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Original Article

Racial Differences in the Effects of Neighborhood Disadvantage on Residential Mobility in Later Life

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Abstract

Objectives: Past research on the residential mobility of older adults has focused on individual-level factors and life course events. Less attention has been paid to the role of the residential environment in explaining residential mobility in older adults. We sought to understand whether neighborhood disadvantage had predictive utility in explaining residential relocation patterns, and whether associations differed between Whites and non-Whites.

Method: Data are from the National Social Life, Health and Aging Project, a nationally representative sample of community-dwelling older adults. Neighborhoods were defined at the census tract level. Local movers (different census tract, same county) and distant movers (different county) were compared with stayers.

Results: After adjusting for individual-level factors, neighborhood disadvantage increased the likelihood of a local move, regardless of race/ethnicity. For non-Whites, higher neighborhood disadvantage decreased the likelihood of a distant move. Among local movers, Blacks and Latinos were less likely to improve neighborhood quality than Whites.

Discussion: Neighborhood disadvantage may promote local mobility by undermining person–environment fit. Racial differences in access to better neighborhoods persist in later life. Future research should explore how older adults optimize person–environment fit in the face of neighborhood disadvantage when the possibility of relocation to a better neighborhood may be restricted.

Keywords: Neighborhood inequality—Person-environment fit—Race differences

Most older adults aspire to age in place (Keenan, 2010), but their ability to remain in their homes and communities may depend on the conditions of their neighborhoods. When socioeconomic disadvantage is highly concentrated in a local area, residents are more likely to be exposed to crime, violence, stress, and environmental toxins, and to experience poor health and educational outcomes (Rudolph et al., 2014; Sampson, Sharkey, & Raudenbush, 2008; Sharkey & Faber, 2014). Empirical studies of the consequences of neighborhood disadvantage for older adult relocation are few (Schieman, 2005), but it is reasonable to expect that a disadvantaged residential environment would undermine the ability of an

older adult to remain living independently in his or her home. Moreover, older adults may be more vulnerable to the negative consequences of disadvantaged neighborhoods than working-aged adults due to increased dependence on their immediate local environment (Cagney & Cornwell, 2010). This study examines the effects of neighborhood disadvantage on residential mobility among community-dwelling older adults and the extent to which such effects differ by race.

Background

It is generally believed that older adults tend to stay put unless prompted to move by a significant life course event, such as retirement or the onset of disability (Litwak and Longino, 1987). Gerontological research suggests that individual-level variables and life course events influence the likelihood of moving in later life. For instance, research has shown that residential mobility in older age is more prevalent among retirees than those still employed, in younger than older old age, among those with higher levels of education or economic resources, in those with health concerns or disability, and those in urban versus rural areas (Sergeant & Ekerdt, 2008; Taylor, Morin, Cohn, & Wang, 2008; Walters, 2002). Less is known about the influence of neighborhood conditions on residential mobility in later life. Evidence suggests that older adults move to avoid high seasonal temperature variation and high tax rates (Walters, 2002), but the effects of neighborhood disadvantage are unknown.

Disadvantaged neighborhood contexts (i.e., those indicated by high concentrations of poverty, unemployment, receipt of public assistance, female-headed households and children) have been shown to be associated with poor physical health, mental health and educational outcomes (Nicholson & Browning, 2011; Rudolph et al., 2014; Sampson et al., 2008). Scholars theorize that when these conditions co-occur at the neighborhood level, they indicate underlying structural disadvantage generally associated with underinvestment, fewer amenities, poor formal infrastructure, and consequentially, crime and disorder (Sharkey & Faber, 2014). Although the majority of research documenting the effects of neighborhood disadvantage has focused on working-age adults and children, neighborhood disadvantage appears to be deleterious for older adults as well (Aneshensel et al., 2007). The vulnerabilities of older adulthood may even magnify the negative consequences of neighborhood disadvantage, at the same time that neighborhood disadvantage increases vulnerability (Glass & Balfour, 2003). For instance, neighborhood disadvantage has been shown to increase risk of functional limitations among older adults (Clarke et al., 2014), and functional limitations, in turn, may decrease one's ability to cope with residential hazards (Lipman, 1991). In summary, neighborhood disadvantage presents unique challenges to safe and sustained community living by older adults.

Motivated by a concern that prior emphasis on individual-level factors has limited detection of mobility patterns driven by social stratification and disadvantage, we ask: How does neighborhood disadvantage influence the likelihood that an older adult will move?

Person-environment fit theory (Lawton, 1980) provides a starting point for considering how neighborhood disadvantage impacts older adults. According to Lawton (1980; Lawton, Windley, & Byerts, 1982), older adults achieve person-environment fit by balancing individual competency and resources, the personal dimension, with environmental demands. Residential mobility is a strategy to optimize person-environment fit (for a review of person-environment fit theory as it relates to residential satisfaction, see

Kahana, Lovegreen, Kahana, & Kahana, 2003). This conceptualization is consistent with the classic understanding of residential satisfaction and mobility: Individuals move to maximize the fit between their needs (social, physical, economic, etc.) and the resources provided in their residential location (Speare, 1974). Our initial hypothesis is that as neighborhood disadvantage increases, an older adult will be less likely to achieve a satisfactory degree of personenvironment fit and, in response, will move to a less disadvantaged neighborhood to improve fit. For example, lack of buses, sidewalks, benches, and timed stoplights may restrict the activity of older adults who cannot drive (Clarke et al., 2014), thus reducing fit and increasing the need for a move. Just as safety concerns related to disability and poor health have been shown to lead older adults' social ties to encourage relocation (Silverstone & Horowitz, 1992), threats to older adult safety and independence stemming from neighborhood disadvantage are likely to promote relocation. For example, neighborhood conflict and crime have been mentioned by older adults as barriers to remaining in a particular neighborhood (Mack, Salmoni, Viverais-Dressler, Porter, & Garg, 1997). However, if an environment includes amenities and infrastructure to support older adults, then they are better able to live independently in that community (Schieman, 2005). The negative effect of neighborhood disadvantage on person-environment fit may drive both local mobility and distant mobility. This likely depends on the particular constellation of characteristics and resources that each older adult uses to optimize fit.

Person-environment fit theory allows for the additional complexity that non-Whites may experience neighborhood disadvantage differently than Whites-though how that might manifest itself is less clear. On one hand, minority older adults may experience a "double jeopardy" stemming from the dual impact of social disadvantage and health challenges that accompany later life and that make them more vulnerable to the negative effects of disadvantage (Carreon & Noymer, 2011). On the other hand, neighborhood disadvantage may be less disruptive to person-environment fit for individuals with long-term residence in the community. Black families, especially, may be more likely to have developed skills over their lives for coping with the challenges of disadvantaged neighborhoods (DeLuca, Garboden, & Rosenblatt, 2013). Further, long-term residence in any neighborhood may provide benefits to person-environment fit in terms of social support and stability.

Drawing on the demographic literature on residential mobility, we find two reasons why we should not rely solely on person–environment fit theory to understand relocation responses to neighborhood disadvantage. First, not all moves are voluntary. Involuntary mobility is another way neighborhood disadvantage may lead to relocation, specifically to local churning (DeLuca, Rosenblatt, & Wood, 2009). Older adults may be forced to relocate due to a sudden health event or in response to residential instability (in their own housing arrangement or in their neighborhood).

Residence in a disadvantaged neighborhood increases exposure to the triggers of involuntary mobility that stem from residential instability, such as eviction, foreclosure, and substandard housing conditions (Desmond & Shollenberger, 2015; Fischer, 2002). Involuntary moves tend to be short distance and made by socioeconomically vulnerable households (Metzger, Fowler, Anderson, & Lindsay, 2015). Yet even after accounting for individual-level socioeconomic status, older adults living in more disadvantaged neighborhoods may be at greater risk of an involuntary move. To illustrate, an economically stable older adult who is renting can be forced to move if the landlord defaults on mortgage payments. The literature leads us to expect that an older adult making an involuntary move in the face of higher neighborhood disadvantage will be just as likely to move within the neighborhood as to move just outside the immediate neighborhood, but less likely to make a distant move.

Second, even when a move is voluntary, non-Whites face additional barriers to circumventing neighborhood disadvantage. Blacks and Latinos live in more disadvantaged neighborhoods and are much less likely than Whites to move out of disadvantaged neighborhoods (Crowder, South, & Chavez, 2006). Further, Blacks are slightly more likely than Whites to move within a county whereas Whites are more likely to move between counties and states (South & Deane, 1993). Prominent demographic explanations for the striking racial differences in mobility out of disadvantaged neighborhoods are as follows: economic disparities (the spatial assimilation hypothesis), discrimination in housing markets (the place stratification hypothesis), and racial differences in exposure to and knowledge about other neighborhoods. According to the spatial assimilation hypothesis, fewer socioeconomic resources limit the opportunities of minority families to move into higher quality neighborhoods (Logan, Alba, & Leung, 1996). Yet even after adjusting for socioeconomic status, legacies of racial segregation and discrimination in the housing market (e.g., the refusal of housing loans by banks) limit non-Whites from moving to better and distant neighborhoods (Crowder et al., 2006; Massey, 2013, Sharkey, 2012). Racial differences in exposure to and knowledge of other neighborhoods are also thought to constrain the potential for Blacks and Latinos to move into less disadvantaged neighborhoods and for Whites to move into more integrated neighborhoods (Krysan & Bader, 2009). Thus, to the extent that these barriers restrict non-White mobility into distant or perhaps better neighborhoods, it is perhaps not surprising that we see racial differences in relocation responses to neighborhood disadvantage.

Our study innovates by exploring the complex influence of neighborhood disadvantage on residential mobility—testing for variation by race and type of move and testing for racial differences in neighborhood attainment among movers. We focus on older adults, a population that is examined less often in the neighborhood effects

literature, yet for whom neighborhood influences may be most consequential.

Method

Data

The data used in this analysis come from the first and second waves of the National Social Life, Health and Aging Project (NSHAP; Waite, Laumann, Levinson, Lindau, & O'Muircheartaigh, 2014), a nationally representative probability sample of community-dwelling older adults born between 1920 and 1949 and aged 57-85 years at the first wave of data collection. The survey design oversampled African Americans and Latinos (O'Muircheartaigh, Eckman, & Smith, 2009). Our statistical analysis adjusted for this complex survey design, applying Wave 1 population weights to all analyses. The final sample (N = 2,261)consists of the respondents from Wave 1 (2005-2006) who were still community dwelling and were re-interviewed in Wave 2 (2010-2011; response rate 76.9%). The Wave 1 respondents excluded from the final sample were not reinterviewed at Wave 2 due to death (n = 318), poor health (n = 115), or other reasons, including refusal to participate and residence in institutional settings (n = 311). Although neighborhood disadvantage is likely to have important consequences for relocation into institutions like skilled nursing facilities, our focus was limited to community-dwelling older adults.

Collaborators at the National Opinion Research Center facilitated the linkage of respondent address data to tract-level census characteristics using the American Community Survey 2005–2009 rolling averages. Our working sample size is 2,182; we omitted one case with missing address data, 61 cases of race described as "other", and 17 cases with a neighborhood disadvantage exposure more than 3 SD above the mean. We used respondent census tract at Wave 1 as a proxy for respondent neighborhood. Although tracts are imperfect approximations of neighborhoods (Tienda & Stier, 1991), and county areas vary greatly by region, our approach is consistent with the vast majority of prior research on residential mobility, locational attainment, and neighborhood effects, and as such, lends itself to comparison (Sharkey & Faber, 2014).

Outcome Variable

In line with previous research on inter-neighborhood mobility (Massey, Gross, & Shibuya, 1994), we defined residential mobility as a move out of the respondent's census tract of residence at Wave 1. Because our aim was to test whether living in a more disadvantaged neighborhood during older adulthood is associated with a higher likelihood of moving to a different neighborhood, we restricted our focus to inter-neighborhood mobility: both local and distal. This is important considering that respondents may be living in retirement communities in which it is relatively

common for residents to move to a different unit within the same community.

Movers were distinguished from stayers (non-movers) by determining whether respondents had a new residential address in Wave 2, relative to Wave 1. Local moves were to a different census tract within the original county of residence, and distant moves were to a different county of residence. We assumed that moves within the original census tract are more similar to non-moves (i.e., moving to a different unit in an apartment or retirement community) in that they would not result in a change in neighborhood disadvantage, so these groups were combined. Sensitivity analyses confirmed that same-tract mobility was not associated with neighborhood disadvantage; moreover, distinguishing same-tract movers from non-movers did not change estimates of the parameters of interest for local and distant moves (results available on request). Thus, the three-category outcome variable for 5-year residential mobility is defined as follows:

- Stayers: those who stay in same census tract
- Local movers: those who move to a new census tract within same county
- Distant movers: those who move out of county

Explanatory Variables

Concentrated neighborhood disadvantage is a composite measure introduced by Sampson, Raudenbush, and Earls (1997). We adapted the measure for the current study by drawing on five neighborhood characteristics measured at the census tract level: proportion of households that are under the poverty level, proportion of households that receive public assistance, proportion of households that are female-headed; proportion of the eligible population unemployed; and proportion of the population younger than 18 years. This measure assumes that the greater the co-occurrence of these five conditions, the more disadvantaged the neighborhood context. These neighborhood-level data come from the 2005 American Community Survey so that it corresponds to respondents' places of residence at Wave I. Following Sampson and colleagues (2008), we conducted principal component analysis (PCA) to generate a metric for the degree of concentrated neighborhood disadvantage in a census tract. The distributions for four of the items (poverty, unemployment, public assistance, and female-headed households) were log transformed before use in PCA; proportion of the population younger than 18 years of age was normally distributed and required no transformation. PCA indicated that the first component (PC1) explained the majority of the covariation in the five items, so we used the PC1 loadings to weight the items and calculate a composite neighborhood disadvantage score. Scores were standardized for ease of interpretation.

We modeled race as a dichotomous measure of minority racial status: White or non-White. White designates non-Hispanic Whites and non-White designates Black/African Americans and Latino/Hispanic Americans. We excluded respondents in the "other" category of race due to the heterogeneity of this group and the fact that there were too few individuals in this group to obtain reliable estimates.

A methodological concern with any study of neighborhood disadvantage and race in the United States is the lack of comparability between White and non-White neighborhoods (Sampson et al., 2008) because very few Whites live in neighborhoods with the highest levels of disadvantage (Lichter, Parisi, & Taquino, 2012). In the case of the current study, the distribution of neighborhood disadvantage scores for non-Whites is denser at higher levels of disadvantage than that of Whites. To facilitate comparison of Whites and non-Whites over the range of disadvantage experienced by both racial groups, we excluded from the analysis 17 respondents with a neighborhood disadvantage score more than 3 SD above the mean.

Analytic Strategy

We used multinomial logistic regression to estimate relative risk ratios for the likelihood of each type of move (local and distal), relative to staying. The models were adjusted for the effects of individual-level factors that may influence residential mobility, including gender, age, education, rural residence, household assets adjusted for household size, living arrangement (1 = living alone; 2 = living with spouseonly; 3 = living with children or others, with or without spouse), disability (the presence of at least one limitation to the activities of daily living), retirement status, change in retirement status (0 = stayed working/retired; 1 = changed retirement status), and residential tenure (years of residence in the neighborhood). All of the covariates, except homeowner status and change in retirement status, were measured at Wave 1 of the study and thus precede any relocation events under study. Lacking information on homeowner status in Wave 1, we included homeowner status in Wave 2 (post-move) as a covariate, following the example of Fischer (2002) who classified renters or owners based on their status after a move on the assumption that owner status is relatively stable, at least in older adults. Change in retirement status was included as a covariate because older adults may move in preparation for retirement (Litwak & Longino, 1987). A high rate of missingness in the household assets variables (36% missing) was corrected by regressing household assets on age, education, and race/ethnicity with multiple imputation using chained equations (10 repetitions) to generate reliable estimates for all cases.

Model 1 examined the effects of neighborhood disadvantage on the likelihood of relocation for local and distant moves. In Model 2, we added an interaction term to test for racial differences in the effects of neighborhood disadvantage on likelihood of residential relocation for local and distant moves. We also tested race-stratified versions of Model 2. Coefficients from all multinomial logistic regression models are reported as relative risk ratios.

In Model 3, we assessed change in neighborhood disadvantage as the change in standard deviation units of disadvantage at Wave 2 relative to Wave 1 and used ordinary least squares regression to test for race/ethnic differences in the effect of changes in neighborhood disadvantage on local and distant moves. These neighborhood attainment models (Models 3.1 and 3.2) distinguish between Latino and Black movers and include covariates for age, education, and household assets adjusted for household size.

Results

Of the 2,182 older adults in the analytic sample, 22% experienced a move during the 5-year study interval. 10% moved locally, staying within their county of origin and 12% moved out of county. Table 1 presents descriptive statistics by mover type. There are no statistically significant differences in rates of relocation between Whites and non-Whites.

The results of the multinomial logistic regressions that predict mover type are presented in Table 2. Results from Model 1 show that the effect of neighborhood disadvantage

on the risk of moving locally versus staying over a 5-year interval is positive (B = 1.22, SE = 0.12). That is, across race, adults living in more disadvantaged neighborhoods in Wave 1 were at 22% greater risk of moving to a different census tract within the county than to stay in the same census tract. Neighborhood disadvantage effects were independent of individual-level factors thought to influence later life relocation. Rural residency, longer residential tenure, home ownership, and greater financial assets were associated with a lower likelihood of making a local move. Distant moves were less likely among those with longer residential tenure, living alone, and who owned their homes, but were positively associated with household assets and change in retirement status. Independent of individual-level covariates and prior to modeling any moderation by race, neighborhood disadvantage has no effect on the likelihood of distant moves relative to staying.

Model 2 tested whether allowing for variation by race changes the effect of neighborhood disadvantage on the risk of local or distant moves. A nonsignificant race-by-disadvantage interaction term showed that the effect of neighborhood disadvantage on the risk of a local move does not

Table 1. Descriptive Statistics of Estimation Sample

		Stayed in same tract	Local mover: Different tract, same county	Distant mover: Different county Mean / Prop	
	Range	Mean / Prop	Mean / Prop		
Total $(n = 2,182)$.785	.096	.119	
Individual and household characteristics					
Male	0 or 1	.515	.529	.559	
White	0 or 1	.833	.623	.770	
Age	57-85	67.3	66.2	66.5	
Post-high school education	0 or 1	.546	.483	.579	
Household assets (adjusted for HH size)	\$2 to \$34 million	\$375,488	\$292,433	\$412,047	
Residential tenure (years in neighborhood)	0-85	23.2	13.6	14.9	
Own home at Wave 2	0 or 1	.890	.575	.682	
Living arrangement					
Living alone (ref)	0	.207	.279	.218	
Living with spouse only	1	.575	.525	.568	
Living with others	2	.218	.196	.214	
ADL difficulty	0 or 1	.199	.268	.220	
Retirement status					
Stayed working (ref)	0				
Status changed from Wave 1 to Wave 2	1	.236	.200	.326	
Stayed retired	2				
Neighborhood characteristics					
Neighborhood disadvantage (standardized)	-2 to 3	138	.040	248	
% HH in poverty	0 to 1	.135	.146	.127	
% HH female-headed	0 to 1	.128	.140	.112	
% HH w/ public assistance	0 to 1	.022	.026	.020	
% Unemployed	0 to 1	.047	.052	.045	
% Children	0 to 1	.246	.247	.240	
Rural	0 or 1	.300	.122	.297	

Note: ADL = activity of daily living; HH = household(s).

 Table 2.
 Multinomial Logit Regression Models Predicting Mover Type at Wave 2

	Model 1	Model 2: Disadvantage- by-race	Model 2.1 Stratified: Whites	Model 2.2 Stratified: Blacks	Model 2.3 Stratified: Latinos
Landau (Different tout a control					
Local move (Different tract, same county)					
Predictors of interest					
Neighborhood disadvantage (PCA Score)	1.223*	1.412*	1.169	1.473*	1.808*
Race/ethnicity (ref = non-White)		1.552 [†]			
Neighborhood disadvantage × Race/ethnicity		0.823			
Neighborhood and household characteristics					. =
Household assets (adjusted for HH size)	1.165*	1.167*	1.232*	1.055	0.788
Living arrangement (ref = living alone)	2 002	2.400	2 (00	1 215	4.045
Living with spouse only	2.082	2.109	2.608	1.215	1.845
Living with children or others	2.209	2.236	2.640	1.630	6.878
Residential tenure (years in neighborhood)	0.973**	0.973**	0.973*	0.976	0.966
Own home at Wave 2 (ref = rent or other)	0.170***	0.170***	0.191***	0.095***	0.062**
Rural (ref = non rural)	0.296**	0.297**	0.313*	0.135**	0.191
Individual characteristics					
Race/ethnicity (ref = non-White)	1.353				
Gender (ref = female)	1.094	1.083	1.150	1.236	0.398*
Age (centered at 65)	0.982	0.981	0.979	1.039	0.880*
Education (ref = no college)	0.729	0.725	0.719	1.099	1.333
ADL difficulty (ref = no difficulty)	1.325	1.339	1.520	0.481	1.766
Retired at Wave 1 (ref = not retired)	0.684 [†]	0.689	0.659	0.582	1.848
Change in retirement status from Wave 1 to Wave 2	0.614^{\dagger}	0.620^{\dagger}	0.627	0.495	0.843
Constant	0.231*	0.196*	0.159†	0.505	1.130
		Model 2:	Model 2.1	Model 2.2	Model 2.3
		Disadvantage-	Stratified:	Stratified:	Stratified:
Distant move (Different county)	Model 1	by-race	Whites	Blacks	Latinos
Predictors of interest					
Neighborhood disadvantage (PCA Score)	0.940	0.560***	1.065	0.400**	0.528^{\dagger}
Race/ethnicity (ref = non-White)		1.230			
Neighborhood disadvantage × Race/ethnicity		1.911**			
Neighborhood and household characteristics					
Household assets (adjusted for HH size)	1.264*	1.261*	1.300*	1.048	1.263
Living arrangement (ref = living alone)					
Living with spouse only	6.205*	6.216*	8.059*	1.553	4.346
Living with children or others	4.691*	4.686*	5.066*	6.409	2.113
Residential tenure (years in neighborhood)	0.977**	0.977**	0.978*	0.966	0.958*
Own home at Wave 2 (ref = rent or other)	0.206***	0.200***	0.222***	0.154**	0.426
Rural (ref = non rural)	1.019	0.991	1.036	0.112*	1.688
Individual characteristics					
Race/ethnicity (ref = non-White)	1.386				
Gender (ref = female)	1.226	1.245	1.235	1.721	1.349
Age (centered at 65)	0.983	0.984	0.987	0.965	0.985
	0.965	0.966	0.912	1.565	0.381
Education (ref = no college)		1 1 1 1	1.205	0.558	2.505
Education (ref = no college) ADL difficulty (ref = no difficulty)	1.173	1.141	1.203	0.000	
	1.173 1.298	1.141	1.231	1.973	1.415
ADL difficulty (ref = no difficulty)					1.415 1.037

Note: Coefficients are reported as relative risk ratios; regressions employ weights to account for complex survey design. Observations: Model 1 = 2,182; Model 2.1 = 1,587; Model 2.2 = 363; Model 2.3 = 232.

ADL = activity of daily living; HH = household(s); PCA = principal component analysis.

 $^{^{\}dagger}p < .10. \ ^{*}p < .05. \ ^{**}p < .01. \ ^{***}p < .001.$

differ among Whites and non-Whites. A significant raceby-disadvantage interaction (B = 1.91, SE = 0.39) indicated that the risk of distant moves differs between Whites and non-Whites. With each standard deviation increase in neighborhood disadvantage, non-Whites are half as likely to move out of county. Neighborhood disadvantage has no such effect on distant moves in Whites. Race-stratified analyses (Models 2.1–2.3) revealed that neighborhood disadvantage is associated with a 60% reduction in the risk of distant moves among Blacks, a similar though nonsignificant reduction among Latinos, and a nonsignificant 6.5% increase in the risk of a distant move among Whites. Figures 1 and 2 provide visual representations of the interaction between neighborhood disadvantage and race in their influence on the probability of local and distant moves, respectively.

Moves may be a response to changes in, rather than levels of, neighborhood disadvantage, so we also examined the

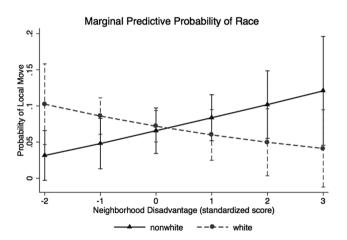


Figure 1. Predicted marginal probability of a local move by race (with 95% confidence intervals). Predictive margins were calculated prior to imputation of missing values, and their confidence intervals are larger than those for estimates that are based on imputed data.

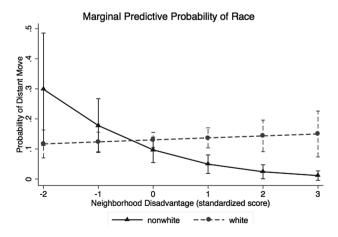


Figure 2. Predicted marginal probability of a distant move by race (with 95% confidence intervals). Predictive margins were calculated prior to imputation of missing values, and their confidence intervals are larger than those for estimates that are based on imputed data.

effect of changes in disadvantage on the likelihood of local and distant moves. For these analyses, we focused only on long-term residents (those who had resided in the same neighborhood for 5 years or longer at Wave 1). Results revealed that a change in neighborhood disadvantage between 2000 and 2005 was not associated with mover type nor did it attenuate the main effects of neighborhood disadvantage. Although these results suggest that levels and not changes in disadvantage motivate moves, we cannot exclude the possibility that neighborhood decline prior to 2000 or a worsening of disadvantage between 2005 and 2009 may have contributed to move likelihood.

Neighborhood Attainment

As shown in Table 3, the higher neighborhood disadvantage is at Wave 1, the greater the average improvement (or reduction in disadvantage) White movers achieve in their neighborhood quality in Wave 2 (B = -0.88, SE = 0.07 for local movers; B = -0.89, SE = 0.06 for distant movers). Black local movers, on the other hand, tend to experience a relative worsening of neighborhood disadvantage at Wave 2 if they come from higher levels of neighborhood disadvantage at Wave 1. Among Black local movers, disadvantage at the destination neighborhood is, on average, 43% worse with each standardized unit increase in neighborhood disadvantage at Wave 1. On average, Blacks and Latinos achieve approximately 1 SD less improvement in neighborhood disadvantage than Whites, with the exception of Latino distant movers who experience the same relative reductions in disadvantage as White distant movers.

Discussion

Results based on our nationally representative sample of community-dwelling older adults show that neighborhood disadvantage increases likelihood of moving to a different neighborhood in the same county. However, the effects on residential mobility differ between Whites and non-Whites. Neighborhood disadvantage decreases the likelihood of distant moves for non-Whites, but not for Whites. In addition, for Whites, exposure to higher Wave 1 neighborhood disadvantage leads to a greater reduction in Wave 2 disadvantage among movers. The opposite is true for Black older adults who move locally. Even after controlling for assets, education, and home ownership, Blacks residing in neighborhoods with higher disadvantage at Wave 1 experienced a worsening of disadvantage when they moved locally.

Our results provide support for person–environment fit theory, with some caveats. The lack of association between neighborhood disadvantage and same-tract moves does not eliminate but reduces concern that the effect of disadvantage on local mobility is explained by local churning due to involuntary mobility rather than person–environment fit. Neighborhood disadvantage does not increase the likelihood of just any move; it increases the likelihood of a move

Table 3. OLS Regression Predicting Change in Neighborhood Disadvantage Post-Relocation (Wave 1 to Wave 2)

	221	Model 3.2: Distant movers (Different county)	
Observations	Model 3.1: Local movers (Different tract, same county)		
Wave 1 Neighborhood disadvantage (PCA score)	-0.877***	-0.891***	
Race/ethnicity (ref = White)			
Black	1.003**	0.962**	
Latino	1.049***	-0.284	
Wave 1 Neighborhood disadvantage × Race/ethnicity			
Neighborhood disadvantage x Black	0.428*	0.056	
Neighborhood disadvantage × Latino	0.209	-0.127	
Age (centered at 65)	0.013	-0.006	
Education (ref = no college)	-0.088	-0.113	
Household assets (adjusted for HH size)	0.018	-0.010	
Constant	-0.538**	-0.299*	

Notes: OLS = ordinary least squares; HH = household(s); PCA = principal component analysis. $^*p < .05$. $^{**}p < .01$. $^{***}p < .001$.

to a different local neighborhood. That said, the effect of neighborhood disadvantage on person-environment fit varies by race—a classic person-environment interaction. Yet person-environment fit theory fails to explain why higher neighborhood disadvantage at Wave 1 predicts a lower likelihood of Black older adults moving out of county or to a more advantaged neighborhood at Wave 2. It is possible that older adults have different personal thresholds for neighborhood disadvantage. Black older adults may enjoy social supports despite neighborhood disadvantage and may be better able than their White counterparts to optimize person-environment fit without relocating (Schieman, 2005). It is also possible that the push to move out of a disadvantaged neighborhood is geographically constrained by the desire to remain close to family regardless of the cost in terms of neighborhood resources. Extended members of minority families are more likely to live in the same or nearby neighborhoods than is the case for White families (Ajrouch, Antonucci, & Janevic, 2001).

We turn to demographic theory on neighborhood attainment, specifically the place stratification hypothesis, to understand why disadvantage decreases the likelihood of distant moves and of moves to better neighborhoods for non-Whites. The place stratification hypothesis identifies race-based barriers to neighborhood attainment that are unexplained by socioeconomic differences (Crowder et al. 2006). Our results suggest that barriers to neighborhood attainment are strongest for Black local movers. Indeed, research on the general population has shown that Blacks are less likely than Whites to improve neighborhood quality when they move, except in the rare instances when they move out of county (Sharkey, 2012). High levels of neighborhood poverty serve as a greater barrier to out-migration for Blacks than for Whites (South, Pais, & Crowder, 2011). We interpret our results as evidence that the barriers to neighborhood attainment intensify with higher exposure

to neighborhood disadvantage for non-White older adults. Neighborhood disadvantage at Wave 1 is shaped by the same underlying barriers that restrict non-White access to better and distant neighborhoods in Wave 2. Our models control for differences in household assets, home ownership, individual education, and age, but it is still possible that unmeasured differences restrict non-White mobility and that such restrictions on non-White mobility intensify with greater neighborhood disadvantage. Thus, the negative effect of neighborhood disadvantage on distant mobility and neighborhood attainment for non-Whites may reflect the complex and possibly mutually reinforcing association between individual disadvantage and neighborhood disadvantage that develops over the life course. In the case of Whites, unmeasured differences between individuals are unlikely to be associated with restricted access to distant and better neighborhoods. Also, to the extent that non-Whites may have limited exposure to and knowledge of better and distant options (DeLuca et al., 2013), they may be less likely to move to neighborhoods with lower levels of disadvantage (Krysan & Bader, 2009).

A limitation of the current study is the exclusion from Wave 2 of the few hundred respondents from Wave 1 who moved into institutional settings or were in too poor health to participate in the second wave of the study. Although we found no significant differences in health and disability status in the full Wave 1 sample and the remaining Wave 2 sample used in our analyses, it is important to note the potential introduction of bias through this natural restriction of the sample. Also, our sample size and multinomial outcome variable meant that we lacked statistical power to distinguish between Blacks and Latinos in our models predicting mover type. Finally, our measure of neighborhood disadvantage might not capture all aspects of disadvantage present in the neighborhood in which case we may be underestimating effects.

In conclusion, neighborhood-level disadvantage is associated with an increased likelihood of local but not distant inter-neighborhood moves in later life. Same-tract moves (e.g., local churning) do not appear to drive the association with local mobility, thus local relocation in response to neighborhood disadvantage does not rule out the person-environment fit perspective. Neighborhood disadvantage is associated with a decreased likelihood of distant moves among non-White but not among White older adults, a nuanced distinction in relocation responses to neighborhood disadvantage that has not previously been explored. Person-environment fit does not fully explain racial differences in the association between neighborhood disadvantage and later life residential mobility. Instead, we suspect that the barriers to non-White distant mobility and relocation to better neighborhoods are also associated with neighborhood disadvantage. The historic advantages Whites have in terms of wealth and access to better neighborhoods may continue to influence neighborhood attainment in later life through their association with neighborhood disadvantage. Future research should explore how older adults optimize person-environment fit in the face of neighborhood disadvantage when the possibility of relocation to a better neighborhood is constrained.

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