteristics, by Race and Nativity, 2000 (Percentages)*

	Overall		White		Black		Hispanic		Asian	
	NB	FB	NB	FB	NB	FB	NB	FB	NB	FB
Female	50.8	49.6	49.1	48.5	51.8	51.6	51.0	50.1	48.4	47.8
Poor	76.4	80.7	34.7	55.9	84.5	85.8	87.9	92.9	62.5	74.6
Resource room	6.6	3.3	7.2	3.1	6.2	3.7	7.7	3.6	3.0	2.6
LEP	5.3	21.6	0.6	5.5	0.8	4.2	12.5	44.4	2.7	13.4
English not spoken at home	37.7	72.1	16.4	92.1	5.2	14.0	73.2	94.9	70.0	75.4
Observations	343,821	63,852	54,873	10,766	132,087	13,988	127,838	23,829	29,023	15,269

Source: Authors' calculations using data from the year 2000 from New York City Department of Education (1997–2002).
Note: NB denotes native-born and FB denotes foreign-born.

TABLE 20.2 *Exposure Index:[a] Origin of Foreign-Born Schoolmates, New York City Public Schools, by Race and Nativity, 2000 (Percentages)*

	Overall		White		Black		Hispanic		Asian	
Region of Birth	Native-Born	Foreign-Born	Native-Born	Foreign-Born	Native-Born	Foreign-Born	Native-Born	Foreign-Born	Native-Born	Foreign-Born
Former U.S.S.R.	7.0	10.3	20.0	37.8	3.3	2.9	3.8	2.7	13.2	9.7
Other Eastern Europe	3.7	3.5	9.4	8.7	1.3	1.0	3.5	2.5	4.3	3.6
Western Europe	3.6	2.6	6.8	4.1	3.4	2.8	2.5	1.7	3.7	2.8
China	4.8	6.5	8.5	7.7	1.7	1.1	3.8	3.2	16.6	15.8
East Asia	4.4	4.2	9.2	4.6	2.6	2.4	3.1	2.9	8.8	7.4
South Asia	6.0	7.7	8.7	9.1	3.6	2.9	5.8	5.9	12.4	13.9
West Asia or North Africa	2.3	2.2	5.3	4.4	1.3	1.0	1.7	1.4	3.4	3.0
Sub-Saharan Africa	3.9	2.4	2.2	1.3	5.5	4.4	3.3	2.3	1.7	1.4
Dominican Republic	21.3	20.2	5.2	4.3	18.1	11.1	34.8	40.3	7.2	8.5
Other Caribbean	19.9	17.1	6.7	4.9	36.7	50.1	10.9	8.5	8.1	8.9
Non-Spanish South America	6.1	6.4	2.5	1.7	8.9	11.0	4.8	4.5	5.8	8.3
Mexico, Central and South America	16.2	16.5	15.2	11.2	12.1	8.6	21.3	23.6	14.5	16.3
Observations	343,584	63,852	54,866	10,766	131,924	13,988	127,774	23,829	29,020	15,269

Source: Authors' calculations using data from the year 2000 from New York City Department of Education (1997–2002).

[a]The exposure indices report the share of a school's population belonging to a certain group for an average student of particular nativity and race.

TABLE 20.3 *Math and Reading Performance, by School's Percentage Immigrant, by Nativity and Race, 1997 to 2002*

				Native-Born			
	All	Foreign-Born	Native-Born	Black	Hispanic	Asian	White
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Math							
School's percentage immigrant	0.0043***	0.0058***	0.0036***	0.0005***	0.0016***	−0.0035***	−0.0057***
Standard error	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0001)	(0.0002)	(0.0002)
Observations	2,241,280	357,899	1,883,381	724,282	695,543	157,324	306,231
R-squared	0.002	0.005	0.001	0.001	0.000	0.002	0.004
Reading							
School's percentage immigrant	0.0018***	0.0030***	0.0009***	0.0010***	0.0006***	−0.0055***	−0.0067***
Standard error	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0001)	(0.0002)	(0.0002)
Observations	2,113,801	303,144	1,810,657	704,351	655,774	152,536	297,995
R-squared	0.000	0.001	0.000	0.000	0.000	0.005	0.005

Source: Authors' calculations using data from New York City Department of Education (1997–2002).
Note: All models include year dummies. Robust standard errors in parentheses.
***$p < 0.01$.

TABLE 20.4 *Math Performance, by School's or Grade's Percentage Immigrant, by Nativity and Race, 1997 to 2002*

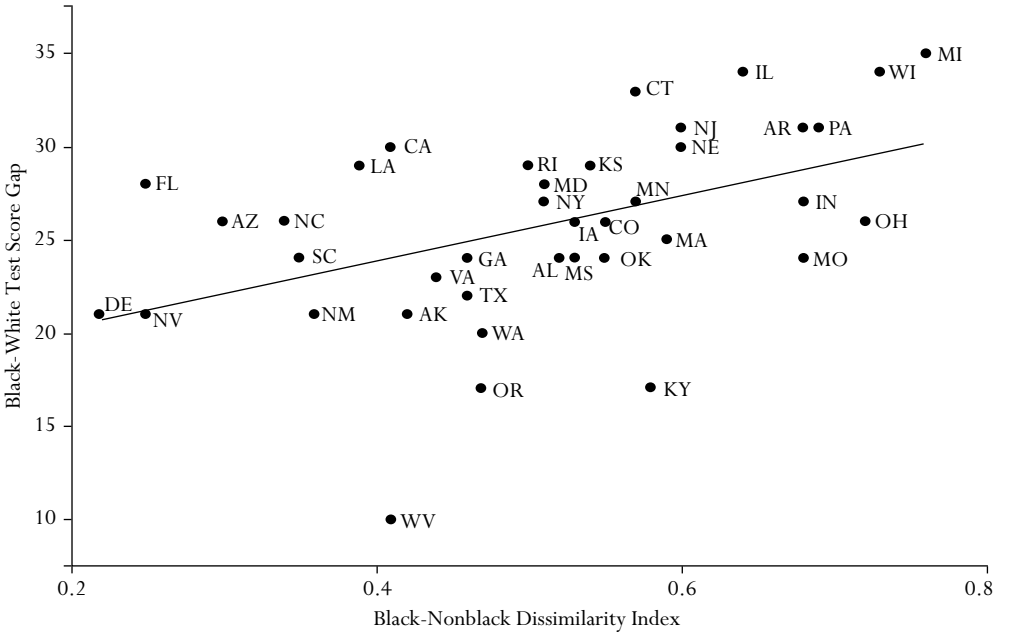
				Native-Born			
	All (1)	Foreign-Born (2)	Native-Born (3)	Black (4)	Hispanic (5)	Asian (6)	White (7)
School fixed effects							
School's percentage immigrant	−0.0046***	−0.0076***	−0.0035***	−0.0035*	−0.0029**	−0.0000	−0.0036**
Standard error	(0.0011)	(0.0016)	(0.0011)	(0.0019)	(0.0013)	(0.0018)	(0.0017)
Number of fixed effects	1,090	1,086	1,090	1,087	1,089	1,046	1,034
R-squared	0.195	0.223	0.194	0.106	0.093	0.175	0.147
Grade school fixed effects							
Grade's percentage immigrant	−0.0011**	−0.0048***	−0.0003	−0.0006	−0.0001	0.0011	−0.0002
Standard error	(0.0006)	(0.0009)	(0.0005)	(0.0009)	(0.0006)	(0.0011)	(0.0009)
Number of fixed effects	3,732	3,671	3,731	3,705	3,709	3,345	3,234
R-squared	0.202	0.233	0.202	0.117	0.103	0.191	0.157
Observations	2,241,280	357,899	1,883,381	724,282	695,543	157,324	306,231

Source: Authors' calculations using data from New York City Department of Education (1997–2002).

Note: All models include year dummies. Test scores measured as z-scores. A grade school fixed effect allows each grade in every school to have a unique intercept. This means that the intercept for third-graders in school A will be different from the intercept for fourth-graders in school A and for third-graders in school B. Robust standard errors, adjusted for within-school clusters, in parentheses.

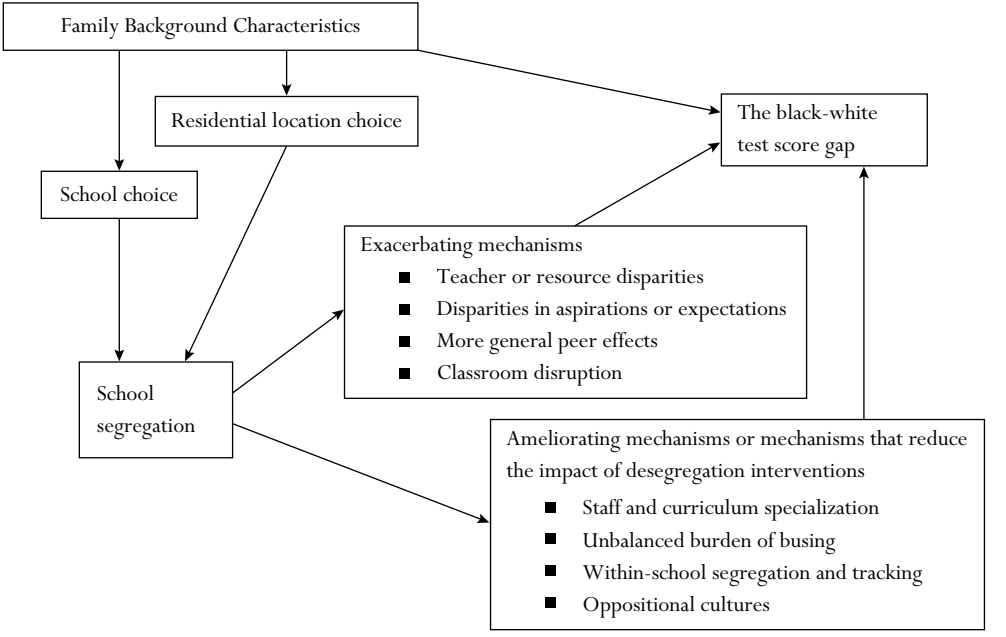
***$p < 0.01$, **$p < 0.05$, *$p < 0.1$

FIGURE 21.1 *State-Level Correlation Between Segregation in School Districts and the Black-White Gap in Fourth-Grade National Assessment of Educational Progress Math Test Scores, 2003*



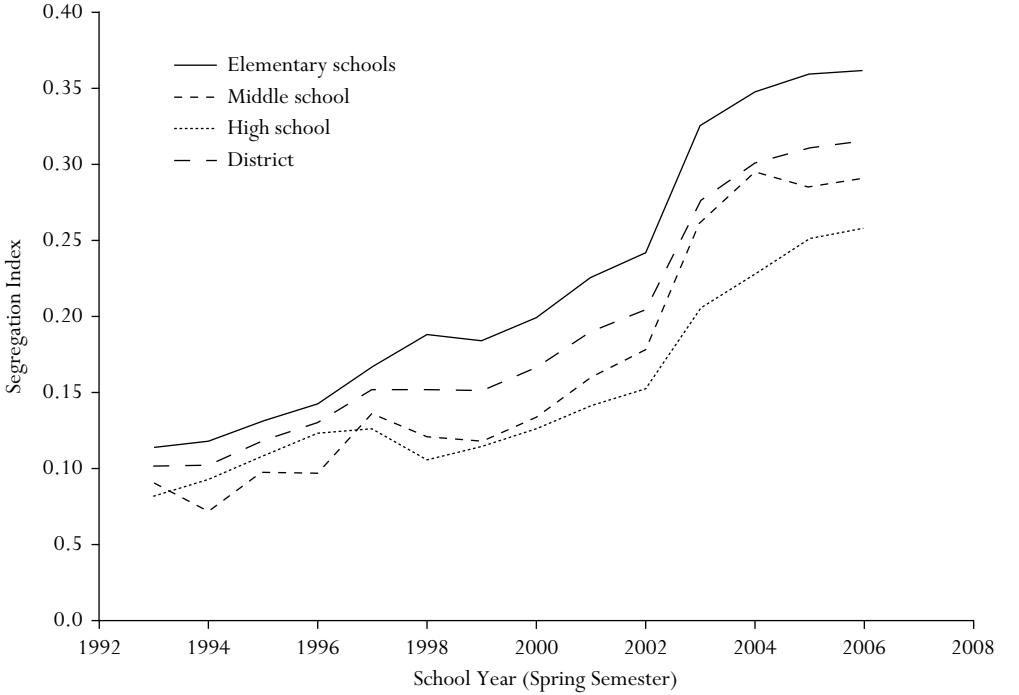
Source: Vigdor and Ludwig (2008).
$r = 0.47$
$p < 0.01$

FIGURE 21.2 *Conceptual Framework Showing Hypothesized Factors Linking School Segregation and Outcome Disparities*



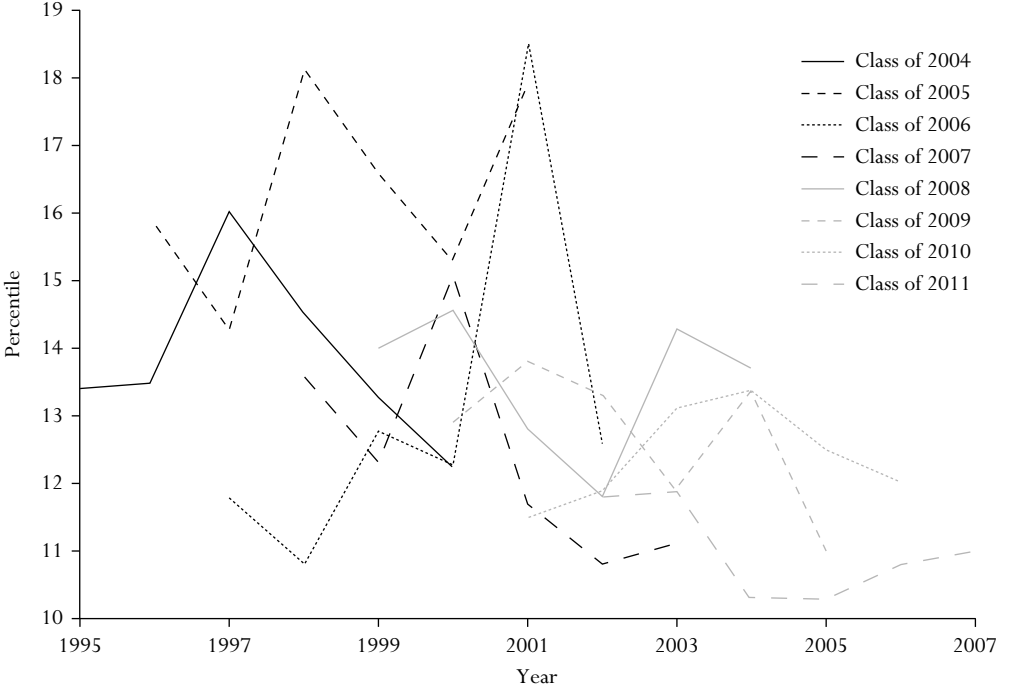
Source: Authors' figure.

FIGURE 21.3 *Exposure-Based Segregation Index in the Charlotte-Mecklenburg Schools, 1992 to 2008*



Source: Authors' calculations based on North Carolina School Activity Reports (North Carolina Department of Public Instruction, various years-a).

FIGURE 21.4 *Percentile of Black Median in White Distribution, Math Scores*

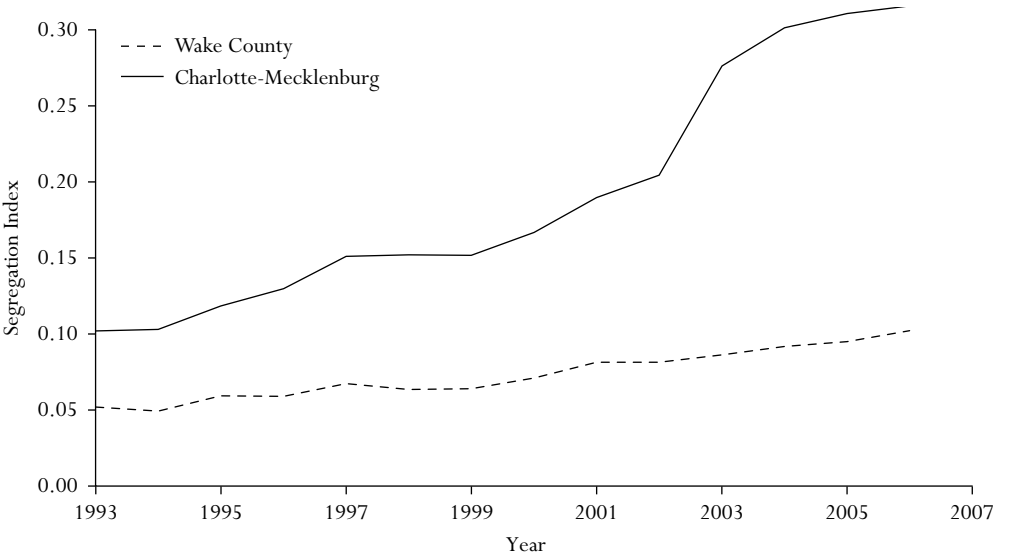


Source: Authors' calculations based on North Carolina End-of-Grade test score database (North Carolina Department of Public Instruction, various years-b).

FIGURE 21.5 *Percentile of Black Median in White Distribution, Reading Scores*

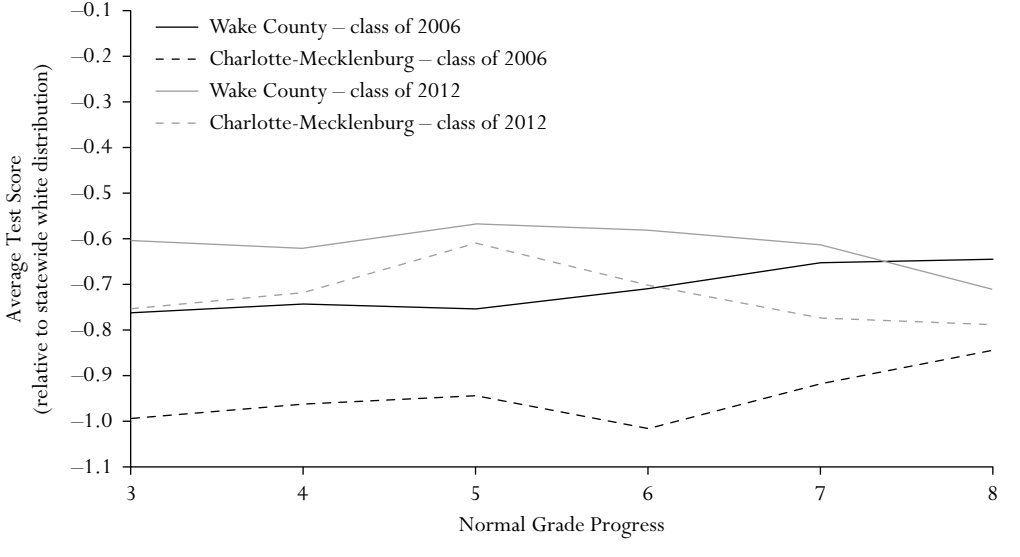
Source: Authors' calculations based on North Carolina End-of-Grade test score database (North Carolina Department of Public Instruction, various years-b).

FIGURE 21.6 *Gap-Based Segregation Index, Charlotte-Mecklenburg and Wake County Schools, 1992–1993 to 2005–2006*



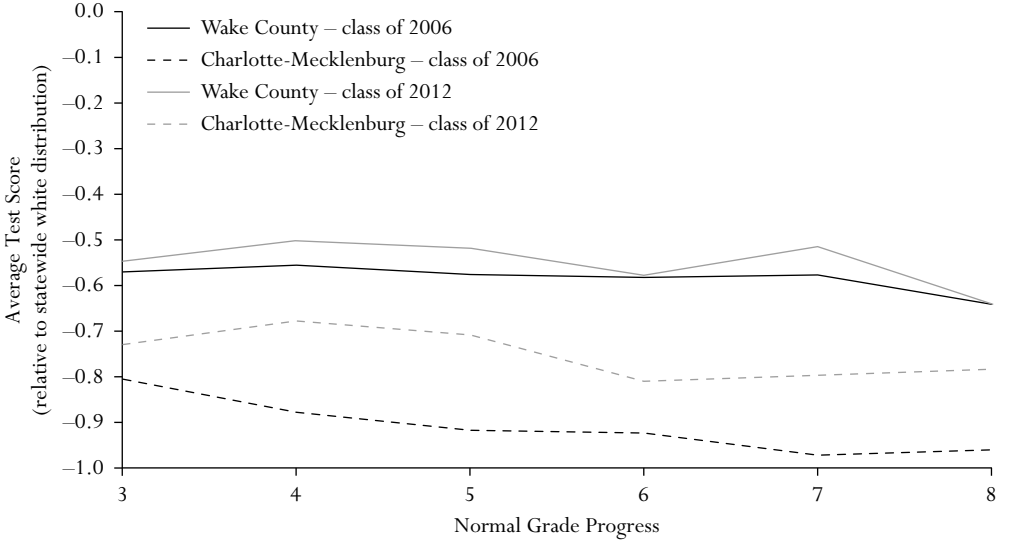
Source: Authors' calculations based on North Carolina School Activity Reports (North Carolina Department of Public Instruction, various years-a).

FIGURE 21.7 *Average Math Test Scores, Normalized Relative to the Statewide Distribution of White Test Scores, for Black Students in Charlotte-Mecklenburg and Wake County, High School Classes of 2006 and 2012*



Source: Authors' calculations based on North Carolina End-of-Grade test score database (North Carolina Department of Public Instruction, various years-b).

FIGURE 21.8 *Average Reading Test Scores, Normalized Relative to the Statewide Distribution of White Test Scores, for Black Students in Charlotte-Mecklenburg and Wake County, High School Classes of 2006 and 2012*



Source: Authors' calculations based on North Carolina End-of-Grade test score database (North Carolina Department of Public Instruction, various years-b).
Note: A value of zero would indicate that a group's mean is equivalent to the statewide mean for whites.

TABLE 21.1 *Trends in the Black Population, 2000 to 2005–2007*

	Mecklenburg County	Wake County
Growth in population	26%	30%
Change in poverty rate	+4%	+5%
Change in high school dropout rate among adults	−5%	−5%
Change in median household income (2007 dollars)	−$5,875	−$7,780
Change in proportion of single-parent families	+5%	+4%

Source: Authors' calculations based on data from Census 2000 (U.S. Bureau of the Census 2003), and the American Community Survey (U.S. Bureau of the Census 2010).

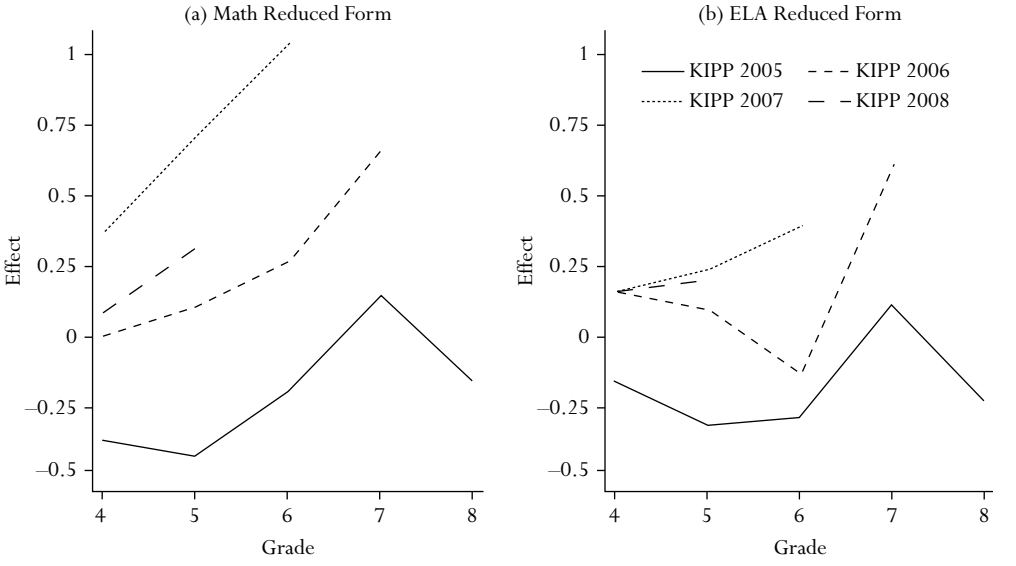
FIGURE 23.1 *Conceptual School Quality and Environmental Quality Matrix*

School Quality \ Environment	Low	Medium	High
Low	Status quo	Moving to Opportunity	------
Medium	Typical charter school	------	------
High	No Excuses charter school	Harlem Children's Zone and SEED charter school	------ *

Source: Authors' figure.

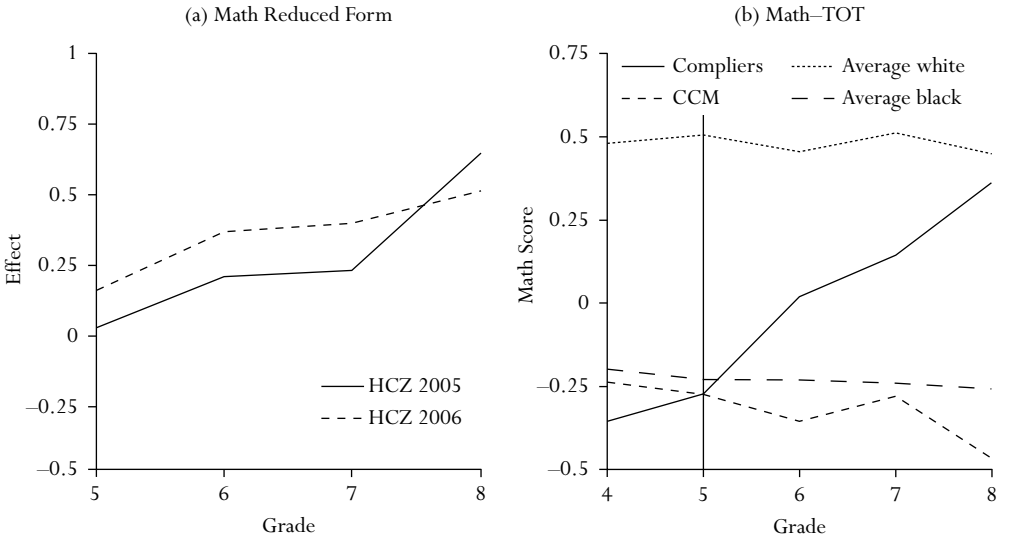
*A Better Chance scholarship program provides low-income minority students with high-quality schools and high-quality environments, but there is no credible evaluation of its impacts. See note 14.

FIGURE 23.2 *Student Achievement in KIPP Lynn*



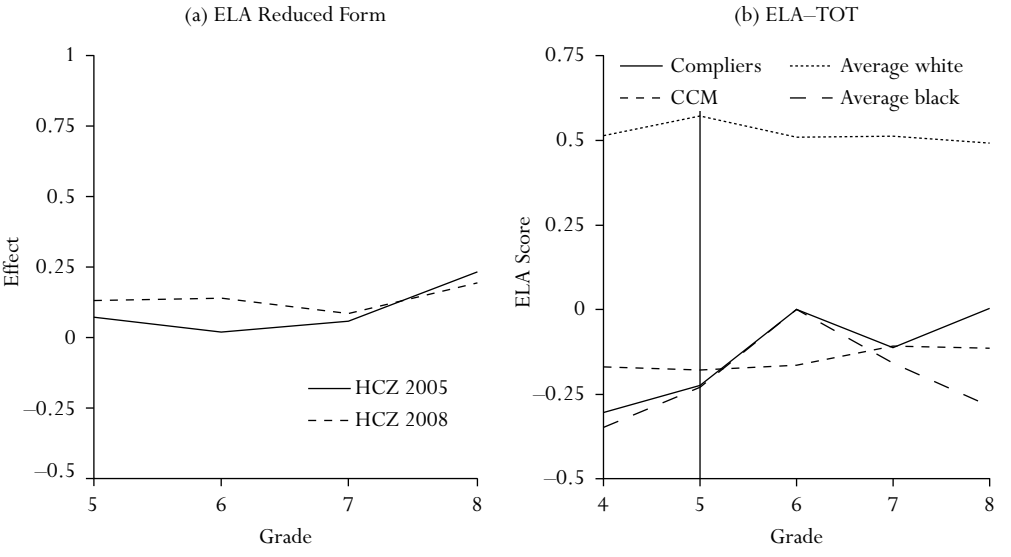
Source: Angrist et al. (2010), with permission.

FIGURE 23.3 *Student Achievement in HCZ (Math)*



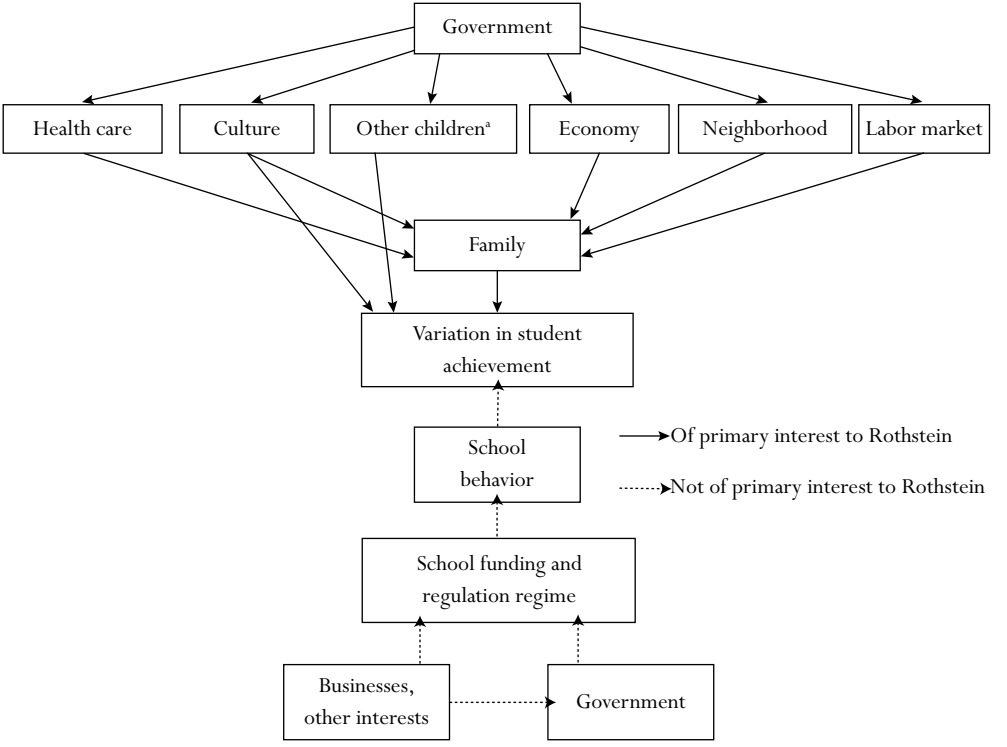
Source: Authors' adaptation of Dobbie and Fryer (2009).

FIGURE 23.4 *Student Achievement in HCZ (ELA)*



Source: Authors' adaptation of Dobbie and Fryer (2009).

FIGURE 24.1 *Rothstein Causal Model*



Source: Authors' figure based on Rothstein (2004).

[a] Rothstein does not consider "other children" to be an in-school factor, because schools have limited control over student characteristics.