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Patterns of Housing Voucher Use Revisited: Segregation and Section 8 Using Updated Data and More Precise Comparison Groups, 2013

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Abstract

What role does the Housing Choice Voucher program play in the economic and racial segregation of its beneficiaries? Expanding upon Metzger's (2014) analysis of the 50 most populous U.S. metropolitan areas with contemporaneous data, this paper substantiates the finding that voucher households are more segregated by income and race at the tract level than households that earn less than $15,000 annually. However, the evidence is mixed when the nonvoucher comparison group is more precisely defined using the specific income limits of the U.S. Department of Housing and Urban Development voucher program and a minority household designation. Voucher households are still concentrated in communities with a higher minority population than extremely low-income renters, but there is less difference in terms of economic segregation. Compared to extremely low-income households facing a housing cost burden, voucher holders are less economically segregated, but the indices for racial segregation are mixed. Limiting the comparison to racial and ethnic minority households, we find that minority voucher households are less segregated by economic concentration than minority extremely low-income households but are more segregated by racial dissimilarity. This paper also explores the role of "source of income" nondiscrimination legislation, which is intended to overcome landlord bias against voucher holders. Contrary to previous research, this model produced weaker evidence that voucher holders are more economically or racially integrated in metropolitan areas including source of income protections. Together, these results suggest that vouchers are more successful in helping recipients reach higher-income neighborhoods than those that are more racially and ethnically diverse.

Key words: Section 8, Housing Choice Vouchers, segregation

Background

Since the 1990s, there has been significant academic and policy interest in the "geography of opportunity" (Briggs, 2005) and how federal housing assistance connects low-income households to place-based opportunity. Empirical research has shown that where individuals reside—particularly where children are born and grow up—is closely correlated with their future health, education, and employment outcomes (Chetty, Hendren, Kline, & Saez, 2014). Better health, educational attainment, and income are all associated with residing in lower poverty, higher opportunity neighborhoods.

As a result, there has been considerable research into the U.S. Department of Housing and Development (HUD) programs, particularly regarding the location and neighborhood characteristics of HUD-assisted households. Also known as the Housing Choice Voucher (HCV) program, HUD's

Section 8 voucher program has received attention specifically because it was designed to integrate assisted households into the private market and enable them to move to better neighborhoods and greater opportunity as their circumstances changed. Although some research has found that voucher households are fairly widely dispersed (Devine, Gray, Rubin, & Taghavi, 2003) and located closer to opportunity than traditional public housing residents or those in poverty more generally (Horn, Ellen, & Schwartz, 2014), voucher households remain highly concentrated in poorer neighborhoods (McClure, Schwartz, & Taghavi, 2014) and further from opportunity (e.g., higher performing schools; Horn, Ellen, & Schwartz, 2014), relative to more general segments of the population. Talen and Koschinsky (2014) found that HUD-assisted households, including voucher holders, reside in neighborhoods with poor access to services and amenities. Moreover, longitudinal analyses provide little or no evidence of improvement over the last decade, with voucher households consistently concentrated in high poverty and minority population neighborhoods (McClure, Schwartz, & Taghavi, 2014; Metzger, 2014).

Despite the research, which largely focuses on comparisons to other housing assistance programs and broad population categories (e.g., all households, renters, households in poverty), the extent to which the HCV program actually contributes to segregation and the concentration of poverty remains poorly understood. Because the voucher household population has fairly distinct characteristics from all these groups, even from other housing programs, it is difficult to say whether the observed segregation is driven by the program or by more general patterns such as features of housing markets or—more broadly—the economy and society.

To provide greater insight into the voucher program's role in racial and economic segregation and concentration, this paper builds on the analysis of Metzger (2014) by using the Comprehensive Housing Affordability Strategy (CHAS) data for 2007–2011 and a special tabulation of the Picture of Subsidized Housing (PoSH) data. These data allow us to more clearly define comparison groups and provide a more complete geographic picture of the distribution and characteristics of voucher households.

Previous Research

There have been a number of recent more general reviews of the research on the location of vouchers (Metzger, 2014; Sard & Rice, 2014). In this paper, we focus on recent studies (Table 1) similar to the current research, their use of data, and their definition of comparison groups. The variables of interest in these papers vary, but all five papers in Table 1, including the current research, are broadly interested in the quality of the neighborhoods in which voucher holders live. Horn, Ellen, and Schwartz (2014) are interested in access to better schools. Talen and Koschinsky (2014) look at access to services and amenities, comparing block groups with high Walk Scores to those with low Walk Scores by the proportions of subsidized households and across a range of neighborhood quality variables. For their part, McClure, Schwartz, and Taghavi (2014) simply look the distribution of vouchers across census tracts of various characteristics.

Horn, Ellen, and Schwartz (2014) and McClure, Schwartz, and Taghavi (2014) also compared subsidized households to the more general populations. McClure, Schwartz, and Taghavi make an implicit comparison of voucher holders to the distribution of all households. Horn, Ellen, and Schwartz compare the location of assisted households to that of households in all rental units and units renting below HUD's Fair Market Rent (FMR), the local rent limit used in administering the

voucher program. Horn, Ellen, and Schwartz also use poor households as a reference sample. The difficulty with these comparisons is that renters who use a voucher are not very similar to all households, all renters, or even all those who rent modest (i.e., below FMR) homes. They are by definition lower income and are more likely to be minorities in urban areas.

Though many voucher users are poor, the typical voucher household in a specific metropolitan statistical area (MSA) may have an income well above or below the national poverty level. This is because the poverty rate is set nationwide and voucher program income limits vary with the local income levels.[2] Moreover, not all those in poverty benefit from a voucher (e.g., college students) and others are not renters at all (e.g., retirees who occupy a home they own free and clear).

These recent analyses provide useful insight into two related questions: (1) Are voucher households—often along with those assisted by other housing programs—located in similar neighborhoods with similar access to opportunity compared to the general population of households, renters, or those in poverty; and (2) Are voucher holders located in similar neighborhoods with access to opportunity as recipients of other housing programs? The answer to the former question is generally no; the latter's is more mixed, but the consensus is that voucher holders fare better than those in most place-based assistance programs serving a similarly low-income population.

Table 1. Recent Analyses of the Segregation and Opportunities of Voucher Holders

Paper	Variable of interest/ Dependent variable	Comparison group(s)	Housing market and policy variables	Other neighborhood characteristics
This Paper	Income and race segregation indices	ELI renters (HUD income limits) by racial/ethnic minority status	SOI legislation	Household income and minority share
Metzger (2014)	Income and race segregation indices	ELI households (approximated as < $15,000)	SOI legislation	Household income and minority share
Horn, Ellen, and Schwartz (2014)	Proficiency rate and other characteristics of nearby schools	Households with children in poverty, renters, other HUD subsidized households	Occupied housing units with rents below FMR, mean rent, vacancy	None
McClure, Schwartz, and Taghavi (2014)	Voucher share of occupied housing and of housing with rents below the FMR	All households	None	Race, ethnicity, and poverty tract shares, central city/suburbs
Talen and Koschinsky (2014)	Walk score	Other HUD subsidized households	% vacant, market strength score, land use diversity, gross density	Minority share, crime, school performance, brownfields

Note. ELI = Extremely Low-Income, FMR = Fair Market Rent, HUD = U.S. Department of Housing and Development, SOI = Source of Income.

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[2] Horn, Ellen, and Schwartz (2014) find that 72.6% of voucher holders nationwide are poor. As a side note, starting with the 2014 income limits, the ELI threshold is set at the poverty level or the traditional ELI threshold, whichever is greater.

However, the limitations of the control groups make the literature less qualified to determine whether the voucher program contributes to, works against, or is simply a nonfactor in racial and economic segregation. To assess the performance of the voucher program in addressing segregation for the specific population it was meant to assist, Metzger (2014) defined her comparison group empirically using program data to better approximate the voucher population. Rather than using poverty, she selected an income cutoff ($15,000 annually) based on the distribution of voucher household income nationally. The results suggested that voucher holders were not only more economically and racially segregated than the general population but also those with similar incomes. On a more positive note, Metzger also found that local "source of income" (SOI) protection laws appeared to mitigate this result.

Though the income limit of $15,000 per year was perhaps closer to defining the voucher-eligible comparison group, it did not vary with local program income eligibility requirements. Furthermore, given the limitations of the publicly available ACS data at the tract level, from necessity, the comparison was to all households below the $15,000 income limit and not cross-tabulated with any other characteristics known to define the voucher population. In particular, tenure and minority status, which are well known to determine housing market opportunities for assisted and unassisted households alike, could not be accounted for. This paper improves on the previous analysis by further specifying the comparison group.

Data and Methods

Following Metzger (2014), this study is a tract-level analysis of the same 50 MSAs, the most populous in 2000. Data on the location and characteristics of voucher households come from a special tabulation of the 2013 PoSH data obtained from HUD through a data license request. In the public PoSH dataset, the characteristics of voucher holders are suppressed for census tracts with between 1 and 10 voucher holders. In our data, the values for a selection of characteristics[3] are not suppressed in these low-voucher tracts. The removal of suppression improves the geographic comparability of the PoSH data to the ACS data at the tract level.

The data used here also include the percentage of voucher households that are both minority and extremely low-income (ELI) according to HUD income limits, a variable not included in the public PoSH data. According to the Quality Housing and Work Responsibility Act (QHWRA) of 1998, 75% of vouchers must serve ELI households (Devine, Haley, Rubin, & Gray, 2000); in our data, 77% of voucher holders fall into this income category (Table 2).

The data for the comparison groups come primarily from the 2007–2011 CHAS data. The CHAS data are American Community Survey (ACS) tabulated by the Census Bureau for HUD using income limits and other categories relevant to HUD programs. These data provide the same ELI cutoffs for the general population used in the PoSH data to describe the HUD-assisted population.

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[3] These characteristics include the percentage of voucher households that have household incomes below HUD's very low-income threshold, the percentage below the extremely low income threshold, and the percentage minority.

Table 2. Characteristics of HCV Households in the 50 Sample Metropolitan Areas

	Minimum across MSAs	Maximum across MSAs	Mean across MSAs	SD across MSAs
VLI	91.1%	98.4%	96.1%	1.5%
ELI	64.3%	86.1%	76.9%	4.5%
Minority	33.9%	99.8%	76.1%	14.3%
Black	0.2%	93.7%	57.8%	23.9%
Native American	0.0%	3.7%	0.6%	0.8%
Asian	0.0%	36.1%	2.7%	5.9%
Hispanic	0.7%	99.6%	14.9%	18.9%
VLI and Minority	33.0%	93.2%	72.8%	13.3%
ELI and Minority	27.6%	76.8%	58.2%	10.7%
Total HCVs	5,122	206,828	25,437	31,410

Note. ELI = Extremely Low-Income, HCV = Housing Choice Voucher, MSA = Metropolitan Statistical Area, SD = Standard Deviation, VLI = Very Low-Income

We used data from the ACS (2007–2011) to create an additional comparison group: households that earn less than $15,000 annually. We employ this more contemporaneous data to update the analyses in Metzger (2014). We also use tract-level income and race and ethnicity data from the ACS to calculate the segregation indices, described in detail below.

Overall, these three data sources allowed us to calculate residential patterns for two voucher groups (i.e., all voucher households, minority voucher households) and four comparison groups (i.e., households that earn less than $15,000 annually [ACS], ELI renters [CHAS], cost-burdened ELI renters [CHAS]; minority ELI renters [CHAS]).

We use households with less than $15,000 in annual income to establish continuity with the previous research. The comparison groups of interest here are the various ELI renter categories. These should better approximate the voucher-eligible population by using the program's local income limits and focusing on renters. The voucher program is a rental program that primarily serves households that are renters when they enter the program. More importantly perhaps, rental housing, particularly the modest rental housing that serves voucher holders, is itself highly concentrated in a relatively few neighborhoods in many metropolitan areas.

We examine the ELI renter population with unaffordable housing-cost burdens, which sharpens the focus on voucher-eligible households without assistance. Households are considered to have an unaffordable housing-cost burden if they spend more than 30% of their income on housing-related costs. Extremely low-income renters without cost burdens already have low rents, in some cases because they already receive housing assistance. Households with a cost burden should be more motivated to apply for and benefit from voucher assistance.

We also specifically compare minority voucher holders to minority ELI households. It is well established that minority renters face discrimination in the rental market, independent of their status as voucher holders (Roscigno, Karafin, & Tester, 2009). This comparison controls for minority status and provides insight into the role of vouchers in serving minority households specifically.

A final set of analyses examined differences in voucher location patterns between MSAs with SOI fair housing protections and those without such local legislation. The Poverty and Race Research Action Council (2015) provided the inventory of SOI laws.

Segregation indices

Using these merged datasets, we consider the concentration of voucher households by income and race/ethnicity. We measured trends in neighborhood income patterns using two indices: the Herfindahl index and the dissimilarity index.

To compute the economic Herfindahl index, we divided census tracts within each MSA into deciles by tract median income. The Herfindahl index scores indicate the extent to which voucher households are evenly distributed across these income deciles. Metzger (2014) provides a more complete description of the calculation of this index. Calculated across income deciles, the Herfindahl index could take a values ranging from 0.1 (i.e., the most dispersed voucher population) to 1 (i.e., the most concentrated voucher population).

The economic dissimilarity index scores were calculated to measure the extent to which voucher households and middle- and upper-income households reside in the same census tracts (Massey & Denton, 1988). For the purpose of the income dissimilarity index, we define middle- and upper-income households as those that earn $50,000 or more annually. A higher dissimilarity index suggests greater segregation between HCV households and middle- and upper-income households, interpreted as the percentage of households from one group who would have to relocate to be evenly dispersed among households from the other group.

For racial concentration, we again employed the Herfindahl index. We divided tracts in each MSA into deciles by the percentage of the tract population that self-reported as non-Hispanic and white and computed the Herfindahl index using these deciles. Similarly, the racial dissimilarity index reflected the overlap of voucher households and non-Hispanic, white residents.

We calculated differences in the respective segregation indices between groups using the nonparametric Kolmogorov-Smirnov equality-of-distributions test (Lilliefors, 1967) because of the nonnormal distribution of segregation indices across MSAs.

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Results

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Table 3 provides results for the income Herfindahl index across the 50 MSAs in the analytic sample. Verifying our previous findings, voucher households were more concentrated in low-income neighborhood compared to households earning less than $15,000 annually ($p < .001$). However, there was no statistically significant difference in the income concentration of voucher holders and other ELI renters ($p = .69$), and voucher households were slightly less economically concentrated than cost-burdened ELI renters ($p < .01$). Moreover, comparison of minority voucher households to minority ELI renters suggested that minority voucher households were relatively less concentrated in high-poverty neighborhoods ($p < .001$).

Table 3. Income Herfindahl Index: Results across 50 Metropolitan Areas

	Minimum	Maximum	Mean	SD	N
Previous Findings (Metzger, 2014)					
Voucher Holders, PoSH 2008	.112	.214	.149	.019	50
Households Earning < $15,000, ACS 2009	.107	.156	.124	.010	50
Voucher Households, PoSH 2013					
All Voucher Holders	.111	.210	.160	.019	50
Minority Voucher Holders	.111	.251	.177	.030	50
Comparison Groups, ACS/CHAS 2011					
Households Earning < $15,000	.106	.161	.130	.011	50
ELI Renters	.114	.184	.157	.015	50
Cost-Burdened ELI Renters	.110	.251	.178	.031	50
Minority ELI Renters	.114	.296	.214	.039	50

Note. ACS = American Community Survey, CHAS= Comprehensive Housing Affordability Strategy, ELI = Extremely Low-Income, PoSH = Picture of Subsidized Households, SD = Standard Deviation.

Table 4. Economic Dissimilarity Index: Results across 50 Metropolitan Areas

	Minimum	Maximum	Mean	SD	N
Previous Findings (Metzger, 2014)					
Voucher Holders, PoSH 2008	.459	.708	.617	.057	50
Households Earning < $15,000, ACS 2009	.358	.594	.491	.052	50
Voucher Households, PoSH 2013					
All Voucher Holders	.459	.783	.617	.059	50
Minority Voucher Holders	.470	.783	.669	.067	50
Comparison Groups, ACS/CHAS 2011					
Households Earning < $15,000	.322	.504	.418	.039	50
ELI Renters	.418	.585	.520	.037	50
Cost-Burdened ELI Renters	.505	.794	.676	.052	50
Minority ELI Renters	.474	.772	.650	.073	50

Note. ACS = American Community Survey, CHAS= Comprehensive Housing Affordability Strategy, ELI = Extremely Low-Income, PoSH = Picture of Subsidized Households, SD = Standard Deviation.

Table 4 presents results for the voucher and comparison groups in terms of our second measure of economic segregation: income dissimilarity. Following a similar pattern as economic concentration, voucher households were higher in income dissimilarity than the original comparison group of households that earn less than $15,000 annually ($p < .001$). Voucher households were also higher in income dissimilarity compared to ELI renters ($p < .001$). Voucher households were again lower in this segregation index compared to cost-burdened ELI renters ($p < .001$), but there was no statistically significant difference between minority voucher holders and minority ELI renters ($p = .51$).

Table 5 presents results for the racial Herfindahl index. In the case of this specific segregation index, scores were higher for voucher households than for households earning less than $15,000 annually

($p < .001$), ELI renters ($p < .001$), and cost-burdened ELI renters ($p < .001$). Likewise, minority voucher holders appeared slightly higher than minority ELI renters in terms of this index, though that difference was not statistically significant ($p = .11$).

Table 6 provides results for our second measure of racial segregation: the racial dissimilarity index. Again substantiating earlier findings, voucher households were higher in racial dissimilarity than households that earn less than $15,000 annually ($p < .001$). Voucher households were also higher in income dissimilarity compared to ELI renters ($p < .001$). Voucher households appeared to be lower in racial dissimilarity than cost-burdened ELI renters, though this difference did not reach statistical significance ($p = .06$). Minority voucher households appeared lower in racial dissimilarity—reflecting greater evenness in their residential distribution vis a vis non-Hispanic white population—compared other minority ELI renters, though this difference was only significant at the .05 level ($p = .03$).

An additional set of models examined whether differences between voucher households and the respective comparison group differed between MSAs with SOI protections and those without. Metzger (2014) provides a description of the statistical methods used. Contrary to Metzger's (2014) results using data from 2008, these difference-in-difference models provided few statistically significant results. Overall, voucher households appeared more dispersed than the respective comparison groups in regions with SOI protections, but only in comparison to households earning less than $15,000 annually did these differences near statistical significance ($p = .11$ for economic dissimilarity, $p = .13$ for racial concentration, $p = .13$ for racial dissimilarity).

Table 5. Racial Herfindahl Index: Results across 50 Metropolitan Areas

	Minimum	Maximum	Mean	SD	N
Previous Findings (Metzger, 2014)					
Voucher Holders, PoSH 2008	.121	.216	.157	.020	50
Households Earning < $15,000, ACS 2009	.101	.137	.111	.007	50
Voucher Households, PoSH 2013					
All Voucher Holders	.116	.236	.164	.029	50
Minority Voucher Holders	.118	.330	.209	.051	50
Comparison Groups, ACS/CHAS 2011					
Households Earning < $15,000	.101	.138	.111	.007	50
ELI Renters	.103	.151	.126	.012	50
Cost-Burdened ELI Renters	.103	.199	.133	.022	50
Minority ELI Renters	.103	.331	.195	.057	50

Note. ACS = American Community Survey, CHAS= Comprehensive Housing Affordability Strategy, ELI = Extremely Low Income, PoSH = Picture of Subsidized Households, SD = Standard Deviation.

Table 6. Racial Dissimilarity Index: Results across 50 Metropolitan Areas

	Minimum	Maximum	Mean	SD	N
Voucher Households, PoSH 2013					
All Voucher Holders	.484	.809	.654	.072	50
Minority Voucher Holders	.505	.822	.716	.066	50
Comparison Groups, ACS/CHAS 2011					
Households Earning < $15,000	.310	.565	.433	.059	50
ELI Renters	.412	.651	.541	.050	50
Cost-Burdened ELI Renters	.563	.775	.680	.053	50
Minority ELI Renters	.546	.800	.691	.068	50

Note. ACS = American Community Survey, CHAS= Comprehensive Housing Affordability Strategy, ELI = Extremely Low Income, PoSH = Picture of Subsidized Households, SD = Standard Deviation.

Discussion

Figure 1 summarizes the average segregation scores for all voucher holders and comparison groups.

In this research and in Metzger (2014), on average across all 50 MSAs, voucher holders are more concentrated economically and in minority neighborhoods than all households that earn less than $15,000 annually. This confirmation of Metzger's earlier results proves that differences in the data alone are not likely to be driving the mixed results using the improved comparison groups.

Compared to all ELI households, the program appears to have little impact, positive or negative, on deconcentrating voucher households away from lower income neighborhoods, according to the economic Herfindahl index. However, when we compare voucher holders to the cost-burdened ELI renters (i.e., those likely to need assistance) we see that voucher holders do appear to live in higher income neighborhoods. A similar pattern is revealed for economic dissimilarity. Voucher holders are less likely to live with middle- and higher-income households than ELI renters generally, but they are more likely to do so than those ELI renters that are housing-cost burdened. These findings may indicate that voucher holders fare better than those in need of assistance without a voucher in reaching higher income neighborhoods and living closer to middle- and high-income households.

Figure 1 does not show a similar pattern for racial segregation. The racial Herfindahl index shows that voucher holders are more concentrated in minority neighborhoods than the comparison groups. The dissimilarity index suggests they have at best no greater success in living in higher percentage white neighborhoods households than the cost-burdened comparison group. The minority voucher holder comparisons (Figure 2) provide further insight into this pattern of findings.

Figure 1. Summary of Findings for All Households
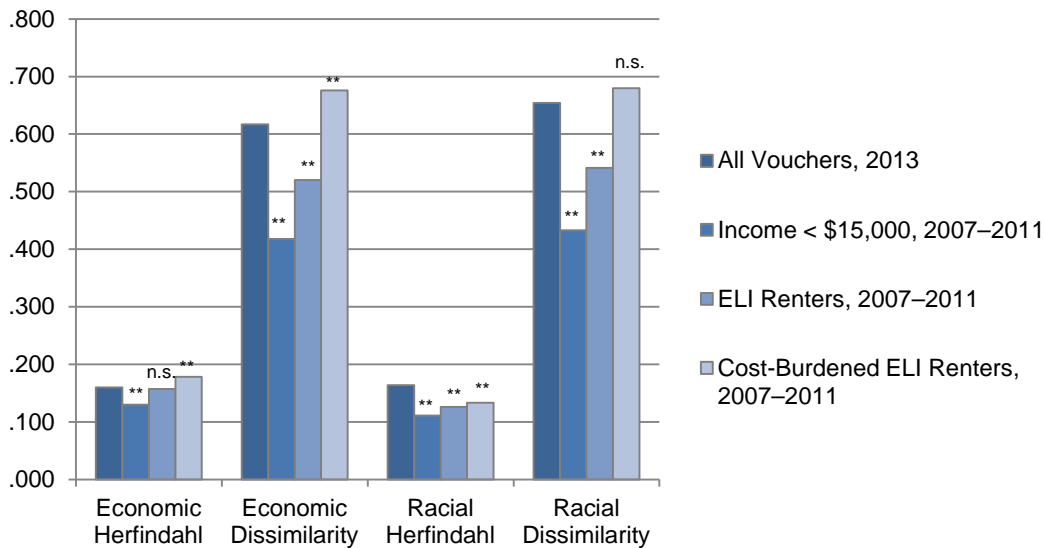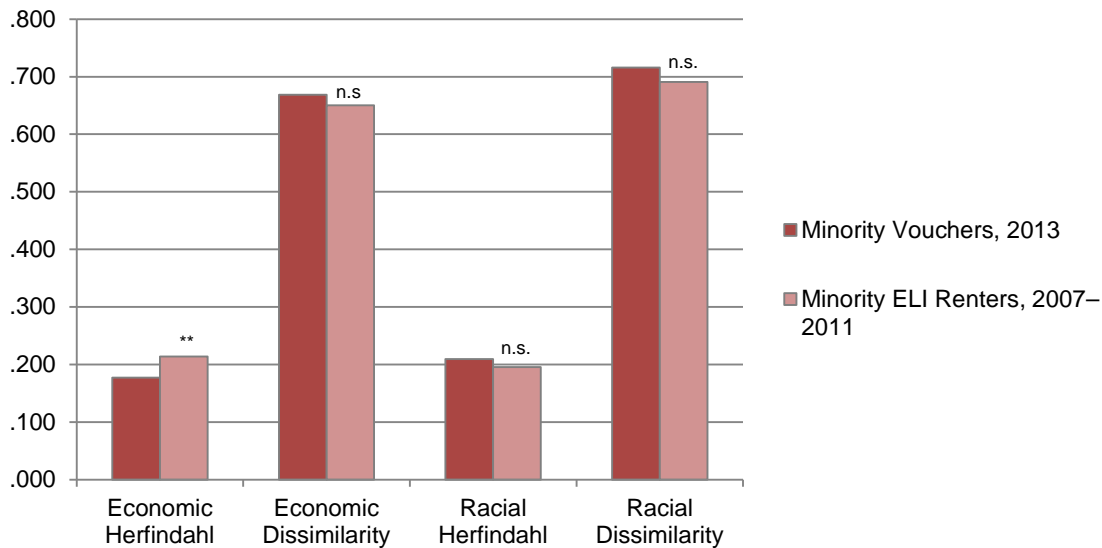

Note. ELI = Extremely Low-Income.
n.s. *p* ≥ .01 compared to voucher holders. **p* < .01 compared to voucher holders. ***p* < .001 compared to voucher holders.

Figure 2 shows that minority voucher holders are little differentiated from other minority ELI households. Again, the economic Herfindahl index suggests that the voucher has some association with living in a higher income neighborhood. According to the dissimilarity indices, voucher holders face similarly low chances of living near middle- or high-income households or those who are not minorities.

On average across the 50 MSAs, minority voucher holders and minority ELI households generally live concentrated in relatively few neighborhoods and rarely live in the same neighborhoods as non-low-income households. In particular, having a voucher appears to have little impact on minority households when it comes to moving away from racially segregated communities. There is evidence, however, that minority voucher households do move to higher income communities, as might be expected from a subsidy meant to make a moderately priced apartment affordable to the lowest income households, but the implication is these relatively higher income neighborhoods still have high percentages of minority residents.

What explains the persistent racial concentration at a national level? On their own, these indices cannot tell us whether program design, local policies, or landlord or tenant behavior—or likely a combination of factors—explain this outcome. Metzger (2014) found that the SOI protections had a significant effect in mitigating the concentration of voucher households. In this research, the direction of the effect was similarly negative but not statistically significant. This remains an area for further study.

Figure 2. Summary of Findings for Minority Households

Note. ELI = Extremely Low-Income.
n.s. $p \geq .01$ compared to minority voucher holders. *$p < .01$ compared to minority voucher holders. **$p < .001$ compared to minority voucher holders.

Future Research

The methodological approach and the present results suggest two separate directions for future research: (1) continuing to improve the comparisons being made, and (2) to look more closely at why the voucher program appears to have so little impact on the racial and ethnic segregation of its recipients.

There are a number of ways to improve the comparisons. In many of these metropolitan areas, residential neighborhoods that serve large urban universities likely represent some of the greatest concentrations of ELI renters, though local colleges and students in general may also account for some of the dispersion of poor and ELI renters. While many students are in need of assistance, in general these are not voucher-eligible populations or likely to apply for a voucher. Therefore, it would be interesting to attempt to account for student populations in the comparison groups.

In keeping with Metzger (2014), this analysis uses a $50,000 cutoff for middle-income households across all 50 MSAs. Future research could make the cutoff MSA specific (i.e., 100% of the HUD Area Median Income) using the CHAS, as was done for the voucher comparison groups. This would likely improve the interpretation of the economic dissimilarity index by ensuring that *middle income* had a similar meaning in MSAs such as Washington, DC, where the median household income is over $100,000 as in other areas such as Memphis, where the median is closer to $50,000.

This paper already looked at SOI protections as one source of local variation. There are other policies meant to address voucher concentration. At the national level, HUD policies such as 50% FMR areas, and more recently the Small Area FMRs, could be evaluated.

But outside of the methods here, these results need to be tied more closely to the literature—both other quantitative approaches and qualitative and ethnographic approaches—on the causes of racial segregation. Multivariate analyses modeling the segregation indices may also prove fruitful.

Conclusion

The analysis here suggests that using comparison groups based on program guidelines and recipient population characteristics, as well as improved data on geographic dispersion, provides useful insights into the strengths and limitations of the voucher program in facilitating economic and racial and ethnic integration. This initial foray encourages us to both extend the analysis to test additional important variables at a national level and look more closely at MSA level variation.

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