



The Promise of Early Interventions for Improving Socioeconomic Outcomes of Black Men

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This brief uses the Social Genome Model to assess the potential impact of various childhood and adolescent interventions on long-term outcomes for black men. In particular, we see that increasing parental emotional support and cognitive stimulation during early childhood and raising reading ability levels in mid-childhood have the greatest impact on later life educational attainment and income (e.g., black men's high school completion, four-year college completion, income at age 29, and income at age 40). The overall effects of successful interventions are modest for the entire population of black men but are somewhat larger for individuals that would be directly affected by the interventions. Our findings suggest that making substantial progress in improving the outcomes of black men will likely require many different interventions that reinforce one another throughout the life course.

The Problem

Black men lag behind white men on virtually every measure of socioeconomic status, from education to employment, from family formation to income, and those differences reflect long-standing disparities between black and white children beginning at birth and extending through childhood and adolescence. Compared with white men, black men are half as likely to have four-year college degrees and twice as likely to be unemployed; when they are working, they earn about 30 percent less. Black children, however, come from more disadvantaged backgrounds than white children. Black children are twice as

likely to live in poverty as white children and more than twice as likely to live with only one biological parent.¹

The Solution

Policy interventions targeting children and youth may improve their circumstances and contribute to improved outcomes as adults. Research demonstrates that improving children’s health and economic circumstances, their home environments, their academic achievement, and their interactions with social institutions like schools and the criminal justice system, may all lead to higher levels of educational attainment and higher incomes in adulthood (see Urban Institute briefs on Healthy Children, Economic Opportunity, Educational Opportunity and Justice).

To assess how early life interventions affect the adult outcomes of black men, we use the Social Genome Model (SGM), a statistical simulation model linking individuals’ circumstances and outcomes across the life course from birth to age 40. Below, we describe the SGM and discuss the aspirational interventions we consider and the later life outcomes we hope to improve. We then document the early life circumstances and later life outcomes for black men and present the results of our simulations for both black men as a whole and for the subset of black men who would be directly affected by the interventions we consider.

The Social Genome Model

The Social Genome Model is a powerful tool for understanding how circumstances from birth through childhood and adolescence influence young adult and adult outcomes. In particular, it can be used to assess the potential long-term benefits of improving conditions for children and youth on their well-being later in life. The SGM is structured around six key life stages: (1) circumstances at birth, (2) early childhood, (3) middle childhood, (4) adolescence, (5) transition to adulthood, and (6) adulthood. Each stage influences all subsequent life stages. For example, whether or not a child is born into a poor family influences his school readiness in early childhood, his reading skills in middle childhood, all the way through his income as a 40-year-old adult. In that example, a reduction in poverty influences future outcomes both directly and indirectly—income in adulthood will be higher because of the direct relationship between childhood poverty and future income as well as because reducing poverty can improve outcomes through the life course (e.g., reducing poverty increases school readiness which, in turn, affects future income). The results we present are the net effects (direct plus indirect) of any particular intervention.

The SGM was originally developed by researchers at the Brookings Institution and is now maintained and enhanced through collaboration among the Urban Institute, Brookings, and Child Trends. The data underlying the model come from the Children of the National Longitudinal Survey of Youth 1979 cohort (CNLSY). The National Longitudinal Survey of Youth 1979 cohort (NLSY-79) began with a cohort of youth age 14 to 21 in 1979. The survey collected a wide range of socioeconomic information on these youth every year until the 1990s and then every year continuing through today. In

1986, the survey began keeping track of children born to women in the NLSY-79. Thus, the CNLSY provides data on a large cohort of youth born in the United States in the 1980s and 1990s, with detailed information on their circumstances at birth, behavior, home environments, school experiences, performance on standardized tests, educational attainment, and early adult economic outcomes. The SGM uses these data to estimate multivariate statistical models linking children's outcomes or status at one stage of development with their outcomes at all subsequent stages. For adult outcomes, the SGM uses data from the original NLSY-79 cohort to impute those outcomes based on adolescent and early adult characteristics. Previous iterations of the SGM (v1.0) pooled data across race/ethnic and gender groups. For this study, we use a version of the SGM (v1.1) in which the relationships between factors at all life stages were estimated separately for four major race/gender groups. Because the mothers of the children in our sample were US residents in 1979, we do not capture the large wave of Latino immigrants that entered the country in the 1980s and 1990s. In addition, there are too few Asians and Native Americans in the data to reliably examine their outcomes. As such, we focus on results produced using the model for black males.

Outcomes and Aspirational Interventions

We hypothesize that changes to policies, institutions, and systems as well as direct interventions, would enable black men to improve on these four metrics relative to their current levels:

- high school graduation by age 19
- completion of a four-year college degree by age 29
- income in early adulthood (age 29)
- income in adulthood (age 40)

When black males increase their education and earnings they gain more secure economic futures, the American economy gains more skilled workers, and American society becomes more inclusive and stable. Interventions that improve the childhood circumstances of black male youth can potentially improve these adult outcomes. Below, we consider goals articulated by our philanthropic partners for improving the circumstances of black boys and young men, and we assess how attaining those goals can shape the circumstances of targeted youth as measured in the SGM. We focus on how achieving those broad goals can be reflected in specific, quantifiable improvements to factors in the SGM and how those improvements beget better adult outcomes. Not all aspects of the goals can be captured by the SGM, but our simulations provide a useful benchmark to foster discussion.

Goal A: Promoting Social-Emotional Health, Mental Health, Behavioral Health, and Physical Health

Hypothetical intervention

- All black boys are born at a healthy weight (no child is a low-birth weight baby)

Goals B and C: Strengthening Well-Being, Health, and Stability of Parents/Caregivers/Important Adults; Reducing the Dual-Generation Impact of Adverse Child Experiences, Trauma, and Toxic Stress

Hypothetical interventions

- All black boys are born into nonpoor families (poverty is a source of stress for families, and reducing poverty will reduce that stress)
- All black boys receive at least the societal average amount of parental emotional support and cognitive stimulation

Goal D: Enhancing Instruction and School Readiness to Prevent Dropping Out

Hypothetical intervention

- All black boys have their reading scores brought up to average levels in both early and middle childhood

Goal E: Stopping School Exclusion

Hypothetical intervention

- Reduce institutional bias so black male students are suspended at the same rates as white male students

Goal F: Promoting Workforce Preparation and Education

Hypothetical intervention

- Through financial aid and mentoring programs, increase the share of black men who have completed four-year college degrees by 10 percentage points (about 15 percent of black men age 25 to 29 have four-year degrees, compared with about 30 percent of white men)

The only outcomes considered here are income at age 29 and income at age 40.

Goal G: Reforming Policing and Sentencing Practices

Hypothetical intervention

- Reduce institutional bias to cut in half the chances that a black youth is convicted of a crime by age 19

We exclude high school graduation as an outcome here, since that outcome is measured at the same time as criminal conviction. Contemporaneously measured factors cannot affect one another within the SGM.

We show how each applicable intervention would improve outcomes for all black men and then, more narrowly, for black men directly affected by the intervention.

Results

Our simulations show how much outcomes improve from their initial levels. For the 1,515 black men in our sample, 70.1 percent have completed high school by age 19, and 13.2 percent have completed college by age 29. Average family income for black men at age 29 is \$47,740 and \$51,440 at age 40 (monetary figures are reported in 2010 inflation-adjusted dollars). These are the outcomes we hope to improve through interventions targeting black male youth during childhood and adolescence.

In table 1, we present the circumstances of black boys that we would like to improve along with our specific aspirational targets for those circumstances. About one in seven black males is a low-birth weight baby; our goal is to reduce that number to 0. More than two out of five black boys are born into families with incomes below the poverty level; our goal is to reduce that number to 0. Almost two-thirds of black boys from birth to age 2 receive below-average amounts of cognitive stimulation as measured by the HOME Inventory of Cognitive Stimulation scale; our goal is to ensure that they receive at least the average level of cognitive stimulation that all children in the SGM receive, regardless of race or sex. More than 7 in 10 black boys from birth to age 2 receive lower-than-average levels of emotional support as measured by HOME Emotional Support scale; our goal is to ensure that they receive at least the average level of emotional support that all children in the SGM receive, regardless of race or sex. About two-thirds of black male students have below-average reading scores on the Peabody Individual Achievement Test in early and middle childhood; our goal is to have all black male students reading at least at the average level for all children in the SGM, regardless of race or sex. About 45 percent of black teens have been suspended from school; our goal is to reduce that percentage to 20 percent (approximately the rate for white males). Almost one in five black men has been convicted of a crime by age 19; our goal is to cut that percentage in half. Finally, 13.2 percent of black men have graduated from a 4-year college by age 29; our goal is to increase that to 30 percent, the average college graduation rate for white men.

TABLE 1

Summary Statistics for the Black Male Sample: Intervention Variables

	Sample value (%)	Aspirational value (%)
Circumstances at birth and age 1-2		
<i>Low birth weight</i>	13.9	0
<i>Parent(s) below poverty level at birth</i>	43.2	0
<i>Below-average cognitive stimulation score</i>	63.3	0
<i>Below-average emotional support score</i>	70.7	0
Circumstances in childhood		
<i>Below mean reading score at age 5-6</i>	62.8	0
<i>Below mean reading score at age 10-11</i>	68.7	0
Circumstances in adolescence		
<i>Ever suspended from school</i>	45.1	20.3
<i>Convicted by age 19</i>	18.3	9.1
Circumstances in young adulthood		
<i>Completed a four-year college degree by age 29</i>	13.2	30

Source: Joined CNLSY/NLSY79 sample.

Note: Sample size is 1,515.

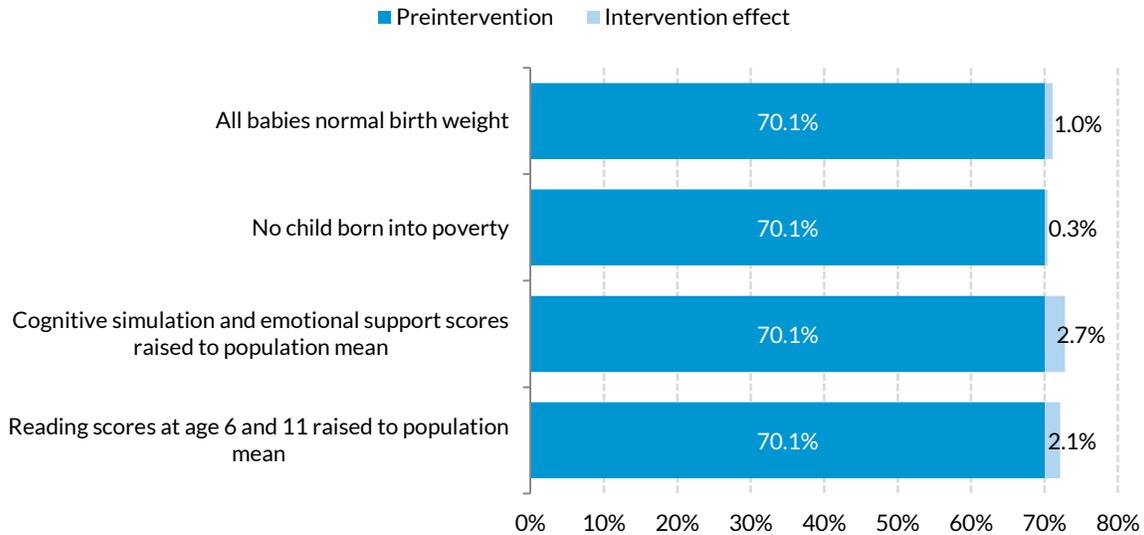
Raising High School Graduation Rates

We considered four early life interventions that could raise high school graduation rates for black men (figure 1). Men without high school degrees do quite poorly in the labor market, and completing high school is a gateway for additional educational attainment. No single intervention profoundly affects graduation rates. For example, ensuring that all children were born at a healthy weight would raise the high school graduation rate for black males by 1 percentage point, from 70.1 to 71.1 percent. Similarly, eliminating child poverty at birth would increase black men's high school graduation rates by 0.3 percentage points. The potential effects of improving the level of emotional support and cognitive stimulation black boys receive in early childhood as well as bringing their reading scores up to population averages in middle childhood are somewhat larger than those from the other two interventions. Improving emotional support and cognitive stimulation would raise black men's high school graduation rates 2.7 percentage points while improving their reading scores would raise graduation rates by 2.1 percentage points.

FIGURE 1

Increasing High School Graduation among Black Men

Simulated Effects of Interventions

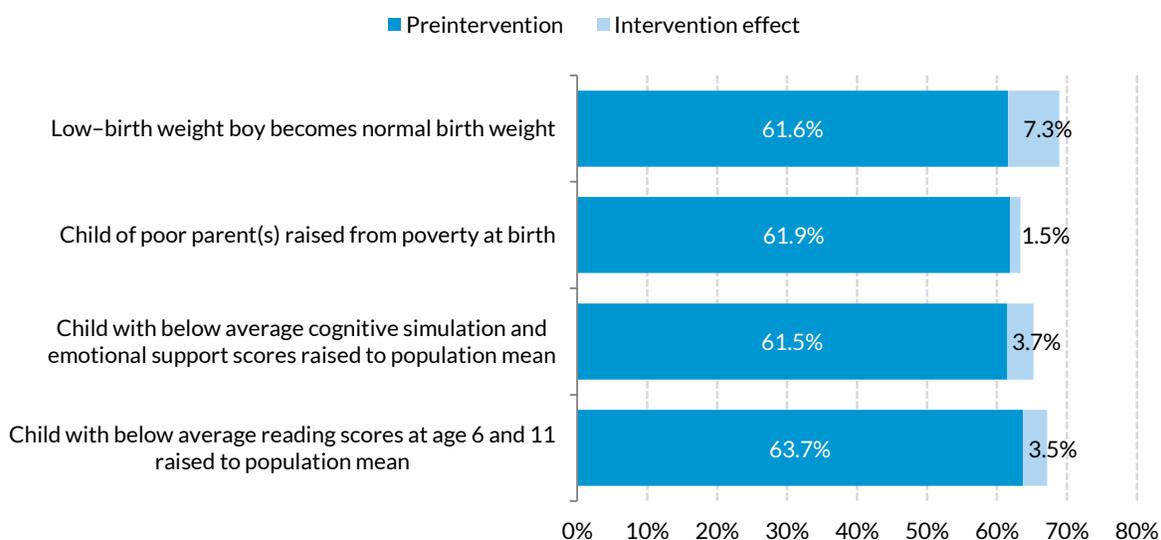


The effects of these interventions are somewhat modest because high school graduation rates are already quite high. Also, we are considering “moving the needle” on the whole population of black men, not just on those who would directly benefit from any given intervention.

We find larger effects of those interventions when we consider solely the subgroups of black men whose health, income status, emotional support and cognitive stimulation, and reading scores are improved, (figure 2). For example, the high school completion rate for black men who were low-birth weight babies is 61.6 percent, almost 10 percentage points lower than among all black men. If those men had been born at a healthy weight, 68.9 percent would complete high school, an improvement of 7.3 percentage points. Reducing the proportion of black boys born into poor households has small effects on high school graduation rates even for those lifted out of poverty. For those who would have been born poor, bringing their incomes up to poverty level would increase high school graduation rates by 1.5 percentage points. On the other hand, among black boys who received below-average levels of emotional support and cognitive stimulation, bringing those levels up to population averages would increase their chances of graduating high school by 3.7 percentage points, from 61.5 to 65.2 percent. Raising the scores of below-average readers up to average would lead to a 3.5 percentage-point increase in high school graduation among black men.

FIGURE 2

Increased Chance of High School Graduation among Black Men Directly Benefiting from Interventions



Increasing Four-Year College Graduation Rates

On average, individuals with four-year college degrees experience less unemployment and earn higher wages than those without such degrees. We consider six early life interventions that could raise college graduation rates for black men (figure 3). Ensuring that all black boys are born at a healthy weight would increase college graduation rates by 1.0 percentage points, while making sure that all were born into nonpoor households would have no discernable effect. On the other hand, improving the emotional support and cognitive stimulation they receive in early childhood would raise the college graduation rate for black men by 0.6 percentage points (from 13.2 to 13.8 percent). Bringing their reading scores up to national averages would raise college graduation rates by 2.2 percentage points. Reducing school suspensions from 45 percent to 20 percent would have a small impact on black men’s college graduation rates of, raising them by 0.2 percentage points. Reducing criminal convictions, however, has no discernable effect on graduation rates.

Again, the above effects are based on all black men in the SGM; the impacts of earlier life interventions on the subset of black male youth whose circumstances are improved are somewhat larger (figure 4). For example, for those black men who would have been born below healthy weight, being born at a healthy weight would increase their chances of graduating from college by 1.0 percentage points (from 13.0 to 14.0 percent). Being born into nonpoor households raises their chances of graduating from college from 9.5 to 9.7 percent. For those who received below-average levels of emotional support and cognitive stimulation, bringing those factors up to average increases the probability of college graduation by 0.8 percentage points. Those whose reading scores are brought up to the general population average would enjoy a 3.7 percentage-point rise in the college graduation

rates, the largest effect for any intervention on college graduation. Black teens who would benefit from a reduction in suspensions would see their chances of graduating from college rise by 0.7 percentage points, but avoiding criminal conviction does not increase college graduation rates.

FIGURE 3

Increasing College Graduation among Black Men

Simulated Effects of Interventions

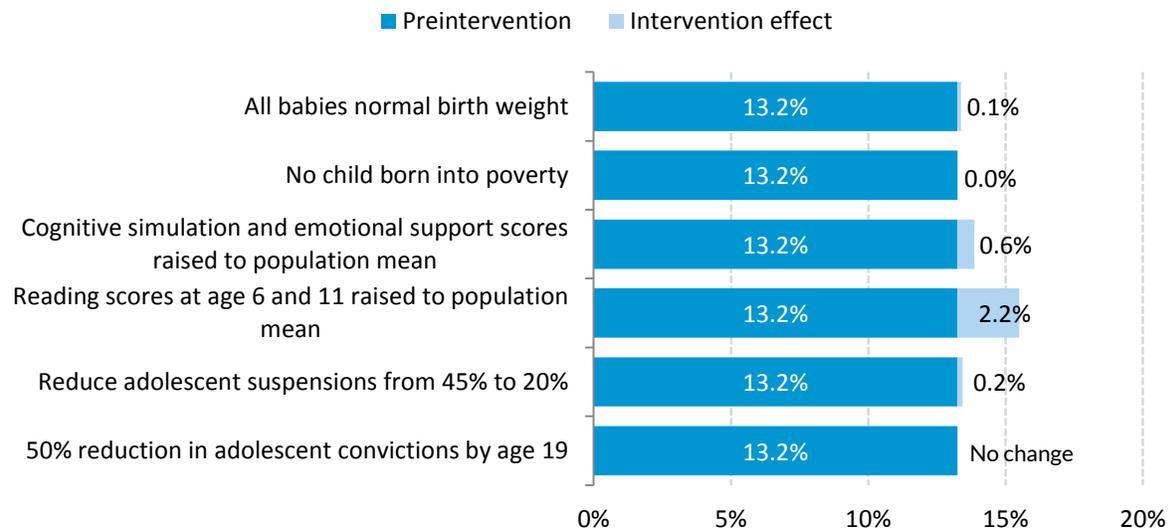
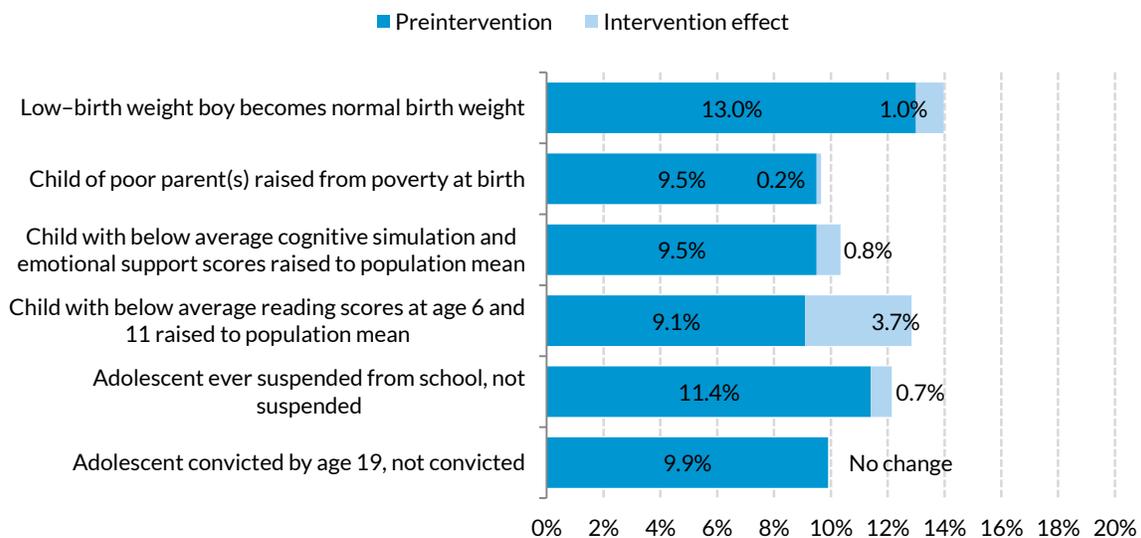


FIGURE 4

Increased Chance of College Graduation among Black Men Directly Benefiting from Interventions



Raising Family Income at Age 29

Black men at age 29 live in families with average annual family incomes of about \$47,740. We consider six earlier life interventions that could potentially raise the family incomes of black men at age 29 (figure 5). “Ensuring that all black male babies are born at a healthy weight and into nonpoor families would raise their family incomes at age 40 by \$670 and \$280, respectively.” In contrast, ensuring that they received at least average levels of emotional support and cognitive stimulation would increase family incomes by \$2,330, and bringing their reading scores up to average levels would increase family income by \$6,860. Reducing suspensions and convictions would lead to family income gains at age 29 of \$410 and \$250, respectively.

The impacts of those interventions on the family incomes of those directly affected by them are, again, somewhat larger than those for the full population of black men (figure 6). For example, being born at a healthy weight would increase those black men’s family income at age 29 from \$44,620 to \$48,580, and being born into a nonpoor family would increase their family incomes from \$40,710 to \$42,140. Those who benefited from having their emotional support and cognitive stimulation brought up to average levels would experience a \$3,160 increase in family income, while those whose readings scores were brought up to average would enjoy an \$11,410 increase. Black teens who otherwise would have been suspended from school would experience a \$1,640 increase in family income at age 29, and those who avoided a conviction would enjoy a \$2,820 increase.

FIGURE 5
Increasing Black Men’s Family Incomes at Age 29
Simulated Effects of Interventions

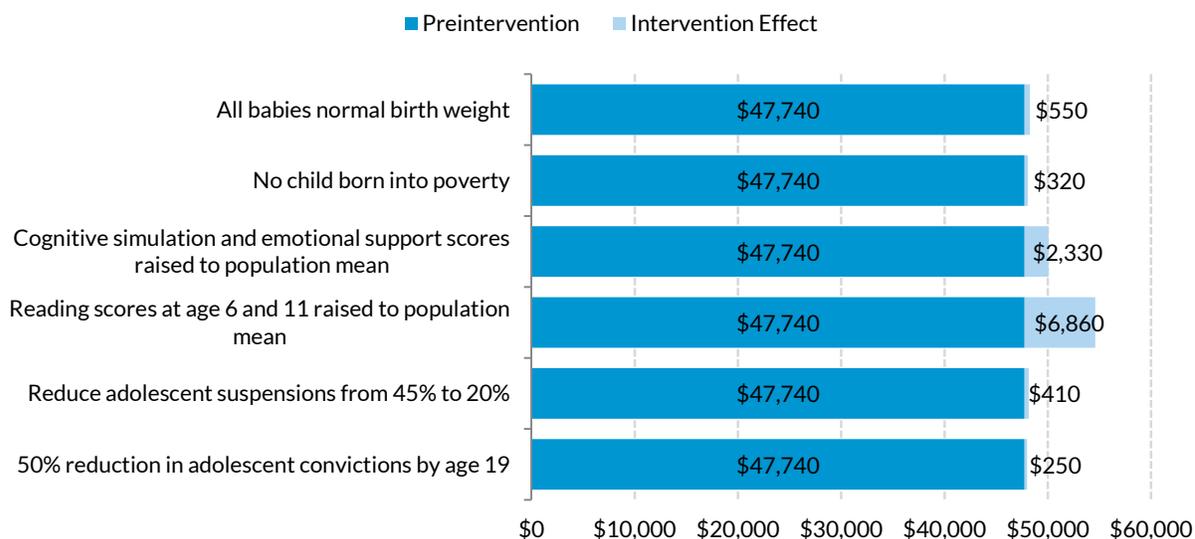
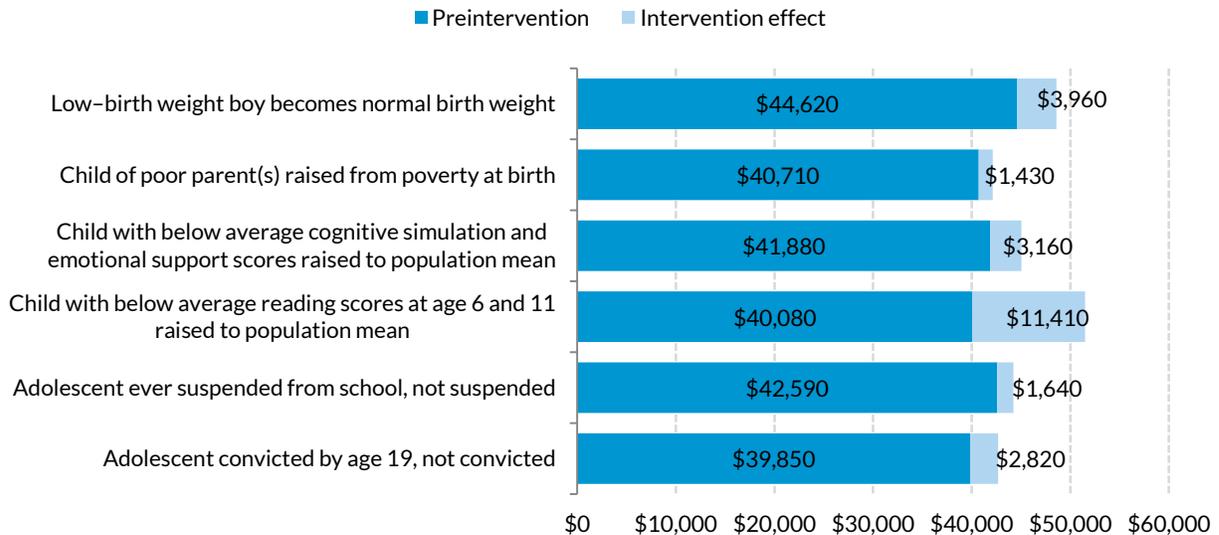


FIGURE 6

Expected Increase in Family Income at Age 29 among Black Men Directly Benefiting From Interventions



Raising Family Income at Age 40

By mid-life, black men live in families with projected average annual incomes of about \$51,440. We consider seven earlier life interventions that could raise the family incomes of black men at age 40 (figure 7). Ensuring that all black male babies were born at a healthy weight and that they are born into nonpoor families would modestly raise their family incomes at age 40 by \$670 and \$280, respectively. In contrast, ensuring that they received at least average levels of emotional support and cognitive stimulation would increase family income by \$3,970, and bringing their reading scores up to average levels would increase family income by \$9,580. Reducing suspensions and convictions would lead to family income gains at age 29 of \$1,420 and \$130, respectively. Finally, bring college graduation rates of black men up to 30 percent would drive up family income at age 40 by \$1,650.

Again, the impact of those interventions on the incomes of those who were directly affected by them are somewhat larger than those for the full population of black men (figure 8). For example, being born at a healthy weight would increase those black men’s family incomes at age 40 from \$49,330 to \$54,130, and being born into a nonpoor family would increase their family incomes from \$46,720 to \$47,980. Those who benefited from having their emotional support and cognitive stimulation brought up to average levels would experience a \$5,390 increase in family income, while those whose readings scores were brought up to average would enjoy an \$15,930 increase. Black teens who otherwise would have been suspended from school would experience a \$5,720 increase in family income at age 40, and those who avoided a conviction would enjoy a \$1,450 increase. Finally, those black men that would now have obtained college degrees would have family incomes that are \$9,790 higher than they otherwise would have been.

FIGURE 7

Increasing Black Men’s Family Incomes at Age 40

Simulated Effects of Interventions

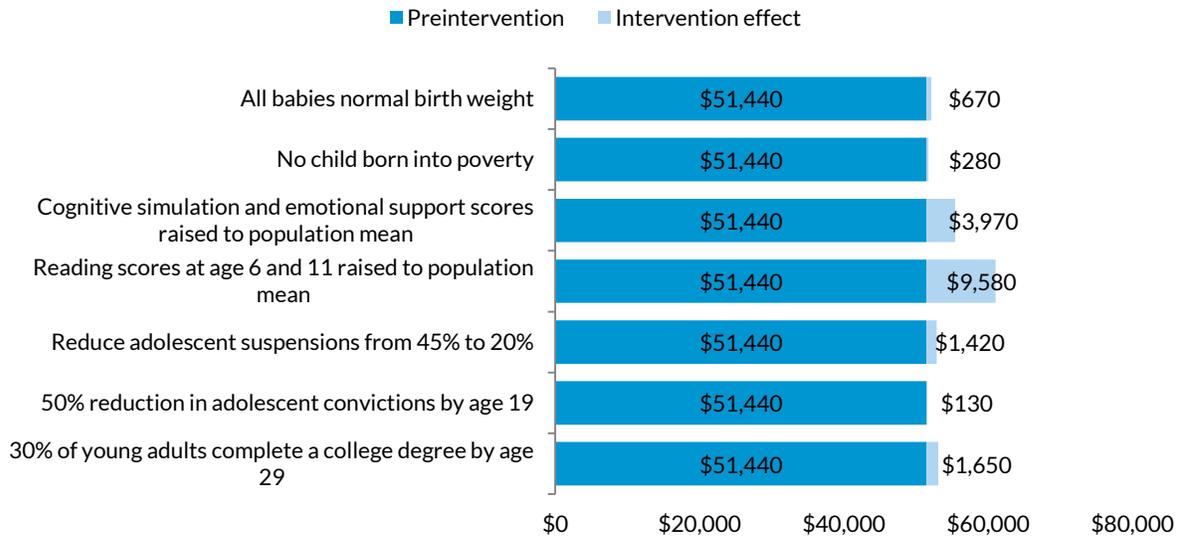
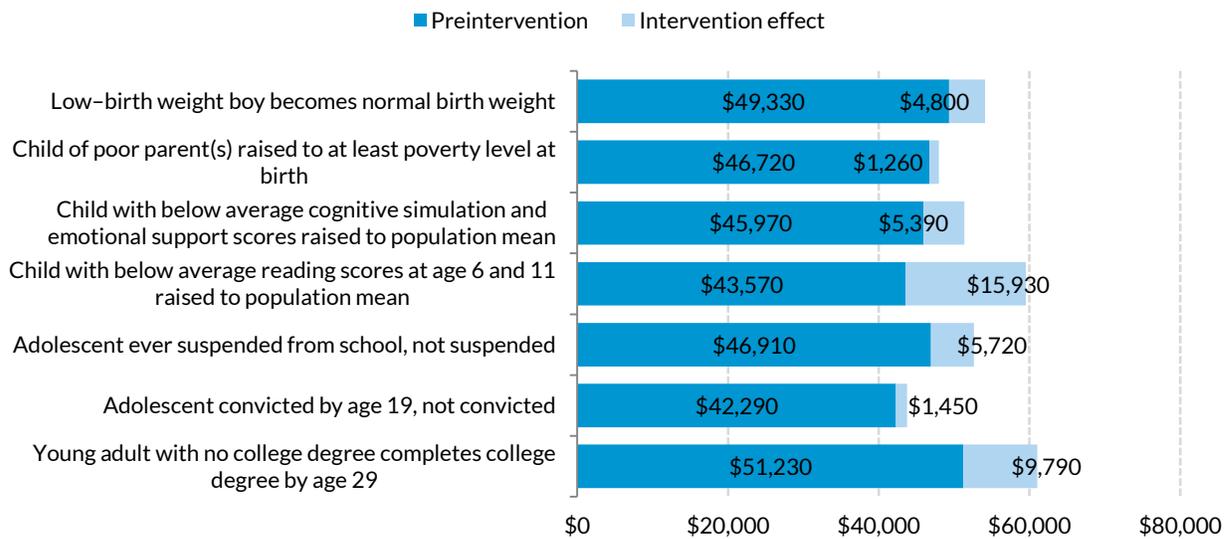


FIGURE 8

Expected Increase in Family Income at Age 40 among Black Men Directly Benefiting from Interventions



Conclusion

The struggles of black men transitioning to adulthood and achieving economic security by mid-life are due, in part, to the cumulative effects of disadvantages throughout their childhood and teen years. The Social Genome Model can assess the potential effects of improving early life circumstances on later life markers of success such as educational attainment and family income.

Our simulation results suggest that, among the factors we consider, **the most effective tool for helping black men complete high school and college, and raising their mid-life family incomes, is raising their reading ability in elementary school.** Further, our simulations suggest that if policies could reduce the stresses experienced by families raising young black children and give parents the tools and stability to provide supportive environments for their children so young black males would receive societal average amounts of emotional support and cognitive stimulation, notable gains would be achieved in high school and college completion and mid-life family income. Other interventions have smaller estimated impacts.

The relatively modest impacts of reducing the incidence of children born at low weights and of children being born into poverty reflect several factors. For example, the vast majority of black male infants (86.8 percent) are born at healthy weights. As such, reducing the incidence of low-birth weight touches only a small segment of the population. Further, many low-birth weight babies go on to thrive, so the benefit of being born at a healthy weight is somewhat limited. Children who are born into poor families are likely to spend at least half their childhoods in poverty, and the cumulative effects of persistent poverty limit their future prospects. The intervention simulated here reduces poverty in the year of birth but does nothing to address the correlates of poverty that likely lead to persistent deprivation throughout childhood and adolescence. Thus, even this ambitious intervention in isolation has limited lifetime benefits.

The simulation results here indicate what could be achieved if we could improve the circumstances of black male children. We still need to identify evidence-based policy solutions that can achieve those improvements. Further, our results highlight the limitations of even successful interventions operating in isolation; really “moving the needle” to improve the outcomes of black men will likely require many different interventions that reinforce one another throughout the life course.

Note

1. See Gregory Acs, with Kenneth Braswell, Elaine Sorensen, and Margery Austin Turner, *The Moynihan Report Revisited*, (Washington, DC: Urban Institute, 2013).

About the Authors



Gregory Acs is the director of the Income and Benefits Policy Center at the Urban Institute, where his research focuses on social insurance, social welfare, and the compensation of workers. He recently completed a study of the factors contributing to persistently high unemployment in the United States and policy responses to that problem. In addition, Acs has studied the low-wage labor market, changes in welfare policies and how they have affected welfare caseloads and the well-being of low-income families, and how state and federal policies affect the incentives families face as they move from welfare to work.



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The Social Genome Model, originally developed at the Brookings Institution and based at the Urban Institute, is a collaborative effort of the Brookings Institution, Child Trends, and the Urban Institute.

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