

Health Equity: Tenant-Based Housing Voucher Programs

Summary Evidence Table

This table outlines information from the studies included in the Community Guide systematic review of Tenant-based Housing Voucher Programs to Promote Health Equity. It details study quality, population and intervention characteristics, and study outcomes considered in this review. Complete references for each study can be found in the Included Studies section of the [review summary](#).

Abbreviations Used in This Document:

- ED: emergency department
- HCV: Housing Choice Voucher
- HUD: U.S. Department of Housing and Urban Development
- MTO: Moving to Opportunity
- N/A: not applicable
- NR: not reported
- NS: Not statistically significant at $p < 0.05$
- RCT: Randomized controlled trial
- TANF: Temporary Assistance for Needy Families

Outcomes Reported in the Following Order:

- Crime
- Education
- Employment
- Healthcare use
- Housing quality
- Housing stability
- Income
- Mental health
- Neighborhood opportunity:
 - Safety
 - Employment
 - Income (poverty level)
 - Other higher quality resources (education, food, healthcare, social services, recreation, transportation)
- Physical health
- Risky behavior

Notes:

- **Suitability of design** includes three categories: greatest, moderate, or least suitable design. [Read more](#) >>
- **Quality of Execution** – Studies are assessed to have good, fair, or limited quality of execution. [Read more](#) >>
- **Race/ethnicity** of the study population: The Community Guide only summarizes race/ethnicity for studies conducted in the United States.
- **Final Effect estimates** greater than zero are rounded to the nearest tenth; estimates less than zero are rounded to the nearest hundredth.

Study	Intervention Characteristics	Population Characteristics	Results
<p>Author, Year: Fenelon et al., 2017</p> <p>Study Design: Prospective cohort</p> <p>Design Suitability: Greatest</p> <p>Quality of Execution: Good</p> <p>Linked studies: Simon et al., 2017; Boudreaux et al., 2020</p>	<p>Location: U.S., nationwide</p> <p>Urbanicity: not reported, national sample</p> <p>Date Intervention Implemented: data examined from 1999-2014, linking National Health Interview Survey and National Health and Nutrition Examination Survey health data with HUD administrative housing data</p> <p>Intervention Details: HUD HCV program; HCV recipients contribute 30% income toward cost of housing</p> <p>Requirement to move to low-poverty areas: no</p> <p>Services Provided: rental assistance</p> <p>Comparison: persons waitlisted for future HUD housing assistance</p>	<p>Eligibility Criteria:</p> <ul style="list-style-type: none"> Participant's income could not exceed 50% of the median income for the county or metropolitan area in which the family chose to live Survey respondent had to provide sufficient personally identifiable information (i.e., social security number, date of birth, gender) For control group: participants had to be on the waitlist for HUD assistance <p>Unit of recruitment: individual</p> <p>Sample Size: 5614 Intervention: 3822 Control: 1792</p> <p>Attrition: NR</p> <p>Demographics: Mean age: 41.6 years Gender: 78% female Race/Ethnicity: 37.6% white; 38.1% Black; 4.7% other; 19.6% Hispanic Employment: 36.8% employed Income: NR Education: 31.3% high school diploma Insurance: 12% private insurance; 68% public insurance</p>	<p>Outcome Measures:</p> <p>Physical health: Self-reported physical health status as excellent, very good, good, fair, or poor; dichotomized as fair or poor versus good, very good, or excellent for this review</p> <p>Mental health: Psychological distress: percent with serious psychological distress as assessed with Kessler-6 scale which asks respondents how often they experience feelings of distress; responses to individual items range from 0 (never) to 4 (almost all the time) and are summed</p> <p>Healthcare use:</p> <ul style="list-style-type: none"> Insurance status: percent uninsured Regular source of care: percent without usual source of health care Healthcare affordability: percent with unmet need due to cost ED use, asthma-related: ED use in the past year for children who had an asthma attack; ED use among children who had been diagnosed with asthma <p>Intervention Duration: NR</p> <p>Follow-up Time: NR</p> <p>Results: Physical health: percent in fair or poor health Intervention: 35.8% Comparison: 34.8% Absolute difference: 1 percentage point; NS</p> <p>Mental health: percent with serious psychological distress Intervention: 12.7% Comparison: 12.1% Absolute difference: 0.6 percentage points; NS</p> <p>Healthcare use: Insurance status: percent uninsured Intervention: 29.6%</p>

Study	Intervention Characteristics	Population Characteristics	Results
			<p>Comparison: 34.0% Absolute difference: -12.9 percentage points; NS</p> <p>Regular source of care: percent without usual source of care Intervention: 22.7% Comparison: 26.4% Absolute difference: -14.0 percentage points; NS</p> <p>Healthcare affordability: percent with unmet need due to cost Intervention: 39.4% Comparison: 45.5% Absolute difference: -13.4 percentage points; NS</p> <p>ED use, asthma-related: ED use among children with an asthma attack: 7.2 percentage points (95% CI: -24.6 to 10.3 percentage points)</p> <p>ED use among children with a diagnosis for asthma: -1.6 percentage points (95% CI: -15.0, 11.8 percentage points)</p>
<p>Author, Year: Garg et al., 2013</p> <p>Study Design: Pre-post with comparison group</p> <p>Design Suitability: Greatest</p> <p>Quality of Execution: Fair</p>	<p>Location: Honolulu, Hawaii, U.S.</p> <p>Urbanicity: urban</p> <p>Date Intervention Implemented: recruitment from 1994 to 1995</p> <p>Intervention Details: HUD HCV program; HCV recipients contribute 30% of income toward cost of housing</p> <p>Requirement to move to low-poverty areas: no</p>	<p>Eligibility Criteria:</p> <ul style="list-style-type: none"> Families who lived in Healthy Start Program target communities and were not already known to Child Protective Services Families in which either parent scored high on Kempe Family Stress Checklist and understood English <p>Unit of recruitment: individuals (mothers)</p> <p>Sample Size: Overall: 169</p>	<p>Outcome Measures: Mental health: maternal mental health, measured using five-item version of the Mental Health Index, which gives an overall measure of anxiety and depressive symptoms</p> <p>Intervention Duration: NR</p> <p>Follow-up Time: one year</p> <p>Results: Mothers who received HUD HCV vouchers were 40% less likely to have poor mental health Adjusted OR 0.40; 95% CI: 0.16–0.97</p>

Study	Intervention Characteristics	Population Characteristics	Results												
	<p>Services Provided: rental assistance</p> <p>Comparison: mothers without housing need</p>	<p>Intervention: 55 Control: 114</p> <p>Attrition: NR</p> <p>Demographics: Mean age: 23.5 years Gender: 100% female Race/Ethnicity: 15% white; 21% Asian American; 33% Native Hawaiian; 33% no primary ethnicity Employment: 43% employed in previous year Income: 77% below poverty level Education: 68% high school diploma Insurance: NR</p>													
<p>Author, Year: Lee et al., 2005</p> <p>Study Design: Prospective cohort</p> <p>Design Suitability: Greatest</p> <p>Quality of Execution: Fair</p>	<p>Location: Indiana (statewide), U.S.</p> <p>Urbanicity: not specified; a statewide sample</p> <p>Date Intervention Implemented: first year of Indiana's welfare reform program was from May 1995 to April 1996</p> <p>Intervention Details: HUD HCV program: recipients contribute 30% of income toward cost of housing</p> <p>Requirement to move to low-poverty areas: no</p>	<p>Eligibility Criteria: families who received welfare benefits at some point during the welfare reform program and resided in rental units using housing vouchers</p> <p>Unit of recruitment: families</p> <p>Sample Size: Overall: 57,227 Intervention: 3,478 Control: 53,749</p> <p>Attrition: NR</p> <p>Demographics: Mean age: NR Gender: NR</p>	<p>Outcome Measures: Reformed welfare and traditional welfare groups were combined to calculate effect estimates; outcomes were reported for families recruited to the voucher program during the first year of welfare reform.</p> <p>Income: average earnings per year</p> <p>Employment: percent employed, last quarter of year 5</p> <p>Intervention Duration: ongoing at assessment</p> <p>Follow-up Time: 5 years</p> <p>Results:</p> <table border="0"> <tr> <td>Income:</td> <td>Baseline</td> <td>5-year follow-up</td> </tr> <tr> <td>Intervention:</td> <td>\$2,996</td> <td>\$7,418</td> </tr> <tr> <td>Comparison:</td> <td>\$2,940</td> <td>\$6,480</td> </tr> <tr> <td>Absolute difference:</td> <td>\$882</td> <td></td> </tr> </table>	Income:	Baseline	5-year follow-up	Intervention:	\$2,996	\$7,418	Comparison:	\$2,940	\$6,480	Absolute difference:	\$882	
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Study	Intervention Characteristics	Population Characteristics	Results
	<p>Services Provided: rental assistance</p> <p>Comparison: welfare families with children who did not receive housing assistance</p>	<p>Race/Ethnicity: 39.7% non-white</p> <p>Employment: on average, employed for 1.8 out of 5 quarters at baseline</p> <p>Income: average quarterly earnings of \$742</p> <p>Education: 60.7% with high school diploma</p> <p>Insurance: NR</p>	<p>Relative difference: 22.6%</p> <p>Employment: Intervention: 58.6% Comparison: 53.5% Absolute difference: 5.1 percentage points</p>
<p>Author, Year: Leech, 2012</p> <p>Study Design: Prospective cohort</p> <p>Design Suitability: Greatest</p> <p>Quality of Execution: Good</p>	<p>Location: U.S., nationwide</p> <p>Urbanicity: mostly urban, statewide sample</p> <p>Date Intervention Implemented: NA; data taken from 2002 and 2004 National Longitudinal Study of Youth (NLSY) surveys. NLSY is a biannual panel study conducted by the Bureau of Labor Statistics. It began in 1979; in 1986, the Bureau started collecting data about children born to women in NLSY sample; in 1994, a similar survey was administered specifically to children 14 years or older.</p> <p>Intervention Details: HUD HCV program; HCV recipients contribute 30% of income toward cost of housing</p> <p>Requirement to move to low-poverty areas: no</p>	<p>Eligibility Criteria: adolescents who were 14 to 19 years of age in 2002 or 2004 and were living with their mothers who had participated in the NLSY</p> <p>Unit of recruitment: individuals</p> <p>Sample Size: Overall: 2405 Intervention: 90 Control: 2315</p> <p>Attrition: N/A</p> <p>Demographics: Mean age: 18 years Gender: 49.1% female Race/Ethnicity: 15.3% Black, 7.3% Hispanic, 77.4% other Employment, mothers: 43% work full-time, 20.2% unemployed Income, family: \$38,956 Education, mothers: 7.4% <high school diploma Insurance: NR</p>	<p>Outcome Measures:</p> <p>Risky behaviors:</p> <ul style="list-style-type: none"> Substance use: either heavy alcohol use or heavy marijuana use. Heavy alcohol use was defined as drinking more than several times in the past month and having had more than five drinks at a time; heavy marijuana use was defined as using within past six months and having used more than intended, built up a tolerance, caused a health problem, or limited activities. Other drug use: any drug use other than marijuana (huffing, prescription drugs, opiates, cocaine, crack, methamphetamine, heroine) within the past year <p>Crime: During the past year, reported having hurt someone badly enough to need a doctor, hit or seriously threatened someone, and/or gotten into a fight at work or school</p> <p>Intervention Duration: ongoing at assessment</p> <p>Follow-up Time: 2 years</p> <p>Results: Substance use: subsidized housing was associated with a 22% decrease in marijuana and alcohol use (p<0.05)</p> <p>Other drug use: subsidized housing was associated with a 31% decrease in drug use other than marijuana (p<0.05)</p>

Study	Intervention Characteristics	Population Characteristics	Results
	<p>Services Provided: rental assistance</p> <p>Comparison: matched individuals living in neighborhoods that were similar to intervention group individuals, but without housing assistance</p>		<p>Crime: subsidized housing was associated with a 43% decrease in violence perpetration (p<0.05)</p>
<p>Author, Year: Lens et al., 2011</p> <p>Study Design: Cross sectional</p> <p>Design Suitability: Least</p> <p>Quality of Execution: Fair</p>	<p>Location: 91 cities in the U.S.</p> <p>Urbanicity: urban</p> <p>Date Intervention Implemented: NR; data taken from 2000 census</p> <p>Intervention Details: HUD HCV program; HCV recipients contribute 30% of income toward cost of housing</p> <p>Requirement to move to low-poverty areas: no</p> <p>Services Provided: rental assistance</p> <p>Comparison: renters with low incomes who were not receiving housing assistance</p>	<p>Eligibility Criteria: voucher recipients and renters with low incomes living in cities chosen randomly from all U.S. cities with at least 100,000 people (according to 2000 Census)</p> <p>Unit of recruitment: families</p> <p>Sample Size: Overall: 9,583 Intervention: NR Control: NR</p> <p>Attrition: N/A</p> <p>Demographics: only provided as average census tract characteristics Mean age: NR Gender: NR Race/Ethnicity: 48.4% non-Hispanic White; 22.5% non-Hispanic Black; 22.9% Hispanic</p> <p>Employment: NR Income: NR Poverty rate: 16.9% Education: NR Insurance: NR</p>	<p>Outcome Measures: Neighborhood opportunity:</p> <ul style="list-style-type: none"> • Safety: percent in high crime neighborhoods; percent in high-violent crime neighborhoods • Income (poverty level): average poverty rate <p>Crime:</p> <ul style="list-style-type: none"> • All crimes per 1,000 people • Violent crimes per 1,000 people <p>Intervention Duration: ongoing at assessment</p> <p>Follow-up Time: N/A</p> <p>Results: Neighborhood safety: Percent in high crime neighborhoods Voucher users: 4.4% Renters with low incomes: 6.0% Absolute difference: -1.6 percentage points; p<0.01</p> <p>Percent in high-violent crime neighborhoods Voucher users: 11.0% Renters with low incomes: 11.4% Absolute difference: -0.4 percentage points; p<0.01</p> <p>Neighborhood poverty rate: Voucher users: 24.4% Renters with low incomes: 26.9% Absolute difference: -1.5 percentage points</p>

Study	Intervention Characteristics	Population Characteristics	Results
			Crime: Crime per 1,000 people Voucher users: 76.9 Renters with low incomes: 82.2 Relative difference: -6.4%; p<0.01
<p>Author, Year: Mills et al., 2006</p> <p>Study Design: RCT</p> <p>Design Suitability: Greatest</p> <p>Quality of Execution: Good</p> <p>Linked studies: Wood, et al., 2008</p>	<p>Location: Atlanta and Augusta, GA; Fresno and Los Angeles, CA; Houston, TX; and Spokane, WA, U.S.</p> <p>Urbanicity: mostly urban</p> <p>Date Intervention Implemented: 1999 to 2006</p> <p>Intervention Details: Welfare to Work Voucher (WtW) program helped families transition from welfare to work. Rental assistance provided through WtW program was the same as that available through HUD HCV program. Once a household successfully used the voucher to lease a unit, assistance continued as long as the household met WtW income eligibility requirements. WtW was phased out in 2004, and vouchers became available through the HUD HCV program.</p> <p>HCV recipients contribute 30% of income toward cost of housing</p>	<p>Eligibility Criteria: Welfare recipients who were making the transition to work and had a household income that did not exceed 50% of the median income for their respective county or area. Participants had to be current or former TANF recipient, or eligible for TANF benefits.</p> <p>Unit of recruitment: families</p> <p>Sample Size: Overall: 8573 Intervention: NR Control: NR</p> <p>Attrition: N/A</p> <p>Demographics: Mean age: 30.7 Gender: 91.8% female Race/Ethnicity: 19.6% white, 49.8% Black, 21,4% Hispanic, 8.2% other Employment: 44.5% employed at baseline Income: \$6.96 average hourly wage Education: 56.9% had high school diploma or GED Insurance: NR</p>	<p>Outcome Measures: Reported in a separate table at the end of this document</p> <p>Intervention Duration: ongoing at assessment</p> <p>Follow-up Time: 4.5 to 5 years after randomization</p> <p>Results: reported in a separate table at the end of this document</p>

Study	Intervention Characteristics	Population Characteristics	Results
	<p>Requirement to move to low-poverty areas: no</p> <p>Services Provided: rental assistance</p> <p>Comparison: people who were eligible but did not get a voucher and remained on the public housing authority's wait list for regular assistance.</p>		
<p>Author, Year: Sanbomatsu et al., 2011</p> <p>Study Design: RCT</p> <p>Design Suitability: Greatest</p> <p>Quality of Execution: Good</p> <p>Linked studies: Chetty et al., 2016; Clarke 2008; Gennetian et al., 2012; Jacob et al., 2015; Kessler et al., 2014; Leventhal et al., 2003; Leventhal et</p>	<p>Location: Baltimore, MD; Chicago, IL; Los Angeles, CA; Boston, MA; New York, NY, U.S.</p> <p>Urbanicity: urban</p> <p>Date Intervention Implemented: families recruited and assigned to study arms from 1994 to 1998</p> <p>Intervention Details: Moving to Opportunity (MTO) experiment offered randomly selected families housing vouchers to move from high-poverty housing projects to lower-poverty neighborhoods; three study arms, a traditional voucher group, a low poverty voucher group and a control group; traditional group received regular Section 8 certificates or vouchers, low poverty voucher group received Section 8 certificates</p>	<p>Eligibility Criteria: families living with children in public housing or project-based Section 8 assisted housing in high-poverty census tracts (those with a 1990 poverty rate of 40 percent or more)</p> <p>Unit of recruitment: families</p> <p>Sample Size: number of households Overall: 4604 MTO group: 1819 HUD voucher group: 1346 Control: 1439</p> <p>Attrition: N/A</p> <p>Demographics: for head of households Mean age: 33.5 at baseline Gender: 97.8% female Race/Ethnicity: 61.4% non-Hispanic African American, 31% Hispanic, 2.6% non-Hispanic white, 0.4% American Indian,</p>	<p>Outcome Measures: Reported in a separate table at the end of this document.</p> <p>Intervention Duration: ongoing</p> <p>Follow-up Time: 10-15 years, depending on baseline recruitment</p> <p>Results: reported in a separate table at the end of document</p>

Study	Intervention Characteristics	Population Characteristics	Results
al., 2011; Ludwig et al., 2011; Nguyen et al., 2013; Nguyen et al., 2016; Osypuk et al., 2012, 2019a, 2019b; Pollack et al., 2019; Sciandra et al., 2013	<p>or vouchers usable only in low-poverty areas</p> <p>Requirement to move to low-poverty areas: Traditional arm: no requirement MTO arm: requirement</p> <p>Services Provided: MTO arm: provided counseling and assistance in finding a private unit to lease</p> <p>Comparison: The control group received no certificates or vouchers but remained eligible for public or project-based housing and other social programs to which families would otherwise have been entitled.</p>	<p>1.6% Asian Pacific Islander, 1.9% other Employment: 14.2% full time, 10.7% part time, 71.7% not working Income: \$12,826.81 median household income Education: 37.5% high school diploma, 17.6% GED, 16.3% currently in school Insurance: NR</p>	

Results from Mills et al., 2006

Outcome measure	Results
Housing quality: proportion rating current housing as excellent or good	Intervention: 69.5% Comparison: 61.6% Absolute difference: 7.9 percentage points
Housing quality: proportion reporting problems	Intervention: 6.2% Comparison: 13.5% Absolute difference: -7.3 percentage points

Outcome measure	Results
Housing quality: proportion living in crowded housing	Intervention: 23.8% Comparison: 45.7% Absolute difference: -21.9 percentage points
Neighborhood opportunity: safety Proportion victimized in the neighborhood	Intervention: 15% Comparison: 15% Absolute difference: 0 percentage points
Neighborhood opportunity: employment Proportion employed in the neighborhood	Intervention: 87.9% Comparison: 87% Absolute difference: 0.9 percentage points
Neighborhood opportunity: income Proportion of neighborhood residents whose income falls below the poverty line	Intervention: 26.16% Comparison: 28.52% Absolute difference: -2.3 percentage points
Housing stability: proportion whose housing is insecure (reported not having a place of one's own to stay at some point during past year or living with others)	Intervention: 44.8% Comparison: 9.3% Absolute difference: -35.5 percentage points
Housing stability: proportion who were homeless (reported living on the streets or living in shelters at some point during past year)	Intervention: 12.5% Comparison: 3.3% Absolute difference: -9.2 percentage points
Housing stability: proportion who moved out of baseline census tract	Intervention: 67.1% Comparison: 56.2% Absolute difference: 10.9 percentage points
Housing stability: number of reported moves	Intervention: 1.45 Comparison: 2.34 Relative difference: -37.6%
Education: proportion of youth who have a high school diploma or GED	Intervention: 4.5% Comparison: 4.5% Absolute difference: 0 percentage points
Education: proportion receiving any education, all ages	Intervention: 43.9% Comparison: 43.1% Absolute difference: 0.8 percentage points

Outcome measure	Results
Education: proportion of youth enrolled in college	Intervention: 2.4% Comparison: 2.4% Absolute difference: 0 percentage points
Education: proportion youth who repeated a grade	Intervention: 29.5% Comparison: 17.9% Absolute difference: 11.6 percentage points, $p < 0.5$
Education: proportion of youth using services for learning or behavior issues	Intervention: 17.7% Comparison: 18.3% Absolute difference: -0.6 percentage points
Income: individual income after three years in US dollars	Intervention: \$3149 Comparison: \$3046 Relative difference: 3.4%
Income, poverty: proportion with cash and near-cash (food stamps, etc.) income below poverty level	Intervention: 48.2% Comparison: 64.7% Absolute difference: -16.5 percentage points
Income, food expenditure: food expenditure in the month before survey	Intervention: \$135 Comparison: \$96 Relative difference: 40.6 %
Income, food insecurity: proportion of households that were food insecure during past 30 days	Intervention: 42.0% Comparison: 42.4% Absolute difference: -0.4 percentage points
Employment: proportion employed, year 5	Intervention: 54.0% Comparison: 47.2% Absolute difference: 6.8 percentage points
Physical health: proportion reporting good or excellent physical health	Intervention: 76% Comparison: 67% Absolute difference: 9 percentage points
Mental health: proportion worried, tense, or anxious ≥ 1 month during past 12 months	Intervention: 51.2% Comparison: 57.7% Absolute difference: -6.5 percentage points

Outcome measure	Results
Healthcare use: proportion with health insurance	Intervention: 63.9% Comparison: 61.1% Absolute difference: 2.8 percentage points
Healthcare use, affordability: proportion could not afford medical care in past year	Intervention: 14.5% Comparison: 17.5% Absolute difference: -3.0 percentage points
Healthcare use, affordability: proportion could not afford dental care in the past year	Intervention: 24.2% Comparison: 28.5% Absolute difference: -4.3 percentage points
Risky behavior: child behavior problems index	Intervention: 26.2% Comparison: 27.1% Absolute difference: -0.9 percentage points
Risky behavior: proportion smoking, adults	Intervention: 37.5% Comparison: 29% Absolute difference: 8.5 percentage points
Crime: child's number of arrests since baseline	Intervention: 0.074 Comparison: 0.164 Relative difference: -54.9%

Stratified results from Mills 2006*

Outcome measure	Stratification Factor	Results
Housing stability: proportion moved out of baseline census tract	Race	Blacks: 6.7 percentage points White: 20.0 percentage points Hispanic: 18.3 percentage points
Income, poverty: proportion with cash and near-cash (food stamps, etc.) income below 75% of poverty level	Race	Blacks: -30.3 percentage points White: -31.4 percentage points Hispanic: 15.3 percentage points

* Additional stratified analyses reported in paper

Results for Sanbonmatsu 2011*, for Voucher Users (Treatment-of the-Treated)

Outcome Measures	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Housing quality: proportion of participants reporting current housing as excellent or good	MTO users: 68.0% Control: 57.0% Difference: 10.9 percentage points	HUD voucher users: 62.0% Control: 57.0% Difference: 5.0 percentage points
Neighborhood opportunity: safety Proportion of participants feeling safe during day	MTO users: 87.8% Control: 80.4% Difference: 7.4 percentage points	HUD voucher users: 87.6% Control: 80.4% Difference: 7.2 percentage points
Neighborhood opportunity: safety Proportion of participants feeling safe at night	MTO users: 68.4% Control: 59.6% Difference: 8.8 percentage points	HUD voucher users: 71.3% Control: 59.6% Difference: 11.7 percentage points
Neighborhood opportunity: poverty Proportion low-income in census tract	<u>MTO users</u> Baseline: 53.0% Follow-up: 21.0% <u>Control</u> Baseline: 53.1% Follow-up: 31.3% Difference between groups: -10.2 percentage points	<u>HUD users</u> Baseline: 54.0% Follow-up: 24.4% <u>Control</u> Baseline: 53.1% Follow-up: 31.3% Difference between groups: -7.8 percentage points
Neighborhood opportunity: education Proportion of students from racial or ethnic minority groups in schools attended by youth	MTO users: 82.7% Control: 90.4% Difference: -7.7 percentage points	HUD voucher users: 88.1% Control: 90.4% Difference: -2.3 percentage points
Neighborhood opportunity: education Proportion of students eligible for free lunch in schools attended by youth	MTO users: 60.0% Control: 70.1% Difference: -10.1 percentage points	HUD voucher users: 66.2% Control: 70.1% Difference: -3.9 percentage points
Neighborhood opportunity: education Student-teacher ratio in schools attended by youth	MTO users: 17.73 Control: 17.8 Difference: -0.6%	HUD voucher users: 17.77 Control: 17.8 Difference: -0.3%

Outcome Measures	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Housing stability: months spent in tract with <10%low-income	MTO users: 20.8 Control: 1.5 Difference: 1248.0%	HUD voucher users: 61.3 Control: 1.5 Difference: 3880.0%
Education: proportion of youth, 15-20, with education on track, overall	MTO users: 78.6% Control: 81.4% Difference: -2.8 percentage points	HUD voucher users: 77.0% Control: 81.4% Difference: -4.4 percentage points
Education: proportion of youth, 19-20, with high school diploma, overall	MTO users: 48.1% Control: 62.2% Difference: -14.1 percentage points	HUD voucher users: 53.0% Control: 62.2% Difference: -9.2 percentage points
Education, proportion of youth, 15-20, attended any college since 2007, overall	MTO users: 23.3% Control: 26.2% Difference: -2.9 percentage points	HUD voucher users: 22.9% Control: 26.2% Difference: -3.3 percentage points
Income: annual individual earnings in previous year, in \$2009	MTO users: \$12966.4 Control: \$12288.5 Difference: 5.5%	HUD voucher users: \$11306.1 Control: \$12288.5 Difference: -8.0%
Income, poverty: proportion of households at or below 100% of poverty line	MTO users: 52.3% Control: 59.0% Difference: -6.7 percentage points	HUD voucher users: 64.9% Control: 59.0% Difference: 5.9 percentage points
Income, food insecurity: proportion of households without enough to eat in past 12 months	MTO users: 26.4% Control: 33.6% Difference: -7.2 percentage points	HUD voucher users: 23.0% Control: 33.6% Difference: -10.6 percentage points
Employment: proportion currently employed, adults	MTO users: 51.1% Control: 52.5% Difference: -1.4 percentage points	HUD voucher users: 40.1% Control: 52.5% Difference: -12.4 percentage points
Physical health: proportion of participants reporting having good or better health, adults	MTO users: 56.8% Control: 56.4% Difference: 0.4 percentage points	HUD voucher users: 55.5% Control: 56.4% Difference: -0.9 percentage points
Physical health: proportion of participants who had at least one asthma or wheezing attack in past year, adults	MTO users: 25.5% Control: 29.3% Difference: -3.8 percentage points	HUD voucher users: 22.7% Control: 29.3% Difference: -6.6 percentage points

Outcome Measures	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Physical health: proportion currently obese, adults	MTO users: 55.9% Control: 58.4% Difference: -2.5 percentage points	HUD voucher users: 56.6% Control: 58.4% Difference: -1.8 percentage points
Physical health: proportion who had diabetes or treated for diabetes during past year, adults	MTO users: 11.1% Control: 16.0% Difference: -4.9 percentage points	HUD voucher users: 6.2% Control: 16.0% Difference: -9.8 percentage points
Physical health: proportion with mobility issues that limited respondents' ability to carry out daily tasks, adults	MTO users: 41.0% Control: 51.0% Difference: -10.0 percentage points	HUD voucher users: 47.2% Control: 51.0% Difference: -3.8 percentage points
Physical health: proportion with high blood pressure (SBP≥140mmHg, DBP≥99mmHg), adults	MTO users: 33.0% Control: 31.5% Difference: 1.5 percentage points	HUD voucher users: 27.4% Control: 31.5% Difference: -4.1 percentage points
Mental health: psychological distress index, adults	MTO users vs. control: -0.22 z-score	HUD voucher users vs. control: -0.16 z-score
Mental health: proportion ever diagnosed with h major depression	MTO users: 13.7% Control: 20.3% Difference: -6.6 percentage points	HUD voucher users: 12.6% Control: 20.3% Difference: -7.7 percentage points
Mental health: proportion ever diagnosed with mood disorder	MTO users: 19.7% Control: 25.5% Difference: -5.8 percentage points	HUD voucher users: 19.7% Control: 25.5% Difference: -5.8 percentage points
Mental health: proportion ever diagnosed with anxiety disorder	MTO users: 6.0% Control: 6.5% Difference: -0.5 percentage points	HUD voucher users: 3.2% Control: 6.5% Difference: -3.3 percentage points
Mental health: proportion who ever had a panic attack	MTO users: 41.6% Control: 40.7% Difference: 0.9 percentage points	HUD voucher users: 37.2% Control: 40.7% Difference: -3.5 percentage points
Mental health: proportion with post-traumatic stress disorder (PTSD)	MTO users: 19.5% Control: 21.9% Difference: -2.4 percentage points	HUD voucher users: 22.5% Control: 21.9% Difference: 0.6 percentage points

Outcome Measures	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Healthcare use: affordability Proportion that did not get needed medical care in past 12 months because they could not afford it, adults and youth	MTO users: 5.6% Control: 6.1% Difference: -0.5 percentage points	HUD voucher users: 2.0% Control: 6.1% Difference: -4.1 percentage points
Healthcare use: proportion with health insurance, adults and youth	MTO users: 86.6% Control: 82.7% Difference: 3.9 percentage points	HUD voucher users: 88.3% Control: 82.7% Difference: 5.6 percentage points
Healthcare use: proportion going to ED for routine care, adults	MTO users: 8.2% Control: 5.1% Difference: 3.1 percentage points	HUD voucher users: 3.3% Control: 5.1% Difference: -1.8 percentage points
Risky behavior: proportion ever smoked, youth 13 to 20 years of age	MTO users: 40.0% Control: 31.2% Difference: 8.8 percentage points	HUD voucher users: 37.6% Control: 31.2% Difference: 6.4 percentage points
Risky behavior: proportion ever had alcoholic drinks, youth 13 to 20 years of age	MTO users: 46.7% Control: 53.4% Difference: -6.7 percentage points	HUD voucher users: 50.8% Control: 53.4% Difference: -2.6 percentage points
Risky behavior: proportion with past 30-day binge drinking, youth 12 to 19 years of age	MTO and HUD voucher users vs. control: 0.7 percentage points	

* Additional analysis reported in papers

Results for Sanbonmatsu 2011* for Everyone Offered a Voucher, Regardless of Whether Voucher was Used (Intention-to-Treat)

Outcome Measures	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Housing voucher use	Post intervention: 47.4% used vouchers	Post intervention: 61.6% used vouchers

Outcome Measures	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Housing quality: proportion of participants reporting current housing as excellent or good	MTO users: 62.3% Control: 57% Difference: 5.3 percentage points	HUD voucher users: 60.1% Control: 57% Difference: 3.1 percentage points
Neighborhood opportunity: safety Proportion of participants feeling safe during day	MTO users: 84.0% Control: 80.4% Difference: 3.6 percentage points	HUD voucher users: 84.9% Control: 80.4% Difference: 4.5 percentage points
Neighborhood opportunity: safety Proportion of participants feeling safe at night	MTO users: 63.9% Control: 59.6% Difference: 4.3 percentage points	HUD voucher users: 66.9% Control: 59.6% Difference: 7.3 percentage points
Neighborhood opportunity: poverty Proportion low-income in census tract	<u>MTO users</u> Baseline: 52.7% Follow-up: 27.4% <u>Control</u> Baseline: 53.1% Follow-up: 31.3% Difference between groups: -3.5 percentage points	<u>HUD users</u> Baseline: 52.6% Follow-up: 28.3% <u>Control</u> Baseline: 53.1% Follow-up: 31.3% Difference between groups: -2.5 percentage points
Neighborhood opportunity: education Proportion of students from racial or ethnic minority groups in schools attended by youth	MTO users: 86.7% Control: 90.4% Difference: -3.7 percentage points	HUD voucher users: 88.8% Control: 90.4% Difference: -1.6 percentage points
Neighborhood opportunity: education Proportion of students eligible for free lunch in schools attended by youth	MTO users: 65.3% Control: 70.1% Difference: -4.8 percentage points	HUD voucher users: 67.5% Control: 70.1% Difference: -2.6 percentage points
Neighborhood opportunity: education Student-teacher ratio in schools attended by youth	MTO users: 17.73% Control: 17.83% Difference: -0.6 percentage points	HUD voucher users: 17.77% Control: 17.83% Difference: -0.3 percentage points
Housing stability: number of moves since baseline	Difference: 25.9%	Difference: 29.1%

Outcome Measures	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Education: proportion of youth (15-20 years of age) with education on track, overall	MTO users: 80.0% Control: 81.4% Difference: -1.4 percentage points	HUD voucher users: 78.5% Control: 81.4% Difference: -2.9 percentage points
Education: proportion of youth (19-20 years of age) with high school diploma, overall	MTO users: 54.9% Control: 62.2% Difference: -7.3 percentage points	HUD voucher users: 56.6% Control: 62.2% Difference: -5.6 percentage points
Education, proportion of youth (15-20 years of age) who attended any college since 2007, overall	MTO users: 24.8% Control: 26.2% Difference: -1.4 percentage points	HUD voucher users: 24.1% Control: 26.2% Difference: -2.1 percentage points
Income: annual individual earnings in previous year, in \$2009	MTO users: \$12,615.5 Control: \$12,288.5 Difference: 2.7%	HUD voucher users: \$11,674.9 Control: \$12,288.5 Difference: -5.0%
Income, poverty: proportion of households at or below 100% of poverty line	MTO users: 55.8% Control: 59.0% Difference: -3.2 percentage points	HUD voucher users: 62.6% Control: 59.0% Difference: 3.6 percentage points
Income, food insecurity: proportion of households without enough to eat in past 12 months	MTO users: 30.1% Control: 33.6% Difference: -3.5 percentage points	HUD voucher users: 26.9% Control: 33.6% Difference: -6.7 percentage points
Employment: proportion currently employed, adults	MTO users: 51.8% Control: 52.5% Difference: -0.7 percentage points	HUD voucher users: 44.8% Control: 52.5% Difference: -7.7 percentage points
Physical health: proportion of participants reporting having good or better health, adults	MTO users: 56.6% Control: 56.4% Difference: 0.2 percentage points	HUD voucher users: 55.9% Control: 56.4% Difference: -0.5 percentage points
Physical health: proportion of participants had at least one asthma or wheezing attack in past year, adults	MTO users: 27.5% Control: 29.3% Difference: -1.8 percentage points	HUD voucher users: 28.2% Control: 29.3% Difference: -1.1 percentage points
Physical health: proportion currently obese, adults	MTO users: 57.2% Control: 58.4% Difference: -1.2 percentage points	HUD voucher users: 57.3% Control: 58.4% Difference: -1.1 percentage points

Outcome Measures	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Physical health: proportion had diabetes or treated for diabetes during past year, adults	MTO users: 13.6% Control: 16.0% Difference: -2.4 percentage points	HUD voucher users: 9.9% Control: 16.0% Difference: -6.1 percentage points
Physical health: proportion with mobility issues that limited respondents' ability to carry out daily tasks, adults	MTO users: 46.2% Control: 51.0% Difference: -4.8 percentage points	HUD voucher users: 48.7% Control: 51.0% Difference: -2.3 percentage points
Physical health: proportion with high blood pressure (SBP≥140mmHg, DBP≥99mmHg), adults	MTO users: 32.2% Control: 31.5% Difference: 0.7 percentage points	HUD voucher users: 28.9% Control: 31.5% Difference: -2.6 percentage points
Mental health: psychological distress index, adults	MTO users vs. control: -0.11 z-score	HUD voucher users vs. control: -0.10 z-score
Mental health: proportion ever diagnosed with major depression	MTO users: 17.1% Control: 20.3% Difference: -3.2 percentage points	HUD voucher users: 15.5% Control: 20.3% Difference: -4.8 percentage points
Mental health: proportion ever diagnosed with mood disorder	MTO users: 22.7% Control: 25.5% Difference: -2.8 percentage points	HUD voucher users: 21.9% Control: 25.5% Difference: -3.6 percentage points
Mental health: proportion ever diagnosed with anxiety disorder	MTO users: 6.2% Control: 6.5% Difference: -0.3 percentage points	HUD voucher users: 4.5% Control: 6.5% Difference: -2.0 percentage points
Mental health: proportion who ever had a panic attack	MTO users: 41.1% Control: 40.7% Difference: 0.4 percentage points	HUD voucher users: 38.5% Control: 40.7% Difference: -2.2 percentage points
Mental health: proportion ever had PTSD	MTO users: 20.7% Control: 21.9% Difference: -1.2 percentage points	HUD voucher users: 22.3% Control: 21.9% Difference: 0.4 percentage points

Outcome Measures	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Healthcare use: affordability; proportion that did not get needed medical care in past 12 months because they could not afford it, adults and youth	MTO users: 5.9% Control: 6.1% Difference: -0.2 percentage points	HUD voucher users: 3.5% Control: 6.1% Difference: -2.6 percentage points
Healthcare use: proportion with health insurance, adults and youth	MTO users: 84.6% Control: 82.7% Difference: 1.9 percentage points	HUD voucher users: 86.2% Control: 82.7% Difference: 3.5 percentage points
Healthcare use: proportion going to ED for routine care, adults	MTO users: 6.6% Control: 5.1% Difference: 1.5 percentage points	HUD voucher users: 4.0% Control: 5.1% Difference: -1.1 percentage points
Risky behavior: proportion ever smoked, youth 13 to 20 years of age	MTO users: 35.4% Control: 31.2% Difference: 4.2 percentage points	HUD voucher users: 35.5% Control: 31.2% Difference: 4.3 percentage points
Risky behavior: proportion ever had alcoholic drinks, youth 13 to 20 years of age	MTO users: 50.2% Control: 53.4% Difference: -3.2 percentage points	HUD voucher users: 51.7% Control: 53.4% Difference: -1.7 percentage points
Risky behavior: proportion with past 30-day binge drinking, youth 12 to 19 years of age	MTO users: 3.7% Control: 3.2% Difference: 0.5 percentage points	HUD voucher users: 3.9% Control: 3.2% Difference: 0.7 percentage points

* Additional analyses reported in papers

Stratified Analyses from Sanbonmatsu 2011* for Voucher Users (Treatment-of the-Treated)

Stratified by Age and Gender

Outcome Measures	Population Group	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Neighborhood opportunity: safety Proportion of participants feeling safe during day	Female youth ages 10-20 at assessment	MTO users: 87.4% Control: 78.4% Difference: 9.0 percentage points	HUD voucher users: 81.4% Control: 78.4% Difference: 3.0 percentage points

Outcome Measures	Population Group	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Neighborhood opportunity: safety Proportion of participants feeling safe during day	Male youth ages 10-20 at assessment	MTO users: 79.8% Control: 81.7% Difference: -1.9 percentage points	HUD voucher users: 75.5% Control: 81.7% Difference: -6.2 percentage points
Neighborhood opportunity: safety Proportion of participants feeling safe at night	Female youth ages 10-20 at assessment	MTO users: 59.0% Control: 48.6% Difference: 10.4 percentage points	HUD voucher users: 59.1% Control: 48.6% Difference: 10.5 percentage points
Neighborhood opportunity: safety Proportion of participants feeling safe at night	Male youth ages 10-20 at assessment	MTO users: 63.4% Control: 59.1% Difference: 4.3 percentage points	HUD voucher users: 54.8% Control: 59.1% Difference: -4.3 percentage points
Employment: proportion currently employed	Female youth ages 15-20 at assessment	MTO users: 30.6% Control: 41.0% Difference: -10.4 percentage points	HUD voucher users: 34.4% Control: 41.0% Difference: -6.6 percentage points
Employment: proportion currently employed	Male youth ages 15-20 at assessment	MTO users: 29.4% Control: 38.1% Difference: -8.7 percentage points	HUD voucher users: 34.5% Control: 38.1% Difference: -3.6 percentage points
Physical health: proportion of participants reporting having good or better health, adults	Female youth ages 10-20 at assessment	MTO users: 86.9% Control: 86.2% Difference: 0.7 percentage points	HUD voucher users: 87.2% Control: 86.2% Difference: 1.0 percentage points
Physical health: proportion of participants reporting having good or better health	Male youth ages 10-20 at assessment	MTO users: 91.5% Control: 90.3% Difference: 1.2 percentage points	HUD voucher users: 89.3% Control: 90.3% Difference: -1.0 percentage points
Physical health: proportion of participants who had at least one asthma or wheezing attack in past year	Female youth ages 10-20 at assessment	MTO users: 18.9% Control: 20.6% Difference: -1.7 percentage points	HUD voucher users: 17.4% Control: 20.6% Difference: -3.2 percentage points
Physical health: proportion of participants who had at least one asthma or wheezing attack in past year	Male youth ages 10-20 at assessment	MTO users: 21.9% Control: 17.4% Difference: 4.5 percentage points	HUD voucher users: 16.6% Control: 17.4% Difference: -0.8 percentage points

Outcome Measures	Population Group	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Physical health: proportion currently obese	Female youth ages 10-20 at assessment	MTO users: 21.7% Control: 27.4% Difference: -5.7 percentage points	HUD voucher users: 24.3% Control: 27.4% Difference: -3.1 percentage points
Physical health: proportion currently obese	Male youth ages 10-20 at assessment	MTO users: 20.3% Control: 18.7% Difference: 1.6 percentage points	HUD voucher users: 18.7% Control: 18.7% Difference: 0 percentage points
Physical health: proportion who had at least one accident or injury in the past year	Female youth ages 10-20 at assessment	MTO users: 11.8% Control: 16.4% Difference: -4.6 percentage points	HUD voucher users: 12.7% Control: 16.4% Difference: -3.7 percentage points
Physical health: proportion who had at least one accident or injury in the past year	Male youth ages 10-20 at assessment	MTO users: 26.8% Control: 19.2% Difference: 7.6 percentage points	HUD voucher users: 24.8% Control: 19.2% Difference: 5.6 percentage points
Mental health: proportion ever diagnosed with major depression	Female youth ages 10-20 at assessment	MTO users: 6.3% Control: 12.8% Difference: -6.5 percentage points	HUD voucher users: 8.3% Control: 12.8% Difference: -4.5 percentage points
Mental health: proportion ever diagnosed with major depression	Male youth ages 10-20 at assessment	MTO users: 9.0% Control: 8.4% Difference: -0.6 percentage points	HUD voucher users: 8.4% Control: 8.4% Difference: 0 percentage points
Mental health: proportion ever diagnosed with mood disorder	Female youth ages 10-20 at assessment	MTO users: 12.2% Control: 21.8% Difference: -9.6 percentage points	HUD voucher users: 16.8% Control: 21.8% Difference: -5.0 percentage points
Mental health: proportion ever diagnosed with mood disorder	Male youth ages 10-20 at assessment	MTO users: 18.7% Control: 14.0% Difference: 4.7 percentage points	HUD voucher users: 19.4% Control: 14.0% Difference: 5.4 percentage points
Mental health: proportion ever diagnosed with anxiety disorder	Female youth ages 10-20 at assessment	MTO users: 6.0% Control: 6.5% Difference: -0.5 percentage points	HUD voucher users: 3.2% Control: 6.5% Difference: -3.3 percentage points
Mental health: proportion ever diagnosed with anxiety disorder	Male youth ages 10-20 at assessment	MTO users: 1.9% Control: 2.2% Difference: -0.3 percentage points	HUD voucher users: 3.8% Control: 2.2% Difference: 1.6 percentage points

Outcome Measures	Population Group	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Mental health: proportion ever had behavior issues	Female youth ages 10-20 at assessment	MTO users: 5.9% Control: 12.7% Difference: -6.8 percentage points	HUD voucher users: 17.4% Control: 12.7% Difference: 4.7 percentage points
Mental health: proportion ever had behavior issues	Male youth ages 10-20 at assessment	MTO users: 6.0% Control: 8.1% Difference: -2.1 percentage points	HUD voucher users: 9.1% Control: 8.1% Difference: 1.0 percentage points
Mental health: proportion who had at least one panic attack in the past year	Female youth ages 10-20 at assessment	MTO users: 34.4% Control: 42.3% Difference: -7.9 percentage points	HUD voucher users: 41.5% Control: 42.3% Difference: -0.8 percentage points
Mental health: proportion who had at least one panic attack in the past year	Male youth ages 10-20 at assessment	MTO users: 36.6% Control: 35.4% Difference: 1.2 percentage points	HUD voucher users: 40.1% Control: 35.4% Difference: 4.7 percentage points
Mental health: proportion with PTSD	Female youth ages 10-20 at assessment	MTO users: 9.5% Control: 9.2% Difference: 0.3 percentage points	HUD voucher users: 6.2% Control: 9.2% Difference: -3.0 percentage points
Mental health: proportion with PTSD	Male youth ages 10-20 at assessment	MTO users: 6.2% Control: 4.1% Difference: 2.1 percentage points	HUD voucher users: 8.4% Control: 4.1% Difference: 4.3 percentage points
Risky behavior: proportion ever smoked	Female youth ages 13-20 at assessment	MTO users: 34.1% Control: 29.7% Difference: 4.4 percentage points	HUD voucher users: 32.3% Control: 29.7% Difference: 2.6 percentage points
Risky behavior: proportion ever smoked, youth 13 to 20 years of age	Male youth ages 13-20 at assessment	MTO users: 46.1% Control: 32.7% Difference: 13.4 percentage points	HUD voucher users: 42.5% Control: 32.7% Difference: 9.8 percentage points
Risky behavior: proportion ever had alcoholic drinks, youth 13 to 20 years of age	Female youth ages 13-20 at assessment	MTO users: 41.7% Control: 54.1% Difference: -12.4 percentage points	HUD voucher users: 49.1% Control: 54.1% Difference: -5.0 percentage points
Risky behavior: proportion ever had alcoholic drinks, youth 13 to 20 years of age	Male youth ages 13-20 at assessment	MTO users: 52.2% Control: 52.8% Difference: -0.6 percentage points	HUD voucher users: 52.3% Control: 52.8% Difference: -0.5 percentage points

Outcome Measures	Population Group	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Crime: number of arrests for violent crimes	Female youth ages 13-20 at assessment	MTO users: 0.06 Control: 0.16 Difference: 35.0%	HUD voucher users: -0.07 Control: 0.16 Difference: -48.0%
Crime: number of arrests for violent crimes	Male youth ages 13-20 at assessment	MTO users: 0.13 Control: 0.48 Difference: 27.0%	HUD voucher users: -0.12 Control: 0.48 Difference: -24.0%

Stratified by Gender

Outcome Measures	Population Group	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Education: proportion of youth 15 to 20 years of age with education on track	Female	MTO users: 81.2% Control: 82.7% Difference: -1.5 percentage points	HUD voucher users: 83.9% Control: 82.7% Difference: 1.2 percentage points
Education: proportion of youth 15 to 20 years of age with education on track	Male	MTO users: 78.6% Control: 82.7% Difference: -4.1 percentage points	HUD voucher users: 73.1% Control: 82.7% Difference: -9.6 percentage points
Education: proportion of youth 19 to 20 years of age with education on track	Female	MTO users: 53.9% Control: 61.9% Difference: -16.9 percentage points	HUD voucher users: 61.9% Control: 61.9% Difference: -8.9 percentage points
Education: proportion of youth 19 to 20 years of age with education on track	Male	MTO users: 42.6% Control: 53.6% Difference: -11.0 percentage points	HUD voucher users: 44.2% Control: 53.6% Difference: -9.4 percentage points
Education: proportion of youth 15 to 20 years of age who attended any college since 2007, overall	Female	MTO users: 28.2% Control: 30.5% Difference: -2.3 percentage points	HUD voucher users: 30.6% Control: 30.5% Difference: 0.1 percentage points
Education: proportion of youth 15 to 20 years of age who attended any college since 2007, overall	Male	MTO users: 18.9% Control: 22.2% Difference: -3.3 percentage points	HUD voucher users: 15.8% Control: 22.2% Difference: -6.4 percentage points

Stratified by Age at Voucher Program Entry

Outcome Measures	Population Group	Moving to Opportunity vs Comparison	HUD Voucher Program vs Comparison
Education: proportion who attended any college	Children <13 years at program entry; adults when assessed	MTO users: 20.6% Control: 15.4% Difference: 5.2 percentage points	HUD voucher users: 16.6% Control: 15.1% Difference: 1.5 percentage points
Education: proportion who attended any college	Adolescents 13-18 years at program entry; adults when assessed	MTO users: 11.7% Control: 22.0% Difference: -10.2 percentage points	HUD voucher users: 14.6% Control: 20.1% Difference: -5.5 percentage points
Income: individual earnings 2008-2012	Children <13 years at program entry; adults when assessed	MTO users: \$14747.1 Control: \$11270.3 Difference: 30.8%	HUD voucher users: \$12428.0 Control: \$11270.3 Difference: 10.3%
Income: individual earnings 2008-2012	Adolescents 13-18 years at program entry; adults when assessed	MTO users: \$13454.8 Control: \$15881.5 Difference: -15.3%	HUD voucher users: \$13830.4 Control: \$15881.5 Difference: -12.9%
Employment: proportion currently employed	Children <13 years at program entry; adults when assessed	MTO users: 64.5% Control: 60.6% Difference: 3.9 percentage points	HUD voucher users: 63.4% Control: 61.3% Difference: 2.1 percentage points
Employment: proportion currently employed	Adolescents 13-18 years at program entry; adults when assessed	MTO users: 61.5% Control: 67.0% Difference: -5.5 percentage points	HUD voucher users: 63.6% Control: 66.0% Difference: -2.4 percentage points

* Additional stratified analysis reported in papers