Housing as a Platform for Improving Education Outcomes among Low-Income Children

Mary Cunningham
Graham MacDonald

Urban Institute

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Introduction

Researchers and policymakers hypothesize that housing can be a platform for academic achievement among low-income students—that is, high-quality, affordable housing, located in safe neighborhoods can go *beyond* providing basic shelter and stability, and can help provide a stable environment where children access high-performing schools, learn, and succeed academically. Most of the empirical evidence to date, however, focuses on the *absence* of high-quality, affordable housing and its consequences for children. There is a dearth of research on how housing can be a *positive* pathway to achieving better school outcomes. Further, methodological limitations plague research on both the negative and positive effects of housing and school outcomes, making it difficult to draw conclusive findings.

To help inform policymakers and move policy forward, this paper discusses the current state of housing in the United States, provides a conceptual framework for housing as a platform to improve educational outcomes for children, reviews the existing evidence that supports conceptual models, and identifies the major gaps in research. Finally, it proposes a list of projects that make up a research agenda for understanding the issue and guiding investments in new research.

Meeting Basic Needs: The Current State of Housing in the United States

The federal government has focused on improving housing for U.S. households since the introduction of the Housing Act of 1937 and the subsequent 1949 Housing Act, which articulated the goal of "a decent home and suitable living environment for every American family" (P.L. 87-71, Sec.2, as cited in Newman 2008). While "a decent home and suitable living environment" is often thought of as one package, it is made up of many different dimensions—including housing stability, affordability, quality, and neighborhood location.[1] All these dimensions may matter in different ways for meeting children's basic needs and helping them achieve positive educational outcomes. Since Congress passed these pieces of legislation, housing policies and programs have led to vast improvements in some dimensions of housing, while other dimensions have fallen seriously behind.

Housing quality, though still a problem for some, has improved significantly since the 1940s, when lead paint, lack of plumbing, and shoddy and aging buildings were commonplace (Turner and Kingsley 2008). Slum removal, large investments in assisted housing, and strict enforcement of housing codes have improved housing quality overall. While these improvements have been significant, about 3.2 million households still live in severely or moderately inadequate housing (i.e., problems with plumbing, heating, electricity, maintenance, and overcrowding) in the private market (U.S. Department of Housing and Urban Development [HUD] 2005). And with no or limited funding for capital improvements, many households living in publicly assisted housing experience substandard housing quality (HUD 2011b).

More recently, affordability and the closely linked problem of residential stability have been the most significant housing challenges facing policymakers. The deep, long-lasting economic crisis and unprecedented problems with housing foreclosures have had major repercussions for the housing

[1] Newman (2008) refers to a housing package as a "housing bundle." Although we define a housing bundle differently than Newman, we use this label to describe the sum of different dimensions of housing.

situations of low-income families. Homelessness and doubling up is increasing among families with children.[2] The U.S. Department of Housing and Urban Development (HUD) reports that homelessness among people in families has increased 20 percent, from 473,541 in 2007 to 567,334 in 2010 (HUD 2011a). Today, among homeless students identified by schools, nearly two-thirds (65 percent) are doubled up; 21 percent are living in homeless shelters; 7 percent are living in hotels or motels; and 7 percent are unsheltered, sleeping in places not meant for human habitation (National Center for Homeless Education 2011). While reliable data on doubled-up households are hard to find, schools across the nation report that the number of students living in doubled up housing situations has grown from 502,082 in 2008 to 668,024 in 2010—a 32 percent increase (National Center for Homeless Education 2011).[3]

Nearly 2 million children are living in homes going through foreclosure as a result of subprime-related foreclosures alone (Lovell and Isaacs 2008). Generally, the effects of foreclosure on children are unknown. One concern, however, is that households going through foreclosure will experience residential instability that will negatively affect members of the household, particularly children, who may be uprooted from their neighborhood, friends, and schools. How do moves caused by foreclosure affect children? Evidence from New York City and Washington, D.C., finds that students affected by foreclosure change schools more often than they would have otherwise and that the schools they transfer to are of lower academic quality, as measured by test scores (Been et al. 2011; Comey and Grosz 2011).

Even before the economic and foreclosure crises, housing affordability has been a problem that policymakers have largely ignored. The rent burden among low-income households has become worse over time: the Joint Center for Housing Studies of Harvard University (2011) finds that the share of severely burdened renters, or those paying more than 50 percent of their income for housing, increased from 20.7 percent to 26.1 percent between 2001 and 2009. Today, the affordable housing shortage is estimated to be 6.4 million units. As Crowley (2003) notes, the availability of affordable housing for low-income households has shrunk significantly in the past two decades as a result of "gentrification, conversion, demolition, and abandonment." As the availability of affordable housing on the private market has declined over time so has the availability of housing subsidies: only one in four households eligible for housing subsidies actually receives assistance (Turner and Kingsley 2008).

Affordability, in many ways, influences residential instability. Families that cannot afford their rent may miss payments and face eviction. In tight housing markets, where obtaining an affordable housing unit is fiercely competitive, low-income families often experience high rates of "churning" from one apartment to the next, as they search for more affordable units. Of course, households move for various reasons, and housing mobility can be positive (e.g., moving to a better housing unit or better neighborhood, or

[2] "Both HUD and ED take homelessness to mean children who 'lack a fixed, regular, and adequate nighttime residence' due to the lack of alternative accommodations; are living in emergency or transitional shelters; are abandoned in hospitals or awaiting foster care placement; or are living in cars, parks, public spaces, abandoned buildings, or other places not ordinarily used as a regular sleeping accommodation for human beings. But the ED definition differs from the HUD definition in that it includes children living in households that are temporarily doubled up due to hardship or loss of housing and migrant workers and their children who are living in the conditions described above. It also includes children who are temporarily living in motels" (Cunningham, Harwood, and Hall 2010).

[3] The reliability of these data varies significantly from school to school and it is unclear if these numbers are increasing due to real increases in doubled up students or better counting methods.

purchasing a home) or negative (e.g., moving because of eviction or problems making the rent). Low-income households experience high rates of housing mobility, often for negative reasons (Coulton, Theodos, and Turner 2009; Crowley 2003). For example, the Making Connections Initiative, a 10-city survey of low-income households, finds that 46 percent of those who moved during the study period were "churning movers," suggesting that their moves were "a response to financial stress or problems in their rental housing arrangements" (Coulton et al. 2009, 12). These frequent moves can lead to frequent school changes.

Where housing is located also matters for children since where households live is inextricably linked to where they attend school. Overcoming the history of residential segregation in the housing market and improving neighborhood outcomes for low-income households has been a major challenge for policymakers. Discrimination in the housing market persists today (Ross and Turner 2005). Minority households are more likely to live in high-poverty tracts with low-quality schools (Galvez 2010; Newman and Schnare 1997; Orfield and Lee 2005). Households that receive housing assistance or public housing are also highly concentrated in poor neighborhoods (Turner, Popkin, and Rawlings 2008). Drug and gang violence plague these neighborhoods, making safety a major concern. School quality is an issue. Most children living in high-poverty neighborhoods attend lower-quality schools than their middle-class counterparts (Orfield and Lee 2005).

While all children are assigned default public schools based on neighborhood location, many students have other schooling options. In 2007, half of students had parents who reported that public school choice was available to them, although only 27 percent of students were enrolled in a school other than their assigned public school. Though this percentage has grown from 24 percent in 1996, among low-income children it has remained constant at 22 percent over this period, despite recent charter school growth (Grady, Bielick, and Aud 2010).

The Current State of Education for Low-Income Children

Although test scores for all students have risen over the past decade, poor children still lag behind their wealthier classmates. Reading and math scores for 4th and 8th grade students qualifying for free lunch were 9 to 12 percent lower on average than students that did not qualify for any lunch subsidies, roughly equivalent to the gap observed in 2003 (National Center for Education Statistics 2011a, 2011b).10.8 million children (25 percent) age 5 to 17 lived in households with incomes below the federal poverty level (FPL) in 2010 (American Community Survey 2010). Using a slightly different measure of poverty, 43 percent of 4th graders and 39 percent of 8th graders qualified for free school lunch (meaning their family's income was below 130 percent of FPL) during the 2010–11 school year, and 5 percent of both groups qualified for reduced-price lunch (family income below 185 percent of FPL).

While the free lunch measure of poverty provides an average for all children in families earning below 130 percent of FPL, it masks significant variation in the low-income population. Children in families earning between 50 and 100 percent of FPL perform worse than children from near-poor households, and children in families earning below 50 percent of FPL typically score twice as far below children from near-poor households than those earning 50–100 percent of FPL (Lacour and Tissington 2011). Students in subsidized housing and homeless children perform similarly poorly. Fifty-four percent of homeless children score below grade level in math, and 75 percent score below grade level in reading. In addition, this particular population is four times more likely than other children to score at or below the 10th percentile in reading (Hart-Shegos 1999). In education literature, typical effect sizes measure

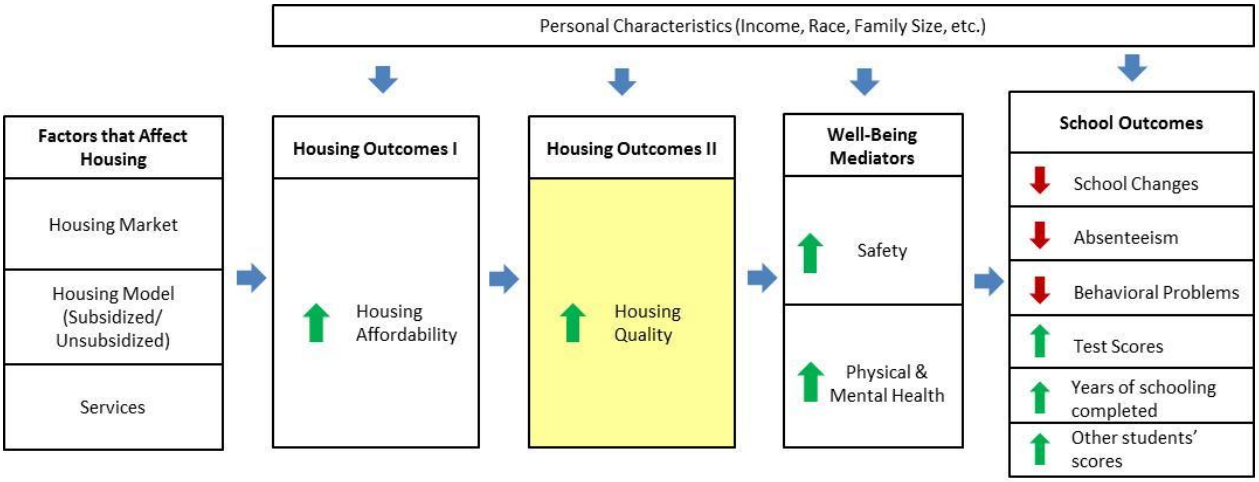
approximately one-tenth of a standard deviation for improvements in teacher quality or cognitive ability (H. Schwartz 2009). Against this backdrop, students living in New York City public housing score on average 0.31 standard deviations below the citywide mean in math and 0.33 standard deviations below the citywide mean in reading (A. Schwartz et al. 2010).

Test scores from early childhood evaluations and high school dropout rates reveal a similar pattern of academic achievement for low-income students. Low-income kindergarten students score around the 30th percentile on the Early Childhood Longitudinal Study reading assessment, while upper-income students score in the 70th percentile (Lacour and Tissington 2011). And although the dropout rate for students from low-income families (8.7 percent) has fallen slightly over the past decade, it is still more than four times greater than the dropout rate for students from upper-income families (2.0 percent) (Chapman, Laird, and KewalRamani 2010).

Housing as a Platform to Improved Education Outcomes for Children

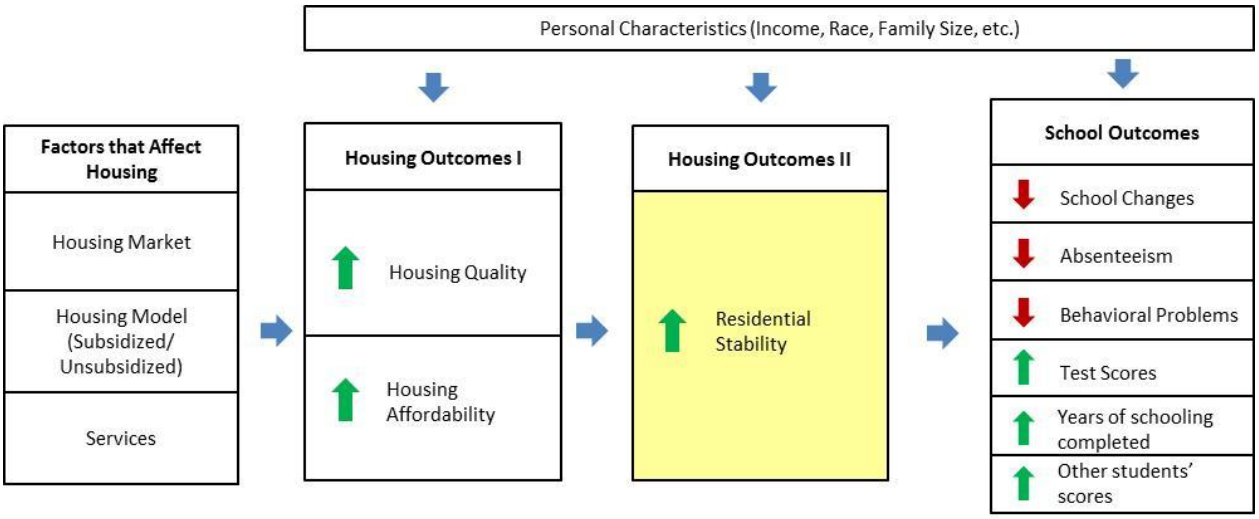
While many factors affect school outcomes among low-income children, including parental involvement and school quality, researchers hypothesize that meeting children's basic housing needs is a critical part of school readiness and academic success. As noted above, different dimensions make up a housing "bundle," and before understanding how housing affects school outcomes for children, researchers must "unbundle" these dimensions. Many researchers have hypothesized and measured how housing affects educational outcomes.[4] The following diagrams provide conceptual models and hypotheses for how housing can create positive pathways toward children's educational success. As the models note, we focus on four housing dimensions that may affect outcomes: housing quality, residential stability, housing affordability, and neighborhood location. These mechanisms affect school outcomes in different ways and, importantly, often interact with each other:

- *Housing quality (*often affected by housing affordability) can positively affect children's safety and health outcomes, leading to better school attendance rates and improved attentiveness in class. Living in a housing unit that comfortably accommodates all members of the household provides a stress-free environment in which children can accomplish homework assignments.

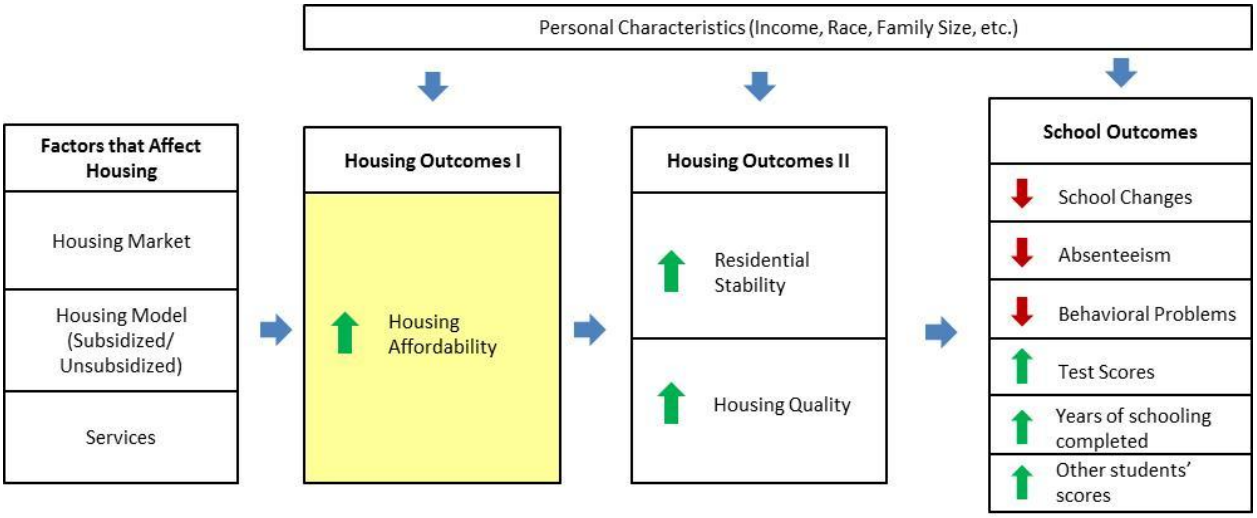


[4] For previous reviews see Brennan (2011) and Newman

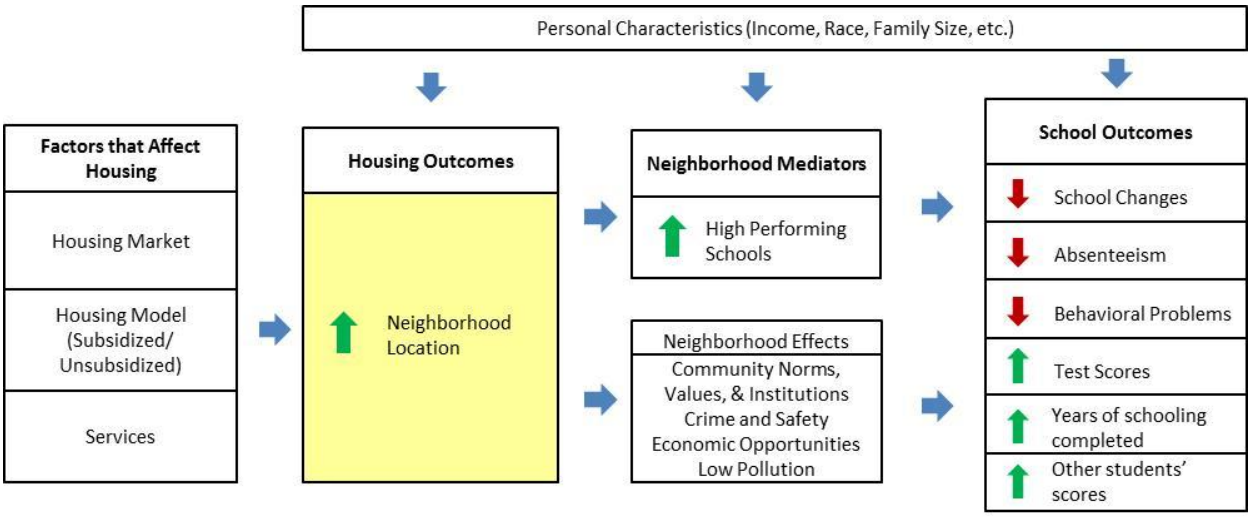
- *Residential stability* (often affected by housing quality and housing affordability) can lead to an uninterrupted school year, avoid disruptions at home caused by an unplanned move, and lead to fewer school changes that leave children behind academically.



- Since housing is the biggest expenditure in household budgets, *affordable housing* can provide families with financial security, leading to improvements in housing quality and residential stability; these improvements lead to better school outcomes, as noted above.



- Housing in a safe and healthy *neighborhood location* can improve household access to high-performing schools that lead to improved academic outcomes. Factors independent of school quality, such as community norms and values, day care availability, and safety may also lead to improved educational outcomes in a good neighborhood.



To gauge the impact of housing on children's educational outcomes, researchers must define not only housing quality, but also the dimensions of school quality, and measuring school outcomes is just as difficult. Typically, student test scores are used a measure of school quality, but researchers, parents, and government officials each have their own definitions for the components of a quality educational institution. Most define quality schools "as having higher teaching quality, greater educational resources, more rigorous course offerings, smaller class sizes, and a school climate that values learning and achievement and holds high expectations for students" (Darling-Hammond 1996 as quoted in Sanbonmatsu et al. 2011). Parents agree with certain aspects of this definition and are silent on others. In a series of nine focus groups, D.C. parents most often cited curriculum and programs, school safety, school resources, location, and teacher quality as the most important aspects of a good school. Only a few parents mentioned student body test scores as a major factor (Filardo et al. 2008). However, in a study of 20 states that publish school ratings and other measures, researchers found that, although schools reported on school inputs such as school resources, and a select few reported on school processes, school accountability measures were exclusively defined by test scores, dropout rates, or course-taking (H. Schwartz et al. 2011).

The Impact of Housing on School Outcomes: What the Research Says

What does the research say about these hypotheses? Most research focuses on the absence of housing and its negative consequences for children's school outcomes. There are a few ways that inadequate housing may affect school outcomes, as measured by accessibility to high-quality schools, attendance, and academic achievement (i.e., school test scores). First, researchers posit that children who experience homelessness or are living in overcrowded, doubled-up situations may lack the necessary tools to do well in school (Dworsky 2008). For example, overcrowded shelters may be noisy and chaotic, interfering with children's ability to complete homework assignments; children may have to share common space and have inadequate workspaces or access to school supplies. Further, parents

experiencing homelessness or residential instability may not be able to prioritize helping children with their homework or be involved in school activities (Cunningham, Harwood, and Hall 2010). Conley (2001) analyzed the Panel Study of Income Dynamics and found that after controlling for family characteristics, children living in overcrowded conditions completed less schooling than their counterparts.

Health problems related to housing quality may affect school attendance, putting children behind in schoolwork and lowering academic achievement. The evidence shows that families living in low-quality housing, particularly children, may suffer severe health consequences. For example, low-income children living in deteriorated public housing, with infestations of cockroaches, mice, and mold, suffer from high rates of asthma (Howell, Harris, and Popkin 2005). Research shows that lead poisoning, an attribute of low-quality housing, is associated with developmental delays and poor educational outcomes (Moonie et al. 2008; Bellinger and Needleman 2003; Lanphear et al. 2000). These health problems can lead to high rates of absenteeism, which is linked to poor educational outcomes. As Kinney and colleagues note (2002), "asthma is one of the leading causes of absences from school." Health problems may also lead to inattentiveness in the classroom, leading to poor grades and test scores. However, much of the literature that links housing, health, and poor educational outcomes only proves correlation, not causation, and suffers from selection issues. It is unclear if poor educational outcomes are *caused* by housing-related health problems or from other family characteristics (e.g., poverty, etc.), making it difficult to clearly establish causality. For example, a study that examined school outcomes for families living in public housing against those in privately owned assisted housing and those eligible for assisted housing but not receiving housing assistance found that after controlling for demographic and family background, the differences in outcomes between the groups disappear (Newman and Harkness 2000). The authors note that "educational outcomes are unaffected by whether a child ever lives in public housing, the duration of the residence, and the stage of childhood in which he or she lives there. These results show that it is the more disadvantaged family background of children who live in public housing, in particular lower levels of earnings, parental education, and economic self-sufficiency, which lead to worse educational outcomes, not public housing itself."

Residential instability may also lead to absenteeism and school changes. The research on school attendance is mixed: some studies find that homeless children have higher rates of absenteeism than housed children, while other studies find no differences (Zima, Wells, and Freeman 1994; Rubin et al. 1996; Buckner, Bassuk, and Weinreb 2001). Residential instability, in many cases, clearly causes frequent school changes. In one study of Chicago elementary school students, only half remained enrolled in the same school over three years, and the majority of school moves were as a result of residential moves (Kerbow, Azcoitia, and Buell 2003). Students who changed schools frequently lag behind their non-mobile students by a year or more in reading and math, and half of this difference can be attributed to mobility (Garriss-Hardy and Vrooman 2005). Low-income families, generally, have high mobility rates (Coulton et al. 2009). Low-income students attending inner-city schools are more likely to change schools frequently: over 17 percent of all third graders have changed schools more than three times, and frequent movers are more likely to have repeated a grade or have low reading scores (GAO 1994; Garriss-Hardy and Vrooman 2005). As the data on children affected by foreclosure indicate, families affected by foreclosure move and change schools more frequently (Been et al. 2011; Comey and Grosz 2011). These school changes may demand the child adapt to a new curriculum and new teacher, and may often require the child to make up schoolwork covered earlier in the year. Further, as Obradovic and colleagues (2009) note, highly mobile students are at risk for "broken bonds" with teachers that may disadvantage those needing the most help in the classroom.

In fact, *all* students suffer in a school with a large population of highly mobile students. Research shows that review and catch-up work become the norm in high-mobility schools, and lessons often stall at elementary skill levels. Teacher morale may be poor as a result, leading to high teacher turnover and an influx of inexperienced teachers (Rhodes 2006). By fifth grade, the curricular pace at schools with highly mobile populations is so different from more stable schools that the math curriculum is typically one grade below grade level (Kerbow et al. 2003). As a result, students perform poorly on standardized tests (Kaase 2005).

One way to decrease residential mobility is through housing subsidies. Research from HUD's Welfare to Work Voucher experiment found that housing vouchers reduce residential mobility, but it is unclear if residential *stability* resulted in better school outcomes since the analysis did not examine outcomes beyond basic housing (Gubits, Khadduri, and Turnham 2009; Mills et al. 2006). More research is needed to understand if these voucher families have improvements in school outcomes as well.

Beyond the stability of the housing unit, the neighborhood location and proximity to high-quality schools may also matter. However, as evidence from the Moving to Opportunity Demonstration (MTO) shows, merely moving families to better neighborhoods may not translate into access to better schools. As Ferryman and colleagues (2008) note, many families who had a chance to switch school districts kept their children enrolled in the pre-move neighborhood schools. Qualitative data suggests that many MTO families were "information poor" and did not make school choices the way middle-class families often do. MTO families reported that neighborhood safety was the first priority when deciding where to live and that safety is the mark of a good school (Ferryman et al. 2008). Despite these challenges, research suggests that getting low-income children into high-performing schools could improve school outcomes. A recent study shows that low-income children who attend schools with middle- and upper-income children do better academically (H. Schwartz 2009).

Finally, housing affordability may lead to low-quality housing and residential instability. The lack of affordable housing can lead to difficult choices in household budgets—for example, choosing between paying the rent or paying for food and other necessities like adequate health care. Families with affordability issues may choose lower quality housing to make up for the gap in income. Financial trouble may also negatively affect children's academic performance and behavioral development (Pribesh and Downey 1999). However, there is some evidence that high-priced housing is not linked to negative long-term outcomes. An analysis of the Panel Study of Income Dynamics finds that "children growing up in higher-priced markets appear to fare no worse than those in lower-priced markets" (Harkness, Newman, and Holupka 2009, 123). These households may be "buying" into better neighborhoods and, thus, better schools. These types of decisions may create positive tradeoffs: by improving the neighborhood location dimension of housing (and therefore increasing the quality of the school attended) and decreasing the affordability dimension, children may experience positive outcomes.

Academically, some studies have found that homeless and highly mobile students score lower than stably housed children do on standardized tests in reading, spelling, and math (Obradovic et al. 2009; Rafferty, Shinn, and Weitzman 2004; Rubin et al. 1996). These differences remain even after controlling for poverty and other stressors. For example, Rubin and colleagues (1996) compared 102 homeless children with 178 housed children and found, controlling for differences in socioeconomic status and demographic characteristics, that homeless children scored lower on tests of reading, spelling, and math proficiency. While this study offers the best evidence of the independent effects of a lack of housing on children's academic success, there still may be unobserved differences between the level of

disadvantage of families who end up homeless and those who do not; further, the study does not explain which dimension of housing is driving the improved outcomes. Is it the frequent moves, school changes, or disruptions in the home that cause these differences?

Common Methodological Challenges in the Research Base

Most studies that examine the impact of housing on children's education outcomes are plagued by methodological limitations. A few limitations stand out in the literature:

- **Studies do not adequately control for family characteristics and selection issues.** Selection bias can affect research on the impact of housing in two different ways. First, it may cause researchers to overlook differences in outcomes that may exist. For example, many studies show mixed results when it comes to understanding the independent effects of the absence of adequate housing (Buckner 2008; Newman 2008). This is because, as many researchers note, it is difficult to disentangle the effects of poverty from those of inadequate housing and homelessness. This same condition may cause researchers to erroneously attribute school outcomes to housing situations, when those outcomes are actually caused by family characteristics. Since most studies do not use experimental or longitudinal designs that would overcome selection issues and omitted variable bias, selection bias remains problematic.
- **Studies do not "unbundle" housing dimensions.** As noted earlier, a housing "bundle" is made up of several different dimensions, and these dimensions may affect school outcomes in different ways. To understand the impacts of housing and design responses to the problem, policymakers need more nuanced information on the "what" and the "how." What is causing the negative outcome? How is that factor causing it? Of course, housing policy should strive to ensure that all dimensions of housing need are met, but each is costly to attain, so knowing which dimensions will achieve the most benefit is critical. Are there dimensions of housing that are more important to achieve? What are the tradeoffs? Is residential stability more important than housing quality or affordability? Is it enough to provide neighborhood location (and therefore access to high-quality schools) but not maximize affordability?
- **Studies do not fully measure housing along those different dimensions.** Many studies examine housing as a dichotomous variable: children are either housed or homeless. However, homelessness is just one end of the inadequate housing spectrum—the worst possible outcome. Even if children do not become literally homeless, as noted above, many low-income families experience substandard housing, affordability problems, and residential instability—all of which may affect children's education outcomes. The duration of these conditions may also matter. As Rog and Buckner (2007) note, "homeless episodes are typically part of a long period of residential instability, marked by frequent moves, stays in one's own housing, and doubling up with friends and relatives." Families move in and out of these circumstances, and they may appear stable at one point in time but experience inadequate housing in others. They may, for example, live in low-quality housing or overcrowded units. Thus, many studies that compare homeless children to other low-income housed children may in fact be comparing homeless children to low-income, *inadequately* housed children.
- **Studies do not adequately describe housing models.** Another challenge with understanding the difference in outcomes among children who are adequately or inadequately housed is highlighting the differences among and within housing models. For example, some public housing may be

distressed, while other developments may offer healthy, safe neighborhoods with high-quality units. Similarly, some private-market housing may offer high-quality units in neighborhoods with high-performing schools, while others may be located in unsafe neighborhoods with substandard housing quality. Private-market housing may look similar or quite different from public housing. Put simply, not all assisted housing or private-market housing is the same, and capturing the condition of the housing along different dimensions is important for interpreting the results of the study.

- **Studies do not explore alternative dimensions of school quality.** The majority of studies attempting to link housing and educational outcomes invariably focus on test scores or graduation rates. However, researchers, parents, and educators may have alternative definitions for the components of a quality education that may include, but are not limited to, social and behavioral outcomes and college readiness (Filardo et al. 2008; H. Schwartz et al. 2011). Understanding how housing interacts with alternative measures of school quality would help researchers and policymakers understand the broader range of educational benefits and costs mediated by housing.

Plan for Future Research

The purpose of creating a research agenda is to inform government agencies, foundations, and other stakeholder organizations about research questions that will help move policy and practice forward. Prioritizing questions will help focus investments and stimulate the interest of researchers from academic and research organizations, ensuring that research undertaken is policy relevant. To optimize the value of research findings, research designs should include rigorous data collection strategies, including quasi-experimental and experimental designs where appropriate. Research should also include qualitative data collection strategies that help understand program design, implementation, and cost analyses that provide data to policymakers so they can weigh costs and benefits of different program and policy approaches. Drawing on the evidence outlined in this framing paper, three areas deserve attention:

- **Understanding the what and the how.** As is clear from our review of the evidence, understanding the impact of housing on school education outcomes is still incomplete. Specifically, researchers have not unbundled different dimensions of housing to understand the "what" and the "how." These questions are not merely academic. To prioritize where to invest "housing dollars," policymakers must know if one housing dimension is more important than another for school outcomes. More research is needed in this area.
- **Testing the efficacy of shallow housing subsidies.** Research shows that providing housing subsidies to families can protect them against homelessness and provide residential stability (Khadduri 2008; Wood, Turnham, and Mills 2008). Considering the current budget environment, it is unlikely that Congress will significantly increase funding for housing vouchers— though advocates should continue to push for this evidence-based program. Meanwhile, policymakers must learn how to do more with less. While it is still an open question, providing a shallow subsidy to families that require less assistance may help keep them stably housed and protect them against unforeseen circumstances, such as health issues or job loss. Researchers need to rigorously evaluate the impact of shallow subsidies and other subsidy structures to understand if they are effective.
- **Linking housing more closely to high-performing schools and helping families make positive choices when searching for housing.** Research shows that low-income children who attend schools with middle- and upper-income children do better academically (H. Schwartz 2009). The data

indicate that without a purposeful intervention, low-income children will meet numerous barriers accessing high-performing middle- and upper-income schools. As MTO reveals, even helping families move to lower-poverty neighborhoods may not result in positive school changes for children (Ferryman et al. 2008). Despite powerful evidence that low-income children are constrained by their low-performing neighborhood schools, housing policy and school policy operate in silos. As Turner and Berube (2009, 1) note, "Public policies have helped shape today's disparities in neighborhood affordability and school quality…programs focused on affordable housing rarely take public schools into account and school officials typically assume that they have no influence over housing patterns." Policymakers must do more to integrate housing and school policy. First, they must identify neighborhoods where high-performing schools are located and map the share of affordable housing in these neighborhoods. Second, policymakers can implement some changes immediately, like prioritizing placement of subsidized housing in neighborhoods with high-performing schools; improving housing and attracting middle-income families to neighborhoods with lower performing schools, with the goal of improving schools over the long term; and providing incentives to housing agencies for helping families move to these neighborhoods (Turner and Berube 2009). In addition, policymakers can provide funding for provision of early childhood education programs on site. Lastly, program interventions could be tested and further studied to understand their full impact. One such example is launching a demonstration project that provides housing vouchers to families to help them move to neighborhoods with high-performing schools and requiring households to switch to the new schools.

To understand more about these gaps in research, we suggest a few research projects in Table 1. The table provides research questions, descriptions of the research projects that would answer the questions, and incubator projects that would serve as a seed to getting the larger research project off the ground.

Conclusion

Research suggests that housing is not only critical for meeting children's basic needs; it can be a platform for improving education outcomes. Further, devoting more resources to housing now that improve educational outcomes could lead to improved employment outcomes, thereby saving money and boosting national productivity. Much more research is needed to understand the how and the why, but the literature clearly demonstrates that some aspects of housing—residential instability and neighborhood location—affect education outcomes. In addition to the how and the why, policymakers lack research on policy interventions that either mitigate the effects of these housing dimensions or solve them. This paper provides a priority list of research questions that, if answered, can help inform policymakers to design potential solutions and go a long way toward connecting the dots between housing and school outcomes for low-income children.

Table 1: Research Questions and Potential Research Projects

Research questions	Research project	Incubator project
Does providing vouchers plus school-focused housing search assistance help low-income families access high-quality schools and help improve their children's educational outcomes?	Launch an experimental demonstration, including cost analyses, that provides enhanced vouchers (vouchers plus school-focused housing search assistance) to low-income families.	Draft hypothesis, research design, and conduct a feasibility analysis.
For hyper-mobile families, what is the impact of shallow subsidies on residential instability and school outcomes? How does providing shallow subsidies to families in neighborhoods with high rates of mobility reduce churning and improve neighborhood outcomes?	Launch an experimental demonstration, including cost analyses, that provides a shallow subsidy to hyper-mobile families in neighborhoods with high mobility rates.	Review literature for research on the efficacy of shallow subsidies. Draft hypothesis, research design, and conduct feasibility analysis.
What are the key components of initiatives that link community development efforts and schools, including providing on-site childhood education programs?	Conduct a national scan of model programs, complete site visits and key informant interviews, and produce case studies.	Complete the scan and outline a typology for understanding core program dimensions.
What is the impact of housing on school outcomes? Which dimensions of the "housing bundle" are the most important when it comes to influencing school outcomes?	Analyze data from integrated databases to examine the impact of housing outcomes on school outcomes.	Draft a paper that investigates ways to use integrated databases to examine the impact of housing outcomes on education outcomes. The paper should specifically look at possibilities to unbundle housing dimensions and to use propensity score matching to create comparison groups.

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