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Introduction

What Have We Learned About the Problems of and Prospects for Disadvantaged Youth?

Jonathan Gruber

One of the most important public policy problems facing the United States today is the life prospects of disadvantaged youths. Youths from low income households, minority youths, and youths from broken families face a series of barriers to success that may have negative implications both today and in the future. Enumerating the problems facing disadvantaged youth in the United States is easy: poor educational opportunities, poor health care, high-crime environments, family dysfunction, and so on. What is much harder is to carefully document those problems across a broad spectrum of contexts. Moreover, it is difficult to assess the extent to which interventions can alleviate these causal impacts of disadvantage on current and long run youth outcomes.

The purpose of this volume is to take on these two challenges from an economics perspective. The volume brings together nine of the leading teams of empirical economics researchers in the country to address these questions from a number of different perspectives. The result is an innovative and comprehensive look at the issues facing youth in the United States in general, and disadvantaged youth in particular.

In this introduction, I provide an overview of the results provided in these studies. I review their findings and the important lessons drawn from each, as well as the lessons in aggregate for both the research and policy communities.

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Summary of papers prepared for conference on the Economics of Disadvantaged Youth. I am grateful to the authors for writing such excellent papers and to the Annie E. Casey Foundation for research support.

The studies themselves fall into three different areas, so the book (and my discussion) groups them accordingly.

Before summarizing the work in the book, it is important to lay the groundwork for the chapters that follow. This set of chapters is *not* designed to be a comprehensive cataloging of all of the problems facing disadvantaged youth, but rather just a sampling of the economics approach to some of them. There is much more work to be done on other problems not addressed in this book, such as substance use and abuse, housing, and work training programs. My hope is that this introduction will introduce readers to tools that they can bring to bear on those questions as well.

Also, there is no one comprehensive definition of “disadvantaged” used in these chapters. There are a whole host of measures that can be used to measure disadvantage, and rather than impose a given measure on any one study, I urged the authors to cast a wide net and consider a variety of measures. The result is enough overlap across chapters that the interested reader can easily compare several studies along a given dimension of disadvantage (e.g., race or income deprivation).

Section I: Education

Clearly, a critical influence on the outcomes of disadvantaged youth is their educational opportunities. Numerous studies have shown that disadvantaged youth who obtain less education, or who are educated in lower quality schools, have worse life outcomes. But the difficulty with interpreting this finding is that those same disadvantaged youth who obtain low-quality education may have worse life outcomes for many reasons: maybe it is the youth with the most troubled home life, for example, who attend the worst schools. If it is the home life, and not the schools, that matters for youth outcomes, then we may be inappropriately focusing our policy attention on the educational arena. This project contains three separate studies that try to disentangle the causal effect of educational quality and quantity on disadvantaged youth.

The first is the study by David Figlio and Jeffrey Roth, “The Behavioral Consequences of Pre-Kindergarten Participation for Disadvantaged Youth.” One of the most exciting public policy debates in the United States is over the role of the government in providing pre-kindergarten education for all children. Many other developed countries start state-funded education (and day care) much earlier than kindergarten. But evidence on the efficacy of early child interventions is mixed. On the one hand, a number of studies find that intensive pre-kindergarten interventions (such as the Perry Preschool and Abecedarian projects) and Head Start programs improve school readiness in the short run and generate less need for governmental services in the long run. On the other hand, the influential National Institute

of Child Health and Development Study of Early Child Care and Youth Development find that children placed in day care at young ages display elevated levels of aggression and disobedience in elementary school. These mixed findings make it difficult to draw firm policy conclusions on the advisability of government support of expanded pre-kindergarten.

The Figlio and Roth chapter provides important new evidence on this debate by bringing to bear a unique new data set that links student birth records to pre-kindergarten participation for every child born in Florida in or after 1994 who subsequently attended public school in Florida. They also address an important issue that has plagued this literature: how to separate the impact of preschool programs from other factors that are correlated with preschool attendance. They do so by comparing siblings within the same family; they show that those who had access to a pre-kindergarten program through their locally-zoned elementary school when they were four years old were much more likely to attend pre-kindergarten than were their siblings who did not have access to a local program. The results here are striking: having a locally-zoned pre-K program raises the odds of attending pre-K, relative to a sibling without.

Using this innovative strategy, Figlio and Roth investigate the impact of pre-K attendance on behavioral problems and find that attending a pre-K program significantly reduces behavioral problems in elementary school. Interestingly, this impact is particularly large when the child lives in a very disadvantaged area, suggesting the value of public pre-K to such areas. In more advantaged areas, there was little effect of public pre-K.

The second chapter of the volume presents a study of the impacts of school choice by Julie Berry Cullen and Brian A. Jacob, entitled “Is Gaining Access to Selective Elementary Schools Gaining Ground? Evidence from Randomized Lotteries.” As their chapter highlights, poor children attend much worse schools than their higher income counterparts. For example, in 2004 high-poverty districts received nearly \$1,000 less per pupil in state and local revenues than low-poverty districts within the same state, and only 65 percent of teachers in high-poverty districts in California met the new federal guidelines for highly qualified teachers in 2004 to 2005, compared to 81 percent in low-poverty districts in the state. Perhaps as a result, the school outcomes of disadvantaged children are much worse than their more advantaged peers. For example, in the Chicago sample that the authors analyze, test scores for whites are more than 10 percent higher than for minorities, and test scores for those eligible for free student meals (a measure of low income) are 10 percent lower than those who are not eligible.

While there have been a number of initiatives to improve the educational opportunities available to low-income children, one of the most popular has been allowing students to opt out of their underperforming local school and choose another public school. But this initiative has proceeded largely

in an evidence vacuum; as the authors point out, there is little to suggest that changing the school environment will improve the outcomes of these disadvantaged children.

Cullen and Jacob address this problem by using their own innovative data set, administrative records on over 50,000 children attending public elementary school in the Chicago Public School District (CPS). Under this system's "open enrollment" policy, students can apply to attend magnet schools and other public schools throughout the CPS, rather than their own local school. The other major innovation of their chapter is a clever means of addressing a common problem in this literature: it is the higher achieving students who will apply to attend more academically successful schools, biasing the results to suggest that better school quality leads to better outcomes. They address this shortcoming in a convincing manner, by noting that the most academically advanced schools in the CPS are oversubscribed, so that they allocate slots by randomized lottery. As a result, the authors can assess the causal impact of attending these schools by comparing those who apply and win the lottery, versus others who apply and are (randomly) denied entry to the school.

Their findings are striking. As expected, winning the lottery is closely associated with attending a higher quality school, as measured either by the average achievement level of peers in the school or by "value-added" indicators of the school's contribution to student learning. Yet there is no evidence that actually attending this better school has any positive impact on student outcomes over the subsequent five years! Students randomly assigned to higher achieving schools are themselves no likely to score higher on subsequent tests.

Most importantly from the perspective of this volume, they also find that there is no evidence that attending a higher achieving school matters for particular disadvantaged subgroups. The large differences in test scores that we see across groups do not in any way dissipate as the disadvantaged groups attend more selective schools. Perhaps this finding should not be surprising given that Cullen and Jacob find that two-thirds of the gap in achievement across groups is present *within* schools, and only one-third occurs across schools. The educational problems of the disadvantaged will not disappear simply by giving them access to better schools.

The third chapter in this series is Philip Oreopolous' study of laws restricting the ability of students to drop out of high school, "Would More Compulsory Schooling Help Disadvantaged Youth? Evidence from Recent Changes to School-Leaving Laws." Another source of educational difference by groups is the rate at which they drop out of high school. For example, students in low-income families are six times more likely to drop out than those in high income families. One policy intervention that can help to remediate this difference is compulsory schooling laws, which mandate that children stay in school until some minimum school-leaving age. Such laws were on

the books for most of the twentieth century, but usually imposed school attendance only until ages of fourteen or fifteen. In the past few decades, however, states have revised these laws to require attendance to higher ages, in some states until age eighteen. If binding, these laws can reduce rates of dropping out, and thereby reduce the gap in attainment between advantaged and disadvantaged students.

Oreopolous' chapter provides a careful analysis of the impact of the recent increases in compulsory schooling ages. He first documents clearly that these laws have increased educational attainment. Moreover, even laws that raised the compulsory age to some point below graduation age still lowered dropout rates and promoted graduation, presumably by increasing interest in school and the willingness to "close out" high school once most of it was compulsory. He even finds that stricter compulsory schooling laws increase college attendance, presumably because high school graduates are in a better position to do the work required by college attendance.

In the second part of his chapter, Oreopolous asks whether the increased education mandated by these laws actually shows benefits for outcomes early in the working career. He finds clear evidence that it does: more education due to compulsory education laws leads to lower rates of unemployment and higher levels of family income.

A particularly important finding in this study is that the major effects of the compulsory schooling laws show up for Hispanic youth only. Thus, these laws appear to work to close the gap in educational attainment and labor market outcomes between Hispanics and whites, but not between blacks and whites. This suggests that compulsory schooling laws may be effective at reducing educational disparities along some dimensions but not others.

Section II: Health and Healthy Behaviors

Another dimension along which disadvantaged youth suffer relative to their advantaged counterparts is health status. These gaps arise from several sources: differences in inherited health status (genetic transmission); differences in treatment of illness; differences in environments that impact health status; and differences in risk-taking behaviors that determine health outcomes (such as smoking and drinking). Three of the chapters in this volume address important aspects of this set of issues.

The first is "Mental Health in Childhood and Human Capital," by Janet Currie and Mark Stabile. There has been increasing attention devoted to child mental health problems, with recent studies showing that one in five children in the United States suffers from mental or behavioral disorders. Currie and Stabile show that there are substantial gaps by socioeconomic status in these measures as well, with disadvantaged children in the United States and Canada exhibiting a 10 to 20 percent larger incidence of behavioral problems than more advantaged children.

Currie and Stabile's chapter is focused on documenting the long-term effects of children's mental health problems, an area that has attracted little attention from economists. They do so by examining the relationship between several common mental health conditions and future outcomes using large samples of children from the Canadian National Longitudinal Survey of Children and Youth (NLSCY), and the American National Longitudinal Survey of Youth (NLSY). They assess the impact of having conditions such as anxiety, depression, and Attention Deficit Hyperactivity Disorder (ADHD) as a child on later life outcomes such as young adult delinquency, grade repetition, and test scores. Once again, they face a difficult problem in this empirical analysis: children with mental health problems typically also face other barriers to success, and it is important for the purposes of the study to disentangle the role of mental health problems from the role played by these other factors. The authors address this concern by using sibling comparisons, comparing the long run outcomes of children who have these childhood mental health problems to the outcomes of their siblings without the problem.

Currie and Stabile find strong evidence that childhood ADHD is negatively associated with later life outcomes in both the United States and Canada, with more modest effects for other childhood mental health problems. They find, however, that there is relatively little consistent "buffering" effect of parental advantage on the impacts of childhood mental health problems on later outcomes. That is, the translation of poor child mental health to poor outcomes later in life is fairly consistent across groups of advantaged and disadvantaged children. As they note, this stands in contrast to work showing that the impact of physical health on later life outcomes is determined strongly by childhood advantage.

The next chapter in this section is Patricia M. Anderson, Kristin F. Butcher, and Diane Whitmore Schanzenbach's study of the determinants of childhood obesity, "Childhood Disadvantage and Obesity: Is Nature Trumping Nurture?" Childhood obesity is one of the leading public health concerns in the United States. The rate of child obesity tripled from 5 percent in the early 1970s to 15 percent thirty years later. Rates of obesity are even higher among disadvantaged youth. As the authors document, obesity rates were 17 percent among children in the lowest income quartile, as opposed to 11 percent in the highest quartile, and obesity rates are much higher for blacks and Hispanics than for whites.

One central question to raise about the high and differential obesity rate is the extent to which it is driven by parental influences. This chapter addresses that question head-on by examining the child-parent correlation in a measure of obesity, body mass index (BMI). In particular, the authors evaluate how this correlation has changed over time and whether the correlation operates differentially for disadvantaged groups. They undertake this study using the most comprehensive documentation of obesity in the United

States over time, the National Health and Nutrition Examination Survey (NHANES). The NHANES collects detailed data on weight and height for both parents and children, and has done so over four waves spanning from 1971 through 2004.

Anderson, Butcher, and Schanzenbach begin by showing that not only are disadvantaged children heavier than advantaged children, but that differential has been growing over time. For example, prior to 1980, families below the poverty line were no heavier than families above; by the end of the sample, they were 2.4 percent heavier than families at three times the poverty line. They then explore the elasticity of a child's BMI with respect to their mother's. They find that this elasticity grew from 0.14 (a 10 percent increase in mother's BMI led to a 1.4 percent increase in child BMI) in the first two waves to roughly 0.2 in the last two waves, a 50 percent increase. Using these elasticity estimates, the results imply that growth in parental BMI can explain about a third of growth in childhood obesity. They use data from another study, comparing biological to adopted children, to confirm that this intergenerational correlation occurs mostly as a result of biology and not shared environment.

They then explore the extent to which this elasticity differs for disadvantaged, relative to advantaged, groups. Surprisingly, despite the faster growth in obesity for the disadvantaged, there is no higher elasticity (nor faster growth in the elasticity). This finding suggests an important role for factors outside the household in combating the growth in obesity among both the advantaged and disadvantaged.

The final chapter in this section is the study of teen pregnancy by Melissa S. Kearney and Phillip B. Levine, "Socioeconomic Disadvantage and Early Childbearing." The United States has a rate of teen births well above other developed nations, with 5 percent of teens giving birth each year; in the United States roughly one-fifth of all women will give birth before the age of twenty. There is tremendous concern over the long run consequences for both the mother and the child of teen pregnancy, and therefore a major interest in understanding the causes of teen pregnancy. Kearney and Levine's chapter carefully investigates the role of socioeconomic disadvantage in driving teen pregnancy.

They begin by using the Panel Study of Income Dynamics (PSID) to document the strong correlation between various measures of disadvantage and teen child-bearing. But, as with the other studies in this volume, they are concerned that it is not the individual disadvantage per se that is driving these decisions; rather, girls who are born into a family characterized by socioeconomic disadvantage may also grow up in communities with social or cultural norms that lead to early childbearing. To address this concern, they turn to a cohort approach. Under this approach, they use data from the Vital Statistics to measure teenage birth rates across cohorts and states over a long period of time. They first find that the analysis at the cohort level

shows a much stronger correlation between socioeconomic disadvantage (such as having a mother with low education or an unmarried mother) and child-bearing than does the analysis at the individual level. This suggests the presence of peer effects, whereby the consequences of disadvantage to some in an area can spill over to the behavior of others in that same area.

They then try to assess the shorter run impacts of a change in socioeconomic disadvantage on teen childbearing by comparing changes in cohort rates of disadvantage to changes in cohort rates of teen childbearing within states over time. They find that there is still a strong association, although weaker than when just comparing steady states: for each 10 percent increase in disadvantage there is at most a 2.5 percent rise in teen pregnancy, and the magnitude is much less for a number of disadvantage measures. This suggests that other social or cultural factors besides economic disadvantage are playing an important role in driving increases in teen pregnancy.

Section III: Contextual Influences

The final section of the book examines the role of contextual influences on the outcomes of disadvantaged children: the unemployment of their parents, the religiosity of the household, and the rate of crime in the neighborhood.

Marianne Page, Ann Huff Stevens, and Jason Lindo start this section by showing the impact of parental job dislocation on youth outcomes in “Parental Income Shocks and Outcomes of Disadvantaged Youth in the United States.” Their chapter strikes at the fundamental question in government policy to help disadvantaged youth: will transferring income to disadvantaged families improve the outcomes of their children? This is obviously a very difficult question to answer since children in families with the highest incomes will have better long run outcomes for many reasons, of which income is only one. What is required to answer this question convincingly is a determinant of family income that is independent of the underlying correlation between the talents of parent and child.

Page, Stevens, and Lindo find such a determinant in job displacements. Specifically, they use data from the PSID to examine families who are similar over time, but where one family experiences a job displacement to an earner and the other family does not. They focus in particular on those who are displaced due to a plant closing, which is clearly independent of decisions made by the earner (and therefore independent of other determinants of the outcomes of their children). Such displacements have been shown in previous work, and are shown again here, to lead to sizeable family income losses.

Their main finding is surprising: those children who suffered income loss in childhood due to the job loss of a parent do not, on average, appear to have worse outcomes as adults. This finding casts significant doubt on the

central role for the typical family of income levels in determining long run child outcomes. At the same time, they find that job loss-related income reductions do impact the long run outcomes of children from disadvantaged households. For example, among children who grew up in households with income below 1.5 times the poverty line, they are 36 percent less likely to have completed high school if a parent was displaced from their job (relative to comparable families without displacement), and 16 percent less likely to attend college. Thus, disadvantage at childhood makes children more susceptible to long run negative influences from lower household income.

The next chapter in this section is a study of the “buffering” effect of religious and social institutions by Rajeev Dehejia, Thomas DeLeire, Erzo F. P. Luttmer, and Josh Mitchell, “The Role of Religious and Social Organizations in the Lives of Disadvantaged Youth.” As noted earlier, there is a substantial body of evidence that shows growing up in a disadvantaged household has negative consequences for later life outcomes—on average. Yet there is considerable variation in these later life outcomes, with some individuals escaping the grip of youth disadvantage. A key question is what factors might be associated with the ability to move out of disadvantage later in life. This chapter asks whether one such factor might be the role of religious or social organizations in the lives of disadvantaged youths.

The authors use the National Survey of Families and Households (NSFH), a panel data set that collects data on the religious and social participation of parents in 1987 to 1988, and follows up the outcomes of their children in 2001 to 2003. In this way, the authors can model these later child outcomes as a function of whether the family was disadvantaged roughly fifteen years earlier, and how that disadvantage interacts with the religious and social participation of the family at that time. The authors use a wide variety of measures of disadvantage, ranging from income to child characteristics, and an equally wide variety of measures of ultimate outcomes, ranging from education and income to subjective well-being. Given the large number of combinations of disadvantage and outcome that they examine (a total of 168), they are careful to ask whether the pattern of findings overall is consistent with a buffering role or not.

The findings are fairly conclusive: parental participation in religious organizations when the child is young does buffer the child against the negative consequences of disadvantage. For example, having a mother with no more than a high school education as a youth reduces the odds that a child attends college by 23 percentage points from a base of 65 percentage points, a decline of about one-third. Yet this effect is larger (31 percentage points) if the youth’s family was an infrequent religious participant during childhood, and it is much smaller (16 percent) if the youth’s family was a frequent religious participant. So the authors say that religious participation provided a “buffering” effect of roughly 50 percent. They do not find a similar buffering role for other social organizations.

The final chapter in this section is the study of the impact of neighborhood criminality on child outcomes by Anna Aizer, “Neighborhood Violence and Urban Youth.” Her chapter opens with a striking fact: three-quarters of American children report having been exposed to neighborhood violence, and exposure to violence is closely associated with poor outcomes for children. Her ambitious chapter aims to explore this exposure in more detail and understand its consequences. She does so using a novel data set, the Los Angeles Family and Neighborhood Study (LA FANS), a survey of children and their families residing in sixty-five neighborhoods in Los Angeles. These data have information on the youth’s individual exposure to violence, as well as information on test scores as a measure of youth outcomes. In addition, she creates an innovative measure of neighborhood violence: hospitalizations for assaults for individuals from that neighborhood.

Aizer finds that, in fact, there is no consistent evidence that exposure to violence, either at the individual or neighborhood level, is associated with reduced child outcomes once family disadvantage is controlled for. That is, the negative correlation one finds between exposure to violence and poor outcomes may not be due to the violence per se but to the other socioeconomic disadvantages present for those exposed to violence. Her results are not sufficiently statistically precise to say that violence does not matter, but she certainly raises the bar for those who would claim that exposure to violence, as opposed to other disadvantages, drives poor child outcomes.

Conclusion: How Does Disadvantage Matter?

This is a terrific set of papers, and together they cast new light on a series of important issues surrounding disadvantaged youth. It is hard to summarize clearly such a wide array of varying findings. But there are some general lessons that can be drawn from this body of work.

Lesson 1: Disadvantage Matters

The first lesson is the least surprising: childhood disadvantage has serious negative consequences for child outcomes—both in the short and long term. The studies in this volume document important differentials in a wide variety of outcomes between advantaged and disadvantaged children. In particular, relative to their more advantaged counterparts, children who have low family incomes, low parental education, or are from racial and ethnic minorities are susceptible to the following:

- More behavioral problems in school
- Lower school test scores
- More likely to drop out of high school
- More likely to be obese
- More likely to be teen mothers

- More likely to suffer from mental illness
- More exposed to violent crime

While not surprising, a number of these studies have brought to bear innovative approaches that allow the authors to separate the role of child disadvantage from other factors (such as genetics); that is, to move from a correlation between disadvantage and poor outcomes to a causal framework.

Lesson 2: Differential Impacts of Public Policy and Other Outside Factors Are Mixed

Probably the most interesting question addressed by most of the chapters in this volume is whether public policies and other outside factors have a differential impact on children in disadvantaged households. The evidence here is surprisingly mixed. In a number of cases, this is shown to be the case:

- Figlio and Roth find that public pre-K has a strong effect on reducing behavioral problems in students who attend schools in disadvantaged areas, but not in students who attend schools in advantaged areas.
- Oreopolous finds that raising the minimum school-leaving age has a positive effect on later life outcomes for Hispanics, but not other groups.
- Page, Stevens, and Lindo find that income shocks to parents arising from job loss have effects on later life outcomes for poor but not for nonpoor children.
- Dehija, DeLeire, Luttmer, and Mitchell find that participation in religious organizations buffer the effects of disadvantage on later life outcomes.

Yet in a number of other cases, this turns out not to be the case:

- Cullen and Jacob find no evidence that moving to a higher “quality” public school has any impact on outcomes for either advantaged or disadvantaged youths.
- Anderson, Butcher, and Schanzenbach find no evidence that there is a higher translation of parental obesity to child obesity in disadvantaged relative to advantaged households.
- Currie and Stabile find no evidence that disadvantaged children see a particularly high translation of childhood mental illness to adult outcomes.

This disparity across the chapters is striking and suggests that context is very important in understanding the impact of protections against disadvantage. In some settings, such as pre-K schooling, high school dropping out, income shocks, or religious participation, there is a particularly strong “buffering” role to be played by interventions. In other settings, such as school choice or the translation of childhood mental illness to adult out-

come, there is not. This is an important distinction because if there is a possible “buffering” role, then later interventions can help offset the implications of youth disadvantage; but if there is not, then policy must intervene to end the source of the disadvantage itself if it is to improve child outcomes. Clearly a next step for this research agenda is understanding why this set of buffering responses is so mixed. In particular, can we refine our understanding of the contexts where interventions do and do not offset the impact of family disadvantage?