

Web Appendix to
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“The Plight of Mixed Race Adolescents”

In this appendix we provide a description of all data sets used in the paper as well as precise definitions together with the exact sources of all variables.

A. Add Health

The National Longitudinal Study of Adolescent Health (Add Health) is a nationally representative sample of 90,118 children, who attended grades 7 through 12 during the 1994-95 academic year. Thus far, information on these children has been collected at three separate points in time. During stage 1 of Wave I (September 1995 – April 1995) an in-school questionnaire was administered to the full sample of children, and 164 questionnaires were completed by school administrators. 20,745 computer assisted in-home interviews were conducted for a core sample of students plus oversamples during stage 2 of Wave I (April 1995 – December 1995). Additionally, a subset of 19,713 children completed the Add Health Picture Vocabulary Test (AHPVT) — an abridged and computerized version of the Peabody Picture Vocabulary Test-Revised; and 17,700 parents or legal guardians did so for the parent questionnaire. The data for Wave II was collected from April 1996 – August 1996 and contains information on 14,738 children and 128 schools. These children were, again, interviewed at home and are a subset of the ones interviewed during Wave I. So are the schools. In Wave III of Add Health (July 2001 – April 2001) 14,979 of the original Wave I in-home interview participants were re-interviewed and given the AHPVT again.⁴³ Moreover, participants were asked to sign a transcript release form and to provide a urine sample to be tested for sexually transmitted diseases (STDs).⁴⁴

All behavior variables without a clear cardinality have been standardized to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition. Children of all other races have been dropped from the analysis. Unless otherwise noted, all of our regressions use missing value indicators, and are weighted by the cross-sectional weights supplied with Add Health for the survey from which the outcome variable was taken.

Below we describe how we combined and recoded some of the Add Health variables used in our analysis.

⁴³ The Wave III data sets also contains 218 young adults who were interviewed during the pretest.

⁴⁴ Upon special requests researchers can also obtain data on 1,507 romantic partners of Wave III Add Health respondents collected in separate interviews.

Home Environment Composite Measure This variable was constructed by regressing each home environment variable, i.e. *Household Income, Not on Welfare, Father in Household, Parents Married, Mother's Age, Mother is College Graduate, Mother Ever Married, and Years in Current Residence*, on a vector of controls for gender, several age categories, place of birth, region, and multiple birth weight intervals, as well as school fixed effects. We then averaged the standardized residuals from these regressions for each individual (rotated such that a higher value indicated a better outcome), and normalized the resulting individual-level averages to have a mean of zero and a standard deviation of one. The composite measure corresponds to this normalized mean.

Physical Composite Measure This variable was constructed by regressing each physical variable, i.e. *Birth Weight, Height, BMI, and Attractiveness*, on a vector of controls for gender, several age categories, place of birth, region, and multiple birth weight intervals, as well as school fixed effects. We then averaged the standardized residuals from these regressions for each individual (rotated such that a higher value indicated a better outcome), and normalized the resulting individual-level averages to have a mean of zero and a standard deviation of one. The composite measure corresponds to this normalized mean.

Achievement Composite Measure This variable was constructed by regressing each achievement variable, i.e. *AHPVT Score, GPA, Never Repeated a Grade, and No Learning Disability*, on a vector of controls for gender, several age categories, place of birth, region, and multiple birth weight intervals, as well as school fixed effects. We then averaged the standardized residuals from these regressions for each individual (rotated such that a higher value indicated a better outcome), and normalized the resulting individual-level averages to have a mean of zero and a standard deviation of one. The composite measure corresponds to this normalized mean.

Behavior in School Composite Measure This variable was constructed by regressing each school behavior variable, i.e. *Trouble with Teachers, Trouble Paying Attention, Trouble with Homework, Trouble with Students, Less Effort Schoolwork, Skipping School, and Ever Suspended or Expelled*, on a vector of controls for gender, several age categories, place of birth, region, and multiple birth weight intervals, as well as school fixed effects. We then averaged the standardized residuals from these regressions for each individual (rotated such that a higher value indicated a better outcome), and normalized the resulting individual-level averages to have a mean of zero and a standard deviation of one.

The composite measure corresponds to this normalized mean.

Behavior Outside School Composite Measure This variable was constructed by regressing each home behavior variable, i.e. *Watch TV, Drink, Smoke, Dare, Lie to Parents, Fight, Property Damage, Steal, Violent Acts, Sell Drugs, Encounter Violence, Ever Sex, Ever STD, and Ever Illegal Drugs*, on a vector of controls for gender, several age categories, place of birth, region, and multiple birth weight intervals, as well as school fixed effects. We then averaged the standardized residuals from these regressions for each individual (rotated such that a higher value indicated a better outcome), and normalized the resulting individual-level averages to have a mean of zero and a standard deviation of one. The composite measure corresponds to this normalized mean.

Household Income On the parent questionnaire in Wave I respondents were asked, “About how much total income, before taxes did your family receive in 1994? Include your own income, the income of everyone else in your household, and income from welfare benefits, dividends, and all other sources.” The values of this variable ranges from \$0 to \$999,000.

Not on Welfare On the parent questionnaire in Wave I the following question was asked, “A you receiving public assistance, such as welfare?” A value of 0 indicates “yes,” whereas 1 indicates “no” as an answer.

Father in Household On the in-school questionnaire in Wave I respondents were asked, “Do you live with your biological father, stepfather, foster father, or adoptive father?” A value of 1 indicates “yes,” whereas 0 indicates “no” as an answer.

Parents Married On the parent questionnaire in Wave I the following question was asked, “What is your current marital status?” This variable takes on a value of 1 if the respondent reports to be married, and 0 otherwise.

Mother's Age On the parent questionnaire in Wave I the following question was asked, “How old are you?” We use the answer to this question only if the respondent was female.

Mother is College Graduate On the in-school questionnaire in Wave I respondents were asked with respect to their mother, “How far in school did she go?” The answer choices range from “she never went to school” to “professional training beyond a four-year college.” We recoded this variable to take on a

value of 1 if the child reported his mother to have at least “graduated from college or a university,” and 0 otherwise.

Mother Ever Married On the parent questionnaire in Wave I the following question was asked. “Have you ever been married?” For female respondents we coded this variable as 1 if the answer was “yes;” and as 0 if the respondent chose “no.”

Years in Current Residence During the in-home interview in Wave I respondents were asked about the month and year of their birth and, “How old were you when you moved here to your current residence?” This variable takes the difference between their imputed age and the answer to the latter question.

Birth Weight On the parent questionnaire in Wave I respondents were asked for the birth weight (in pounds and ounces) of their child. We convert the answers into kilograms.

Height During the in-home interview in Wave I respondents were asked, “What is your height in feet and inches?” The answer choices ranged from “4 feet, 0 inches” to “6 feet, 9 inches and over.” We converted the respondents' weight into meters.

BMI During the in-home interview in Wave I respondents were asked, “What is your weight?” The answers ranged from 50 to 430 pounds. We converted the answer in kilogram and constructed this variable using this answer and the one to the previously mentioned question according to the formula: $BMI = \text{Weight} / \text{Height}^2$.

Attractiveness At the end of the in-home interview in Wave I the interviewer was asked to rate the physical attractiveness of the respondent on a scale from 1 to 5, where 0 indicates “very unattractive”, and 5 indicates “very attractive.” Whenever we consider this variable we account for interviewer fixed effects. Moreover, this variable has been standardized to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

AHPVT Score Linked to a respondent’s answers to the Wave I in-home interview is his score on the Add Health Picture Vocabulary Test. The test scores range from 0 to 87. We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

GPA On the in-school questionnaire in Wave I respondents were asked for their grades in English, Math, History, and Science. Each of these variables ranges from 0 to 4.0. We take the average of the given answers.

Never Repeated a Grade During the in-home interview in Wave I respondents were asked, “Have you ever repeated a grade or been held back a grade?” We recode this variable to take on a value of 1 if the given answer was “no,” and 0 if it was “yes.”

No Learning Disability On the parent questionnaire in Wave I respondents were asked with respect to their child, “Does (he/she) have a specific learning disability, such as difficulties with attention, dyslexia, or some other reading, spelling, writing, or math disability?” We recoded this variables so that 0 indicates “yes” and 1 indicates “no.”

Trouble with Teachers On the in-school questionnaire in Wave I respondents were asked, “Since school started this year, how often have you had trouble getting along with your teachers?” The variable ranges from 0 to 4, where 0 indicates “never,” and 4 indicates “everyday.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Trouble Paying Attention On the in-school questionnaire in Wave I respondents were asked, “Since school started this year, how often have you had trouble paying attention in school?” The variable ranges from 0 to 4, where 0 indicates “never,” and 4 indicates “everyday.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Trouble with Homework On the in-school questionnaire in Wave I respondents were asked, “Since school started this year, how often have you had trouble getting your homework done?” The variable ranges from 0 to 4, where 0 indicates “never,” and 4 indicates “everyday.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Trouble with Students On the in-school questionnaire in Wave I respondents were asked, “Since school started this year, how often have you had trouble getting along with other students?” The variable ranges

from 0 to 4, where 0 indicates “never,” and 4 indicates “everyday.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Less Effort Schoolwork On the in-school questionnaire in Wave I respondents were asked, “In general, how hard do you try to do your school work well?” The variable ranges from 0 to 4, where 0 indicates “I try very hard to do my best,” and 4 indicates “I never try at all.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Skipping School On the in-school questionnaire in Wave I respondents were asked, “In the past twelve months, how often did you skip school without an excuse?” The variable ranges from 0 to 6, where 0 indicates “never” and 6 indicates “nearly every day.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Never Suspended or Expelled During the in-home interview in Wave I respondents were asked, “Have you ever received an out-of-school suspension from school?” and “Have you ever been expelled from school?” We coded the variable as 1 if the answer to both questions was “no,” and as 0 if at least one question had been answered with “yes.”

Watch TV On the in-school questionnaire in Wave I respondents were asked, “Outside of school hours, about how much time do you spend watching television or video cassettes on an average school day?” The variable ranges from 0 to 4, where 0 indicates none, and 4 indicates “more than 4 hours.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Drinking On the in-school questionnaire in Wave I respondents were asked, “In the past twelve months, how often did you drink beer, wine, or liquor?” The variable ranges from 0 to 6, where 0 indicates “never” and 6 indicates “nearly every day.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Smoking On the in-school questionnaire in Wave I respondents were asked, “In the past twelve months, how often did you smoke cigarettes?” The variable ranges from 0 to 6, where 0 indicates “never” and 6 indicates “nearly every day.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Daring On the in-school questionnaire in Wave I respondents were asked, “In the past twelve months, how often did you do something dangerous because you were dared to?” The variable ranges from 0 to 6, where 0 indicates “never” and 6 indicates “nearly every day.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Lie to Parents On the in-school questionnaire in Wave I respondents were asked, “In the past twelve months, how often did you lie to your parents or guardians?” The variable ranges from 0 to 6, where 0 indicates “never” and 6 indicates “nearly every day.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Fight On the in-school questionnaire in Wave I respondents were asked, “In the past year, how often have you gotten into a physical fight?” The variable ranges from 0 to 4, where 0 indicates “never” and 4 indicates “more than 7 times.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Property Damage During the in-home interview in Wave I respondents were asked, “In the past 12 months, how often did you deliberately damage property that didn't belong to you?” The variable ranges from 0, implying “never,” to 3, implying “5 or more times.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Steal During the in-home interview in Wave I respondents were asked, “How often did you take something from a store without paying for it?” The variable ranges from 0, implying “never,” to 3, implying “5 or more times.” We have standardized this variable to have mean zero and a standard

deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Violent Acts In three separate questions during the in-home interview in Wave I respondents were asked how many times each of the following things happened to them during the last 12 months: they got into a physical fight, they pulled a knife or gun on someone, they shot or stabbed someone. The answer choices to each question range from 0 to 2, where 0 indicates “never”, and 2 indicates “more than once.” We coded this variable as the mean of the given answers, and standardized it to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Sell Drugs During the in-home interview in Wave I respondents were asked, “How often did you sell marijuana or other drugs?” The variable ranges from 0, implying “never,” to 3, implying “5 or more times.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Encounter Violence In five separate questions during the in-home interview in Wave I respondents were asked how many times each of the following things happened to them during the last 12 months: they saw someone shoot or stab another person, someone pulled a knife or gun on them, someone shot them, someone cut or stabbed them, they were jumped. The answer choices to each question range from 0 to 2, where 0 indicates “never”, and 2 indicates “more than once.” We coded this variable as the mean of the given answers, and standardized it to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Ever Sex During the in-home interview in Wave I respondents were asked whether they ever had vaginal intercourse. A value of 0 implies “no” as an answer, and 1 implies “yes.”

Ever STD In ten separate questions during the in-home interview in Wave I respondents were asked whether they had ever been told by a doctor or nurse that they had any of the following sexually transmitted diseases: chlamydia, syphilis, gonorrhea, HIV or AIDS, genital herpes, genital warts, trichomoniasis, hepatitis B, bacterial vaginosis, or non-gonococcal vaginitis. We coded this variable so that it takes a value of 0 if the respondent answered “no” to each question, and 1 if he answered with “yes” to at least one question.

Ever Illegal Drugs In four separate questions during the in-home interview in Wave I respondents were asked how old they were when they tried the following drugs: marijuana, any kind of cocaine (including powder, freebase and crack cocaine), inhalants (such as glue, or solvents), and other type of illegal drug (such as LSD, PCP, ecstasy, mushrooms, speed, ice, heroin, or pills without a prescription). One answer choice to each question was “You never tried any [...]” This variable was coded as 0 if the respondent reported to have never tried any of the drugs to which these four questions refer, and as 1 if he reported to have tried at least one of them.

Mother Cares On the in-school questionnaire children were asked with respect to their mother, “How much do you think she cares about you?” The variable ranges from 1 to 5, where 0 indicates “not at all” and 5 indicates “very much.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Father Cares On the in-school questionnaire children were asked with respect to their father, “How much do you think he cares about you?” The variable ranges from 1 to 5, where 0 indicates “not at all” and 5 indicates “very much.” We have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Close to People On the in-school questionnaire children were asked how strongly they agree or the disagree with the statement, “I feel close to people at the school.” The variable ranges from 1 to 5. We coded it such that 1 implies “strongly disagree” and 5 implies “strongly agree.” Moreover, we have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Feel Accepted On the in-school questionnaire children were asked how strongly they agree or the disagree with the statement “I feel socially accepted.” The variable ranges from 1 to 5. We coded it such that 1 implies “strongly disagree” and 5 implies “strongly agree.” Moreover, we have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Feel Loved On the in-school questionnaire children were asked how strongly they agree or the disagree with the statement “I feel loved and wanted.” The variable ranges from 1 to 5. We coded it such that 1 implies “strongly disagree” and 5 implies “strongly agree.” Moreover, we have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Not Depressed On the in-school questionnaire children were asked, “In the last month, how often did you feel depressed or blue?” The variable ranges from 0 to 4. We recoded it such that 0 indicates “everyday” and 4 indicates “never.” Moreover, we have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Like Oneself On the in-school questionnaire children were asked how strongly they agree or the disagree with the statement “I like myself just the way I am.” The variable ranges from 1 to 5. We coded it such that 1 implies “strongly disagree” and 5 implies “strongly agree.” Moreover, we have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

Chances Live to 35 On the in-school questionnaire children were asked, “What do you think are the chances you will live to age 35?” The variable ranges from 0 to 8, where 0 indicates “no chance” and 8 indicates “it will happen.” Moreover, we have standardized this variable to have mean zero and a standard deviation of one in the weighted population of white, black, and black-white children according to our strict child-based definition.

B. 2000 US Census

In addition to Add Health we also utilize data from the 2000 US Census. We use the integrated public use 5% sample.⁴⁵ The 2000 Census allowed respondents to check more than one race. Based on their answers the Census Bureau then assigns them one of more than 150 racial categories in its detailed version of the race variable. The Census Bureau codes an individual as “White and Black” if he reports to be only of white and black origin. Since this coincides with our strict definition, we code an individual as mixed race if the Census Bureau does so, i.e. if it codes him as “Black/White.”

All of our adult outcome variables are restricted to individuals who were at least 18 old at the time

⁴⁵ Our Census data has been obtained from <http://usa.ipums.org>.

the Census was taken. Our home environment variables are restricted to children between the age of 10 and 19.

All our Census data regressions are weighted and include missing value identifiers.

Adult Outcome Composite Measure This variable was constructed by regressing each adult outcomes variable, i.e. *Married, Have Children, Bachelor's Degree, Employed, Weeks Worked Last Year, Occupational Score, Household Income, Poor, Not Migrated Within Last 5 Years, Own Home, Value House, Live Outside City Center, Institutionalized, and Disabled*, on a vector of controls for gender, several age categories, a nativity indicator, and state fixed effects. We then averaged the standardized residuals from these regressions for each individual, and normalized the resulting individual-level averages to have a mean of zero and a standard deviation of one. The composite measure corresponds to this normalized mean.

Household Income This variable reports the sum of the total money income of all household members living in the household at the time of the Census, who are 15 years old and above.

Not on Welfare The Census reports the pre-tax income from public assistance programs, referred to as “welfare,” during the previous year for each household member. We coded this variable as 0 if the individual received any income from welfare, and as 1 if no welfare payments were received.

Father in Household The Census Bureau provides a constructed variable indicating whether the father of a person lives in the same household, and if so the father's person number. Our variable takes on a value of 0 if the person's father does not live in the same household, and 1 if he does.

Parents Married We retrieve the marital status of a child's parents, and code this variable as 1 if the parents who are present in the household report to be married, and 0 if they don't.

Mother's Age We retrieve the age of a child's mother and use it for this variable.

Mother is College Graduate We retrieve the educational attainment of a child's mother; and code this variable as 1 if she has at least obtained a bachelor's degree, and as 0 otherwise.

Mother Ever Married After linking a mother's current marital status to her child, we let this variable take on a value of 1 if she reports "Married, spouse present," "Married, spouse absent," "Separated," "Divorced," or "Widowed;" and as 0 if her current status is "Never married/single."

Not Migrated within Last 5 Years The Census asked people whether they had lived in the same, or a different house 5 years earlier. If an individual answered to have lived in the same house, he is coded as 1. He is coded as 0 if he reported to have lived in a different house.

Married The Census reports the marital status of each respondent. We coded this variable as 1 if the individual is married or currently separated, and as 0 otherwise.

Have Children The Census reports the number of own children living in the household. We retrieve this variable for individuals aged 18 to 40 and code it as 1 for strictly positive reported values, and as 0 otherwise.

Bachelor's Degree The Census reports a respondents' educational attainment. We retrieve this variable and recode it to take on a value of 1 if the respondent has attained a bachelor's degree, master's degree, a professional degree beyond a bachelor's degree, or a doctoral degree. For all other educational achievements we assign a value of 0.

Employed The Census reports a respondents' current employment status. We retrieve this variable and recode it to take on a value of 1 if the respondent reports to be employed, and as 0 if the respondent is unemployed or out of the labor force.

Weeks Worked Last Year The Census reports the number of weeks the respondent worked for profit, pay, or as an unpaid family worker during the previous year. We retrieve this variable.

Occupational Score The IPUMS Census sample contains a constructed variable that assigns scores to each occupation based on the median income of all persons in this particular occupation in 1950. We retrieve this variable and normalize it to have mean 0 and a standard deviation of 1 in our sample.

Poor The Census reports the pre-tax income from public assistance programs, referred to as “welfare,” during the previous year for each household member. We coded this variable as 0 if the individual received any income from welfare, and as 1 if no welfare payments were received.

Own Home The Census reports whether the inhabitants of a housing unit owned or rented it. We retrieve this variable and code it as 1 in the former case, and as 0 in the latter case.

Value House For owner-occupied housing units or vacant for sale units the Census reports its value. We retrieve this variable, and code it as missing for respondent who do not own a housing unit.

Live Outside City Center The Census reports whether a household was located in a metropolitan area, and if so whether it is located in the central city. We retrieve this variable and code it as 1 for respondents whose household is located in the central city, and as 0 otherwise.

Institutionalized The Census classifies all housing units as one of three types: households, group quarters, and vacant units. Those being classified as group quarters are further differentiated by type. One of these types is “institutions”, such as correctional institutions, mental institutions, institutions for the elderly, handicapped and poor etc. We retrieve the group quarter variable and recode it to take a value of 1 if the Census indicates that the respondent lives in an “institution”, and as 0 otherwise.

Disabled The Census contains different variables indicating whether a respondent suffers from certain disabilities. We retrieve information on disabilities related to work, cognitive ability, ambulatory ability, independent living, self-care, vision or hearing. If the respondent reports suffering from any one of these we code the variable as 1, and 0 otherwise.

C. NCHS Vital Statistics

In order to analyze racial differences in birth outcomes we use the Birth Cohort Linked Birth and Infant Death Data for the year 2000. This file is produced by the National Center for Health Statistics (NCHS) using data from birth and death certificates made available by US States under the Vital Statistics

Cooperative Program (VSCP).⁴⁶ The “denominator” file, which is the specific file we use, includes all births occurring in 2000 and the corresponding data reported on the birth certificates. It also includes an indicator for whether a birth certificate could be matched with a death certificate; that is if the infant is known to have died within the first year of life. According to NCHS, states routinely link infant birth and death certificates and exchange information if a third state is identified as the state of residence at the time of birth or death.

The race of every child is inferred from the race of his or her parents. A child is coded as white if both parents are white, as black if both parents are black and as mixed race if one parent is black and the other is white. Due to missing information on the race of the father we are unable to assign a race to 584,125 out of 4,063,823 observations.

Only white, black and mixed race individuals are retained in our sample. All regressions are weighted and include missing values indicators. In what follows we describe in details the outcome variables.

Home Environment Composite Measure This variable was constructed by regressing each birth outcomes variable, i.e. *Birth Weight*, *Infant Mortality*, *Duration of Pregnancy*, *Anemia*, *Diabetes*, *Fetal Distress*, *Mother Smoked During Pregnancy*, and *Mother Drank During Pregnancy*, on a vector of controls for gender, mothers' age, mothers' years of schooling, mother never married, and region fixed effects. We then averaged the standardized residuals from these regressions for each individual (rotated such that a higher value indicated a better outcome), and normalized the resulting individual-level averages to have a mean of zero and a standard deviation of one. The composite measure corresponds to this normalized mean.

Birth Weight The original variable reports an infants' birth weight in grams. We converted it into kilograms.

Infant Mortality The Linked Birth/Infant Death Birth Cohort Data reports whether the child born during the reference year, i.e. 2000, died within one year from the birth, where death is determined by whether the birth certificate could be linked with a death certificate. This variable has been coded as 1 if the infant born could be linked with a death certificate in the following 12, and as 0 otherwise.

⁴⁶ The National Bureau of Economic Research (NBER) makes the Linked Birth/Infant Death Data set for each year from 1983 to 1991 and from 1995 to 2002 available online. See <<http://www.nber.org/data/births.html>>.

Duration of Pregnancy This variable indicates the length of the gestation period in weeks.

Anemia The Vital Statistics classify anemia and diabetes as “medical risk factors.” Risk factors are recorded as (1) “Factor reported”, (2) “Factor not reported”, (8) “Factor not on certificate”, or (9) “Factor not classifiable”.

We coded this variable as 0 if the original variable is (2), and as 1 if the original variable takes on a value of (1). Values of (8) or (9) are treated as missing.

Diabetes The Vital Statistics classify anemia and diabetes as “medical risk factors.” Risk factors are recorded as (1) “Factor reported”, (2) “Factor not reported”, (8) “Factor not on certificate” or (9) “Factor not classifiable”.

We coded this variable as 0 if the original variable is (2), and as 1 if the original variable takes on a value of (1). Values of (8) or (9) are treated as missing.

Fetal Distress indicates whether the mother reported to have had fetal distress before or during childbirth. The original variable is coded as (1) “Complication reported”, (2) “Complication not reported”, (8) “Complication not on certificate”, or (9) “Complication not classifiable”.

We coded this variable as 0 if the original variable is (2), and as 1 if the original variable takes on a value of (1). Values of (8) or (9) are treated as missing.

Mother Smoked During Pregnancy This variable is coded as 0 if the mother self-reports not having used tobacco during the pregnancy and as 1 if the mother admits to having used tobacco during the pregnancy.

Mother Drank During Pregnancy This variable is coded as 0 if the mother self-reports not having used alcohol during the pregnancy and as 1 if the mother admits to having used alcohol during the pregnancy.

Table A.1: Summary Statistics by Race

Variable	Full Sample	White	Black	Mixed	Source
Demographics					
Female	.499 (.500)	.495 (.500)	.515 (.500)	.484 (.501)	Add Health, School Survey
Age (in years), Wave I	14.983 (1.742)	15.015 (1.738)	14.869 (1.757)	14.821 (1.651)	Add Health, School Survey
Born in US	.979 (.143)	.982 (.132)	.968 (.176)	.959 (.199)	Add Health, School Survey
West	.118 (.323)	.133 (.340)	.061 (.239)	.229 (.421)	Add Health, School Administrator Survey
Midwest	.300 (.458)	.327 (.469)	.203 (.402)	.310 (.463)	Add Health, School Administrator Survey
Northeast	.146 (.353)	.167 (.373)	.072 (.258)	.159 (.367)	Add Health, School Administrator Survey
South	.435 (.496)	.372 (.483)	.665 (.472)	.302 (.460)	Add Health, School Administrator Survey
Home Environment					
Household Income (in Dollar)	48,029 (48,046)	51,547 (47,838)	29,925 (45,472)	29,767 (18,655)	Add Health, Parent Questionnaire
Not on Welfare	.916 (.278)	.940 (.237)	.794 (.404)	.844 (.366)	Add Health, Parent Questionnaire
Father in Household	.769 (.422)	.833 (.373)	.534 (.499)	.544 (.499)	Add Health, School Survey
Parents Married	.725 (.446)	.787 (.409)	.426 (.495)	.245 (.434)	Add Health, Parent Questionnaire
Mother's Age (in years)	41.588 (6.396)	41.596 (5.964)	41.600 (8.273)	39.660 (3.737)	Add Health, Parent Questionnaire
Mother is College Graduate	.319 (.466)	.321 (.467)	.308 (.462)	.370 (.484)	Add Health, School Survey
Mother Ever Married	.955 (.206)	.987 (.115)	.800 (.400)	.916 (.281)	Add Health, Parent Questionnaire
Years in Current Residence	7.817 (5.770)	8.065 (5.743)	6.719 (5.782)	4.654 (4.151)	Add Health, Home Interview Wave I
Physical					
Birth Weight (in kilogram)	3.385 (.545)	3.415 (.539)	3.222 (.547)	3.362 (.443)	Add Health, Parent Questionnaire
Weight (in kilogram)	64.390	63.890	66.698	66.006	Add Health, Home Interview Wave I

	(15.811)	(15.680)	(16.229)	(15.204)	
Height (in meters)	1.692	1.692	1.692	1.707	Add Health, Home Interview Wave I
	(.106)	(.106)	(.108)	(.096)	
BMI	22.328	22.136	23.239	22.601	(constructed)
	(4.356)	(4.244)	(4.744)	(4.617)	
Attractiveness ^o	.000	.007	-.041	.414	Add Health, Home Interview Wave I
	(1.000)	(.998)	(1.008)	(.904)	
Achievement					
No Learning Disability	.861	.863	.850	.961	Add Health, Parent Questionnaire
	(.346)	(.344)	(.357)	(.197)	
AHPVT ^o	.000	.164	-.756	-.161	Add Health, Home Interview Wave I
	(1.000)	(.913)	(1.037)	(1.011)	
GPA	2.865	2.934	2.592	2.720	Add Health, School Survey
	(.793)	(.788)	(.755)	(.783)	
Never Repeated Grade	.797	.824	.673	.653	Add Health, Home Interview Wave I
	(.403)	(.381)	(.469)	(.480)	
Behavior in School					
Trouble with Teacher ^o	.000	-.051	.198	-.003	Add Health, School Survey
	(1.000)	(.967)	(1.098)	(.980)	
Trouble Paying Attention ^o	.000	-.031	.119	.127	Add Health, School Survey
	(1.000)	(.972)	(1.095)	(.990)	
Trouble with Homework ^o	.000	-.044	.170	.132	Add Health, School Survey
	(1.000)	(.976)	(1.071)	(.955)	
Trouble with Students ^o	.000	-.065	.247	.214	Add Health, School Survey
	(1.000)	(.966)	(1.086)	(1.053)	
Effort Schoolwork ^o	.000	.058	-.224	.095	Add Health, School Survey
	(1.000)	(1.002)	(.956)	(1.089)	
Skipping School ^o	.000	.013	-.054	.207	Add Health, School Survey
	(1.000)	(1.002)	(.982)	(1.319)	
Never Suspended or Expelled	.728	.774	.519	.484	Add Health, Home Interview Wave I
	(.445)	(.418)	(.500)	(.504)	
Behavior Outside School					
Watch TV ^o	.000	-.140	.527	.255	Add Health, School Survey
	(1.000)	(.947)	(1.021)	(.987)	
Drinking ^o	.000	.026	-.103	.145	Add Health, School Survey
	(1.000)	(1.004)	(.975)	(1.055)	
Smoking ^o	.000	.078	-.303	.060	Add Health, School Survey
	(1.000)	(1.055)	(.667)	(1.073)	

Daring°	.000	.057	-.227	.191	Add Health, School Survey
	(1.000)	(1.025)	(.856)	(1.154)	
Lie to Parents°	.000	-.005	.015	.203	Add Health, School Survey
	(1.000)	(.985)	(1.054)	(1.125)	
Fight°	.000	-.019	.071	.241	Add Health, School Survey
	(1.000)	(.997)	(1.007)	(1.130)	
Property Damage°	.000	.032	-.152	.192	Add Health, Home Interview Wave I
	(1.000)	(1.033)	(.816)	(1.020)	
Steal°	.000	.011	-.063	.572	Add Health, Home Interview Wave I
	(1.000)	(1.013)	(.920)	(1.398)	
Violent Acts°	.000	-.058	.252	.629	Add Health, Home Interview Wave I
	(1.000)	(.947)	(1.166)	(1.601)	
Sell Drugs°	.000	-.004	.020	.019	Add Health, Home Interview Wave I
	(1.000)	(.989)	(1.048)	(1.041)	
See Violence°	.000	-.065	.294	.302	Add Health, Home Interview Wave I
	(1.000)	(.933)	(1.213)	(1.290)	
Ever Sex	.398	.358	.576	.584	Add Health, Home Interview Wave I
	(.489)	(.480)	(.494)	(.497)	
Ever STD	.029	.018	.079	.082	Add Health, Home Interview Wave I
	(.169)	(.134)	(.270)	(.277)	
Ever Illegal Drugs	.312	.321	.266	.556	Add Health, Home Interview Wave I
	(.463)	(.467)	(.442)	(.501)	
Psychological Variables					
Mother Cares°	.000	-.016	.062	-.017	Add Health, School Survey
	(1.000)	(1.012)	(.947)	(1.069)	
Father Cares°	.000	.009	-.044	-.298	Add Health, School Survey
	(1.000)	(.978)	(1.111)	(1.352)	
Close to People°	.000	.042	-.170	-.095	Add Health, School Survey
	(1.000)	(.985)	(1.042)	(.961)	
Feel Accepted°	.000	-.024	.098	-.002	Add Health, School Survey
	(1.000)	(.997)	(1.007)	(.926)	
Feel Loved°	.000	-.030	.124	-.068	Add Health, School Survey
	(1.000)	(.992)	(1.022)	(1.023)	
Not Depressed°	.000	-.035	.145	-.185	Add Health, School Survey
	(1.000)	(.995)	(1.006)	(1.103)	
Like Oneself°	.000	-.071	.292	.021	Add Health, School Survey
	(1.000)	(.999)	(.950)	(1.061)	
Chances Live to 35°	.000	.054	-.216	-.013	Add Health, School Survey

	(1.000)	(.947)	(1.163)	(1.065)	
Birth Outcomes					
Birth Weight (kg)	3.316 (.609)	3.376 (.587)	3.144 (.657)	3.299 (.618)	NCHS Vital Statistics
Duration of Pregnancy (weeks)	38.780 (2.598)	38.886 (2.403)	38.364 (3.078)	38.794 (2.697)	NCHS Vital Statistics
Anemia	.024 (.153)	.020 (.140)	.035 (.185)	.029 (.167)	NCHS Vital Statistics
Diabetes	.029 (.169)	.029 (.168)	.032 (.175)	.028 (.166)	NCHS Vital Statistics
Fetal Distress	.039 (.194)	.037 (.188)	.049 (.217)	.042 (.202)	NCHS Vital Statistics
Mother Smoked During Pregnancy	.122 (.327)	.113 (.316)	.065 (.246)	.173 (.378)	NCHS Vital Statistics
Mother Drank During Pregnancy	.009 (.095)	.008 (.088)	.007 (.083)	.010 (.098)	NCHS Vital Statistics
Infant Mortality	.007 (.083)	.005 (.071)	.011 (.106)	.008 (.089)	NCHS Vital Statistics
Adult Outcomes					
Married	.587 (.492)	.615 (.487)	.384 (.486)	.319 (.466)	2000 US Census
Have Children	.381 (.486)	.376 (.484)	.415 (.493)	.327 (.469)	2000 US Census
Bachelors Degree	.221 (.415)	.234 (.424)	.121 (.326)	.177 (.382)	2000 US Census
Employed	.611 (.488)	.621 (.485)	.539 (.498)	.634 (.482)	2000 US Census
Weeks Worked Last Year	45.119 (12.77)	45.373 (12.542)	43.212 (14.228)	41.186 (15.118)	2000 US Census
Occupational Score ^o	27.926 (1.336)	28.318 (1.451)	25.055 (8.936)	25.742 (9.876)	2000 US Census
Household Income (log)	1.712 (.909)	1.759 (.881)	1.351 (1.032)	1.575 (.965)	2000 US Census
Poor	.095 (.293)	.079 (.269)	.213 (.41)	.169 (.375)	2000 US Census
Not Migrated within Last 5 Years	.581 (.493)	.586 (.492)	.545 (.498)	.389 (.488)	2000 US Census
Own Home	.753	.779	.555	.500	2000 US Census

	(.431)	(.415)	(.497)	(.5)	
Value House (log)	11.569	11.606	11.186	11.598	2000 US Census
	(.878)	(.872)	(.848)	(.893)	
Live Outside City Center	.446	.466	.314	.459	2000 US Census
	(.497)	(.499)	(.464)	(.498)	
Institutionalized	.019	.016	.045	.022	2000 US Census
	(.138)	(.125)	(.206)	(.147)	
Disabled	.241	.230	.317	.219	2000 US Census
	(.428)	(.421)	(.465)	(.414)	

Notes: The entries are means and standard deviations of student-level data for those students in Add Health who are either white, black, or mixed race according to our strict child-level definition. All behavior and psychological variables, AHPVT, and Attractiveness have been normalized to have mean of 0 and standard deviation of 1 in the weighted sample of white, black, and mixed children. The final column shows the survey from which the variable was extracted. In all cases, sample weights provided with Add Health are used in the calculations. See the appendix for further details on the construction of our sample. Variables marked with ° are normalized to have mean 0 and standard deviation 1 in our weighted sample.

Table A.2: Home Environment (Add Health)

Dependent Variable	Raw Data			School Fixed Effects: No			R-squared
	White	Black	Mixed	White	Black	Observations	
Household Income (log)	51,547 (47,838)	29,925 (45,472)	29,767 (18,655)	.509*** (.142)	-.162 (.142)	8,294	.115
Not on Welfare	.940 (.237)	.794 (.404)	.844 (.366)	.096 (.085)	-.049 (.086)	9,406	.046
Father in Household	.833 (.373)	.534 (.499)	.544 (.499)	.293*** (.039)	-.010 (.039)	48,197	.087
Parents Married	.787 (.409)	.426 (.495)	.245 (.434)	.541*** (.088)	.169* (.089)	9,433	.102
Mother's Age	41.596 (5.964)	41.600 (8.273)	39.660 (3.737)	1.881*** (.627)	1.919*** (.674)	8,537	.034
Mother is College Graduate	.321 (.467)	.308 (.462)	.370 (.484)	-.039 (.040)	-.043 (.040)	41,016	.011
Mother Ever Married	.987 (.115)	.800 (.400)	.916 (.281)	.076* (.042)	-.118*** (.044)	8,564	.115
Years in Current Residence	8.065 (5.743)	6.719 (5.782)	4.654 (4.151)	3.353*** (.669)	2.037*** (.681)	10,716	.032

Heteroskedasticity robust standard errors in parentheses.

* denotes significance at 10%-level, ** significance at 5%-level, and *** significance at 1%-level.

Table A.3: Physical Variables (Add Health)

Dependent Variable	Raw Data			School Fixed Effects: No			
	White	Black	Mixed	White	Black	Observations	R-squared
Birth Weight (in kg)	3.415 (.539)	3.222 (.547)	3.362 (.443)	-.004 (.095)	-.143 (.096)	8,672	.047
Height (in meters)	1.692 (.106)	1.692 (.108)	1.707 (.096)	-.020 (.014)	-.017 (.015)	10,711	.254
BMI	22.136 (4.244)	23.239 (4.744)	22.601 (4.617)	-.393 (.746)	.442 (.754)	10,549	.052
Attractiveness ^o	.007 (.998)	-.041 (1.008)	.414 (.904)	-.422*** (.155)	-.418*** (.157)	10,787	.036

Heteroskedasticity robust standard errors in parentheses.

* denotes significance at 10%-level, ** significance at 5%-level, and *** significance at 1%-level.

Variables marked with ^o are normalized to have mean 0 and standard deviation 1 in our weighted sample.

does not include birth weight dummies

Table A.4: Achievement Variables (Add Health)

Dependent Variable	Raw Data			School Fixed Effects: No			R-squared
	White	Black	Mixed	White	Black	Observations	
No Learning Disability	.863 (.344)	.850 (.357)	.961 (.197)	-.111*** (.032)	-.093*** (.033)	9,407	.058
AHPVT Score ^o	.164 (.913)	-.756 (1.037)	-.161 (1.011)	.239 (.167)	-.478*** (.168)	10,296	.252
GPA	2.934 (.788)	2.592 (.755)	2.720 (.783)	.178*** (.061)	-.103* (.062)	43,930	.109
Never Repeated a Grade	.824 (.381)	.673 (.469)	.653 (.480)	.133 (.086)	.051 (.087)	10,791	.121

Heteroskedasticity robust standard errors in parentheses

* denotes significance at 10%-level, ** significance at 5%-level, and *** significance at 1%-level.

Variables marked with ^o are normalized to have mean 0 and standard deviation 1 in our weighted sample.

Table A.5: Psychological Variables (Add Health)

Dependent Variable	Raw Data			School Fixed Effects: No			
	White	Black	Mixed	White	Black	Observations	R-squared
Mother Cares ^o	-.016 (1.012)	.062 (.947)	-.017 (1.069)	-.028 (.073)	.065 (.074)	44,583	.016
Father Cares ^o	.009 (.978)	-.044 (1.111)	-.298 (1.352)	.270** (.126)	.207 (.127)	37,105	.021
Close to People ^o	.042 (.985)	-.170 (1.042)	-.095 (.961)	.108 (.068)	-.066 (.069)	45,463	.036
Feel Accepted ^o	-.024 (.997)	.098 (1.007)	-.002 (.926)	-.062 (.072)	.092 (.073)	44,751	.021
Feel Loved ^o	-.030 (.992)	.124 (1.022)	-.068 (1.023)	-.008 (.082)	.165** (.083)	44,818	.019
Not Depressed ^o	-.035 (.995)	.145 (1.006)	-.185 (1.103)	.134 (.105)	.353*** (.105)	46,350	.083
Like Oneself ^o	-.071 (.999)	.292 (.950)	.021 (1.061)	-.099 (.095)	.296*** (.096)	44,879	.067
Chances Live to 35 ^o	.054 (.947)	-.216 (1.163)	-.013 (1.065)	.032 (.081)	-.167** (.082)	46,769	.032

Heteroskedasticity robust standard errors in parentheses

* denotes significance at 10%-level, ** significance at 5%-level, and *** significance at 1%-level.

Variables marked with ^o are normalized to have mean 0 and standard deviation 1 in our weighted sample.

Table A.6A: Behavior in School (Add Health)

Dependent Variable	Raw Data			School Fixed Effects: No			R-squared
	White	Black	Mixed	White	Black	Observations	
Trouble with Teacher ^o (check this)	-.051 (.967)	.198 (1.098)	-.003 (.980)	-.007 (.076)	.209*** (.077)	47,305	.041
Trouble Paying Attention ^o	-.031 (.972)	.119 (1.095)	.127 (.990)	-.132 (.082)	.015 (.083)	47,141	.014
Trouble with Homework ^o	-.044 (.976)	.170 (1.071)	.132 (.955)	-.141* (.073)	.053 (.075)	47,193	.021
Trouble with Students ^o	-.065 (.966)	.247 (1.086)	.214 (1.053)	-.232*** (.081)	.038 (.082)	47,235	.056
Effort Schoolwork ^o	-.058 (1.002)	.224 (.956)	-.095 (1.089)	.033 (.086)	.307*** (.087)	47,495	.077
Skipping School ^o	.013 (1.002)	-.054 (.982)	.207 (1.319)	-.144 (.095)	-.216** (.096)	46,852	.069
Never Suspended or Expelled	.774 (.418)	.519 (.500)	.484 (.504)	.225** (.088)	.041 (.088)	10,793	.141

heteroskedasticity robust standard errors in parentheses

* significant at 10%-level; ** significant at 5%-level, *** significant at 1%-level

Standardized to have mean 0 and standard deviation 1 in our weighted sample.

Table A.6B: Behavior Outside of School (Add Health)

Dependent Variable	Raw Data			School Fixed Effects: No			
	White	Black	Mixed	White	Black	Observations	R-squared
Watch TV ^o	-.140 (.947)	.527 (1.021)	.255 (.987)	-.382*** (.075)	.199*** (.076)	47,477	.116
Drinking ^o	.026 (1.004)	-.103 (.975)	.145 (1.055)	-.117 (.080)	-.267*** (.080)	46,767	.105
Smoking ^o	.078 (1.055)	-.303 (.667)	.060 (1.073)	.040 (.078)	-.408*** (.078)	46,881	.081
Daring ^o	.057 (1.025)	-.227 (.856)	.191 (1.154)	-.113 (.091)	-.397*** (.092)	46,695	.073
Lie to Parents ^o	-.005 (.985)	.015 (1.054)	.203 (1.125)	-.221** (.093)	-.188** (.093)	46,622	.010
Fight ^o	-.019 (.997)	.071 (1.007)	.241 (1.130)	-.229*** (.088)	-.156* (.089)	45,338	.078
Property Damage ^o	.032 (1.033)	-.152 (.816)	.192 (1.020)	-.111 (.154)	-.252 (.155)	10,722	.041
Steal ^o	.011 (1.013)	-.063 (.920)	.572 (1.398)	-.507* (.261)	-.539** (.263)	10,715	.021
Violent Acts ^o	-.058 (.947)	.252 (1.166)	.629 (1.601)	-.557* (.336)	-.328 (.338)	10,736	.081
Sell Drugs ^o	-.004 (.989)	.020 (1.048)	.019 (1.041)	.030 (.124)	.040 (.128)	10,720	.028
See Violence ^o	-.065 (.933)	.294 (1.213)	.302 (1.290)	-.268 (.214)	.038 (.217)	10,738	.065
Ever Sex	.358 (.480)	.576 (.494)	.584 (.497)	-.180** (.072)	-.022 (.073)	10,684	.163
Ever STD	.018 (.134)	.079 (.270)	.082 (.277)	-.061 (.047)	-.007 (.047)	10,784	.041
Ever Illegal Drugs	.321 (.467)	.266 (.442)	.556 (.501)	-.183** (.089)	-.258*** (.089)	10,638	.059

Heteroskedasticity robust standard errors in parentheses

* denotes significance at 10%-level, ** significance at 5%-level, and *** significance at 1%-level.

Variables marked with ^o are normalized to have mean 0 and standard deviation 1 in our weighted sample.