

Switching Social Contexts: The Effects of Housing Mobility and School Choice Programs on Youth Outcomes

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Abstract

Despite years of research, methodological and practical obstacles make it difficult to conclude whether policies aimed at improving schools and communities are effective for improving youth outcomes. To complement existing work, we assess research on the educational and social outcomes for comparable youth who change school and neighborhood settings through unique housing policy and school voucher programs. Research shows that housing programs have helped poor families move to much safer, less disadvantaged, and less segregated neighborhoods. Some housing programs have also provided early educational benefits for young people who relocated to less poor and less segregated neighborhoods, but these gains were not maintained in the long run. School voucher programs have helped disadvantaged youth attend higher-performing private schools in less segregated environments with more middle-class peers. Although some voucher programs have shown small positive effects, the results of others are less certain owing to methodological weaknesses. Future research should directly examine families' selection processes and be cautious with quantitative research that uses naturally occurring variation to model the effects of potential social programs. Researchers should also recognize the family processes that interact with social policy to determine how youth development can be improved, alongside the structural and political processes that condition how programs work at a larger scale.

Bronfenbrenner, if you want to understand something, try to change it.

—Urie Bronfenbrenner, quoting a mentor in *American Psychologist*, 1977

INTRODUCTION

Neighborhoods and schools are important contexts for the socialization and development of young people as well as sites where the mechanisms of opportunity and inequality operate. Both schools and communities have also become the focus of many recent policy discussions. Residential mobility, school mobility, and housing policy garnered national attention after the hurricane disaster in New Orleans, and HOPE VI demolitions (the largest federal urban revitalization effort to date) are leading to the relocation of poor families in cities all over the country. School accountability, test score gaps between white and minority students, and choice programs are central to the No Child Left Behind (NCLB) legislation, and federal courts have recently considered whether to mandate or overturn racial or socioeconomic integration in housing and school settings.¹ These contexts have been of central interest to social scientists, and multiple *Annual Reviews* have assessed literature on the effects of schools and neighborhoods on the lives of young people (Arum 2000, Hallinan 1988, Sampson et al. 2002, Small & Newman 2001).

As noted in these reviews and elsewhere, despite years of research on the developmental effects of social contexts, we do not know definitively how neighborhood and school changes or some combination of both could be used as effective policy levers to improve youth well-being. This is due in large part to two related issues. First, despite relatively high levels of residential mobility in the United States, we see little variation in the types of schools that low-income minority children attend and the

neighborhoods they inhabit. Often, disadvantaged families are trapped in poor neighborhoods, and their children are trapped in low-performing schools (Massey & Denton 1993, South & Crowder 1997, South & Deane 1993). Therefore, we do not often get the chance to observe how a more advantaged environment might affect their life chances. Second, families choose neighborhoods and schools—they are not randomly distributed across social settings. This endogeneity or selection problem plagues attempts to recover causal estimates in research using observational designs to study environmental effects because the characteristics and dynamics of families that lead them to choose social settings (albeit among a set of constrained alternatives) may also affect their children's outcomes (Manski 1995, Moffitt 2004, Winship & Morgan 1999).

Fortunately, there have been some unique opportunities to study what happens when children experience moderate to radical changes in their schooling or neighborhood environments, by virtue of external social and political forces. For example, government or privately funded interventions such as school choice vouchers and housing mobility programs attempt to redistribute opportunity by allowing individuals the chance to change contexts. Other research opportunities come from historical efforts to satisfy court-mandated remedies, such as school and housing desegregation programs, which may allow for new opportunities through systemic change and individual mobility. Still others are a combination of interventions and social science experiments, such as school choice voucher lotteries and the federal Moving to Opportunity (MTO) housing experiment. These programs and accompanying evaluation research vary in design, methodological rigor, "treatments," and policy relevance. To complement existing work, we assess research specifically focusing on outcomes for youth who have changed school and neighborhood settings through housing policy programs and under certain types of school voucher initiatives. We do not address theories of how

¹*Thompson v. Department of Housing and Urban Development* (95–309) (Baltimore, MD); *Parents Involved in Community Schools v. Seattle School District No. 1* (05–908); and *Meredith v. Jefferson County Board* (05–915).

neighborhoods and schools matter for child and adolescent development, as this has been done extensively elsewhere (see Bowles & Gintis 1976; Brooks-Gunn et al. 1997a,b; Dreeben 1968; Hallinan et al. 2003; Sampson et al. 2002).

THE EFFECTS OF NEIGHBORHOODS AND SCHOOLS ON YOUTH DEVELOPMENT

Over the past 40 years, social scientists have been interested in the effects of social contexts and how they help explain unequal life outcomes. Analyses of school and neighborhood effects have become increasingly popular among researchers, in part because empirical demonstrations that link social contexts to educational and life course attainment signify the possibility for policy to intervene in these contexts. Understanding the significance of social environments has an inherent appeal relative to individual-level explanations for inequality (such as cultural dispositions and intelligence), and efforts to examine the importance of individual versus environmental factors have inspired a great deal of scientific and political debate [for examples, refer to the debate around Herrnstein & Murray's *The Bell Curve* (1994) in Fischer et al. (1996) and Volume 24 (1995) of *Contemporary Sociology*; see also reviews of the research challenges and politics surrounding the structure and culture debate as it pertains to the study of the underclass in Jencks 1993, Marks 1991, Small & Newman 2001]. We do not repeat the details from this vast literature, but summarize broad conclusions.

Inspired by the work of Wilson (1987) and guided by theories such as social capital and relative deprivation, numerous researchers have documented that neighborhood-level characteristics, such as poverty rate, often predict child and youth outcomes even after statistically controlling for family socioeconomic status (SES) or child academic performance. The social and structural dimensions of disadvantaged neighborhoods, including racial segregation,

poverty, unemployment, and violence, predict youth outcomes such as high school dropout (Aaronson 1998, Crane 1991, Crowder & South 2003), teenage childbearing (Crane 1991, Ensminger et al. 1996), sexual activity (Browning et al. 2004), behavioral problems (Brooks-Gunn et al. 1993, Elliott et al. 1996), and drug use (Case & Katz 1991). Poor neighborhoods also appear to diminish educational attainment and other adolescent outcomes in part through lower levels of positive adult socialization and collective efficacy (Ainsworth 2002, Card & Rothstein 2007, Connell & Halpern-Fisher 1997, Garner & Raudenbush 1991, Sampson et al. 2008). Neighborhoods can also factor into youth expectations about work, drug use, and college attendance (Lillard 1993, MacLeod 1987, Sullivan 1989). Furthermore, recent research has begun to link disadvantaged neighborhoods with diminished health outcomes (cf. Acevedo-Garcia et al. 2003, Aneshensel & Sucoff 1996).

Despite extensive evidence linking neighborhoods and youth development, most research still finds that family background matters more than neighborhoods (Brooks-Gunn et al. 1997a,b; Sampson et al. 2002). However, neighborhoods can affect family resources because residential location affects the number and types of jobs available for parents (Holzer 1991, Ihlanfeldt & Sjoquist 1998, McLafferty & Preston 1992). Recent ethnographic work has also suggested that neighborhoods might affect the outcomes of young people by influencing parenting styles, child monitoring strategies, and the social and institutional resources accessible to parents in the neighborhood (Furstenberg et al. 1999, Jarrett 1997).

Research on the influence of schooling environments has also had a long career, starting with the theories of Durkheim and Parsons and gaining empirical momentum with Coleman's seminal report in 1966 and the early status attainment research (Blau & Duncan 1967, Coleman et al. 1966). In his controversial report, Coleman found not only that funding differentials between black and white schools

were smaller than expected, but also that they did not seem to matter for explaining achievement. Rather, he found that the educational aspirations and social background of middle-class peers were more important for predicting achievement than was school funding. Coleman took these results to mean that efforts to integrate students by race and SES would be successful (Coleman later changed his mind, finding that desegregation policies within districts often led to an increase in between-district segregation and by and large did not lead to economic integration; Coleman et al. 1975). Early developments in social stratification research (e.g., Blau & Duncan 1967, Sewell & Hauser 1975) showed that the relationship between son's and father's occupational attainment was largely mediated by schooling. Jencks et al. (1972, 1979) and Bowles & Gintis (1976) presented critical reanalyses and concluded that although education had increasingly offset the effect of family background, these effects were not as large as previous work had shown, and these models ignored the structural barriers to an equal access education in the United States. (A more recent and growing body of work has also considered how schooling contributes to the development of noncognitive skills, such as motivation or sociability; cf. Farkas 2003.)

Other common approaches to studying school effects have compared public and private school students' academic achievement and found that youth attending Catholic schools—especially black and low-income youth—had higher achievement scores (Bryk et al. 1993, Coleman & Hoffer 1987). More recently, others have employed sophisticated methods to determine whether private and Catholic schools significantly improve student academic achievement after accounting for selection bias (Morgan 2001, Neal 1997). Although many studies conclude that school quality has small effects on student learning when compared with family resources, researchers have continued to incorporate a variety of data sources and methods into the debate over the effects of school and peer characteristics, such as student racial and socioeconomic characteristics, teacher quality,

and funding and curriculum (Burtless 1996, Card & Krueger 1992, Downey et al. 2004, Ferguson & Ladd 1996, Hanushek & Rivkin 2006, Mayer & Peterson 1999). A number of researchers have concluded that teacher quality and classroom size contribute significantly to student achievement (Clotfelter et al. 2007, Jencks & Phillips 1998, Nye et al. 1999, Rivkin et al. 2005; however, see Jacob et al. 2008 for estimates that question the longevity of teacher effects).

CHALLENGES OF RESEARCH ASSESSING NEIGHBORHOOD AND SCHOOL EFFECTS

Despite widespread and growing interest in neighborhood and school processes, some researchers have been skeptical about our ability to recover the causal effects of these contexts with common methodological approaches and measures (see Hanushek 1997, Mayer & Jencks 1989, Moffitt 2004). Two related (but not exhaustive) limitations make it difficult to know whether neighborhoods and schools independently affect the outcomes of young people: Families do not generally make large changes in the quality of their social contexts, and families choose these contexts. Although families often move, and as a result children change schools, we see what Sampson (2008) calls “profound structural constraint” and Oakes (2004) calls “structural confounding.” As a result of housing discrimination, low levels of information, transportation limitations, and fear of unfamiliar areas, poor families remain concentrated in violent, disadvantaged neighborhoods, and their children are trapped in low-quality schools (Charles 2003, Henig 1995, Sampson & Sharkey 2008, South & Crowder 1997).²

²Because of this stability in environment across social classes, some research suggests that “window” estimates are just as good as multiple measures of social context in childhood (cf. Jackson & Mare 2007, Kunz et al. 2003). However, other work debates the extent to which point-in-time estimates are accurate reflections of the environments children experience over time (cf. Gramlich et al. 1992, Wolfe et al. 1996).

In particular, black families are less likely to convert human capital into desirable neighborhood amenities such as low crime and other resources (Alba et al. 1994; Logan & Alba 1991, 1993; Massey & Denton 1987). This leads to the common finding that poor black families move into white areas less often and exit white areas more often than white families (Gramlich et al. 1992, Massey et al. 1994, South & Crowder 1997). Blacks also have a high rate of moving into poor neighborhoods even after they have been in a low-poverty neighborhood, suggesting that blacks' tenure in low-poverty areas is precarious (South et al. 2005). School sector research also reports low levels of transfer between public schools and Catholic or private schools (Bryk et al. 1993) and that school transfers among minority families do not appreciably improve school quality (Hanushek et al. 2004). In other words, in the natural course of events we do not observe poor families living in wealthy communities, and we do not often see their children attending schools with rigorous academic courses. With observational data, we are often confined to modeling the amount of variation in social or academic outcomes that can be explained by contextual and family factors in place, given current conditions. Therefore, we cannot easily determine what might happen if families and children were to make large changes in these environments, either individually or en masse.

Second, families choose neighborhoods and schools. This makes it hard to know whether neighborhoods themselves matter more than parental resources or children's traits. What leads families to pick a certain neighborhood or a school setting is probably also related to other aspects of the family that affect child development (Mayer & Jencks 1989). Volatility in family structure or parental income partly determines neighborhood options and may also reflect underlying instability in family dynamics, routines, and the psychological resources of parents. Such family instabilities also have direct effects on young people such as how they perform in school, their mental health, and whether they engage in risky behaviors

(cf. Fomby & Cherlin 2007, Wu 1996). Similarly, in the sociology of education literature, it is commonly found that more educated parents send their children to private schools and also take an active role in requesting their teachers and negotiating the courses they take (Coleman et al. 1982; Lareau 1989, 2003; Useem 1992). These issues are commonly referred to as the endogeneity or the self-selection problem in social science research, and they plague our attempts to recover causal estimates of environmental effects (see Duncan & Magnuson 2003, Winship & Morgan 1999).

Generally, the research designs of studies attempting to estimate neighborhood and school effects are limited by the use of statistical controls and observational data.³ Typical approaches involve using nationally representative panel data, capitalizing on naturally occurring variation in school and neighborhood quality, and modeling the association between variation in neighborhood or school measures (such as census tract racial composition or school test score performance) and individual youth outcomes (such as high school dropout). Extensive controls are usually introduced to adjust for selection into schools and neighborhoods (to substitute for the selection equation). From these models, regression coefficients of context effects are estimated, and then extrapolated, so that one hypothetically compares what would happen to children from families of equivalent SES if one family relocated to a community that was one or two standard deviations above the mean in terms of affluence or school test scores, and the other family moved

³There have been many recent exceptions and sophisticated attempts to advance our use of observational data to overcome the limitations of nonexperimental designs. See Harding (2003) for an example of propensity score matching to estimate neighborhood effects, Foster & McLanahan (1996) and Card & Rothstein (2007) for demonstrations of the instrumental variables approach, Sampson et al. (2008) for the use of inverse probability of treatment weighting for estimating time varying neighborhood effects, Jacob (2004) for the use of a natural experiment (HOPE VI), and Wheaton & Clarke (2003) who use cross-nested random effects models to estimate the impact of neighborhoods at different points in time as well as selection factors on child and youth behaviors.

to a community that was two standard deviations below the mean on these measures. While reasonable, this approach is limited not only because the threat of unobserved characteristics inevitably remains, but also because poor children rarely live in wealthy communities and children from affluent families rarely reside in disadvantaged neighborhoods—the data do not exist. In other words, there are no exchangeable families in the data, and off-support inferences are made; the social structural confounding, or “ecological differentiation” (Sampson 2008) of society makes it so that we do not often observe such combinations of individual and community SES (Oakes 2004).

Our motivation for writing this review stems in part from a concern about the application of research that uses relatively weak observational designs to inform questions of significant social policy importance. We do not claim that observational data from national panel studies tell us little; in fact, quite the contrary. It is through such research that we discover the structural correlates of inequality, how social systems function, the predictive power of social context, and how the relationships between social contexts and life outcomes might be mediated by family or peer processes. However, research that examines naturally occurring variation in social contexts and uses this variation to explain how outcomes differ cannot ascertain what would happen if we implemented the social policies and programs that some of these studies advocate in their conclusions. Therefore, to understand whether improving neighborhood or school contexts could have beneficial effects on young people, we need to observe similar youth who experience very different kinds of social environments, under conditions

in which self-selection is a lesser threat to the results. We consider such examples below.

SWITCHING SOCIAL CONTEXTS

Over the past 15 years, there have been many opportunities to study what happens when children experience moderate to radical changes in their schooling or neighborhood environments. These opportunities range considerably from government interventions and court-mandated remedies to social science experiments. These programs and accompanying research vary in design, but many of them provide an example of what happens when social environments change because of external or exogenous forces. In other words, families and children change community or school (or both) contexts not necessarily because of their own individual attributes, but because a policy or institutional development changed their social opportunity structure (i.e., there is an instrument that predicts exposure to a new school or community that is unrelated to family and child characteristics) (cf. Angrist et al. 1996). The literature in education, psychology, sociology, public policy, and economics we review here falls into two broad categories: neighborhood change and school change (see **Table 1**).⁴

For this review, we focus on findings from a selection of these efforts—mainly assisted housing mobility programs and school choice vouchers. In large part, our decision to focus on the results of these programs rests on five elements: design, degree of environmental change, availability of individual-level analyses, implementation of field trials, and replications or multiteam evaluations (see **Tables 2** and **3** for brief descriptions). First, the research designs used to evaluate the effects of these mobility and

Table 1 Programs and policies that allow for switching social contexts

Neighborhood change	School change
Assisted housing voucher programs	Desegregation and busing efforts
Housing desegregation remedies	Charter and magnet schools
Section 8 voucher program	School choice vouchers
HOPE VI program	No Child Left Behind choice provisions

⁴We do not consider within-school changes, such as whole school reform, state-level accountability changes, restructuring, or curricular innovation (see Schneider & Keesler 2007 for a review). Similarly, we do not consider in-place community redevelopment or revitalization efforts, such as empowerment zones, asset building, or mixed-income initiatives (see Grogan & Proscio 2001, Joseph 2006, Pattillo 2007, Taub 1994).

Table 2 Elements of housing and school choice programs

Program	Intended Treatment	Program Size	Community Change?	School Change?	Sites	Population
Gautreaux	Housing voucher used in suburban communities not more than 30% African American or revitalizing city neighborhoods	7000 families	Yes	Yes, most suburban movers also changed schools	Chicago	African American public housing residents or wait-listed families
MTO	For experimental families, housing voucher used in census tracts not more than 10% poor	4600 families (1700 in experimental group)	Yes	Sometimes, but low proportion of children changed school districts	Chicago, Los Angeles, New York, Boston, Baltimore	Public housing residents in very poor neighborhoods
Yonkers	Families moved to townhomes in mostly white middle-class neighborhoods	189 families	Yes	No, children did not move far enough to change school district	Yonkers, NY	African American families, most in public housing
Thompson	Housing voucher used in communities not more than 30% African American, 10% poor, or 5% subsidized housing	2000 vouchers (1200 movers to date)	Yes	Yes, for some families who moved out of the city	Baltimore	African American public housing residents or wait-listed families
Milwaukee	Vouchers of up to \$4373 in 1996 (\$6501 in 2006-2007) to be applied toward private school tuition	1000 vouchers	No	Yes, private school attendance among voucher recipients who used their voucher	Milwaukee public and private schools	Students from families with incomes $\leq 175\%$ of the federal poverty level
Cleveland	Vouchers providing for between 75% and 90% of private school tuition	5000 vouchers	No	Yes, private school attendance among voucher recipients who used their voucher	Cleveland public and private schools	Students from families with incomes $\leq 200\%$ of the poverty level
New York	Vouchers of \$1400; tuition almost always exceeded this amount	1300 vouchers	No	Yes, private school attendance among voucher recipients who used their voucher	New York public and private schools	Students in grades 1-4 who were eligible for the federal free lunch program
Dayton	Vouchers worth 60% of private school tuition (but not more than \$1200)	515 vouchers	No	Yes, private school attendance among voucher recipients who used their voucher	Dayton public and private schools	Students from families living at $< 200\%$ the federal poverty level
Washington, DC	Vouchers worth 60% of private school tuition (not more than \$1700)	809 baseline vouchers	No	Yes, private school attendance among voucher recipients who used their voucher	Washington public and private schools	Students from families living at $< 270\%$ the federal poverty level

Table 3 Research on housing and school choice programs

Program	Research design elements	Research challenges	Useful references
Gautreaux	Assignment to neighborhoods not based on family choice, but rather housing counselor assignment and position on wait-list	No control group, only comparisons of similar families moving to different kinds of communities	DeLuca et al. 2009, Rubinowitz & Rosenbaum 2000
MTO	Randomized trial with two treatment groups and control group	Only half of experimental families leased up in low-poverty communities; most new communities were still segregated and declining socioeconomically; hard to know if testing neighborhood effects and/or mobility effects	Kling et al. 2007, Orr et al. 2003
Yonkers	Movers selected by lottery and comparison group of stayers created from other public housing families eligible for the program	No baseline data; control group not random; relocation changed both neighborhood and housing type	Briggs 1998, Fauth et al. 2007
Thompson	Movers compared with a group of eligible families who received a voucher but did not move and other voucher holders in metro Baltimore	All families chose new neighborhoods, nonmovers were not random; families began moving in 2003, so only short-term follow-up	DeLuca & Rosenblatt 2008b
Milwaukee	Data are observational, with some efforts at sophisticated analysis, and multiple analyses performed by distinct researchers	With observational data, impossible to disentangle the likely influence of selection bias	Greene et al. 1998, Rouse 1998, Witte 1996
Cleveland	Initially vouchers randomly offered in schools where subscription exceeded slots; later, all students who requested vouchers received them. Low-income students, African Americans, and students who were current or former students in the Cleveland public schools also targeted.	Research on the Cleveland voucher program criticized for use of poor test score measures and selective school participation	Belfield 2006, Metcalf 2001, Peterson et al. 1999
New York, Dayton, and Washington, DC	Experimental design: vouchers randomly offered to eligible students; take-up not universal, resulting in three experimental groups: control group, intent-to-treat group, and treated group	Attrition over time was substantial, and only partial tuition was offered (which may introduce bias between families who were and were not able to afford the gap between vouchers and full tuition)	Howell et al. 2002, Howell 2004, Krueger & Zhu 2004

school choice programs, while not without limitations, are more rigorous and allow for more valid causal inferences. They are based on randomized lotteries, random assignment, position on a wait-list, or quasi-random selection procedures.⁵ Second, by design, these programs induced larger context changes than some of the others. For example, built into the Gautreaux housing program was the requirement that families relocate to neighborhoods that were less than 30% African American, and housing units in such neighborhoods were found for the families by housing counselors; these changes are much larger than those seen under the regular Section 8 voucher program in which families often move to other poor or segregated communities. Similarly, school voucher programs provide subsidies for children to change schools, usually transferring from low-performing public schools to private schools; such school sector changes are not common among less affluent students (Bryk et al. 1993).

Third, these studies examine changes in individual-level outcomes, such as test scores, rather than system-level changes. In other words, we focus on studies that explore whether switching from a poor performing public school to a private school improved math and reading test scores, rather than assessing whether school choice vouchers induce accountability and efficiency among public schools in the same system (or whether housing vouchers reduce racial segregation on the metropolitan level). Fourth, the studies we selected provided results from programs that were fielded, not simulation models. Last, we tried to include studies with multiple independent research teams (such as the MTO research program) or replications by different researchers with access to the same data (as in the Milwaukee, Cleveland,

and New York voucher programs). We do not mean to suggest that the other kinds of housing and school programs cannot provide us with insights about the relationships between social environments and youth development or have not provided for benefits to individual children and adolescents. However, at present, the consensus is that research evaluating some of these other efforts (such as magnet schools, cf. Blank 1990) is limited in its capacity to produce results that support causal inference. However, we do describe some of these research developments and examples below, given their past and future significance.

For example, the Housing Choice Voucher program (formerly the Section 8 program) has provided for significant voluntary relocation among the urban poor, although the research is mixed in terms of whether vouchers could lead to educational or social benefits for young people (Schwartz 2006). Although families using housing vouchers relocate to communities that are less poor and segregated than families living in housing projects, many end up moving to areas that are still quite impoverished and racially segregated (Basolo & Nguyen 2006, Cronin & Rasmussen 1981, Newman & Schnare 1997, Turner 1998). However, several more recent studies have shown that in some cities many voucher holders make large improvements in housing quality and community safety (Feins & Patterson 2005, Varady & Walker 2003).

Another major housing program, HOPE VI, has provided funding for the demolition, planning, and redevelopment of public housing communities. On the one hand, some research suggests that the involuntary relocation involved in HOPE VI severs social ties and makes it difficult for families to establish new social networks in their new communities (Clampet-Lundquist 2004, 2007) and that large numbers of HOPE VI relocatees end up in other public housing projects or relocate to other poor, segregated communities (Venkatesh 2002). As a result, their children do not experience improvements in school quality relative to their peers who remain in the housing projects (Jacob 2004). On the other hand, recent

⁵The power of randomization is that it equates individuals on the expectation of all pretreatment characteristics and is an independent determinant of their selection into a treatment. This allows for the estimation of causal effects because, theoretically, any differences on post-test observations of the outcome are attributable to the treatment, not to selection factors.

research from a multicity study shows that the families who use vouchers to relocate end up in neighborhoods that are significantly safer, and their children exhibit fewer problems acting out at home or at school than the children who relocated to other public housing projects (Gallagher & Bajaj 2007, Popkin & Cove 2007). Relocation appears to be a mixed blessing for HOPE VI families, but research on child outcomes is still relatively rare, and it is too early to tell whether families and young people might benefit from moving back to the mixed-income developments that have replaced the high-rise projects.

Since *Brown v. Board of Education*, there have also been many different efforts to provide higher-quality and less segregated schooling for minority children. Decades of reviews on the effects of desegregation and busing have produced mixed results, in large part because of the methodological weaknesses of the studies (Bradley & Bradley 1977). However, at present most researchers conclude that black student achievement appears to be enhanced (or at least unaffected) in integrated environments, especially in earlier grades and especially in studies using longitudinal data or experimental designs [Cook (1984a,b), Crain & Mahard (1983), St. John (1975); however, Armor (2002) reviewed experimental and quasi-experimental studies of desegregation and concluded that racially balanced schools do not seem to improve achievement gaps]. Charter schools provide the promise of enhanced educational environments because, while publicly funded and still subject to accountability, they have more freedom in hiring practices and curriculum development than traditional public schools (Renzulli 2005). Unfortunately, although most states have charter school authorization laws, knowledge of student achievement is still in its early stages. In their first years of operation, charter schools' students' test scores tend to decline, but these losses are recovered after a few years (Booker et al. 2007, Loveless 2003). To date, the research on the benefits of charter schools for minority children is mixed, with some very recent studies showing gains in Milwaukee (Witte et al.

2007) and either widening achievement gaps or mixed effects in other states (Bifulco & Ladd 2007, Gill et al. 2001, Zimmer & Buddin 2006). There are also questions of whether charter schools can provide large changes in social environments, as many are marked by particularly high levels of segregation (Gajendragadkar 2005, Rickles et al. 2005). Magnet schools are public schools that encourage integration through enriched environments such as specialized math and science programs and additional resources aimed at attracting more advantaged students (Lauen 2007a). Using nationally representative data, Gamoran (1996) suggested that magnet schools increase reading scores after controls for selection, and another study showed mixed evidence of long-term gains, such as high school graduation (Crain & Thaler 1999). Unfortunately, we could not find more extensive research that examined the academic outcomes of magnet school students.⁶

Although not an official school voucher program, the federal NCLB Act is worth mentioning. The legislation includes a provision that forces failing schools to provide choice options: Underperforming schools receiving Title I funds that do not make adequate yearly progress (AYP) for two years in a row must offer students the chance to attend another public school in the same district or one nearby that is making AYP. However, it is unclear what the effects of this kind of choice will be because the amount of choice actually exercised under NCLB has been minimal: Only about 1% of the 3.3 million students eligible for a school change in 2003–2004 transferred (Hess & Finn 2006, Lauen 2007b). In large part, this lack of take-up is due to poor information, the absence of real alternative local schools, and practical issues like transportation (Hess & Finn 2006,

⁶Magnet schools may also fail to provide decreased levels of segregation. This is in part fueled by application processes that disadvantage poorer and minority children (Archbald 2004) and by white parents avoiding predominantly black local schools (Saporito & Lareau 1999). However, an analysis of public elementary schools in five California metropolitan areas found that magnet schools, on average, provided students with more integrated environments (Rickles et al. 2005).

West & Peterson 2003). With limited intradistrict options and low participation rates to date, it is not clear the extent to which NCLB will provide research opportunities to assess the effects of changing educational contexts for public school students.

SWITCHING NEIGHBORHOODS: EXAMINING THE EVIDENCE FROM ASSISTED HOUSING VOUCHER PROGRAMS

Previous research using observational data has linked the structural and social dimensions of neighborhoods to the educational and behavioral outcomes of young people. However, poor and minority youth remain isolated from many of the resources present in middle-class communities and schools. Therefore, it makes sense that neighborhood relocation programs that help low-income families move to safer, more opportunity-rich communities could have profound effects on their children. In part, such a move can lead to improvements in neighborhood and housing quality, creating the possibility of safer public spaces for playing, more jobs for parents, access to other employed adults, and new friendships with academically engaged peers (Mayer & Jencks 1989). If the housing relocation allows moves across school district boundaries, there is also the possibility that children will attend higher-quality schools with skilled teachers and enrichment programs. Below we assess how housing relocations affect neighborhood quality and life outcomes for children and parents, reviewing research from four housing mobility programs that took place in six cities, from as early as 1976 and as late as 2002.

The Gautreaux Program

The first major residential mobility program, the Gautreaux program, came as a result of a 1976 Supreme Court ruling in a lawsuit filed on behalf of public housing residents against the Chicago Housing Authority and the U.S. Department of Housing and Urban

Development (HUD) (Polikoff 2006). The suit charged these agencies with racially discriminatory practices in the administration of Chicago's low-rent housing programs. Between 1976 and 1990, the court remedy provided vouchers for more than 7000 families in the Chicago metro area to move to nonsegregated communities. Suburbs with black populations of more than 30% were excluded by the consent decree. Although the choice to participate in the program was voluntary, families did not choose the housing units into which they relocated. They were assigned to apartments in new neighborhoods by housing counselors (who were working with landlords) on the basis of their position on a waiting list, similar to a random-draw lottery (Rubinowitz & Rosenbaum 2000). Participants could refuse an offer, but few did so because they were unlikely ever to get another. Although only about 20% of the eligible applicants moved through the program, self-selection does not appear to have affected program take-up (Peterson & Williams 1995). Rather than opting out of the program, most nonmovers were not offered a housing unit and thus not given the chance to participate. Housing counselors were forbidden by the consent decree from making offers selectively among families, and there is no evidence that they did so.

The Gautreaux program included three selection criteria to harmonize the relationships between landlords and tenants. It tried to avoid overcrowding, late rent payments, and building damage by excluding families with more than four children, large debts, or unacceptable housekeeping. Although they met these criteria, qualifying participants shared many characteristics of poor, single-parent, welfare-dependent families.⁷

⁷These criteria reduced the eligible pool by less than 30%. S.J. Popkin (unpublished manuscript) found that the Gautreaux participants and a sample of Aid to Families with Dependent Children (AFDC) recipients were similar in time spent on AFDC (seven years on average), although the welfare group had more second-generation recipients. The groups were similar in terms of marital status (45% never married and 10% currently married), but differed by

Although Gautreaux counselors worked to place families in low-poverty, racially integrated neighborhoods according to the consent decree, at points it was difficult to find housing in neighborhoods that met these criteria. In response, the program adjusted its definition of qualifying destinations to include neighborhoods that were quite poor and segregated but were judged to be improving. As a result, about one-fifth of the Gautreaux families was placed in high-poverty, highly segregated neighborhoods, almost all of which were within the city limits of Chicago (and an average of seven miles away) (Mendenhall et al. 2006). This variation makes it possible to compare the fortunes of these families with the outcomes of the four-fifths of participating families placed in more affluent and less segregated neighborhoods, most of which were in suburban communities (an average of 25 miles away).⁸

Early Gautreaux results showed that children who moved to the suburbs went to much more rigorous schools, took more college track courses, received higher grades, and were more likely to attend college than their counterparts who moved to other city neighborhoods (Kaufman & Rosenbaum 1992, Rubinowitz & Rosenbaum 2000). Almost 90% of the children who moved to suburban communities were attending schools that were performing at or above national levels, in stark contrast to their original inner-city schools. Mothers reported that their children were getting needed assistance in the new schools and that they were benefiting from the more challenging academic courses in the suburban areas (Kaufman &

Rosenbaum 1992). These results suggested that neighborhood change could improve schooling opportunities and educational outcomes, despite initial disruptions in social ties, family routine, or schooling adjustments. Suburban mothers also benefited from higher levels of postmove employment (Popkin et al. 1993, Rubinowitz & Rosenbaum 2000).

To improve the design and data quality of the earlier work, recent research accounted for more preprogram characteristics and used administrative data to locate recent addresses for a random sample of 1500 Gautreaux movers, as well as track residential and economic outcomes for mothers and children. Gautreaux was indeed successful in helping public-housing families relocate to safer, more integrated neighborhoods (Keels et al. 2005). These families came from very poor neighborhoods, with census tract poverty rates averaging 40–60%, or three to five times the national poverty rate. Through the program, they moved to neighborhoods that were 17% poor—less than half the original rate (the poverty rate for those who moved to the suburbs was even lower, at 5%). By the late 1990s, 15 to 20 years after relocating, Gautreaux mothers continued to live in neighborhoods with lower poverty rates than their original public housing communities. Gautreaux also achieved striking success in moving low-income black families into more racially integrated neighborhoods (DeLuca & Rosenbaum 2003). The origin communities were 83% black, whereas the communities in which the program placed families averaged 28% black (most of the suburban moves were to communities that were more than 90% white). Some Gautreaux families later moved to neighborhoods that contained considerably more blacks—48%, on average—or a fairly even balance of blacks and individuals from other races (suburban movers were later living in areas that were about 36% black; DeLuca & Rosenbaum 2003). Despite the increase, these levels were less than half of what they had been in the origin neighborhoods.

Parental economic outcomes, such as welfare receipt, employment, and earnings, were

education and age: 39% of the Gautreaux women dropped out of high school compared with 50% of the AFDC sample, and Gautreaux participants were slightly older.

⁸As a result of the program, participants' preferences for placement neighborhoods had relatively little to do with where they ended up moving, providing a degree of exogenous variability in neighborhood placement that undergirds Gautreaux research. At the same time, both Votruba & Kling (2004) and Mendenhall et al. (2006) document significant correlations between baseline family and neighborhood characteristics and suburban placements. Although these characteristics are controlled in the statistical analyses, there remains the possibility of selection bias.

also influenced by the income and racial characteristics of placement neighborhoods. Women who moved to mostly black, low-SES neighborhoods received welfare 7% longer, on average, than women placed in any other neighborhoods; women placed with few (0–10%) versus many (61–100%) black neighbors had employment rates that were six percentage points higher and earned \$2200 more annually than women placed in more segregated and less affluent areas (Mendenhall et al. 2006).

Another striking finding is that there seems to be a second generation of Gautreaux effects. Research on the children of the Gautreaux families has demonstrated that the neighborhoods where they resided in the late 1990s as adults were substantially more integrated than their overwhelmingly minority origin neighborhoods (Keels 2008a). With most Gautreaux children still too young for a reliable assessment of career successes, Keels (2008b) used administrative data on criminal justice system involvement to examine arrests and convictions for the young adults. Males placed in suburban locations experienced significantly lower odds of being arrested or convicted of a drug offense compared with males placed within Chicago; specifically, there was a 42% drop in the odds of being arrested and a 52% drop in the odds of being convicted for a drug offense for suburban movers relative to city movers. Surprisingly, females placed into mostly white suburban neighborhoods had approximately three times the likelihood of being convicted of a drug, theft, or violent offense compared with females placed within Chicago. Although there has been no long-term follow-up of the educational achievement of Gautreaux children, research has shown that suburban mover children were more likely to be referred for special education services, even after adjusting for previous referral (DeLuca & Rosenbaum 2000).

In several qualitative studies (Rosenbaum et al. 2002, 2005), researchers explored social processes through interviews with 150 mothers who described how these neighborhoods helped improve their lives and the lives of their children. After the moves, mothers described

a new sense of control over their lives and remarked that their new environments helped them to see that they had the ability to improve their circumstances. Specifically, women reported feeling better about not having to put down a public housing address on job applications. Other women noted that they and their children got to know more white people and would feel less intimidated about interacting with whites in the future. Similarly, mothers reported social responsiveness from their neighbors. Many said that they could count on neighbors' help if their child misbehaved or seemed at risk of getting into trouble, if their child was sick and could not attend school, or if there was some threat to their family or homes. Some reported a willingness to take jobs because they could count on a neighbor to watch their child if they were late getting home from work.

Moving to Opportunity

The Gautreaux evidence suggested that the life chances of low-income families and their children depended not just on who they were, but where they lived. Critics questioned the findings, however, raising doubts about whether families who moved to suburbs and those who moved to other city neighborhoods were really comparable. Gautreaux was not a randomized trial: There was no control group of families who stayed in their original neighborhoods. In part to test the promise of Gautreaux, the MTO program, legislated and funded in the 1990s, was designed as a rigorous social experiment. Beginning in 1994, MTO gave public housing residents in high-poverty neighborhoods in five cities (New York, Boston, Baltimore, Chicago, and Los Angeles) the opportunity to apply for a chance to receive a housing voucher. Families were assigned at random to one of three groups (see Orr et al. 2003). The experimental group received a Section 8 voucher that would allow them to rent an apartment in the private market, but they could only lease in census tracts with 1990 poverty rates of less than 10% (unlike Gautreaux, there were no racial restrictions on the destination neighborhoods). This

group also received housing counseling to assist them in relocating. Another group received a Section 8 voucher with no geographical restrictions. Finally, the control group received no new housing assistance but could continue to live in public housing or apply for other housing assistance.

About 4600 families were part of the MTO program across all five cities, and more than 1700 were randomly assigned to the group offered the low-poverty vouchers. A little over half of these families used the vouchers to successfully lease up in a low-poverty neighborhood. Nonprofit agencies provided the housing counseling in partnership with public housing authorities, who administered the vouchers. Although families were given housing counseling, they chose their own housing units within allowable census tracts. In most cities, counselors provided a series of workshops to help families manage their budgets, search for housing, and learn how to present themselves favorably to potential landlords. In Baltimore, they also assisted the search process by running neighborhood tours so that the families could see communities and homes in the outlying counties (Feins et al. 1997). Although counselors did try to help families with nonhousing issues before the move (such as credit problems, employment, and depression), they did not provide assistance with transportation costs, job searches, or local school information after the family relocated.

As with Gautreaux, families who moved with MTO vouchers relocated to neighborhoods with much lower poverty rates than their public housing neighborhoods: The new neighborhoods were 11% poor on average, compared with about 40% or more in the original communities (Feins & Shroder 2005). When they were contacted after four to seven years, families who had moved with low-poverty vouchers were still in neighborhoods that were significantly less poor, but many moved from their first MTO communities into more disadvantaged ones. MTO set no race-based limits on placement neighborhoods, and MTO families moving in conjunction with the program both

began and ended up in neighborhoods with high minority concentrations (Feins & Shroder 2005). Unsurprisingly, when families signed up for MTO, more than three-quarters reported that the most important reason for wanting to move was to escape inner-city gangs, drugs, and violence; access to better quality housing came in as the second most important reason. Four to seven years later, the experimental movers reported much higher levels of neighborhood and housing quality than control group families. Fewer experimental movers were victimized, and they felt safer at night; they reported greater success getting police to respond to calls in their current neighborhoods, and they saw less drug-related loitering (Kling et al. 2004).

Researchers also found significant reductions in MTO mothers' psychological distress, on par with the benefits of best practices in antidepressant therapies (Kling et al. 2007), suggesting that safer environments could improve parents' mental health, which plays an important role in children's well-being (Mayer 1997). They also found significant reductions in obesity and increases in self-reported healthy eating habits and exercise among the mothers who moved. Mothers worried less about violence and having to constantly monitor their children's safety and seemed thus freer to pursue other activities (Kling et al. 2004). In terms of the effects of MTO on family socioeconomic outcomes, results were less overwhelming. MTO mothers were no more likely to be employed, earned no more, and received welfare no less often than mothers assigned to the control group (Kling et al. 2007). In part, this could be explained by the fact that the control group was more likely to be employed during the time as well, given the economic boom of the 1990s.

Early research on the direct effects of MTO on young people found that moving to less poor neighborhoods helped children attend higher-performing schools and increased children's test scores and school engagement, especially in Baltimore (Ludwig et al. 2001b). The Boston site demonstrated a one-third reduction in delinquent behaviors for experimental

boys, compared with controls (Katz et al. 2001), and early analyses for the Baltimore youth demonstrated a reduction in the proportion of experimental and Section 8 boys who were arrested for violent crimes (Ludwig et al. 2001a). However, by the time of the interim impacts evaluation four to seven years later, results became more complicated and gendered patterns emerged. Relative to controls, young women who relocated with the experimental vouchers demonstrated large reductions in arrests for both violent and property crimes and significantly lower levels of depression and anxiety, and they were also less likely to drop out of school, use drugs, drink, or smoke (Kling et al. 2007). Unfortunately, young men in the low-poverty experimental group evidenced 20% more behavior problems and were 30% more likely to be arrested than their control counterparts (Kling et al. 2005).

Despite the early educational benefits, the follow-up study showed virtually no gains in academic performance or school engagement for the children from the experimental group, and only small increases in school quality (Sanbonmatsu et al. 2006). For example, before moving with the program, MTO children attended schools ranked at the fifteenth percentile statewide; four to seven years after the move, they were attending schools that ranked at the twenty-fourth percentile. After the move, youth were attending schools with about 10% fewer minority peers and almost 13% fewer students eligible for the federal lunch program (Sanbonmatsu et al. 2006). In part, the lack of educational effects could be explained by the fact that, by the time of the interim study, almost 70% of the MTO children were attending schools in the same district where they signed up for the program (Orr et al. 2003).

Researchers wanted to understand the mixed results of MTO, especially the differences in youth outcomes by gender, so in 2003–2004 they began to conduct in-depth interviews in the five MTO cities. Some of the work in Boston, Los Angeles, and New York suggests that the young women experienced less anxiety in part because they no longer had to worry

about the sexual harassment and pressure for sex they experienced in their city neighborhoods (Popkin et al. 2008). Clampet-Lundquist and colleagues (2006) explored additional gender differences in Baltimore and found that MTO girls and boys socialize in different ways: Boys were more likely to hang out with their friends on the corner or on a neighborhood basketball court, and girls were more likely to visit with friends from school and socialize inside their homes or go to a downtown mall. Boys may have been at higher risk of delinquency because these routines do not fit in as well in low-poverty neighborhoods, which may explain why they did not benefit from peers in their new neighborhoods as much as girls did (Clampet-Lundquist et al. 2006).

The interviews also suggested that social and structural processes prevented children's access to higher-quality schools (DeLuca & Rosenblatt 2010). Despite receiving housing subsidies, the neighborhoods where MTO families moved and the rental housing market constraints they faced precluded their access to the higher-performing schools available in the adjacent counties. The conditions of life in poverty also affected program participation—many families juggled severe challenges such as drug addiction, suspicious landlords, diabetes, and depression. At times, these issues made schooling a lower priority. Parents' beliefs also affected whether the MTO move led to school changes: Some mothers did not want children to change schools if it was going to be disruptive or keep them from old friends, and other parents believed that if their children just worked hard, they could do well in any school (DeLuca & Rosenblatt 2010).

Yonkers's and Baltimore's Programs

Another innovative quasi-experimental program of research, the Yonkers Family and Community Project, evaluated the outcomes for families who moved to new housing constructed in middle-class white majority neighborhoods through a 1985 desegregation court order in Yonkers, New York (Fauth et al. 2004, 2005,

2007). The courts found that the “discriminatory siting of public housing had created a dual system of neighborhood schools resulting in the denial of equal educational opportunity for children of color” (Briggs 1998, p. 192). The remedy was immediate school desegregation and the provision of 200 newly constructed, subsidized housing units (in eight townhome developments) in the mostly white communities of Yonkers.

To get a chance to relocate to the new units, low-income minority families (in public housing or on the wait-list) entered a lottery and were randomly selected for the subsidy. Between 1992 and 1994, 189 families moved into the new units with moving assistance, and housing counseling was provided for a month after the move. Because the housing authority restricted access to the information about the families who entered the lottery but did not win, the researchers constructed a control group from two sources. First, they generated a sample of nonmovers by asking participants to name families they knew who did not move, and they also recruited public housing families who were eligible for the lottery (about half of this group actually did sign up for the lottery). From these two sources, they generated a sample of about 150 black and Latino families with children, and followed up with them two years later and again seven years after the program began.

The follow-up research showed that youth whose families moved to the new units were exposed to less poverty, substance use, and violence, and their parents reported more satisfaction with their housing quality (Fauth et al. 2004). However, because of school desegregation, school quality did not differ between the mover and stayer control groups, as both groups attended schools that were more than 70% poor and minority. Early results suggested that the children who were younger (ages 8–9) when their families moved were less delinquent than the stayers, whereas the older adolescents (ages 16–18) exhibited more behavioral problems (Fauth et al. 2005). The authors speculated that it could have been due to trouble

adjusting to the radical change in social context (going from mostly minority to mostly white communities) or the disruption of the move itself (Fauth et al. 2005). Seven-year follow-up data suggested that mover youth ages 15–18 had lower educational engagement, more substance use, and more anxiety than the stayer group and that in part the higher levels of anxiety and depressive symptoms were attributable to the lack of contact with neighbors in the new communities (Fauth et al. 2007; cf. Briggs 1998).

Analyses of the effects of the moves on parent behaviors suggested that the mover parents were less strict with their children, a result that is consistent with the literature on how neighborhoods affect parenting (see Furstenberg et al. 1999) but that in this case might have allowed the youth to act out. The results from the Yonkers research do not provide strong support for the role of mobility programs in improving youth development, but the research does have limitations that prevent definitive conclusions. There were no baseline measures recorded for the children’s outcomes, the outcomes were all self-reported, and the program itself was met with great political resistance that might have affected the extent to which residents who moved became integrated into the community enough for children to experience the benefits of the middle-class community (Fauth et al. 2007). The researchers also note that it is hard to expect large benefits from the move to the new communities in the absence of supports and strong connections to middle-class neighbors (Fauth et al. 2007).

The most recent housing mobility program in place is the Thompson program in Baltimore. In 1995, with the assistance of the American Civil Liberties Union, public housing residents in Baltimore City filed suit against the public housing authority of Baltimore City and HUD, citing that both agencies failed to dismantle the city’s racially segregated system of public housing, which had been put in place as early as the 1930s. In 1996, a partial consent decree was issued, as the first part of a larger anticipated remedy. As a result of this

decree, the Thompson program currently provides 2000 special housing vouchers to be given to plaintiff class members (former or current public housing families) to create housing opportunity in middle-class, mostly white areas of Baltimore City and the adjacent counties. Families are allowed to relocate only within census tracts that are less than 30% African American, are less than 10% poor, and have fewer than 5% of the residents receiving housing subsidies. As of September 2008, about 1200 families have moved to such neighborhoods with these targeted vouchers, and researchers are currently analyzing these early moves, which are only 1–5 years after initial lease up (DeLuca & Rosenblatt 2008a). Early evidence examining relocations for Thompson movers relative to several quasi-experimental comparison groups (including regular Section 8 voucher holders and eligible nonmovers) suggests that the Thompson vouchers have led to large reductions in neighborhood poverty, segregation, and crime and to increases in the quality of the schools children are eligible to attend because of their relocation (DeLuca & Rosenblatt 2008b). Research has yet to evaluate whether the Thompson moves have affected individual-level youth outcomes. A final remedy decision is also still pending (which has the potential to provide several thousand new vouchers), so it will be some time before we know the full potential of the Thompson program to affect the lives of Baltimore's poorest families and children. (See Briggs 1997; Goetz 2002, 2003; Popkin et al. 2003; Turner 1998 for additional reviews of housing mobility programs and details about programs in other cities such as Minneapolis, Denver, and Dallas.)

SWITCHING SCHOOLS: EXAMINING THE EVIDENCE FROM SCHOOL VOUCHER PROGRAMS

Researchers expected that improving residential access through these housing programs could improve access to schooling opportunity,

given the linkage between geographic residence and school zoning (Orfield & Eaton 1996, Rivkin 1994). However, the evidence above paints a mixed picture, as some of the programs did not lead to large changes in school contexts and educational outcomes. Previous research suggests that there has been a lack of consideration for school context in neighborhood research, what Arum (2000) calls “the most probable source of institutional variation affecting educational achievement within neighborhoods” (p. 401). Therefore, it might not be surprising that we have not seen large consistent changes in educational or even some behavioral outcomes as a result of housing programs.

In this section, we assess the research on school voucher programs, which by design lead to more direct changes in school context. Vouchers are distinct from other forms of school choice, such as charter or magnet schools, in that they provide the opportunity for youth to attend private schools, often using public funds. The political, legal, and social vision for school vouchers is vast, ranging from providing individual student benefits of equity, opportunity, and diversity to providing a source of accountability and efficiency at the public school system level (Levin 1998). Voucher programs are relatively rare, with only about 63,000 recipients funded nationwide in 2000 (Howell 2004). Still, in the decade following the establishment of the first voucher program in 1990, dozens of programs emerged across the country (Howell et al. 2002). More than a decade of research has scrutinized the influence of vouchers, and we examine some of the studies with the strongest designs below, using data from programs in five cities and voucher programs from the early 1990s through to the present.⁹

⁹We focused our attention on school voucher programs that had some form of a lottery, student achievement/performance data, and, given the political charge of the issue, multiple independent evaluations. This ruled out other research on pilot and ongoing voucher programs in Florida (Figlio & Rouse 2006 only look at the effect of the vouchers on school performance), San Antonio (Martinez et al. 1995 had no replications and no random selection), and the privately funded Children's Scholarship Fund in North Carolina

A powerful political charge has surrounded school vouchers and has colored related research. In a piece discussing reviews of voucher research, Howell (2002) summarized that “when scholars survey the nascent empirical literature on school choice, they see very different things and discern very different lessons. And they will continue to do so until more, and better, data are collected from larger, better-financed voucher programs” (p. 79). Taking a step back to view vouchers through the wider lens of public opinion, about 40% of the U.S. population supports vouchers, and another 40% opposes them (Howell et al. 2008). Although public school teachers tend to oppose vouchers, blacks and Hispanics show five times as many supporters as opponents (Howell et al. 2008). Herein, we attempt to present the strongest available evidence, but it may be impossible to disentangle entirely even the most rigorous research from the politically charged environments in which programs are implemented.

Milwaukee Parental Choice Program

In 1990, Wisconsin was the first state to dedicate public funds to vouchers in the Milwaukee Parental Choice Program (MPCP; Witte & Thorn 1996), implemented under the support of Republican Governor Tommy Thompson. Aimed at improving the educational opportunities of disadvantaged youth, vouchers of up to \$4373 were distributed to students from families with incomes 175% of the federal poverty level or less (Rouse 1998). Although more than 1000 vouchers were available, participation fell short in part owing to limited spaces provided in private schools (McLarin 1995). As late as 1995, only 830 youth were participating (McLarin 1995).

Most of the students who signed up for the program were not performing well in their orig-

inal public schools, according to test scores gathered through the first four years of the program. Families in the MPCP were more educated than their public school comparison group, but were more likely to be single parents, unemployed, and on public assistance than private school counterparts (Witte 1996). Likewise, voucher applicants were more often minorities with lower math and reading test scores and lower family incomes than Milwaukee public school students on average (Rouse 1998). Among students offered vouchers, blacks and Latinos were less likely to use them, whereas students with single parents and lower family incomes were more likely to use them (Witte 2000). By 1996, 20 nonreligious private schools in Milwaukee were participating, including bilingual, African American cultural-emphasis, Montessori, and Waldorf schools (Rouse 1998). Around the same time, Governor Thompson expanded the program to include more students and allow vouchers to be applied toward religious school tuition (this expansion was delayed by the Wisconsin Supreme Court’s examination of the constitutionality of applying public funds to religious school tuition; Sanchez 1995).

By the late 1990s, there were three evaluation studies of the effectiveness of the Milwaukee program, all confronting challenges posed by the program’s lack of a formal experimental design. Witte (2000) did not identify consistent improvements for voucher recipients when compared with a group of public school students. Greene et al. (1999) compared voucher winners to students who signed up but lost the lottery and identified significant testing gains in reading, which showed up in the later years of the program. Rouse (1998) reanalyzed the data using an instrumental-variables strategy to control for student ability and family background (as well as nonrandom take-up among lottery winners) and found small significant testing gains in math but not in reading. Goldhaber et al. (1999) examined the extent to which the differences in results could be accounted for by the selection of families into the voucher

(Greene 2001 took advantage of a random lottery, but there was no published replication).

program and did not find support for this explanation. Other concerns have been raised about whether the differences in these results could be attributed to how authors accounted for nonrandom attrition, as well as the generalizability of these results, given that the Milwaukee program did not initially include religious schools and that the assignment was not done independently of the school system (Goldhaber et al. 1999, Witte 1996). More recent research examined Milwaukee's program following 1998's expansion and inclusion of religious schools (Chakrabarti 2008). Using a difference-in-difference approach, the author identified academic improvement in multiple subjects under the expanded program, which stood up to rigorous statistical testing (Chakrabarti 2008).

Cleveland Scholarship and Tuition Program

Amid a contentious history of desegregation struggles, state takeover, and teacher turnover, the state-funded Cleveland Scholarship and Tuition Program began in the fall of 1996 (Hess & McGuinn 2002). Although many suburban private schools were initially unwilling to accept the voucher students, by 1998 over 3600 students were participating in the program, attending over 50 mostly religious schools¹⁰ (Hess & McGuinn 2002, Peterson et al. 1999), and the program grew to over 5000 students in 100 schools by 2006. Aimed at improving education for disadvantaged youth, the program targeted low-income students (with family incomes at or below 200% of the poverty level) and African American youth who were current or former students in the Cleveland

public schools. The program originally used a lottery to award vouchers in schools where subscription exceeded slots, though later all students who applied were awarded vouchers (Howell et al. 2002). Initially, the program was limited to students through the eighth grade, but it extended to ninth grade and later in 2003 (Belfield 2006). The program provides between 75% and 90% of tuition, depending on poverty level. Newspaper articles published at the time emphasized the controversy surrounding the constitutionality of applying public funds toward religious school tuition (Sadler 1996). Within its first year, Cleveland's program was deemed constitutional, then halted as the Ohio Court of Appeals unanimously determined it to be unconstitutional (Sanchez 1997). The debate continued, eventually reaching the Supreme Court, which ruled by a single vote in favor of the voucher program (Kronholz & Greenberger 2002).

Evaluations by Metcalf (2001) found no statistically significant effects on reading and math for voucher users beyond the first grade, but did find some language benefits. Greene et al. (1998) and Belfield (2006) have criticized the research design because of poor test score measures, selective school participation, inadequate accounting for individual student- and school-level attributes, and the fact that their analyses did not include voucher users who only attended the private schools for a short time (Belfield 2006). The most recent research using more appropriate comparison groups, sensitivity tests, subgroup analyses of students, and propensity scores finds no effects of the Cleveland vouchers on the educational performance of students (Belfield 2006).

New York, Dayton, and Washington, DC

More recently, privately funded school voucher programs have been implemented with experimental designs in New York City, in Dayton, Ohio, and in Washington, DC. In all three

¹⁰The Cleveland program was met with immense political and structural challenges, including the unwillingness of neighboring suburban districts to participate, given the low amount of the voucher and the focus of the voucher program on the poorest of the city's students. This led the Cleveland public schools to create several schools specifically so that the voucher program could operate (see Hess & McGuinn 2002 for a detailed history of the program).

cities, voucher programs were designed to open educational opportunities for low- and moderate-income families, largely from the inner cities (Howell et al. 2002). Although students had the option to apply vouchers to religious or nonreligious private schools, the vast majority enrolled in religious institutions: In New York, about 85% of recipients were enrolled in Catholic schools two years into the program, with the other 15% of recipients largely distributed among Baptist, Lutheran, and other Protestant institutions. In Dayton, a somewhat smaller proportion (72%) of recipients enrolled in Catholic schools, and another 22% enrolled in non-denominational Christian schools. Similarly, 71% of Washington recipients enrolled in Catholic schools, with another 20% enrolled in other religious institutions (Howell et al. 2002).

Beginning in 1997–1998, under New York’s Republican Mayor Rudolph Giuliani’s strong support, students in grades one through four who qualified for federal school lunch could apply for vouchers worth \$1400 (Howell et al. 2002). This prerequisite for program participation restricted the applicant pool to the poorest youth of all three programs. Thirteen hundred such vouchers were offered. The average tuition of private schools attended by voucher recipients was \$2100, meaning most families had to bridge the gap between vouchers’ value and tuition (Howell et al. 2002); additionally, families were responsible for transportation between home and school (Howell 2004). By comparison, beginning in 1998–1999, kindergarten through eighth grade students in Dayton whose families earned less than twice the federal poverty level could apply for vouchers worth 60% of tuition (capped at \$1200; Howell et al. 2002). Representing the smallest voucher pool, 515 such vouchers were offered. That same year, students in kindergarten through twelfth grade in Washington whose families earned less than 2.7 times the federal poverty level could apply for vouchers worth 60% of tuition (capped at \$1700); 809 such vouchers were

offered. The average tuition of private schools attended by voucher recipients in Dayton was \$2600 and in Washington \$3100 (Howell et al. 2002).¹¹

Taking a closer look at program implementation, vouchers were randomly assigned through lotteries in all three cities, making for a treatment group of students whose families applied and were given school vouchers (an intent-to-treat group) and a control group of students whose families applied but were not given school vouchers. In New York, more than 17,000 applications were received in the program’s first year, nearly twice the number of applications expected (Steinberg 1997). Families provided baseline information, and students were tested annually. Researchers analyzed results both for students who took advantage of vouchers and transferred schools and for students who, despite being offered a voucher, did not change schools (Howell et al. 2002).

Analyses performed by Howell et al. (2002) revealed statistically significant academic test score gains of about six points (one-third of a standard deviation), but only for black students, not white or Hispanic students. However, the design had limitations. For example, vouchers only offered partial private school tuition, so families given vouchers still had to come up with enough funding to fully finance private tuition and also support transportation to the new school, and families who could do so were likely to differ in important ways from families who did not take up the program. Additionally, attrition was substantial: For the second post-treatment observation, 66% of the New York

¹¹The constitutionality of applying public funds to religious schools remained a central issue in public debate. In 1996, the New York State Board of Regents rejected the proposed voucher plan (*New York Times* 1996). However, by using private funds, these programs skirted the issue of constitutionality (*Wall Street Journal* 1997). Vouchers were also debated in Washington. In the face of strong local opposition, a 2001 proposal including \$1500 vouchers was rejected, but in 2004 a program with vouchers of up to \$7500 passed, marking the first federally funded voucher program (Hsu 2004).

sample, 49% of the Dayton sample, and 50% of the Washington sample responded (Howell et al. 2002). In subsequent analyses, Howell (2004) found that, although the parents who applied for the program were more likely to be African American and lower income, those who managed to use the voucher to send their child to a private school were higher income. They also discovered that the stayers (the less than 60% of families who kept their children in the private schools past three years) were three times more likely to be white (Howell 2004). Further, even under ideal implementation, the findings would still be limited in their generalizability. Data will not generalize to students whose families did not apply to programs, as no such students are included in the data, nor to students from higher-income families, as only low-income families were offered vouchers. It is also not clear why the gains were concentrated only among African American youth (Krueger & Zhu 2004).

Shortly after the Howell et al. papers were published, another team of researchers reanalyzed the same data for the New York site of the program, revealing even stronger shortcomings (they focused on the New York program because it had the highest take-up rate, largest sample size, and lowest attrition rate; Krueger & Zhu 2004). Krueger & Zhu (2004) included students with missing baseline scores (increasing the sample size by 44% in the third and final follow-up year), which dramatically reduced the academic gains observed for blacks. Further, they raised great concern with the way in which race was defined by Howell et al. (2002): Students were considered black only if their mothers specifically checked the survey box for black/African American (non-Hispanic). Students with black fathers or whose parents filled in a race under "other" such as "black Hispanic" were not considered black. Analyzing the data with "black" defined as students with a mother *or* father who checked "black" or who filled in a race that includes black further reduced the size of the program effect for blacks (Krueger & Zhu 2004).

Chicago

Cullen et al. (2006) analyzed the results of the extensive and long-running school choice program in the Chicago public schools, a program first designed in response to a 1980 desegregation consent decree. Although it is not a voucher program, we include a brief discussion here because the Chicago open enrollment program allows for substantial change in school academic quality and employs lotteries. The research is also less affected by nonrandom attrition because more than 90% of lottery participants enroll in the Chicago public schools, and there was little evidence that those who remain in the sample differ on observable dimensions from those who did not. Focusing on eighth grade students applying for ninth grade admission, they analyzed administrative data from 194 randomized lotteries and more than 14,000 applications (through which students applied to attend magnet schools and other programs within their district) at 19 oversubscribed schools.

Their results show that students given the opportunity to switch schools (as compared with those who lost the lottery) landed in schools with lower poverty and crime rates and higher peer achievement and attainment levels. For example, winning the lottery to attend one of the more in-demand schools reduces the percentage of students receiving free and reduced lunch by over 5 points. Despite the significant context changes, lottery winners did not seem to benefit academically. In fact, the academic performance of some students suffered: Lottery winners ranked lower throughout high school and were more likely to drop out after attending schools with high-achieving peers (Cullen et al. 2006). On measures of nonacademic outcomes, students attending schools of their choice reported fewer problem behaviors and arrests, but no improvements in terms of school satisfaction, teacher trust, or aspirations. The authors tried to explain the results by considering the role of parent involvement, peer discontinuity, and travel distances and found that these factors could not help explain the lack of educational improvement.

SUMMARY AND LIMITATIONS OF PROGRAMS¹²

Although the housing and school choice voucher programs differ in many important ways, we attempt to summarize the important takeaway points. The findings from these programs suggest that many low-income families are motivated to improve the well-being of their children's environments by relocating to a new neighborhood or by coming up with the difference in tuition to help their child attend a higher-performing school. After all, most voucher programs are oversubscribed. The research reviewed here also shows that programs can significantly change the social environments of families and children, and they have successfully done so for thousands of youth. Housing programs have successfully helped poor parents move to safer and less disadvantaged communities and, in some cases, less segregated neighborhoods, and school choice vouchers have helped poor students enroll in private schools. There is some evidence that improvements in neighborhood quality and safety can also improve parental socioeconomic self-sufficiency and mother's mental health, but again, some programs differ on these results, and other evaluations have not measured them.

Despite the ability for some of these programs to bring about context changes, it appears much more difficult to improve the educational outcomes of children. Early Gautreaux results suggested large benefits for children

moving to the suburbs, but there were no long-term follow-up studies of these outcomes, and Gautreaux's design was only quasi-experimental. More recent MTO research concludes that neighborhood change is not enough to substantially improve schooling quality or educational outcomes. School choice voucher programs have helped thousands of young people attend private and religious schools that far outperform their local public schools. Although voucher programs aimed at low-income students may lead to academic gains for black students, evidence for other races/ethnicities is simply too mixed to draw a strong conclusion (Gill et al. 2001, Ladd 2002). Although the results vary by city and to some extent by design, the evidence to date does not suggest that these programs have led to large gains in achievement for children. In terms of other social behaviors, it appears that living in low-poverty communities can help to improve the mental health of female young adults and reduce their substance use and other delinquency (although even this research is mixed, as the Gautreaux and MTO programs come to different conclusions). On the other hand, young men do not benefit in the same way from moving to less poor neighborhoods and may be at even higher risk of getting arrested and participating in problem behaviors.

However, we may see new results that shed light on these processes, as the Thompson program in Baltimore has relocated families to radically different communities and is in its early stages. Researchers are also about to go into the field for a ten-year follow-up to MTO to see whether some of the early improvements have more substantial long-term benefits. For example, the reduction in stress among the MTO movers might translate over time into stable employment prospects and better outcomes for their children. There are also ongoing developments in the evaluation of charter schools (such as the work of Henry Levin and colleagues at Teachers College), and a long-term evaluation of the Milwaukee voucher program (see the current work of the School Choice Demonstration Project at the Universities of Arkansas

¹²One concern with any voucher program is that the removal of the most motivated families and children from schools and communities will lead to brain drain or the destabilization of low-income neighborhoods (Caldas & Bankston 2005). On the contrary, one touted promise of school choice programs is that they will induce public school improvement through competition. While these are important considerations, we do not cover the research that evaluates the community benefits or externalities of these programs. In part this is because there has not been much research on the topic, especially with respect to the assisted housing voucher programs discussed here. For related research on the spillover effects of housing vouchers, see Galster et al. (1999); for work that examines the larger effects of school integration plans on public school segregation, see Saporito & Sohoni (2006); and for a discussion of the systemic effects of school choice vouchers, see Hoxby (1996).

and Wisconsin) that might provide insight into how these environmental changes influence achievement.

Why were the effects of these programs not larger? One explanation is that even though some of these programs used random assignment and other rigorous design elements, it is possible that the programs (treatments) were not of sufficient quality, quantity, or duration to produce large improvements. Some programs change schools but not neighborhoods; some change neighborhoods but not schools. Theoretically, we might expect larger effects if both contexts changed, but only one program to date (Gautreaux) has induced that kind of difference. For example, many of the MTO families moved to neighborhoods that, although less poor, were still racially segregated and experiencing economic declines by the time of the interim survey; many families also moved back to high-poverty communities after their first year. Despite housing relocation, most of the MTO children did not change school districts. In Yonkers, the movers and stayers both attended the same high-poverty schools, and there was little evidence of social integration between the mover youth and their new neighbors.

Recent research on the private school vouchers demonstrates that although African American parents were more likely to sign up for the voucher lotteries, they were also much more likely than white parents to remove their children from the private schools within three years, reducing exposure to higher-quality environments (Howell 2004). Additionally, the criteria parents use to navigate school choice options may not be those most likely to improve academic outcomes: Both minority and non-minority parents used criteria of convenience, informal word of mouth, and concerns about their child's social integration that were racially influenced (Henig 1995). In the early years of the Cleveland program, there were no suburban schools willing to allow the inner-city children to attend their schools, and in Milwaukee the limited spaces provided by private schools also restricted the number of voucher recipients able to switch schools (McLarin 1995). More

generally, the students that private schools are willing to accept may also differ in meaningful ways; private school acceptance is quite different from random school assignment. These considerations highlight how even well-designed social programs may not be able to ensure that all the young people who participate in them experience the opportunity-rich new environments long enough to make a significant difference.

Following this explanation, another possible reason that we did not see consistently large gains in educational and social outcomes is that we make assumptions that the input, such as a neighborhood change or school quality change, will be enough to lead to large improvements in youth development. However, the kinds of families participating in many of these programs have often been living in poverty for generations and have needs that exist beyond those that the vouchers are meant to remedy. It is possible that the limited effects seen from research on housing and school voucher programs are due to the lack of additional structural supports.

For example, MTO, Yonkers, and Gautreaux only provided housing vouchers and did not provide family-based employment assistance, transportation help, or educational information and counseling. A housing-only program, even under optimal conditions, might have limits. To improve parents' self-sufficiency, we may need to couple neighborhood change with the provision of services and supports tailored to individual families' needs (cf. Briggs & Turner 2006). Moving to a safer neighborhood might improve mothers' mental health and allow children to socialize more freely in the community. However, these changes may need to be supplemented with additional resources so that parents can find better jobs and children can get some help when they struggle in more challenging schools. For example, there is the possibility that the new Thompson program's outcomes may differ from those of other programs because there are extensive multipartner efforts in place to help connect these families to resources in their new communities, such as a city-based

job-counseling program to include suburban employers, a local foundation providing cars for Thompson families working in the suburbs, and fair housing lawyers working to implement a school liaison program to help families negotiate new schooling options when they move. Similar considerations apply for school voucher programs. As researchers note, the choice programs vary in the amount of tuition they provide, and few provide additional support for transportation or (to our knowledge) tutoring assistance to help children adjust to the new and more challenging school environments. Programs that supplement vouchers with these additional resources might be more successful.

Another consideration is that the mobility or disruption of neighborhood and school changes masks or eliminates possible gains that might come from exposure to new schools and communities. There are likely to be trade-offs in terms of developmental outcomes and family dynamics that accompany changing contexts. For example, research has suggested that residential and school mobility can lead to high school dropout and delinquency, in part because it severs social ties (Astone & McLanahan 1994, Coleman 1988). In most cases, we cannot tell the difference between disruption effects and the effects of new environments because both processes (moving and changing contexts) occur at the same time (cf. Sampson 2008).

FUTURE RESEARCH DIRECTIONS AND POLICY

We recommend several directions for research development. First, although rigorous designs that try to remove the sources of selection bias are critical for understanding the effects of social programs, we also recommend pursuing research that directly examines selection processes. For example, we need to pursue systematic qualitative research to explore how parents select environments for their children and to understand better how parents and children engage new opportunity structures that come from social policy interventions. For example, many researchers agree that although we know

a great deal about neighborhood inequality, we do not know enough about how families pick neighborhoods (Charles 2003, Rossi & Shlay 1982, Sampson 2008).

Some research has begun to explore the issues of selection, instead of dismissing it as a “nuisance to be controlled for” (Sampson et al. 2002). For example, DeLuca & Rosenblatt (2010) use qualitative and quantitative data to examine why the MTO program did not lead to better schooling environments for the children in the experimental group. They find that although parents received housing subsidies to move to low-poverty areas, most did not acquire housing in the communities that had the highest performing schools. Part of the explanation lies in the constraints of the rental market, and part of it is influenced by parents’ information and beliefs. When asked about their school choices, many MTO parents did not consider academic rigor as important as a welcoming atmosphere, others thought it was better not to switch schools, and still others believed that if their children worked hard enough, it did not matter where they went to school. Although these beliefs seem counterintuitive, considering just how low performing many of their original neighborhood schools were, it is important to remember that these families likely never had experience with better schools or the information that many middle-class parents use in making choices about their children’s teachers, courses, and schools. This kind of research reminds us that poor parents are not just wealthy parents without money—they engage opportunities differently based on the conditions of their lives.¹³

We need more research that gives us a window into these processes so that we can better understand which programs will work and how

¹³Similar findings were identified in the school choice literature: For example, high levels of segregation in magnet schools appear to be fueled by parents seeking convenient schools and a good environment for their children’s social integration rather than academically superior schools and by parents relying on word of mouth to learn about schools (perpetuating advantage or disadvantage among certain circles of parents; Henig 1995).

they can be improved. Certainly experimental evaluations of policy interventions can provide valuable causal estimates and effect sizes, but we are left not knowing how a program did or did not produce improvements. This can lead to the conclusion that some policy approaches are ineffective when they are really a necessary but insufficient part of the solution to the problems poor families face. These differences are critical. Other examples of qualitative research that sheds light on how social programs work include Romich & Weisner's (2000) research on how parents manage funds from their Earned Income Tax Credit, and Gibson & Weisner's (2002) research on take-up rates in antipoverty programs.

Second, in part because of ethical resistance to randomizing treatments to individuals, as well as political resistance to bringing poor or minority children and families into middle-class neighborhoods, we agree with researchers who are increasingly advocating for group randomized trials where entire schools or communities get a treatment (St. Pierre & Rossi 2006, Boruch et al. 2004, Oakes 2004). In addition to the ethical benefits, these designs remove concerns about disruption effects, independence of treatment, and crossover effects, in which control group members gain access to the treatment on their own. Of course, these designs have their limitations as well in terms of cost, statistical power (given fewer cases), and the challenge of theory (Shadish et al. 2001, St. Pierre & Rossi 2006).

Third, there is a difference between (*a*) research assessing how much variation in existing neighborhood and school contexts helps explain the differential life course outcomes of young people and (*b*) research that tries to understand the effects of changes that come from housing and education policies. Therefore, we need to be more careful and creative in our approach to quantitative research that uses naturally occurring variation in observational data. Although there have been many advances (such as propensity score analyses), many researchers still rely on national panel data to study the effects of social context. This poses

several problems, as noted by other researchers, but one significant and rarely discussed issue is exchangeability. By virtue of social stratification, it is rare that we observe poor families in affluent communities. This poses problems for estimation because we are making off-support inferences; in other words, we are applying estimates for regression models to individuals who are not present in the data (Oakes 2004).

One way to deal with this issue is to focus more attention on interventions or policy changes that occur within specific community or single-city panel studies, or build these considerations into design (see research using the Mobile Youth Study in Alabama for an example; Bolland et al. 2005). The advantage of such data, relative to a multicity or national survey, is that by the nature of its homogeneity, single-site studies control for some hidden bias. In a recent article, Rosenbaum (2005) noted that in the absence of randomization, "reducing heterogeneity...reduces both sampling variability and sensitivity to unobserved bias" (p. 148). Local samples reduce hidden bias that might accompany selection into different environments (cf. Rosenbaum 2005) and also make it more likely that youth are exchangeable (Oakes 2004, Oakes & Johnson 2006, Winship & Sobel 2004). Others provide guidance and additional modeling strategies to handle these and other limitations of nonexperimental data (Heckman et al. 1998, Winship & Morgan 1999).

Fourth, we noticed that, particularly in the case of school vouchers, there was little research that helped us understand how the programs work and what elements need to change in order to observe greater improvements if they are possible. One of the distinct features of our review is the large number of nonsociological sources we bring to bear on our assessment of these topics. In other words, we rely on a substantial body of economics research. In part, this is due to the innovative nature of the counterfactual design and value-added approaches that the field of economics has developed over the past few decades. We searched both sociological and education literatures for

research that evaluates the impact of school choice programs on young people and came up with little. Sociologists have for years been making great efforts to understand how environments affect the behaviors of individuals. In the case of programs such as those presented here, we need to make more progress. For example, what circumstances lead minority families to leave private schools after receiving a voucher? What difficulties do children face in more rigorous schools, and can these be overcome to increase retention? These questions are ripe for exploration by sociologists of education.

On a final note, as a discipline that concerns itself with using social science to inform social policy, we need to think carefully about how we interpret the results of our research for policymaking. Many scholars and funding agencies want their research to make a difference. But there are realities that make it hard to come to quick conclusions about the relevance of social program research for public policy on a large scale. The success or failure of school and housing programs depends on at least two things: individual choices and community buy in. Many families do choose to improve their well-being through opportunities presented in innovative policies, and many benefit from their participation. However, the realities of how families approach social policy opportunities and use programs can clash with the theory of how these programs work.¹⁴ Housing and school choice programs rely on parents' motivation to apply,

¹⁴The results from MTO were the subject of an illuminating exchange between sociologists and economists focused on the issues of selection and neighborhood choice. Clampet-Lundquist & Massey (2008) reanalyzed the data motivated by several of the program's weaknesses—namely that many families selected not to move, many also left low-poverty neighborhoods within a short period of time, and only some families relocated to neighborhoods of appreciably higher socioeconomic quality and low segregation. The authors used regression-based analyses to see whether family outcomes vary by the type of neighborhood families move into and find results that differ from the experimental analyses previously published. In turn, Ludwig et al. (2008) wrote a rejoinder, explaining why the experimental results hold up to the Clampet-Lundquist & Massey critiques and why nonexperimental estimates of program effects are flawed. Sampson (2008) added to the exchange by discussing the larger

the marshaling of extra resources to move or supplement a voucher, information about better schools and communities, and realistic options to access rental housing and schools in such communities. These are often in short supply, and most programs do not offer the extra supports. In other words, some of the very challenges that prevent poor families from accessing social opportunities in the first place do not go away when they participate in a school or housing intervention. These additional difficulties, such as poor health or unstable family networks, continue to influence their lives in ways that make it hard for them to fully realize the benefits of these programs as policymakers imagined them.

Additionally, the reality of social stratification makes it difficult to know how such policy efforts will operate in the present system if we were to scale up these efforts at the aggregate level (metropolitan area or school system). There are larger social and structural forces (e.g., housing discrimination, conflicts over school funding between cities and suburbs, and selective private school standards) that explain why we do not see large numbers of minority families sharing schools and communities with white middle-class families. These realities provide the context in which we are trying to implement social programs, and there are often difficulties.

We know from the MTO and Yonkers programs and the school voucher cases that there is substantial political pushback from existing social systems, whether they are the suburbs of Baltimore City or the teachers' unions in Cleveland or Washington, DC. Both housing dispersal programs and school voucher programs were designed in part to address racial and socioeconomic disparities in access to resources and to improve life outcomes. Years of research on the effects of busing and studies of white flight demonstrate the systemic challenges and obstacles of political will that stand in the way

relevance of MTO to the field and the realities of structural constraint in urban areas.

of realizing the benefits of reducing inequality for young people (Clark 2008, Coleman et al. 1975, Schelling 1971, Tiebout 1956). Research on the effectiveness of programs that change the opportunity structure for small groups of individuals needs to be considered in light of larger structural forces that shape that opportunity structure in the first place.

We are not suggesting that school and housing interventions are not beneficial—in fact, the evidence we review supports the idea that the lives of thousands of children and families have been changed by these programs. For example, families in the Gautreaux program experienced radical changes in the racial composition

of their new neighborhoods, and the experimental MTO families moved to communities that had poverty rates that were four times lower than their original housing projects; these changes are rarely seen in observational data. However, not all of the individual-level results for youth who participated in these programs have been consistently large and long-term. Therefore, we suggest that researchers seriously consider the individual-level processes that determine how youth development can be improved through such programs as well as the structural and political conditions that can allow for such programs to work at a larger scale.

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The authors are not aware of any biases that might be perceived as affecting the objectivity of this review.

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