

As Wilson argued, the exodus of black working- and middleclass families from inner-city areas had adverse effects on the poor families left behind, because it eliminated a "social buffer" that helped "keep alive the perception that education is meaningful, that steady employment is a viable alternative to welfare, and that family stability is the norm, not the exception" (p. 49).

Was Wilson right to worry about concentrated poverty? Although we will suggest that indeed he was, we will also show that he was right partly for the wrong reasons. Our research on the U.S. Department of Housing and Urban Development's (HUD) Moving to Opportunity (MTO)<sup>1</sup> randomized mobility experiment raises questions about the effects of concentrated poverty on the earnings, welfare receipt, or schooling outcomes of low-income families. The MTO experiment suggests that concentrated poverty does have extremely important impacts, but on outcomes not emphasized so much by Wilson – such as physical and mental health.

## **Concentrated Poverty in America**

The stark differences across neighborhoods in social composition and social conditions are among the most striking features of American cities.

While our cities remain extremely segregated, it is encouraging that levels of racial segregation peaked in 1970 and have been declining ever since. New research by Harvard professor Edward Glaeser and Duke professor Jacob Vigdor shows that levels of racial segregation are, by some measures, as low as they have been since 1910.

Given that the racial and economic composition of neighborhoods are strongly correlated, it is natural to assume that if racial segregation is declining, income segregation must be declining as well. But, surprisingly, that is unfortunately not the case—since 1970 the poor are increasingly likely to live in neighborhoods populated by lots of other poor families. Research by The Brookings Institution shows that nearly 9 million Americans now live in neighborhoods in which over 40 percent of all residents are poor—what Brookings calls "extreme-poverty neighborhoods," or what many people used to call slums or ghettos.

Of particular concern is the possibility that public policy has actually contributed to the problem of concentrated poverty in America. For example, the construction of high-rise public housing projects that became notorious nationwide—like Pruitt-Igoe in St. Louis, Robert Taylor Homes and Cabrini-Green in Chicago, the Marcy Projects in New York, or Jordan Downs in Watts—brought together poor families by the hundreds, thousands, or sometimes tens of thousands. At the same time, many suburban townships used zoning rules to keep out low-cost housing.

This concern that living in a high-poverty neighborhood might "doubly disadvantage" the poor families residing in them dates back at least to the Chicago School of sociology in the 1920s. It was, however, renewed with the publication of Wilson's widely-read book in 1987. Some empirical support for this hypothesis came from Northwestern sociologist James Rosenbaum's work tracking families who were relocated in the 1970s

as part of a U.S. Supreme Court decision that led to the city of Chicago's Gautreaux mobility program. Rosenbaum found that public housing families who were moved to low-poverty suburbs rather than to other parts of Chicago fared better in school and in the labor market. While subsequent studies have found less pronounced differences between families who, through Gautreaux, were moved to the suburbs rather than to other parts of Chicago, the initial results were important and provocative enough to motivate HUD to sponsor MTO, a "gold-standard" randomized experiment.

## Moving to Opportunity

Studying the effects of neighborhood environments on people's life outcomes is challenging because most people have at least some degree of choice over where they live. This makes it difficult to determine the degree to which differences across neighborhoods in people's outcomes reflect the causal effects of neighborhoods on outcomes, versus the influence of whatever personal or family characteristics caused some people to wind up living in different communities. For example, poor neighborhoods may compromise health, or it might be that unhealthy people are more likely to end up living in poor neighborhoods. To solve this problem of selection bias, in 1992 Congress authorized HUD to carry out the MTO demonstration as a randomized experiment, akin to the sort of clinical trial that is regularly used to produce gold-standard evidence about the causal effects of health interventions in medicine.

Between 1994 and 1998, MTO enrolled a total of 4,604 families with children living in high-poverty public housing projects in five cities: Baltimore, Boston, Chicago, Los Angeles, and New York. The housing projects from which MTO families came were among the most distressed in the country, with an average tract poverty rate of fully 53 percent. These projects were also extremely racially segregated, and so almost all of the families in MTO are members of racial and ethnic minority groups—around two-thirds are African-American and most of the rest are Hispanic.

Surveys collected at baseline (Table 1) show just how disadvantaged these families were when they initially signed up for MTO. The average annual household income was \$12,709 (in 2009 dollars). Most of the MTO households were headed by unmarried women. Fewer than two of five MTO household heads had a high school diploma, while three-quarters were on welfare. Over 40 percent report that someone in the home had been victimized by crime during the six months prior to the MTO baseline surveys.

The families that volunteered for MTO were then randomly assigned to one of the following three conditions:

The *low-poverty voucher group* was offered the chance to use a housing rent-subsidy voucher to move into private-market housing. As part of the MTO design, the vouchers offered to families in this group could only be redeemed in census tracts with a 1990 poverty rate under 10 percent. Families had to stay in these neighborhoods for one year or lose their voucher; after the year was up they could use their housing voucher to move

again, including to a higher-poverty area. Families in this group also received housing search assistance and relocation counseling from local non-profit organizations.

The traditional voucher group was offered a regular housing voucher to move into private-market housing, with no special MTO-imposed constraints on where they could move. Families in this group did not receive any special housing mobility counseling beyond what is normally provided to voucher-holders.

The *control group* did not receive access to any new services through MTO, but did not lose access to any housing or other social services to which they would otherwise have been entitled.

The key contribution of MTO's randomized experimental design was to create three groups of low-income families that were on average the same at baseline in all respects, with the following exception: only two of the three groups were offered the chance to use a housing voucher to move into lower-poverty areas. As a result, any differences in average outcomes across the three groups observed after the time of random assignment can be attributed to the fact that some families but not others were offered the chance to use vouchers to move to less distressed neighborhood environments.

In practice, only 47 percent of those offered a low-poverty voucher and 63 percent of those offered a traditional voucher relocated through MTO. In what follows we report the effects of MTO on those who actually moved through MTO with a voucher (in the program evaluation literature this is known as the "effect of treatment on the treated").

Figure 1 shows that the MTO demonstration succeeded in generating pronounced and sustained differences in average neighborhood conditions across the three randomized groups.

#### TABLE 1. Baseline Characteristics

	Low-Poverty Voucher	Traditional Voucher	Control	All Groups
	N=1456	N=678	N=1139	N=3273
Age as of December 31, 2007				
35	0.145	0.132	0.143	0.141
36-40	0.212	0.236	0.229	0.224
41-45	0.236	0.223	0.234	0.231
46-50	0.184	0.203	0.175	0.187
> 50	0.223	0.207	0.219	0.217
Race and Ethnicity				
African-American (non-Hispanic)	0.631	0.608	0.639	0.627
Other non-white (non-Hispanic)	0.034	0.030	0.035	0.033
White (non-Hispanic)	0.024	0.024	0.025	0.025
Hispanic ethnicity (any race)	0.311	0.338	0.301	0.316
Gender and Marital Status				
Female	0.988~	0.978	0.978	0.982
Never married	0.623	0.624	0.637	0.628
Education Characteristics				
High school diploma	0.381	0.347	0.361	0.365
Certificate of General Educational Development (GED)	0.159 *	0.183	0.199	0.179
Employment and Income Characteristics				
Working	0.271	0.269	0.245	0.262
Receiving Aid to Families with Dependent Children (AFDC)	0.763	0.736	0.763	0.756
Total Household income (2009 \$)	\$12,866	\$12,788	\$12,439	\$12,709
Site				
Baltimore	0.134	0.140	0.135	0.136
Boston	0.201	0.207	0.205	0.204
Chicago	0.205	0.209	0.205	0.206
Los Angeles	0.233	0.214	0.226	0.225
New York	0.227	0.231	0.229	0.229
Neighborhood Characteristics				
Household member was crime victim in last six months	0.434	0.414	0.416	0.422
Streets unsafe at night	0.493	0.517	0.512	0.506
Very dissatisfied w/ neighborhood	0.478	0.477	0.467	0.474
Lived in neighborhood 5+ years	0.599	0.616	0.606	0.606

Notes:  $^*$  = P <.05,  $\sim$  = P <.10 on a pair wise probability-weighted t-test of the difference between the low-poverty voucher or traditional voucher group and the control group. All values represent shares. Shares are calculated using sample weights to account for changes in random assignment ratios across randomization cohorts and for subsample interviewing.

Data source and sample: Baseline survey. All sample adults interviewed for the final evaluation. Measures: The baseline head of household reported on the neighborhood characteristics listed here.

Averaged over the entire 10-15 year study period, families who move with a traditional voucher are in census tracts with poverty rates about one-quarter lower than that of their control group



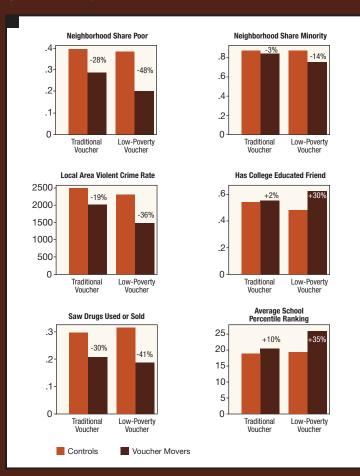
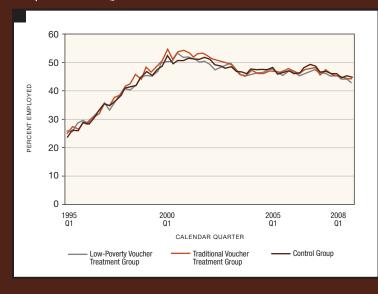


FIGURE 1. Quarterly Employment Rate by Random Assignment Group and Calendar Quarter



counterparts, while families who move with an MTO lowpoverty voucher are in census tracts that have poverty rates equal to about one-half those of similar control group families.

Although MTO had more modest impacts on the levels of neighborhood racial segregation and school quality experienced by families, moving with a low-poverty voucher increased the chances of having a college-educated friend by about one-third, reduced the local-area violent crime rate by about one-third, and reduced the chances of having seen drugs used or sold in the neighborhood by about two-fifths.

# What Happens to Families When They Move Out of Extreme-Poverty Areas?

The congressional legislation that authorized HUD to carry out MTO explicitly mentioned the goals of improving children's schooling and adult earnings. With respect to those outcomes, the MTO findings were somewhat disappointing.

Figure 2 shows that adult employment rates increased overall during the 10-15 year period over which we followed up with MTO families, but that the average employment rates were nearly identical across the three randomized MTO groups. Similarly, we found almost no detectable differences in schooling outcomes for children across the three randomized MTO groups—even for children who were very young (pre-school age) at the time their families moved through MTO.

On the other hand, we found that moving to a lower-poverty neighborhood through MTO had very large beneficial impacts on several important physical health outcomes (see Figure 3, which builds on results we published in October 2011 in the New England Journal of Medicine). While MTO did not have detectable impacts on overall self-reported health status, Figure 3 shows that a sizable share of the MTO control group met the public health standard of "extremely obese," defined as having a body mass index, or BMI (weight in kilograms divided by height in meters squared), of 40 or more. For an American woman of average height (five foot four) this would correspond to a weight of about 235 pounds. Moving with an MTO low-poverty voucher reduced the risk of extreme obesity by about one-third. These MTO moves also reduced the risk of diabetes (as measured by blood samples taken from the program participants) by over 40 percent.<sup>2</sup>

These are very sizable impacts on health outcomes. One of the most pressing public health problems in the U.S. is the approximate doubling of obesity and diabetes rates since 1980. The declines in prevalence of extreme obesity and diabetes due to MTO are about equal to the increase in these problems during the "diabesity" epidemic of the last three decades. Another way to think about the size of these impacts is to note that they are similar in magnitude to what we see from the leading medical treatments for diabetes, including medication. These sorts of comparisons are always a bit complicated because clinical trials of medical interventions

typically enroll study samples that are not nearly as economically disadvantaged as the one that signed up for MTO. But still, the fact that changing neighborhood environments has perhaps the same size effect on diabetes as leading medical treatments that are explicitly designed to reduce diabetes is striking.

We also found very sizable impacts of MTO on several important mental health outcomes as well, including major depression. Around one of five women in the MTO control group had ever experienced major depression over their lifetimes. Moving with either a low-poverty voucher or traditional voucher in MTO reduced the risk of major depression by over one-quarter. These impacts compare favorably with what we see from best-practice medical treatment for depression. The effect on mental health from moving to a lower-poverty neighborhood is not so different from that of taking anti-depressants like Prozac.

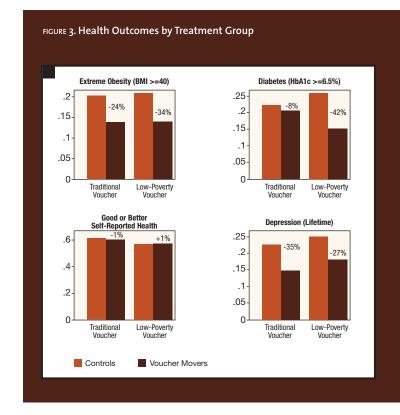
### Conclusion

MTO is one of the largest and most ambitious social-policy experiments carried out by the U.S. government in decades. Because it's unlikely that an MTO-style intervention would ever be carried out on a large scale, our findings from the MTO experiment are perhaps most important for their basic science implications regarding how neighborhood environments affect people's life chances.

Of course there is the question of how results for the MTO sample might generalize to other samples and contexts, which is always an important qualification to keep in mind with any social-science study (whether an experiment or an observational study). But for what it's worth, the MTO families and their baseline neighborhoods do not look dramatically different from other samples of high-poverty-area residents that have been studied in the "neighborhood effects" literature.

The MTO findings raise the possibility that very distressed neighborhood environments may be less important for outcomes like children's schooling and adult earnings than hypothesized in William Julius Wilson's landmark book *The Truly Disadvantaged*. But neighborhoods may be extremely important for physical and mental health outcomes.

If the goal of social policy is defined narrowly as that of reducing income poverty, then the growing geographic con-



centration of poverty in America that we have seen since 1970 might not be at the top of our list of concerns. But if the goal is understood more broadly to be about improving the lives of poor families, then the geographic concentration of poverty is very much worth worrying about.

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## **Endnotes**

I. The four of us were part of a larger research team assembled by the National Bureau of Economic Research (NBER) to carry out the long-term follow-up study of families in Moving to Opportunity under contract with HUD. The principal investigator for the overall project was Lawrence Katz of Harvard University and the NBER. Other research team members were Emma Adam, Northwestern University; Greg

Duncan, University of California at Irvine; Ronald Kessler, Harvard Medical School; Jeffrey Kling, Congressional Budget Office and NBER; Stacy Lindau, University of Chicago; and Robert Whitaker, Temple University. All opinions expressed here are those of the authors and do not reflect the views of HUD or the Congressional Budget Office.

2. Our *New England Journal of Medicine* paper reports the effects of being offered the chance to move through MTO, known as the "intention to treat" effect. Because around half the families offered a low-poverty voucher moved with the voucher, the effect of treatment on the treated (which we report above) is about twice as large as the intention to treat effect.