Associations of Housing Mobility Interventions for Children in High-Poverty Neighborhoods With Subsequent Mental Disorders During Adolescence

Ronald C. Kessler, PhD; Greg J. Duncan, PhD; Lisa A. Gennetian, PhD; Lawrence F. Katz, PhD; Jeffrey R. Kling, PhD; Nancy A. Sampson, BA; Lisa Sanbonmatsu, PhD; Alan M. Zaslavsky, PhD; Jens Ludwig, PhD

**IMPORTANCE** Youth in high-poverty neighborhoods have high rates of emotional problems. Understanding neighborhood influences on mental health is crucial for designing neighborhood-level interventions.

**OBJECTIVE** To perform an exploratory analysis of associations between housing mobility interventions for children in high-poverty neighborhoods and subsequent mental disorders during adolescence.

**DESIGN, SETTING, AND PARTICIPANTS** The Moving to Opportunity Demonstration from 1994 to 1998 randomized 4604 volunteer public housing families with 3689 children in high-poverty neighborhoods into 1 of 2 housing mobility intervention groups (a low-poverty voucher group vs a traditional voucher group) or a control group. The low-poverty voucher group (n=1430) received vouchers to move to low-poverty neighborhoods with enhanced mobility counseling. The traditional voucher group (n=1081) received geographically unrestricted vouchers. Controls (n=1178) received no intervention. Follow-up evaluation was performed 10 to 15 years later (June 2008-April 2010) with participants aged 13 to 19 years (0-8 years at randomization). Response rates were 86.9% to 92.9%.

**MAIN OUTCOMES AND MEASURES** Presence of mental disorders from the *Diagnostic and Statistical Manual of Mental Disorders* (Fourth Edition) within the past 12 months, including major depressive disorder, panic disorder, posttraumatic stress disorder (PTSD), oppositional-defiant disorder, intermittent explosive disorder, and conduct disorder, as assessed post hoc with a validated diagnostic interview.

**RESULTS** Of the 3689 adolescents randomized, 2872 were interviewed (1407 boys and 1465 girls). Compared with the control group, boys in the low-poverty voucher group had significantly increased rates of major depression (71% vs 3.5%; odds ratio (OR), 2.2 [95% CI, 1.2-3.9]), PTSD (6.2% vs 1.9%; OR, 3.4 [95% CI, 1.6-7.4]), and conduct disorder (6.4% vs 2.1%; OR, 3.1 [95% CI, 1.7-5.8]). Boys in the traditional voucher group had increased rates of PTSD compared with the control group (4.9% vs 1.9%, OR, 2.7 [95% CI, 1.2-5.8]). However, compared with the control group, girls in the traditional voucher group had a decreased rate of conduct disorder (0.3% vs 2.9%; OR, 0.1 [95% CI, 0.0-0.4]).

**CONCLUSIONS AND RELEVANCE** Interventions to encourage moving out of high-poverty neighborhoods were associated with increased rates of depression, PTSD, and conduct disorder among boys and a reduced rate of conduct disorder among girls. Better understanding of interactions among individual, family, and neighborhood risk factors is needed to guide future public housing policy changes.

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Author Affiliations: Department of Health Care Policy, Harvard Medical School, Boston, Massachusetts (Kessler, Sampson, Zaslavsky); School of Education, University of California Irvine, Irvine (Duncan); National Bureau of Economic Research, Cambridge, Massachusetts (Gennetian, Katz, Kling, Sanbonmatsu, Ludwig); Department of Economics, Harvard University, Cambridge, Massachusetts (Katz); Congressional Budget Office, Washington, DC (Kling); Harris School of Public Policy, University of Chicago, Chicago, Illinois (Ludwig).

Corresponding Author: Ronald C. Kessler, PhD, Department of Health Care Policy, Harvard Medical School, 180 Longwood Ave, Boston, MA 02115 (kessler@hcp.med.harvard.edu).
Observational studies have consistently found that youth in high-poverty neighborhoods have high rates of emotional problems even after controlling for individual-level risk factors. These findings raise the possibilities that neighborhood characteristics affect emotional functioning and neighborhood-level interventions may reduce emotional problems. Available data from observational studies are unclear and subject to selection bias and the possibility of reverse causality (ie, families with emotional problems end up in poorer neighborhoods). Despite this uncertainty, presumptive neighborhood effects have been characterized, causal pathways have been hypothesized, and interventions have been implemented.

It is important to evaluate these causal claims regarding neighborhood effects experimentally. The US Department of Housing and Urban Development (HUD) enacted a housing mobility experiment known as the Moving to Opportunity for Fair Housing Demonstration by randomizing volunteer low-income public housing families with children to receive vouchers to move to lower-poverty neighborhoods. An interim evaluation 4 to 7 years after randomization showed that the intervention caused families to move to better neighborhoods with lower poverty and crime rates and increased social ties with more affluent people. Significant reductions in psychological distress and depression were also found among adolescent girls in the intervention group vs control group. Causal pathways have been hypothesized, and interventions have been implemented.

The primary objectives of the Moving to Opportunity study were to move families to lower-poverty neighborhoods and increase educational achievement and economic self-sufficiency. Mental disorders were measured as post hoc outcomes. The current report presents the first exploratory analyses evaluating long-term associations of housing mobility randomization with mental disorders among participants who were in early childhood at randomization and adolescence at follow-up.

Methods

Study Design

Families (n=4604) in the Moving to Opportunity study were recruited by public housing authorities from 1994 to 1998. Families had to reside in public or project-based assisted housing in high-poverty census tracts (>40% of families in poverty) in Baltimore, Boston, Chicago, Los Angeles, or New York; be eligible for Section 8 housing; and have 1 or more children age younger than 18 years. Census tracts contain 2500 to 8000 people and are defined by the US Census Bureau to be “homogeneous with respect to population characteristics, economic status, and living conditions.” Housing authorities sent recruitment letters, held information sessions, and asked families to complete applications within 4 weeks of the invitation. Signed consents and baseline questionnaires were obtained during intake sessions prior to randomization. Families were then randomized into 1 of 3 groups using a computerized random-number generator: a low-poverty voucher group, a traditional voucher group, or a control group. In the low-poverty voucher group, families were offered a standard rent-subsidy voucher restricted to low-poverty census tracts (<10% of families in poverty). Vouchers provided subsidies for private-market housing equal to the difference between a rent threshold and the family’s rent contribution (30% of income, identical to public housing). Families remained eligible for vouchers as long as they met income and other criteria. Families also received short-term housing counseling during their initial housing search. After 1 year, families in the low-poverty voucher group could use their voucher to relocate to a different tract, including those with higher-poverty rates, or could remain in the tract where they originally moved even if the poverty rate of that tract fell out of the low-poverty range. In the traditional voucher group, families were offered a standard rent-subsidy voucher without restriction on location as well as standard mobility counseling. In the control group, families were offered no new assistance. Enhanced mobility counseling was offered to low-poverty voucher group families because of restrictions on where they could move. The protocol was approved by the Office of Management and Budget and HUD. Twenty-three percent of invited families applied, and ultimately 48% of low-poverty voucher families and 63% of traditional voucher families used their vouchers to move.

Interim (4-7 years after randomization) and long-term (10-15 years after randomization) evaluation surveys were carried out with household heads and residents who were children at baseline randomization and adolescents at follow-up. Most adolescents in the interim evaluation were in middle childhood or early adolescence (ages 9-16 years) at randomization, whereas most adolescents in the long-term evaluation were in early childhood (ages 0-8 years) at randomization. Long-term assessments were performed June 2008 through August 2008 by interviewers blinded to group assignment. All adolescents from households with 1 to 3 baseline children and 3 randomly selected adolescents from households with 4 or more baseline children were targeted for interview. Large households were purposely undersampled to reduce household burden.

Recruitment for long-term assessment began with telephone tracking and networking to locate hard-to-recruit participants. Potential respondents were offered $50 for completing interviews. Although most interviews were performed face-to-face, some were performed by telephone. Of the hard-to-recruit nonrespondents, 35% were randomly selected for intensive recruitment with increased financial incentives.
Written informed parental consent and adolescent assent were obtained before interviews. These procedures were approved by the Office of Management and Budget, HUD, and the institutional review boards of the National Bureau of Economic Research, University of Chicago, University of Michigan, and Northwestern University.

**Measures**
Baseline head-of-household questionnaires focused largely on sociodemographics and neighborhood experiences (eg, social networks and crime victimization). Mental disorders were not assessed. Item-level missing data on the variables assessed was less than 5% for all but 5 variables (low birth weight; hospitalization before first birthday; baseline health problems that restricted normal activities; parent educational level; whether someone read to the child more than once daily during his/her early childhood; 5.5% to 11.2% missing). There were no missing values on the intervention variables. Item-level missing data were imputed using multiple imputation using SAS software.

The long-term assessment included the Composite International Diagnostic Interview (CIDI), a widely used psychiatric diagnostic evaluation tool known to have good concordance with clinical diagnoses of mental disorders based on the *Diagnostic and Statistical Manual of Mental Disorders* (Fourth Edition) (*DSM-IV*). The CIDI questions were read word-for-word and responses recorded in prespecified (mostly yes/no) format. Diagnoses were generated by CIDI algorithms operationalizing *DSM-IV* inclusion criteria. Diagnoses were made for *DSM-IV* disorders present within the past 12 months. Item-level missing data were less than 1% for each symptom question and were recoded conservatively to assume the symptom was absent. We focused on 6 *DSM-IV/CIDI* disorders: mood (major depression), anxiety (panic, posttraumatic stress), and disruptive behavior (oppositional-defiant, intermittent explosive, conduct). Bipolar disorder was also assessed, but was not analyzed due to low prevalence and insufficient statistical power to detect meaningful associations (eTable 1 in Supplement 1).

**Statistical Analysis**
Sample size was determined by the Moving to Opportunity study budget ($70 million Congressional authorization, additional vouchers from local housing authorities, and counseling donated by nonprofit agencies). Randomization was designed to yield equal numbers of families within cities using vouchers in each intervention group. The number of families in the control group invited was set to equal the mean number invited in the 2 intervention groups. As voucher use percentages were determined only after randomization, proportions randomized across groups were modified during the study to adjust for observed rates of voucher use. The HUD determined that this design would yield 80% power to detect an effect of $20000 in increased earnings in each intervention group with a one-sided a of .05 (Table 4). Post hoc power calculations showed that the long-term follow-up sample of adolescents had at least 80% power to detect an odds ratio (OR) for each of the 6 mental disorders considered herein of 1.4-1.8 (eTable 1 in Supplement 1).

Intention-to-treat logistic regression analysis was used to estimate associations of the interventions with the outcomes. Across-time variation in the intervention vs control group selection ratios from 1994 to 1998 was corrected for by weighting. Case-level multiple imputation based on 20 pseudosamples was used to adjust for the fact that not all baseline participants completed follow-up interviews. The Taylor series method implemented in SUDAAN was used to adjust for weighting and clustering (cities, housing projects, families). The significance of sex differences was assessed by estimating a logistic regression equation to predict each disorder that included dummy variables for each intervention, a dummy variable for sex, and 2 dummy variables for the interactions of interventions with sex. A 2-degree-of-freedom χ² test was used to evaluate the significance of the interactions. In cases for which the test was significant, associations of the interventions with the disorder were considered separately for each sex. The evaluation of sex differences was carried out because significant sex differences had been found in previous interim evaluations. The 6 mental disorders were considered separately because risk factors vary across these disorders. The Benjamini-Hochberg method was used to adjust significance tests across outcomes for the false discovery rate.

Logistic regression coefficients and standard errors were exponentiated to create ORs and 95% confidence intervals. Mental disorder prevalence estimates in the intervention vs control groups were used to calculate absolute risk (AR) and absolute risk reduction (ARR). The jack-knife repeated replications method in SAS was used to generate confidence intervals for the estimates of AR and ARR. Statistical significance was evaluated using a 2-sided α of .05.

**Results**

**Response Rates**
The 3689 adolescents assessed were aged 0 through 8 years (median age, 4 years) at baseline and aged 13 through 19 years (median age, 16 years) at the time of long-term follow-up interviews. A total of 2872 adolescents were interviewed (1407 boys and 1465 girls from 2134 families), including 1165 in the low-poverty voucher group (843 families), 799 in the traditional voucher group (615 families), and 908 in the control group (676 families), out of the 3689 eligible in the baseline sample (77.8% participation rate). An additional 643 adolescents were randomly excluded (188 from families with >4 eligible respondents and 455 due to difficult recruitment) and 174 were lost to follow-up (including 18 deceased) (Figure). The weighted response rates were 92.9% (low-poverty voucher group), 86.9% (traditional voucher group), and 89.4% (control group) using the American Association of Public Opinion Research definition. Respondents were more likely to be girls and non-Hispanic black but did not differ significantly from nonrespondents on other baseline personal, family, and neighborhood characteristics (eTable 2 in Supplement 1).
Sample Characteristics
Baseline sociodemographic characteristics of adolescents were largely comparable across the 3 groups for both boys (Table 1) and girls (Table 2). Most respondents were non-Hispanic black (61.8%-66.2% of groups) or Hispanic (27.7%-33.2% of groups). The majority of respondents were ages 0 through 5 years at...
Mental Disorder Prevalence Within the Past 12 Months

The most prevalent mental disorders within the past 12 months were found to be intermittent explosive disorder (14.2% of boys and 16.0% of girls) and oppositional-defiant disorder (6.8% of boys and 8.4% of girls), followed by major depressive disorder (5.5% of boys and 7.9% of girls), posttraumatic stress disorder (PTSD) (4.4% of boys and 6.6% of girls), conduct disorder (4.3% of boys and 1.6% of girls), and panic disorder (4.1% of boys and 3.7% of girls) (eTable 3 in Supplement 1).

Associations of Interventions With Mental Disorders Among Boys and Girls Combined

Adjusting for the false discovery rate, respondents in the low-poverty voucher group had significantly elevated prevalence baseline (82.2%-87.9% of groups), with mean age of 3.6 years in each group and range of 0 through 7 years in the low-poverty voucher group and 0 through 8 years in traditional voucher and control groups. The majority of baseline families received Aid to Families with Dependent Children (79.1%-85.1% of groups). Mean baseline neighborhood poverty rates were 53.6% to 54.9% (Table 3).
Table 2. Baseline Characteristics of the Moving to Opportunity Adolescent Girl Long-term Follow-up Evaluation Sample Groups

<table>
<thead>
<tr>
<th>Respondent Characteristics</th>
<th>Low Poverty Voucher Group* (n = 711)</th>
<th>Traditional Voucher Group (n = 541)</th>
<th>Control Group (n = 569)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at baseline, y*</td>
<td>Numberb</td>
<td>% (95% CI)</td>
<td>P value&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>0-5</td>
<td>613</td>
<td>83.8 (79.8 to 87.9)</td>
<td>.86</td>
</tr>
<tr>
<td>Mean</td>
<td>3.6 (3.4 to 3.9)</td>
<td>.76</td>
<td>3.5 (3.2 to 3.7)</td>
</tr>
<tr>
<td>Median</td>
<td>4.0 (0 to 8)</td>
<td>4.0 (0 to 8)</td>
<td>4.0 (0 to 8)</td>
</tr>
<tr>
<td>Required special medicine/equipment</td>
<td>60</td>
<td>8.1 (5.7 to 10.4)</td>
<td>.53</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic (any race)</td>
<td>215</td>
<td>33.2 (24.7 to 41.7)</td>
<td>.74</td>
</tr>
<tr>
<td>White (non-Hispanic)</td>
<td>11</td>
<td>2.2 (-0.4 to 4.7)</td>
<td>.66</td>
</tr>
<tr>
<td>African American (non-Hispanic)</td>
<td>464</td>
<td>61.8 (51.9 to 71.6)</td>
<td>.89</td>
</tr>
<tr>
<td>Other race (non-Hispanic)</td>
<td>19</td>
<td>2.9 (0.8 to 4.9)</td>
<td>.94</td>
</tr>
<tr>
<td>Baseline characteristics of the sample adult</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>High school diploma</td>
<td>278</td>
<td>38.4 (32.2 to 44.7)</td>
<td>.63</td>
</tr>
<tr>
<td>Currently in school</td>
<td>135</td>
<td>19.4 (15.2 to 23.6)</td>
<td>.48</td>
</tr>
<tr>
<td>Employed</td>
<td>151</td>
<td>22.3 (18.6 to 25.9)</td>
<td>.93</td>
</tr>
<tr>
<td>Never married</td>
<td>483</td>
<td>67.3 (62.6 to 72.0)</td>
<td>.33</td>
</tr>
<tr>
<td>&lt;18 y at birth of first child</td>
<td>216</td>
<td>28.0 (22.9 to 33.1)</td>
<td>.19</td>
</tr>
<tr>
<td>Single mother</td>
<td>633</td>
<td>87.8 (84.2 to 91.5)</td>
<td>.48</td>
</tr>
<tr>
<td>Baseline Household Characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income, $</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤7000</td>
<td>143</td>
<td>17.6 (12.0 to 23.2)</td>
<td>.22</td>
</tr>
<tr>
<td>7001-9000</td>
<td>134</td>
<td>18.5 (15.4 to 23.7)</td>
<td>.31</td>
</tr>
<tr>
<td>9001-12000</td>
<td>174</td>
<td>25.3 (20.2 to 30.3)</td>
<td>.98</td>
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<tr>
<td>12001-17000</td>
<td>144</td>
<td>20.3 (15.5 to 25.2)</td>
<td>.55</td>
</tr>
<tr>
<td>≥17001</td>
<td>113</td>
<td>17.2 (13.5 to 20.9)</td>
<td>.31</td>
</tr>
<tr>
<td>Receives AFDC</td>
<td>598</td>
<td>82.9 (78.9 to 86.9)</td>
<td>.23</td>
</tr>
<tr>
<td>Household size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td>72</td>
<td>10.8 (7.8 to 13.9)</td>
<td>.16</td>
</tr>
<tr>
<td>3</td>
<td>186</td>
<td>27.4 (23.3 to 31.4)</td>
<td>.52</td>
</tr>
<tr>
<td>4</td>
<td>191</td>
<td>26.4 (22.7 to 30.1)</td>
<td>.75</td>
</tr>
<tr>
<td>≥5</td>
<td>262</td>
<td>35.4 (30.1 to 40.8)</td>
<td>.20</td>
</tr>
</tbody>
</table>

Abbreviation: AFDC; Aid to Families With Dependent Children.

* Based on multiple imputation data (described in the text) to adjust for the fact that 22.2% of eligible baseline respondents did not participate in the long-term evaluation survey.

Of PTSD (7.2% [95% CI, 5.7%–8.6%]; OR, 1.8 [95% CI, 1.2–2.7]) compared with the control group (4.2% [95% CI, 3.2%–5.2%]) (Table 4). None of the other 11 comparisons of low-poverty or traditional voucher groups with the control group was significant. Odds ratios comparing the low-poverty voucher group with the control group were in the range 0.7–1.6 (P = .13–.84). Odds Ratios comparing the traditional voucher group with the control group were in the range of 0.9–1.1 (P = .70).

After adjusting for the false discovery rate, the ORs comparing the low-poverty and traditional voucher groups with the control group varied significantly by respondent sex for 3 of the 6 outcomes: major depression (χ² = 14.1, P = .007), PTSD (χ² = 9.0, P = .03), and conduct disorder (χ² = 11.7, P = .01). Odds ratios were not significantly different by sex for panic disorder (χ² = 6.2, P = .08), oppositional-defiant disorder (χ² = 4.4, P = .16), or intermittent explosive disorder (χ² = 1.3, P = .60). Based on these results, the remaining analyses focused on major depression, PTSD, and conduct disorder separately for boys and girls.

Associated with Interventions With Mental Disorders Among Boys

Adjusting for the false discovery rate, boys had significantly elevated rates of major depression in the low-poverty voucher
group (7.1% [95% CI, 4.1%-10.1%]; OR, 2.2 [95% CI, 1.2-3.9]) compared with the control group (3.5% [95% CI, 2.3%-4.6%]), elevated rates of PTSD in both the low-poverty voucher group (6.2% [95% CI, 4.7%-7.7%]; OR, 3.4 [95% CI, 1.6-7.4]) and the traditional voucher group (4.9% [95% CI, 3.0%-6.8%]; OR, 2.7 [95% CI, 1.2-5.8]) compared with the control group (1.9% [95% CI, 0.9%-2.9%]), and of conduct disorder in the low-poverty voucher group (6.4% [95% CI, 4.7%-8.1%]; OR, 3.1 [95% CI, 1.7-5.8]) compared with the control group (2.1% [95% CI, 1.1%-3.2%]) (Table 5). Neither of the other 2 comparisons between intervention and control groups was significantly different, with ORs in the range 0.5-1.2 (P = .06-.40).

### Discussion

Our post hoc exploratory analysis found that interventions to encourage moving out of high-poverty neighborhoods were associated with increased depression, PTSD, and conduct disorder among adolescent boys and reduced conduct disorder among adolescent girls randomized at ages 0 through 8 years. These sex differences were broadly consistent with interim follow-up results in suggesting that girls profited more than boys from moving to better neighborhoods.8,9,11 An exception is that the interim analysis found that the intervention led to significantly reduced prevalence of major depression among girls, whereas this association was not significant in the current analysis either among girls in the low-poverty voucher group.
(6.5% [95% CI, 4.7%-8.3%]; OR, 0.6 [95% CI, 0.3-1.0]) or among girls in the traditional voucher group (6.5% [95% CI, 4.5%-8.4%]; OR, 0.6 [95% CI, 0.3-0.9]) compared with the control group (10.9% [95% CI, 8.4%-13.4%]), P = .06 for the OR in each of these 2 comparisons when corrected for false discovery rate. Qualitative evidence obtained in the interim evaluation suggested that the finding that the intervention had negative effects on boys but not girls was due to sex differences in both neighborhood experiences and in the social skills needed to capitalize on the new opportunities presented by their improved neighborhoods.32-34 Although the magnitudes of these significant associations of the interventions with mental disorders were modest in the intention-to-treat analyses, these estimates would be larger if the analyses were restricted to movers. It is also noteworthy that these ORs are comparable in size with those published in studies of risk factors considered to be of high policy significance. For example, the elevated OR of PTSD found among low-poverty voucher boys is comparable in size to the ORs found between combat exposure and PTSD in epidemiological studies of the military.35 Furthermore, it is important to recognize that these associations were evaluated 10 to 15 years after randomization. It is not clear if the magnitudes of the associations were stable over this entire time, but if so, they would be substantial despite the relatively high NNT.

External validity was reduced by the fact that only 23% of eligible families volunteered for the Moving to Opportunity...
study. However, the public housing population is large and therefore even this small fraction represents more than 300,000 low-income US children, making the volunteer families significant from a policy perspective even though they were only a minority of all public housing families. A question might be raised about whether the added costs of developing a special housing intervention for such a small proportion of public housing recipients could be justified by the small proportion accepting the offer, but this concern is mitigated by the fact that many housing economists believe the true costs of housing vouchers are actually lower than those of conventional public housing because of the increased efficiency of the open housing market.

It is nonetheless difficult to draw policy implications from these results, because the findings suggest that the interventions might have had harmful effects on boys but protective effects on girls. Future governmental decisions regarding widespread implementation of changes in public housing policy will have to grapple with this complexity based on the realization that no policy decision will have benign effects on both boys...
and girls. One way to do so might be to develop more nuanced assignment rules than currently exist or additional intervention elements to mitigate the adverse effects of the intervention on boys while maintaining the protective effects on girls.

Development of such refinements will require a better understanding of the interactions of influences among individual, family, and neighborhood characteristics leading to child and adolescent mental disorders. Although the Moving to Opportunity study was not designed to produce this kind of understanding, these results should create an impetus to do so by documenting that neighborhoods do matter. The challenge for future research is to increase understanding enough to guide allocation of the substantial amount of money spent on public housing in the United States each year (more than $36 billion in fiscal year 2012) to maximize the health and well-being of all family members rather than to maximize value for some family members at the expense of other family members.

The Moving to Opportunity study had several strengths, including an experimental design, large sample size, and long follow-up. However, it also had several noteworthy limitations: only 23% of eligible families volunteered, and families offered vouchers had rather severe time limits on enrollment and practical constraints on finding housing that might have artificially reduced uptake. These factors may reduce the generalizability of the results. Other limitations include the fact that nonrespondents might have differed systematically from respondents; that the experiment was implemented when the unemployment rate was much lower than it is today; that the CIDI and other mental health measures were not administered at baseline; and that, as with all policy experiments, the study design made it impossible to trace intervening processes that might account for aggregate intervention effects. In addition, the Moving to Opportunity study was underpowered to detect effects of the 2 separate intervention groups on uncommon adolescent mental disorders.

Despite these limitations, we found significant associations of the study interventions to reduce neighborhood-level poverty with several important adolescent mental disorders, providing evidence that experimental manipulation of incentives to move is associated with adolescent emotional functioning. However, because the interventions were also associated with changes in many other aspects of neighborhoods and participant experiences, pathways accounting for the associations of the interventions with adolescent mental disorders remain unclear, creating a challenge for future research to develop nuanced decision rules for matching public housing families with neighborhoods to maximize the health and well-being of all family members.

Conclusions

Interventions to encourage moving out of high-poverty neighborhoods were associated with increased rates of depression, PTSD, and conduct disorder among boys and a reduced rate of conduct disorder among girls. Better understanding of interactions among individual, family, and neighborhood risk factors is needed to guide future public housing policy changes.
Poverty and Mental Disorders in Adolescents

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