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Migration, Mobility, and Neighborhood Attainment: Using the PSID to Understand the Processes of Racial Stratification

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Abstract

In this article we describe the considerable influence of the Panel Study of Income Dynamics (PSID) on research on residential migration, mobility, and neighborhood attainment, as well as the role of PSID-based research in housing policy debates. We review some of the central research findings and key discoveries that have come from analyses that have used the PSID. We then present new research, using PSID data that are linked to geographic data, to demonstrate how geographic moves are associated with changes in neighborhood poverty rates. The relationship differs markedly for blacks and whites, and our results add to a body of work that shows sharp racial differences in residential context, and the role that personal migration plays in shaping this stratification. Finally, we use these findings and the shortcomings of past research to prescribe ways that the PSID could be enhanced to understand more about migration dynamics and processes of residential stratification.

Keywords

internal migration; residential mobility; Panel Study of Income Dynamics (PSID); neighborhood attainment; race/ethnicity

Despite well-documented declines in mobility, the United States claims a highly mobile population, with approximately 10 percent of its population moving every year, and with each individual experiencing an average of 11.7 moves during their lifetime (Spring, Tolnay, and Crowder 2013). Individuals choose to move to change employers, move closer to jobs or good schools, and move into different dwellings and neighborhoods, among a multitude of other potential reasons. Central to these motivations is the concept of improvement—individuals and families often move to improve their circumstances. However, the United States is also a highly stratified and unequal society, and opportunities to improve one's circumstances are often not distributed equally across race, with segregation, discrimination in the job and housing market, and differential access to high quality schools and job opportunities, among other factors limiting the options that many minorities face (Pager and Shepherd 2008). At the same time, mobility and migration have historically been important means for blacks to improve their social and economic circumstances, as was the case for blacks during the Great Migration (Tolnay 2003). Given that blacks tend to originate in more disadvantaged residential contexts than whites (Sharkey 2013), migration and mobility may

be particularly important means for improving the outcomes of blacks, pointing to potential racial differences in the benefits and costs of mobility.

The Panel Study of Income Dynamics (PSID) provides a unique opportunity to assess the ways in which race and a multitude of other characteristics structure the returns to mobility and migration, because it continually surveys a large, diverse group of people and their residential dynamics over a long period of time—something relatively few other studies can claim to do—and includes a uniquely rich and extensive set of questions related to migration dynamics. It is perhaps no surprise then that the PSID has become a standby for migration and residential mobility researchers, and has been central for the advancement of these literatures since the surveys inception in 1968.

In this review, we describe the features of the PSID that have made the data source so important for the study of migration and residential mobility. We then demonstrate how the PSID may be used to address important questions currently confronting the literature on these topics. To do so, we examine how moving out of the metropolitan area, state, or region one grew up in is associated (or not) with improvements in exposure to neighborhood poverty, both when individuals first form households, and 10 years later, when individuals are in their middle adulthood and have settled into a particular residential area. We also examine how race structures these relationships. In addition to highlighting the utility of the PSID for mobility research, this analysis provides insights into the ways in which longer-distance migration influences racial stratification in neighborhood outcomes at multiple stages of the life course.

The Utility of the PSID

Multiple types of mobility and migration

Several features of the PSID make the data especially useful for the study of migration and residential mobility. In particular, the PSID provides annual (biennial after 1997) measures of several aspects of the mobility process, including questions related to whether the householder moved from a different housing unit since the preceding interview, basic reasons for moving, and plans to move in future intervals. In addition to providing information on movement between housing units, the PSID affords the opportunity to match individual respondents to their geographic identifiers at each interview, thereby allowing the researcher to differentiate between moves within the same neighborhood; moves between different neighborhoods; and moves that involve migration to a different county, metropolitan area, state, or region. This ability to detect multiple types of movement allows for the development of a more complete picture of mobility and migration behavior and affords researchers the opportunity to test a wider range of theoretical arguments related to these phenomena.

Utilizing the geographic complexity of the PSID, researchers have been able to demonstrate the intricate and multifaceted nature of migration outcomes and the ways in which those outcomes are stratified by gender, race, and socioeconomic status (SES). For example, Clark and Withers (2002) used the PSID to compare men and women who move within labor markets to women and men who move across labor markets, allowing the authors to better

understand the extent to which migration disrupts women's employment, as is commonly argued, or whether women's employment is instead disrupted by events—such as the birth of a child or the decision to leave the labor force—that may occur in tandem with the migration event. Using this strategy, the authors showed that the influence of migration on married women's employment is more modest and shorter-lived than had been previously assumed.

The ability to link PSID data to tract-level census data and higher order geographical data has also allowed for considerable insights into the microlevel processes that shape the geographic concentration of poverty. In an early study on the topic, Massey, Gross, and Shibuya (1994) linked the PSID to tract- and metropolitan-level data to show that metropolitan residential segregation explains a large share of the racial differences in mobility into and out of poor neighborhoods. This work helped to motivate a long line of PSID-based work on the interplay among individual resources, metropolitan opportunity structures, and residential attainment processes (cf., South and Crowder 1997a; Crowder and South 2005; South, Crowder, and Chavez 2005). For example, Pais, Crowder, and South (2012) used the PSID and its restricted geocoded data to compare how individuals' socioeconomic resources differentially influence blacks' and whites' abilities to move into more advantaged neighborhoods across metropolitan areas. They found that, in most metropolitan areas, blacks are better able to use their education and income to move into whiter neighborhoods than are whites, but even the most advantaged blacks live in neighborhoods with higher percentages of minorities than the least advantaged whites. In contrast, blacks are less able to convert their income and education to mobility into higher income neighborhoods than whites (Pais, Crowder, and South 2012). By showing the stability of these relationships across metropolitan areas, Pais, Crowder, and South (2012) informed theoretical discussions concerning the relationships among residential mobility, neighborhood attainment, socioeconomic resources, and race. Likewise, Quillian (2015) used discrete-choice models to illustrate that blacks are more likely than whites to move into low-income tracts, though this is largely because they are sorting into predominantly black tracts, which tend to be lower income.

By enabling individual-level data to be linked to geographic identifiers in the census, the PSID allows researchers to study multiple geographic levels of mobility. It has thereby facilitated investigations into the determinants and consequences of different kinds of mobility, and has, as a result, been important for migration and mobility theory. The geographic complexity of the PSID has also enabled researchers to examine whether different types of moves correspond to different types of outcomes, something we explore in the analysis below.

Longitudinal and intergenerational nature of the PSID

In addition to allowing researchers to study multiple types of moves, the PSID is uniquely valuable for following families over time and for not only following the original set of family members surveyed, but for following children as they leave their parental households and form their own households. Indeed, the longitudinal nature of the PSID makes it exceptionally well-suited for studying the precursors of moves; certain elements of the

mobility process, including the influence of mobility expectations on actual moves; how the implications of moves unfold over time within and across families; and residential trajectories.

Studies have capitalized on the longitudinal nature of the PSID to show how moves might be precipitated. For example, Hall et al. (2018) demonstrate that experiencing a foreclosure during the Great Recession was associated with moving to more disadvantaged neighborhoods, particularly for Hispanics. Other studies examine how marital dissolution (Cooke, Mulder, and Thomas 2016; South, Crowder, and Trent 1998; Clark and Lisowski 2017), coupling (Clark and Lisowski 2017), experiencing a job change or the birth of a child (Clark and Lisowski 2017), the desire to downsize among older adults (Banks et al. 2011), housing debt (Coulson and Grieco 2013), increases in property damage from natural hazards (Elliott and Howell 2017), and changes in health status (Halliday and Kimmitt 2008) increase the likelihood of moving in subsequent periods. In contrast, proximity to kin (Spring et al. 2017) and Internet use (Cooke and Shuttleworth 2017) tend to decrease the probability of moving, the former by increasing the interpersonal costs associated with moving and the latter by decreasing the costs of not moving because, for example, individuals are able to work remotely.

Likewise, the longitudinal nature of the PSID has allowed researchers to examine whether expectations surrounding moves are translated into actual moves. For example, Crowder (2001) finds that blacks and whites expect to move at similar rates, though blacks are significantly less able than whites to actualize those expectations by moving. Moreover, both blacks and whites have become less likely to actualize their mobility expectations over time (Foster 2017), suggesting that individuals may be increasingly stuck in place.

Other studies have used the PSID's longitudinal structure to examine how the consequences of migration unfold over time. For example, the PSID has been used to show that moving up to 2 years after a job loss helps to reduce costs (wages and work hours) of job displacement (Jolly 2015). Likewise, migration and occupational change (while staying with one's employer) exhibits a positive relationship with earnings a year after migrating, while migration and employer change (but no occupational change) exhibits a positive relationship with earnings in subsequent years after migrating (Krieg 1997). Without the benefit of longitudinal data, these relationships would have been less clear and the dynamic unfolding of migration's benefits and costs would have been obscured.

The longitudinal nature of the PSID also allows researchers to study individuals' residential trajectories, or the movement of individuals into and out of different types of locations over time. For example, researchers have studied mobility into and out of poor neighborhoods (Quillian 2003; South and Crowder 1997a; Crowder, South, and Chavez 2006), segregated neighborhoods (South and Crowder 1998a, 1998b; Lee 2017), suburbs (South and Crowder 1997b), and neighborhoods proximate to environmental hazards (Crowder and Downey 2010), among other mobility trajectories.

The PSID has also allowed researchers to examine how the places individuals live and the characteristics of those places *persist* across the lifetimes of individuals and how these

trajectories influence disparities in outcomes. For example, Huang, South, and Spring (2017) demonstrate that temporal changes in the neighborhoods of nonmobile residents are predominantly responsible for black–white disparities in neighborhood SES. Likewise, individuals who start in low-income neighborhoods exhibit a relatively high likelihood of staying in low-income neighborhoods throughout their lives, and this is particularly the case for blacks (Lee et al. 2017a; South et al. 2016; Vartanian, Buck, and Gleason 2007). Sharkey (2013) extends these analyses by exploring neighborhood disparities across generations, showing that 48 percent of blacks live in poor neighborhoods over multiple generations (compared with 7 percent of whites), while only 1 percent of blacks live in affluent neighborhoods over consecutive generations (compared with 18 percent of whites; Sharkey 2013). Sharkey is therefore able to capitalize on the longitudinal and intergenerational structure of the PSID to illustrate that the consequences associated with neighborhoods are often not felt only in one generation, but over multiple generations, affecting individuals' and families' abilities to migrate out of poor neighborhoods and to experience upward mobility.

The consequences of persistent residence in disadvantaged neighborhoods are considerable. Indeed, research using the PSID has shown that persistent neighborhood disadvantage is associated with significantly lower levels of high school graduation (Wodtke, Harding, and Elwert 2011), lower cognitive ability (Sharkey and Elwert 2011), and worse later life health outcomes (Johnson, Schoeni, and Rogowski 2012). The longitudinal nature of the PSID therefore allows researchers to examine how residential trajectories and their consequences unfold over time, thereby providing important insights into processes that shape the life outcomes of individuals and families in fundamental and enduring ways.

Availability of rich sets of predictors

Another unique component of the PSID is its rich diversity of predictors. The wide variety of questions asked concerning individual and familial characteristics allows researchers to better account for the selectivity of migrants and nonmigrants, and to more accurately isolate the unique relationships among migration, residential mobility, and the outcomes of interest. Indeed, migrants are a select group that tend to possess greater social, material, and personal resources that enable them to successfully relocate to different neighborhoods, cities, states, or even regions (Spring, Tolnay, and Crowder 2013). It is therefore important to account for these resources to prevent confounded relationships. The PSID's breadth of information allows researchers to control for many of these confounding characteristics and to ensure that any observed benefits associated with migration are not, instead, due to the characteristics of the migrants themselves.

Additionally, the breadth and depth of information available allows researchers to test a variety of explanations for and moderators of the relationships under study. For example, many researchers are interested in explaining racial disparities in migration and mobility outcomes. Given the multitude of potential reasons offered by researchers for explaining racial disparities (including SES, discrimination, preferences, and so on), the PSID offers a uniquely rich opportunity to explore the reasons behind racial and ethnic disparities in outcomes. For example, housing discrimination and differences in wealth have been offered

as potential explanations for why blacks tend to live and stay in poorer and more segregated neighborhoods than whites. Using the PSID, Crowder, South, and Chavez (2006) examined the role of wealth and South and Crowder (1998a) examined the role of housing discrimination in explaining the greater tendency of blacks to move into and stay in predominantly black communities. Though neither article finds substantial evidence that wealth or housing discrimination explains this relationship, their ability to examine these potential mechanisms offers unique and important contributions to the study of racial disparities.

All these studies and many more illustrate the value of the PSID for studying residential mobility and migration. Indeed, the availability of a rich set of predictors, the longitudinal and intergenerational nature of the PSID, and the PSID's ability to be linked to an array of geographic identifiers has enabled investigators to rigorously study migration and residential mobility, their precursors, and their influences on a diverse array of outcomes.

The PSID and this Study

In this study, we harness these qualities of the PSID to demonstrate how moving out of the metropolitan area, state, and region one grew up in are associated with changes in neighborhood poverty rates across adolescence and adulthood and how these relationships differ for blacks and whites.¹ In doing so, we are able to demonstrate the utility of using the PSID to study important questions in migration and mobility research, including how the returns to migration are structured by different types of moves and how migration and mobility are associated with racial stratification in neighborhood outcomes.

Indeed, it is well-established that, in comparison to whites, blacks are more likely to live in impoverished neighborhoods with higher levels of crime, pollution, and structural disadvantage (Desmond and Shollenberger 2015; Kravitz-Wirtz et al. 2016; Massey and Denton 1993; Pais, Crowder, and Downey 2014; Patillo 2005; Sharkey 2013; South and Crowder 1997a; Timberlake 2007). It is, therefore, possible that mobility and migration are particularly important for blacks and their neighborhood attainment because blacks have more room in which to improve their neighborhood circumstances. In contrast, whites tend to live in better neighborhoods regardless of their economic circumstances (Crowder, Pais, and South 2012; Patillo 2005). However, this highly stratified system is, itself, partly a product of discrimination in housing search processes and the housing market, disparities in residential knowledge, white flight, and discrimination in the job market, which limits the acquisition of socioeconomic resources and thereby prevents families from moving to better neighborhoods (Charles 2003; Krysan and Crowder 2017; Massey and Denton 1993; Pager and Shepherd 2008; Patillo 2005; Spring Tolnay, and Crowder 2013). It is therefore possible

¹ We also investigated the relationship between neighborhood poverty rates and moving across census tracts between adolescence and adulthood. However, relatively few individuals remained in the census tracts they grew up in after entering adulthood. Specifically, while 19.36 percent of respondents remained in the same census tract as they moved from adolescence into their first independent household, just 9.24 percent remained in the same tract 10 years later, corresponding to small sample sizes particularly once these results were disaggregated by race. This reflects the relatively small geographic scale of census tracts and the resulting tendency for interdwelling moves to result in the movement across tract boundaries. Thus, moving across census tracts was not significantly associated with changes in neighborhood poverty rates 10 years after household formation, though intertract mobility was associated with a slight decline in neighborhood poverty rates of -0.013 for whites ($p < 0.05$) and a slight increase in neighborhood poverty rates of 0.029 ($p < 0.05$) for blacks when individuals first formed their households.

that mobility and migration are associated with larger improvements in neighborhood outcomes for whites, who may be less constrained in their abilities to maximize their utility and move into better neighborhoods.

Given the findings in past research, we expect that (1) blacks will tend to live in neighborhoods with higher poverty rates relative to whites, both in adolescence and in adulthood. Because blacks have more room to experience improvement in residential outcomes than whites, we expect that (2) shorter- and longer-distance migration will be associated with greater improvements in upward residential mobility for blacks than for whites (though, as mentioned above, this expectation is not a foregone conclusion). We expect that (3) these relationships will become stronger as the distance of the move increases, given that longer-distance moves require greater resources and are therefore likely to be associated with more socioeconomically selective migrants. Moreover, longer-distance moves are associated with greater upheavals in social and economic circumstances that might otherwise constrain individuals and their wellbeing. For example, long-distance moves might be more likely to disrupt harmful peer networks, which tend to be associated with increases in the probability that individuals engage in criminal activities (Haynie, Silver, and Teasdale 2006). Long-distance moves may also be more likely to be associated with moves to new labor markets that contain new and diverse job opportunities. It is possible that (4) these relationships may differ in the short-term, when individuals have just formed their own households, and in the long-term, 10 years after individuals have formed their own households. On one hand, it is possible that the benefits of a move may taper off over time and that, as a result, migration will be associated with smaller changes in neighborhood poverty rates in the long term than in the short term. On the other hand, individuals who have moved may be able to build on the benefits experienced from an initial move to continue improving their circumstances. We therefore expect to see differences in the short and long term, though we do not hypothesize about the direction of these differences.

Data and Analytic Strategy

Sample selection

For this analysis, we utilize data from the 1979–2011 waves of the PSID. Earlier waves of data are excluded because outcomes of partnered female heads of household were not consistently collected prior to 1979. We focus on household heads because members of households often move together; including other family members would therefore risk counting joint moves multiple times. For each member of our sample we examine residential location both in the survey year in which the individual first became a household head and 10 years later.

Outcomes

Our outcome of interest is the change in neighborhood (census tract-level²) poverty rates between adolescence (age 17 years) and adulthood (in the year an individual forms their household and 10 years later). An individual who lived in a neighborhood with a 20 percent poverty rate at age 17, a 10 percent poverty rate at the point of household formation, and a

15 percent poverty rate 10 years later would therefore have a short-term change in their neighborhood poverty rate of –10 percentage points and a long-term change in their neighborhood poverty rate of –5 percentage points.

To identify census tracts and to thereby identify tract-level poverty rates, we utilize the PSID's restricted-access Geospatial Match Files. Changes in tract boundaries are accommodated by using the Neighborhood Change Database (NCDB), which standardizes tract boundaries to 2010 census boundaries.

Focal independent variables

We examine whether the type of move is associated with the neighborhood returns to migration by examining moves across (1) metropolitan areas, (2) states, and (3) regions between adolescence (defined as age 17 years) and adulthood. For many individuals, the residences they lived in at 17-years-old reflect the residences they grew up in. Indeed, the majority of individuals under age 17 have not moved, and the vast majority of individuals under age 17 have not moved beyond their county of residence (Ihrke and Faber 2012). Consequently, mobility/migration out of the area one lived in at age 17 predominantly captures individuals who have never moved out of their metropolitan area, states, and regions of residence prior to their household formation. As mentioned above, we examine whether individuals have moved out of their adolescent residential contexts both at the point at which they form their own households and 10 years later.

We also examine whether these relationships are structured by a respondent's race (whether the respondent identifies as non-Hispanic black or non-Hispanic white). We do not examine whether these relationships vary by Hispanic ethnicity because too few Hispanics were interviewed in the PSID in early years to make this a tractable analysis.

Analytic strategy

To examine the link between adolescent location and neighborhood poverty later in life we use ordinary least squares (OLS) regression with robust standard errors. We estimate separate models to examine the effects of inter-metropolitan statistical area (MSA), interstate, and inter-regional moves. We also include interactions between these mobility/migration-related variables and race to examine potential inter-racial differences in these relationships. We present unweighted regression models because PSID sample weights are largely a function of income and other variables included in our models. In these circumstance, unweighted regression coefficients are preferred because they are unbiased, consistent, and are more efficiently estimated (Winship and Radbill 1994).

In our analyses we begin with bivariate models to characterize overall differences in neighborhood context across racial groups and migration experiences. Our multivariate models add controls for a wide range of variables that may affect neighborhood location and allow us to better isolate the effects of race and migration status. These controls include the

². While the census-tract is an imperfect definition of a neighborhood (Lee et al. 2008), it shares a similar size and similar features with conventionally defined neighborhoods (Jargowsky 1997; White 1987), and it allows us to examine tract-level characteristics such as, in this case, tract-level poverty rates. This definition is also consistent with prior literature (e.g., Quillian 2002).

age and gender of the respondent, a dummy variable indicating whether the respondent is married or cohabiting, and the number of children in the household. To account for the SES of the household, we include a dummy variable indicating whether the household head is employed, the number of years of education obtained by the household head, and the taxable family income of the household (measured in constant 2010 dollars). We also include controls for the number of household residents per room in the housing unit (to account for crowding) and whether the respondent is a homeowner. Finally, we include the year of observation and the number of years that have elapsed between surveys (1 or 2 years to account for PSID's switch to a biennial survey after 1997).

Results

Table 1 reports average neighborhood poverty rates at age 17, at the formation of the independent household, and 10 years later, separately by race and migration status. Several points emerge from these statistics. First, neighborhood poverty declines modestly across the life course for black householders, regardless of their longer-distance migration patterns. For example, among blacks remaining in the same metropolitan area, the average neighborhood poverty rate drops from 27.8 percent at age 17 to 25.4 percent 10 years later. In contrast, average neighborhood poverty among whites actually increases slightly across the life course. Second, the reductions in neighborhood poverty across the life course for blacks appear to be especially pronounced for those moving to a different metropolitan area, state, or region. For example, among blacks moving to a different metropolitan area, average neighborhood poverty drops more than 10 percentage points, from 25.9 percent to 15.6 percent, a decrease that is more than double that experienced by those remaining in the same metropolitan area from age 17 to 10 years after the formation of an independent household. Third, Table 1 illustrates pronounced racial differences in exposure to neighborhood poverty. Across all mobility statuses and all three points in the life course, the average poverty rate for blacks is typically at least double that experienced by their white counterparts.

Overall, these results illustrate both immense racial disparities in neighborhood poverty rates but also the importance of mobility and migration for improving the neighborhood attainment outcomes of whites and, particularly, blacks. Indeed, racial disparities in neighborhood poverty rates are considerably smaller for migrants than for nonmigrants. However, these relationships could simply reflect the selectivity of migrants and/or racial differences in sociodemographic factors that shape neighborhood attainment. Indeed, Table 2 below indicates that black respondents are less likely to be married, employed, and homeowners, and have more children, fewer years of education, and lower family incomes. Similarly, in comparison to nonmigrants, migrants tend to have higher levels of education, income, and probabilities of employment (Spring, Tolnay, and Crowder 2013). It could therefore be the case that migrants live in less impoverished neighborhoods because they are select individuals, and not because of the move itself. To help address these possibilities, we turn to multivariate analyses.

First, we estimated a set of regression models to examine the relationship between migration and the change in neighborhood poverty rates between age 17 and the year immediately after the formation of an independent household. We then estimated these relationships for the

change in neighborhood poverty rates between age 17 and 10 years after household formation. Figure 1 displays the results of models predicting short-run differences in neighborhood poverty—those based on the comparison of the neighborhood context at age 17 and neighborhood poverty in the first year of independence—for those remaining in the same metropolitan area and those moving to a different metro. Panel A presents the bivariate results and Panel B presents the multivariate results with covariates held at their overall sample means. These figures are based on regression models presented in online appendix Table A1, columns 1 and 2.

In the bivariate analyses, we see that whites who stay in the metropolitan areas they grew up in once they form their own households experience very little change in their neighborhood poverty rates between adolescence and adulthood. However, whites who move out of the metropolitan areas they grew up in experience a 4.2-percentage-point increase in their neighborhood poverty rates between adolescence and adulthood. In contrast, nonmigrant blacks experience a very modest 1.3-percentage-point decrease in their neighborhood poverty rates between adolescence and adulthood, while migrant blacks experience a significant and rather substantial decrease in their neighborhood poverty rates of almost 4.5 percentage points.

These relationships remain consistent once covariates are added into the model. White inter-metro migrants and nonmigrants experience a 4- and 1.25-percentage-point increase in their neighborhood poverty rates between adolescence and adulthood, respectively. In contrast, migrant and nonmigrant blacks experience a 4.9- and 1.5-percentage-point decrease in their neighborhood poverty rates between adolescence and adulthood, respectively. Thus, whites experience a very modest increase in neighborhood poverty rates as they age into adulthood, and this is particularly true for migrants. For blacks, however, moving out of the metropolitan area one grew up in is associated with a substantial decline in neighborhood poverty at the time individuals become independent and form their own households. This is an especially important phenomenon given the high poverty rates experienced by blacks during adolescence, and aligns with our expectations that migration would be associated with larger improvements in neighborhood attainment outcomes for blacks than for whites.

We next examine whether these relationships change when individuals move out of the state they grew up in, which likely represents a costlier, longer-distance move than a move across metropolitan areas. The results from these analyses (presented in Figure 2; full results available in appendix Table A1, columns 3 and 4) are substantially similar to the results for intermetro migration. Interstate migration is associated with a significant increase in neighborhood poverty rates between adolescence and adulthood for whites, but it is associated with a significant decrease in neighborhood poverty rates between adolescence and adulthood for blacks. Nonmigrant blacks and whites experience very modest but significant decreases and increases in neighborhood poverty rates over time, respectively.

As was the case for intermetro migration, these relationships do not change when covariates are included in the models. Contrary to expectations, these relationships are slightly (though nonsignificantly) weaker for interstate migration than for intermetro migration. Our expectation that an increase in the expected distance of a move would be associated with

larger improvements in neighborhood outcomes therefore does not hold when we compare these two focal independent variables. It should be noted, however, that while interstate moves are likely to cover longer distances, we do not directly examine how many miles an individual moves when they move across MSAs versus states. These conclusions are therefore tentative.

Results for the analysis of the effect of more extreme migration events—those involving movement to a different region—illustrate the robustness of the general findings (Figure 3). Blacks and whites remaining in the regions they grew up in experience small but counterbalancing changes in their neighborhood poverty rates as they age into adulthood and start their own households. Moving out of the region one grew up in is, however, associated with substantial improvements in the neighborhood poverty rates of blacks, but increases in neighborhood poverty rates for whites. These improvements for blacks are slightly larger for interregional migration than they were for intermetro or interstate migration, offering support for our original hypotheses, though given the smaller percentage of individuals who migrate across regions, the confidence intervals for inter-regional migration are also larger.

The results to this point suggest that migration to a different metropolitan area, state, or region plays an important role in improving the neighborhood context for blacks as they form their own households and helps to reduce initial racial differences in neighborhood poverty. However, are these relationships maintained over time? In other words, do we still see smaller racial disparities in neighborhood outcomes among migrant blacks and whites 10 years after they have formed their own households? To examine this, we next turn to the analyses of the link between intermetro, interstate, and inter-regional migration and neighborhood poverty 10 years after the formation of an independent household. The results of these analyses are presented in Figures 4–6, which are based on the regression analyses presented in online appendix Table A2.

The results in Figure 4 indicate that the relative residential benefits of migration persist well into the independent lifecourse, at least for blacks. Ten years after individuals form their own households, having moved to a different metropolitan area since adolescence is no longer associated with meaningful changes in neighborhood poverty rates among whites. For blacks, however, the residential benefits of moving out of the metropolitan area one grew up in are even more pronounced 10 years after household formation than they were in the short-run at the point of household formation. Specifically, neighborhood poverty rates decrease by almost 11 percentage points between adolescence and middle adulthood for blacks moving to a different metropolitan area. Nonmigrant blacks also experience longer-run improvements in their neighborhood poverty rates, and these improvements are larger than they were when blacks first formed their households, though the confidence intervals also increase in size for this older group of individuals, largely because not all individuals observed in adolescence had aged into middle adulthood by 2011.

These results are consistent when the focus turns to interstate migration (Figure 5) and inter-regional migration (Figure 6). The only differences between the results for these different types of moves are that the reductions in neighborhood poverty rates for black intermetro migrants are slightly greater than the declines for black interstate and inter-regional

migrants, and white inter-regional migrants experience slightly larger increases in neighborhood poverty rates than do white intermetro and interstate migrants. However, these differences are not statistically significant because, as mentioned above, the confidence intervals are somewhat larger for this sample because the sample size declines over time. The nonsignificant differences in the returns to various types of moves contradicts our hypothesis that an increase in the expected distance of a move would be associated with stronger relationships between migration and neighborhood attainment.

Moreover, as was the case for intermetro migration, the returns to interregional and, particularly, interstate migration are somewhat larger for individuals who are in their middle-adulthood than for individuals who just formed their own households. This is an interesting finding illustrating the persistence of the benefits of migration for individuals' neighborhood outcomes as they age.

The results of our analysis illustrate well-established racial disparities in neighborhood poverty rates, disparities that are particularly large for adolescents. However, these results also suggest that migration to a different metropolitan area, state, or region between adolescence and adulthood can substantially alter these racial disparities. For blacks, migration is associated with significant and sometimes substantial improvements in neighborhood poverty rates at the point that individuals form their own households and age into middle-adulthood. For whites, all types of migration between adolescence and adulthood are associated with slight increases in neighborhood poverty rates, particularly when whites first form their own households. This could be a result of whites moving from suburbs and other areas with traditionally lower overall levels of poverty into cities in their young adulthood. As a result, migration is associated with a significant narrowing of the racial disparity in neighborhood poverty rates. Importantly, these improvements in neighborhood attainment are maintained for individuals who formed their households 10 years prior and are therefore in their middle adulthood.

Discussion

The results of our analysis provide insights into the unique ways in which the PSID may be used to explore the complexity of trajectories in migration across race and over time as individuals grow up, form their own households, and decide to stay or leave the residential contexts they grew up in. More generally, this analysis utilizes several unique features of the PSID to highlight the utility of the PSID for understanding broader processes of migration and residential stratification. In particular, the rich longitudinal and multilevel structure of the PSID, the ability to link family members across generations, the availability of information on multiple residential moves and several stages of the mobility process, and the opportunity to combine the PSID with other sources of data related to residential context all make the PSID uniquely suited for understanding residential dynamics.

The same features that make the PSID useful for understanding residential dynamics make it an indispensable tool in debates about housing and housing-related policy. For example, recent research has used the PSID to better understand the role of housing-assistance programs in shaping residential trajectories and neighborhood dynamics (Lee et al 2017b;

Massey et al. 2013; Newman and Holupka 2017a). Building on this work, another line of research has examined the role of housing assistance on residential stability and, by extension, individual educational and health outcomes, especially among children (Lennon, Clark, and Joshi 2016; Newman and Holupka 2017b). A separate line of PSID-based research highlights the effects of the broader housing-policy context by examining variations in foreclosure dynamics across policy settings and their role in shaping variations in the financial well-being and mobility patterns of families, as well as implications for broader patterns of neighborhood change and segregation (Coulson and Grieco 2013; Hall, Crowder, and Spring 2015a, 2015b). Most recently, the PSID has been used to explore the potential effectiveness of housing-related debt-reduction programs to affect residential and financial stability of families (Ganong and Noel 2017). In all this research, the unique characteristics of the PSID allow researchers to understand the complex interactions between social policy, microlevel characteristics, and context-specific forces in shaping migration and mobility dynamics and their consequences.

However, because the PSID has been so important in the study of migration and mobility, many of the key shortcomings in our collective knowledge of these important social and demographic processes are a reflection of the shortcomings of the PSID data and other longitudinal data sources. Thus, it is important to highlight potential improvements and additions to the PSID that would facilitate even stronger research in the areas of mobility and migration. Three broad areas are worth highlighting here. First, the curators of the PSID should continue their longstanding efforts to diversify the PSID panel by growing the samples of racial and ethnic minority populations and immigrant groups. Because it was based primarily on the descendants of a sample originally drawn five decades ago, the PSID has traditionally been most useful for studying the migration and mobility patterns of black and white families, leaving open important questions about generalizability to other populations. Recognizing this, the curators of the PSID have made substantial progress in diversifying the panel, which should allow the PSID to remain a central source of information about the rapidly changing American residential landscape.

Second, the utility of the PSID would be greatly enhanced with an improved slate of questions related to the reasons for mobility and immobility. At present, the PSID contains only the most basic information on householders' reasons for a past move and, in some years, a single question about the reasons for considering a move. While these questions provide some basic insights not available from other sources of data, they are somewhat irregular and typically provide insights into only the most important, but generally vague, reasons for moving, leaving researchers to infer mobility motivations from observed patterns of, and variation in, mobility behavior. Stronger information on individuals' residential priorities and perceptions about the potential costs and benefits of migration would allow for direct tests of some hotly debated theoretical arguments, including those related to the role of neighborhood racial composition in mobility decisions and the supposed increasing rootedness of American households. More importantly, these data would provide considerable leverage for the development of social policy aimed at improving residential access, neighborhood stability, and workforce distribution.

Third, the utility of the PSID for the study of migration and mobility would be significantly enhanced with the addition of information on variations in knowledge about residential options and the tools and approaches individuals employ in the search process. Challenging basic assumptions of rational decision-making processes, there are strong clues that much of the variation in patterns of residential mobility and migration reflect individual-level differences in how individuals perceive opportunities to access housing options in specific neighborhoods or regions (Krysan and Crowder 2017). Yet besides those from small local surveys, there are few data on individuals' knowledge or perceptions of residential opportunities. The addition of a slate of questions related to knowledge and perceptions of opportunities in specific areas to the multilevel, longitudinal data already offered by the PSID would provide unprecedented opportunities to better understand crucial aspects of the residential stratification process, as well as the microlevel and contextual drivers of these underappreciated forces. All these changes would have a dramatic impact on the already impressive utility of the PSID for understanding the dynamics of migration, mobility, and residential attainment.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Biography

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FIGURE 1.
The Relationship between Intermetro Migration and Neighborhood Poverty Rates in the Year of Household Formation by Race

FIGURE 2.

The Relationship between Interstate Migration and Neighborhood Poverty Rates in the Year of Household Formation by Race

FIGURE 3.

The Relationship between Inter-Regional Migration and Neighborhood Poverty Rates in the Year of Household formation by Race

FIGURE 4.
The Relationship between Intermetro Migration and Neighborhood Poverty Rates 10 Years
after Household Formation by Race

FIGURE 5.
The Relationship between Interstate Migration and Neighborhood Poverty Rates 10 Years
after Household Formation by Race

FIGURE 6.
The relationship between Inter-regional Migration and Neighborhood Poverty Rates 10
Years after Household Formation, by Race

TABLE 1

Mean Neighborhood Poverty Rates across Race and Mobility/Migration Status

	Black			White		
	At age 17 years	At HH form	10 years later	At age 17 years	At HH form	10 years later
MSA						
Not moved	0.278	0.260	0.254	0.091	0.110	0.106
Moved	0.259	0.177	0.156	0.074	0.114	0.085
State						
Not moved	0.272	0.256	0.254	0.089	0.111	0.102
Moved	0.252	0.181	0.154	0.074	0.114	0.087
Region						
Not moved	0.271	0.253	0.246	0.088	0.111	0.101
Moved	0.248	0.178	0.165	0.070	0.114	0.082
<i>N</i>	19,343	1,693	921	25,086	1,952	1,312

At HH form: at household formation; MSA: metropolitan statistical area.

TABLE 2

Means (Standard Deviations) of Variables Included in Multivariate Regressions

	Black		White	
	At HH Form	10 Years Later	At HH Form	10 Years Later
Change in neighborhood poverty	−0.017 (0.157)	−0.034 (0.176)	0.019 (0.095)	0.010 (0.083)
Move MSA	0.128 (0.334)	0.127 (0.333)	0.281 (0.449)	0.320 (0.467)
Move State	0.115 (0.319)	0.116 (0.321)	0.172 (0.378)	0.202 (0.402)
Move Region	0.049 (0.216)	0.048 (0.213)	0.095 (0.294)	0.114 (0.318)
Female	0.551 (0.498)	0.625 (0.484)	0.485 (0.500)	0.541 (0.498)
Age of HH head	23.914 (4.456)	30.944 (3.382)	23.306 (3.722)	30.572 (2.873)
Married	0.261 (0.439)	0.417 (0.493)	0.390 (0.488)	0.720 (0.449)
Number of children in HH	0.758 (0.987)	1.620 (1.339)	0.245 (0.597)	1.223 (1.142)
Persons per room	0.697 (0.485)	0.716 (0.400)	0.552 (0.343)	0.575 (0.306)
Homeowner	0.095 (0.293)	0.248 (0.432)	0.184 (0.388)	0.591 (0.492)
Employed	0.680 (0.467)	0.687 (0.464)	0.835 (0.372)	0.812 (0.391)
Years of education	12.509 (2.111)	12.284 (2.026)	13.725 (2.640)	13.586 (2.597)
Family income	22.500 (18.978)	31.907 (27.490)	34.838 (27.110)	62.077 (46.125)
Year of observation	1992.988 (9.750)	1994.230 (8.300)	1993.646 (9.235)	1995.021 (8.843)
Observation length	1.313 (0.464)	1.288 (0.453)	1.339 (0.473)	1.349 (0.477)
Observations	1,693	921	1,952	1,312

HH: Household; At HH form: at household formation; MSA: metropolitan statistical area.