

Benefits of Living in High-Opportunity Neighborhoods

Insights from the Moving to Opportunity Demonstration

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The U.S. Department of Housing and Urban Development designed and implemented the Moving to Opportunity (MTO) demonstration to assess the long-term impacts of providing housing vouchers to help low-income families move from severely distressed, high-poverty housing projects to low-poverty neighborhoods. Families living in public and assisted housing projects in five cities (Baltimore, Boston, Chicago, Los Angeles, and New York) were invited to participate. Those that volunteered for the demonstration were randomly assigned to one of three treatment groups. The experimental group received housing vouchers that (for the first year) could only be used in low-poverty neighborhoods, along with one-time help finding a house or apartment that qualified. The comparison group received regular housing vouchers that they could use to move to any neighborhood. And the control group continued to receive housing subsidies in the original development (for more on the origins and design of MTO, see Briggs, Popkin, and Goering 2010).

MTO's experimental design provides a powerful tool for answering the question: are families in the treatment group better off after roughly 10 years than their counterparts in the comparison and control groups? Recently released evaluation results conclude that, as a group, the MTO experimental families enjoy significantly better health outcomes than the control group but not higher employment, incomes, or educational attainment (Sanbonmatsu et al. 2011).

Key Findings

- The MTO Final Evaluation found significant gains in health but not employment, incomes, or educational attainment for poor families that received special-purpose vouchers to move to low-poverty neighborhoods.
- One possible reason gains were limited is that few experimental families spent much time living in high-opportunity neighborhoods.
- MTO families that lived longer in neighborhoods with lower poverty and higher education levels did achieve better outcomes in work and school, as well as in health.
- These results may reflect a complex set of feedback loops between neighborhood environment and family success, rather than simple, one-way causality.
- Evidence supports ongoing investments in programs that help poor families find and afford housing in high-opportunity neighborhoods.

One possible reason that gains were limited to health outcomes is that few experimental families spent much time living in high-opportunity neighborhoods. In fact, less than half the families in the MTO treatment group actually moved to low-poverty neighborhoods, and many moved back to higher-poverty neighborhoods after a year or two. Although the experimental group families moved to better-quality housing and safer neighborhoods than their counterparts in the control group, few spent more than a year or two in high-opportunity neighborhoods (for a discussion of mobility patterns among demonstration families, see Turner et al. 2011). In other words, MTO did not produce the dramatic and lasting improvements in neighborhood environment envisioned when it was designed.

Do Families Benefit from Living in High-Opportunity Neighborhoods?

Did families that lived in high-opportunity neighborhoods longer experience better outcomes than comparable families that stayed in distressed neighborhoods or that only briefly lived in high-opportunity neighborhoods? To explore this question, we used MTO survey data for all families that participated in the demonstration to statistically test for relationships between their exposure to high-opportunity neighborhoods (over the demonstration period) and their individual well-being at the end of the demonstration. We focused on three dimensions of individual well-being: physical and mental health, income and employment, and education.¹

A central challenge for this analysis is that some attributes enabling families to move to and remain in a high-opportunity neighborhood might also enable them to succeed economically or educationally, making it difficult to disentangle the independent effects of time spent in high-opportunity neighborhoods. For example, families with employed adults (and higher earnings) may be better able to afford the costs of living in a low-poverty neighborhood. The MTO data provide a rich array of baseline characteristics for participating adults, which we used as controls in our analysis to reflect families' characteristics and capacities at the start of the demonstration period *before* they began to experience differential access to high-opportunity neighborhoods. But other unmeasured attributes may also influence both residential location and other outcomes. So estimates of the association between exposure to high-opportunity neighborhoods and the long-term well-being of adults and children might best be viewed as *upper-bound estimates* of independent neighborhood effects.

High-Opportunity Neighborhood Definitions

- **High-work and -income neighborhoods:** census tracts with poverty rates below 15 percent and labor force participation rates above 60 percent.
- **High-education neighborhoods:** tracts where more than 20 percent of adults have completed college.
- **Predominantly white neighborhoods:** tracts where the non-Hispanic white share of the population exceeds 70 percent.
- **High-job-density neighborhoods:** tracts with more than 200,000 low-wage jobs located within five miles of the tract centroid.

Time Spent in High-Opportunity Neighborhoods

We tested two alternative strategies for measuring exposure to high-opportunity neighborhoods. The first strategy calculates the total time the family spent in neighborhoods defined as high opportunity and estimates the independent effects on individual outcomes (controlling for baseline characteristics). This approach asks: do people who live longer in neighborhoods that meet a predefined standard of high opportunity experience better outcomes, other things being equal? We considered four criteria for defining neighborhoods as high opportunity, including low poverty and unemployment, high education levels, many white residents, and ample nearby job opportunities (see Turner et al. 2012 for a full discussion of these definitions). However, this initial set of models produced no meaningful results.

This may reflect the fact that so few families spent time in high-opportunity neighborhoods. For example, families in MTO's experimental group averaged only 22 percent of their time (between random assignment and the final survey) living in high-work and -income neighborhoods, and only 9 percent of their time in predominantly white neighborhoods. Even if more time living in high-opportunity neighborhoods actually did have a positive effect on outcomes, it might be difficult to observe this effect from the experience of MTO participants. To illustrate, suppose that two families—A and B—each lived at three locations over the course of the demonstration period. Family A spent all its time in neighborhoods that were 40 percent poor. Family B spent one-third of its time in a neighborhood that was 17 percent poor, one-third in a neighborhood that was 20 percent poor, and one-third in a neighborhood that was 23 percent poor. Both would be defined as having *no* exposure to low-poverty neighborhoods because neither family spent any time in a neighborhood with a poverty rate of less than 10 percent, but family A experienced an average neighborhood poverty rate of 40 percent, while family B experienced an average rate of only 20 percent. These two experiences could be qualitatively different, even though neither family spent time in neighborhoods defined as high opportunity.

Average Neighborhood Characteristics over Time

Given the small share of MTO families spending much time in high-opportunity neighborhoods, our second strategy uses time-weighted average values of neighborhood characteristics instead of time spent living in neighborhoods that meet a high-opportunity threshold. This approach effectively compares outcomes for our hypothetical family A—with a 40 percent average poverty rate in the example above—to family B—with a 20 percent average rate. In other words, do people who lived for more time in neighborhoods that scored better on indicators of opportunity experience better individual outcomes at the end of the demonstration period? Results are summarized in table 1.

MTO families that lived in neighborhoods with lower poverty and higher education levels achieved better outcomes in health, work, and school. These findings are consistent with the hypothesis that neighborhood environment matters for low-income adults and children. We find statistically significant relationships for two neighborhood opportunity indicators—poverty and adult education levels—with adults' physical activity limitations and anxiety, adult employment,

household earnings and income, boys' physical health, college enrollment among youth (both boys and girls), and children's English and math test scores.

Table 1. Significant Relationships between Neighborhood Opportunity Indicators and Individual Outcomes

Adult Outcomes	Lower poverty	Higher education		
Obese	-	-		
On high blood pressure meds	-	-		
On cholesterol meds	-	-		
Had physical activity limitations	↓	↓		
Absence of physical health problems	-	-		
Experienced major depressive episode	-	-		
Experienced any mood disorder	-	-		
Experienced anxiety disorder	-	-		
Anxiety score	↓	-		
Absence of mental health problems	-	-		
Monthly income	↑	-		
Employed last week	↑	-		
Household earnings	↑	↑		
Head's earnings above poverty	↑	↑		
Youth Outcomes	Boys		Girls	
	Lower poverty	Higher education	Lower poverty	Higher education
Obese	-	↓	-	-
Asthma or wheezing	-	↓	-	-
Absence of physical health problems	-	↑	-	-
Experienced major depressive episode	-	-	-	-
Experienced any mood disorder	-	-	-	-
Experienced anxiety disorder	-	-	-	-
Anxiety score	-	-	-	-
Absence of mental health problems	-	-	-	-
Ever enrolled in college	-	↑	-	↑
English score	↑	-	↑	↑
Math score	↑	↑	↑	-

Source: Turner et al. (2012).

Adults living in lower-poverty neighborhoods experience less anxiety and are less likely to have physical health limitations. They also have higher incomes and higher household earnings, and are more likely to be employed and to have earnings above the federal poverty level. Adults living in neighborhoods with higher shares of college-educated adults are also less likely to have physical activity limitations; they have higher earnings, and their earnings are more likely to exceed poverty.

Youth (both boys and girls) living in lower-poverty neighborhoods have higher English and math test scores. Boys living in neighborhoods with higher shares of college-educated adults experience less obesity, asthma, and wheezing, and fewer physical health problems. They are also more likely to have attended college and achieved higher math scores. Girls living in neighborhoods with higher education have higher English test scores.²

These outcomes are not only statistically significant but also meaningful in size. For example, an adult who lived in neighborhoods with poverty rates averaging 16 percent over the demonstration period had a predicted monthly income \$233 higher at the end of the period than an adult who lived in neighborhoods with poverty rates averaging 41 percent. The corresponding differences in boys' predicted English and math test scores equate to nearly a year of instruction (Nichols and Özek 2010).

Conclusions

Our results are roughly consistent with findings from the Gautreaux experiment, an earlier assisted housing-mobility initiative implemented in Chicago that helped low-income African American families move to predominantly white neighborhoods in the suburbs.³ Although Gautreaux was not designed as a random assignment demonstration, research has found significant long-term gains in children's educational outcomes and adult employment for families that moved to and remained in predominantly white neighborhoods with high levels of educational attainment and other community resources (see, for example, Keels et al. 2005).

However, our estimates of neighborhood effects do not fully align with the estimated impacts of the MTO treatment. The MTO Final Evaluation found significant gains in physical and mental health for adults and girls in the MTO treatment group relative to the comparison group, but not for boys, and no evidence of economic or educational gains. Our findings, on the other hand, suggest that adults living in neighborhoods with lower poverty and more-educated neighbors experienced better outcomes in employment, income, and physical health. Both boys and girls living in these neighborhoods experienced better educational outcomes, and boys (but not girls) experienced better outcomes on some health measures.

How can these differences be explained? It is not unreasonable to conclude that economic and educational effects are weaker for the MTO treatment group as a whole than for those who lived in higher-opportunity neighborhoods. But it is surprising that neither neighborhood poverty nor the share of college-educated adults is associated with girls' mental and emotional well-being, given the MTO findings. One possible explanation is that some other

dimension of neighborhood opportunity, such as safety or—as suggested by Popkin, Leventhal, and Weissman (2010)—absence of a sexually coercive environment, which we have not effectively captured here, explains the gains for MTO girls. This argues for further exploration of the dimensions of neighborhood opportunity, including the use of administrative data on crime rates by tract for the full demonstration period.

It is certainly possible that these results reflect a complex set of reciprocal relationships between neighborhood environment and family success (rather than simple, one-way causality). For example, families may move to or stay in better neighborhoods *because* they got a good job or increased their income; or parents who see the value of education for their children’s future might *simultaneously* relocate to a neighborhood with great schools and also motivate their children to succeed academically (see Sampson and Sharkey 2008 for thoughtful discussion of interconnections between mobility decisions and neighborhood effects).

We have controlled for a wide array of baseline family characteristics and find meaningful associations between neighborhood opportunity and outcomes for both adults and youth. Moreover, our measures of exposure to high-opportunity neighborhoods reflect families’ experience over the full 10-year demonstration, not just the characteristics of the neighborhoods they occupied at the very end of the period. Although we find evidence that lower neighborhood poverty and higher neighborhood education levels matter, we did not identify critical levels for these neighborhood attributes, above which individual outcomes improve. Nor were we able to identify how much time adults or children need to spend in better neighborhoods to benefit from the opportunities available there. Furthermore, we do not control for selection on unobserved characteristics, so family members’ long-range planning capabilities, time preferences, or motivation and perseverance might account for both moves to better neighborhoods and better employment and educational outcomes.

Despite these limitations, the findings reported here support ongoing investments in programs that help low-income families find and afford housing in high-opportunity neighborhoods, including housing vouchers, mobility assistance and incentives, and targeted housing acquisition and production programs. HUD’s obligation to affirmatively further fair housing requires that its policies work to ensure all households (regardless of race or ethnicity) have access to high-opportunity living environments. Ongoing research in this area can also help inform neighborhood revitalization strategies, by identifying neighborhood attributes that lead to better outcomes for low-income families and prioritizing the investments most likely to improve outcomes for low-income families where they currently live.

NOTES

1. This brief summarizes research presented in Turner et al. (2012), which provides methodological details and statistical results for all the models tested. Separate models are estimated for adults, boys, and girls based on earlier evidence that boys and girls may experience residential mobility and neighborhood environments differently. All models include data for members of all three treatment groups, focusing on differences in outcomes associated with neighborhood attributes, rather than differences associated with the experimental treatment.
2. The fact that measures of average neighborhood quality performed better as predictors of adult and youth outcomes than measures of time in high-opportunity neighborhoods could mean that we set the wrong thresholds to define high-opportunity neighborhoods. Therefore, we tested several local polynomial regression models modeling both raw and regression-adjusted outcomes (residuals from regressions) as nonlinear functions of our major weighted neighborhood characteristics, but the effects looked surprisingly linear. Although this preliminary exploration did not yield any clear evidence of threshold effects, this area of research warrants further exploration.
3. Gautreaux was implemented as part of a litigation settlement and explicitly focused on desegregation goals (see Polikoff 2006).

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