

March, 2004

Experimental Analysis of Neighborhood Effects on Youth

Kling and Liebman

Youth Criminal Behavior in the MTO Experiment

Kling, Ludwig, and Katz

Children who live in areas of concentrated poverty consistently do worse in school, have more health problems and get in trouble with the law more often than youth who grow up with more affluent neighbors. To what extent, however, should these outcomes be attributed to the disadvantaged neighborhoods themselves, as opposed to family and individual differences that are not directly related to any given residential environment? The answer is critical to the design of education, health, housing and other social policies aimed at assisting low-income families.

Previous investigations of neighborhood effects through analysis of housing mobility programs have been limited by the possibility that participating families who moved out of areas of concentrated poverty differed systematically from their neighbors in terms of motivation and capacity. The Moving to Opportunity (MTO) program, instituted by the U.S. Department of Housing and Urban Development in the 1990s, avoided this self-selection bias by randomly assigning families living in high-poverty public housing to three groups: those who received a housing voucher to be used only in low-poverty Census tracts, those who received Section 8 vouchers with no restrictions, and a control group who received no voucher of any kind.

The authors of two working papers find that neighborhoods do seem to have independent effects on youth education, health, and behavior, but that these effects are quite complex. While girls fare better in many ways after moving to more affluent neighborhoods, boys appear to be either unaffected or negatively affected by such moves. The authors conclude their analysis, therefore, by focusing on the possible reasons for such gender differences in the effects of neighborhood mobility.

Moving to Opportunity

From 1994-98, 4600 households enrolled in MTO in Baltimore, Boston, Chicago, Los Angeles, and New York. Applicants, all of whom were initially living in high-poverty public housing, were assigned by lottery to one of three groups:

- The Experimental Group: Received a housing voucher (along with housing search assistance) that was only valid in Census tracts with a 1990 poverty rate below 10 percent.
- The Section 8 Group: Received a regular Section 8 voucher with no location restriction and no special counseling.
- The Control Group: Received no housing voucher.

The two groups who were issued vouchers were designated “treatment” groups, and compliance (those who moved through MTO) was 43 percent in the experimental group and 55 percent in the Section 8 group.

In 2002, several years after random assignment, approximately 1,800 children of MTO families between the ages of 15 to 20 were surveyed on several outcome domains, including education, risky behavior, mental and physical health, and criminal behavior. Surveys, which included reading and math tests, were conducted in person, and for the study of criminal behavior, official arrest data was also compiled.

Findings

The addresses of the MTO youth studied in 2002 revealed that, four to seven years after random assignment, program participants were still dispersed in neighborhoods that differed substantially in relative affluence. At the time of random assignment, 94 percent of MTO youth resided in Census tracts with poverty rates of 36 percent or higher. In 2002, 70 percent of the experimental compliers and 41 percent of Section 8 compliers were living in a Census tract with a poverty rate of less than 24 percent, versus 21 percent of those in the control group. However, this upward neighborhood mobility did not affect all youth equally, largely improving outcomes for females while on balance negatively affecting outcomes for males.

The positive effects for girls were concentrated in the domains of education, mental health and criminal behavior. For example, 83 percent in the experimental group females (89 percent of experimental compliers) had either graduated from high school or were still in school, compared with 77 percent of control group females. In addition, there were significant gains in mental health among girls in the treatment groups. Compared with control group females, the relative odds of a generalized anxiety disorder were about 70 percent lower among experimental group compliers and 80 percent lower in the Section 8 group. Finally, compared to females in the control group, females in the Section 8 group were about 25 percent less likely to have ever been arrested, and the number of lifetime arrests for experimental group females was 33 percent lower, including a significant reduction in violent crime (mainly assaults).

In the case of male youth, however, those in the experimental group were about 13 percent more likely than those in the control group to have ever been arrested, largely due to increases in property crime (driven by larceny). In addition, surveys revealed increased “risky behavior” in terms of higher rates of substance abuse among both experimental and Section 8 males compared to those in the control group, more than a tripling of alcohol use among compliers and even larger increases in marijuana and cigarette smoking. And finally, males in both treatment groups registered negative physical health outcomes compared to the control group, suffering a large and significant increase in non-sports injuries.

Analysis and Implications

The authors address three models of neighborhood effects that would predict improved youth outcomes after moves to more affluent neighborhoods: the “epidemic model” or the tendency for like to beget like, the “collective socialization model” that looks at the influence of local adult role models, and the “institutional model” that takes into account the quality of local schools, police and other neighborhood institutions. They also examine an alternative model, known as the “relative deprivation model,” which posits that teens moving to a more affluent neighborhood may feel resentful or anxious around more affluent, higher-achieving peers, leading to withdrawal from school, impaired mental health, and more anti-social behavior. However, none of these models make strong predictions that only female outcomes would be beneficially affected. The stark gender division in outcomes among MTO youth, indicates to the authors that none of these models provides a complete explanation for neighborhood effects. As to broader social policy initiatives that might take into account neighborhood effects on youth, the authors emphasize that while their findings indicate that these effects are significant, they are also more complex than conventional wisdom would suggest.

They propose several mediators for further research, based on the hypothesis that boys and girls react differently to more affluent neighborhoods. These include the possibility that boys have a harder time socializing in new environments and therefore associate with similarly disaffected and more delinquent peers in their new neighborhoods, that females react to more affluent schoolmates by trying harder in school while males react with resentment, stealing from classmates and disengaging from academics, or that parents of daughters may relax after a move into a “safer” neighborhood but may worry about their sons fitting in or winding up in trouble, and that sons react negatively to this parental anxiety.