Perceptions of School Quality and Their Impact on Residential Mobility Decisions

Joshua L. Freely, Temple University
Kimberly A. Goyette, Temple University

The common perception among the public is that schools influence the locations to which people move. Realtors prominently place the school districts associated with particular houses on their websites, and it is clear from home prices that there is variation in the perceived "quality" of a school district, and that quality school districts are desirable. These perceptions about the draw of quality schools to potential home-buyers or renters are "pull" factors; those characteristics that draw people to more desirable neighborhoods. However, few people discuss school quality as a "push" factor. If it is commonly understood that schools are an important factor in where people move, are they also an influence on why people decide to move in the first place? In this research, we consider that low quality schools might indeed "push" people out of neighborhoods.

Research on the motivations of people who decide to change residences is widespread and multidisciplinary. Much of the literature on residential movement considers the decision making process of potential movers from an economic standpoint (Phe and Wakely 1998). This market-based approach to explaining residential mobility theorizes that people decide to move based upon an analysis of how the move will maximize their housing investment. Households seek to reach a "locational equilibrium" that maximizes the value of their property in relation to other amenities such as distance to the urban center, the provision of public goods, the cost of taxes, and other locationally related expenditures (Cho 2001; Alonso 1964).

Sociologists and demographers discovered that in addition to monetary considerations, there were life cycle and household characteristics that contribute to people's motivation to

move, that may also limit their ability to move (Landale and Guest 1985). Investigations into who moves and who stays have revealed that age (Lee at al. 1994; South and Deane 1993), marital status (South and Deane 1993), the presence of children (McHugh et al. 1990), source of income (Kasarda 1988), and the receipt of public housing assistance have varying effects on people's decisions to move. In addition, there is convincing evidence that both race (South and Deane 1993) and concentrated poverty (South and Crowder 1998) serve to limit individuals' motivation to move and their location. These life-cycle/demographic explanations of residential mobility still assert that potential movers make rational choices of where to go, choices that weigh economic and non-economic factors, but these choices are constrained by certain personal and household characteristics.

Still another line of research assesses the role of residential satisfaction in motivations to move. Key components of residential satisfaction include safety, government services, housing costs, and community cohesiveness (Speare 1974; Landale and Guest 1985; Lee at al. 1994). One under-studied component of residential satisfaction, particularly for parents with children, is the judgment of the quality of neighborhood schools (Harris 1999; Krysan 2002). While the public perception is that the quality of local schools influences the desirability of a neighborhood, few researchers have documented the extent to which negative perceptions of local school quality drive people out of neighborhoods. Neither is it known the extent to which judgments of school quality are related to other measures of residential satisfaction, nor how much weight these judgments have in desires to move out of neighborhoods compared to other factors.

In addition to perceived school quality, school choice research has found that the actual characteristics of schools themselves influence motivations to change schools. For example,

recent research suggests that white students are more likely to flee public schools with growing proportions of African American students for magnet, charter, or private schools than are African American students (Saporito 2003). However, this has not been linked to residential decision-making. Are there key characteristics of local schools like racial composition or rates of passing Pennsylvania System of School Assessment (PSSA) tests that influence residents to leave their neighborhoods? We extend this research to investigate whether or not actual characteristics of schools influence individuals' desires to change residences, above and beyond their reported perceptions of school quality.

Finally, little research has considered how the impact of perceived school quality on the motivation and intention to move varies according to demographic characteristics like race and education. If these perceptions are an important part of mobility decisions, variability in the factors that influence the desires of people of different races to move may add to our understanding about the processes sustaining economic and racial residential segregation.

In this research, we address two sets of questions. First, do perceptions of local school quality influence the motivation and the intention to move? If so, how does that compare to other measures of residential dissatisfaction? Do characteristics of local schools impact residents' desires to move? Second, do race and parents' education influence the role of perceived school quality in the motivation and intention to move? To answer these questions, we rely on a unique data set that links information about residents, their local school districts, and their neighborhoods.

Residential Decision Making

Economic rational choice research that investigates why people move primarily focuses on how residents maximize the returns to their housing investments. While much of this market

theory is based strictly on price analyses, some revisions of the market approach include other measures of community quality in analyses of residential choice. (Phe and Wakely 1998; Cho 2001) For example, the physical environment, housing quality, and public expenditures have been associated with residential location (Phe and Wakely 1998). Public expenditures, particularly service quality and tax rates, have been linked to municipalities' ability to attract residents (Tiebout 1956). Those towns with better services and lower tax rates should attract residents because they offer better value for their consumers (Logan and Schneider 1981). This has led to the notion that by providing high quality services while controlling the cost of service by restricting increases in taxes, towns can positively influence the in-migration of residents (Margulis 2001).

This model has also been used to determine how educational quality affects residential locational choices. Margulis (2001) found that smaller municipalities that could deliver a quality education while maintaining relatively low property tax rates could successfully attract higher income families over the short term, at least until the cost of providing those services begins to rise.

While the market based approach to residential choice is useful for imagining the process of how housing consumers make their decisions, it assumes a fully economic motivation on the part of the mover. While this assumption is useful for the purpose of creating econometric models of housing choice, it leaves uninvestigated the question of how people take non-monetary factors into consideration when deciding whether or not to move and where to live.

Sociologists and demographers added non-economic factors to research on who moves and who stays. (Landale and Guest 1985) These include life cycle factors like age (Lee at al. 1994; South and Deane 1993), marital status (South and Deane 1993), and the presence of

children (McHugh et al. 1990), as well as household factors including the source of a household's income (Kasarda 1988) and the receipt of public housing assistance. Other research incorporated these life cycle/demographic explanations of residential mobility into research that assesses the role of people's residential satisfaction in their decision to move.

Adapting the work of Rossi (1955) who proposed that people often moved from one place to another to signify a change in status, Speare (1974) theorized that there were specific non-economic factors that contributed to people's decision to move and to their choice of destination. Primary among the non-economic factors was satisfaction with their current neighborhood. Among the survey items used to construct an index of "residential satisfaction" were housing characteristics (age, size, presence of a yard), satisfaction with the surrounding neighborhood and section of town in which the house is located, and the distance of the home to schools, shopping, and work. Attachment to the community, indicated by the number of relatives the respondent had in the neighborhood and whether or not the respondent felt a bond with his or her neighbors, was also measured. Speare found that residential satisfaction was a significant factor in determining both whether an individual was motivated to move and the destination of that move. He posited that when dissatisfaction reached a threshold of intolerability, it prompted movement on the part of the resident.

There have been several revisions and extensions of the residential satisfaction theory of mobility. The original research found residential satisfaction was most relevant for intra-urban moves. When applied to inter-county migration, residential satisfaction was still predictive of migration, but only when interacted with an index of intention to stay in the area long-term (Bach and Smith 1977). In their re-evaluation of Speare's theory, Landale and Guest (1985) stressed the importance of subjective measures of community bonds. In fact, a strong connection

to neighbors was found to be nearly as important as any other measure in Speare's model. When they added an index of the respondent's satisfaction with his/her larger community and measures of possible constraints to moving (lack of home-ownership, lack of financial ability, and ties to the locale) to Speare's measures of satisfaction with immediate place of residence, the effect of Speare's measure was greatly reduced.

Another addition to the Speare model was neighborhood context, which can be conceptualized in different ways. Objective indicators of neighborhood character can be used to describe the context: income, racial mix, density, change in population, and length of tenure of its residents. Another aspect of the neighborhood context is the residents' perceptions of the conditions in that neighborhood. Lee at al. (1994) added both "objective" measures of neighborhood context and residents' perceptions of the neighborhood to the traditional Speare model of mobility. They included the racial mix of the neighborhood, the per capita income, the tenure mix, the mobility rate, the vacancy rate, the population change, and familism as objective conditions in their analyses. To model perceptions, they used questions about specific neighborhood problems like crime and traffic congestion, measures of attachment, thoughts about physical and demographic changes in the neighborhood, and whether the respondent felt that the neighborhood was improving. They found that adding the objective conditions added great predictive power to models of residential mobility. However, most perceptions, independent of the conditions of the neighborhood, did not add significantly to models and consequently were not included in the final model. The authors acknowledge that measurement problems could possibly have obscured their effects. While perceptions mattered little in this research, independent of objective conditions, the introduction of measures of neighborhood

context was an important advance in the mobility literature because it established that individuals might consider extra-market factors and information when deciding where to live.

While some economic research has suggested that the quality of education per tax dollar influences mobility decisions, "objective" measures of school quality like the percentage of students who do not pass standardized tests and "subjective" measures like perceptions of the quality of neighborhood schools have remained largely absent from measures of neighborhood context and residential satisfaction. It is widely understood that people take educational quality into account when deciding where to live. However, it is unclear the extent to which perceptions of educational quality influence a resident's desire and intention to move. The extent to which perceived and actual measures of school quality may influence the motivation of a resident to move may be tied to life course factors such as whether the household includes children, and may be depend on the resident's ability to afford schooling options other than public schools.

Apart from its absence in research on neighborhood satisfaction, perceived and actual measures of school quality may also be of interest to researchers because these factors may contribute to the process of economic and racial segregation in neighborhoods. One measure of "neighborhood context" frequently considered in the residential mobility literature is racial composition. Recent research has examined the role that racial makeup plays in neighborhood desirability. These studies argue that a decline in housing values associated with black in-migration are not necessarily the result of white prejudice, but are instead the result of whites using race as a proxy for socio-economic status. In other words, whites desire educated, affluent neighbors, and because African Americans generally have lower education and wealth, whites may be more averse to Black neighbors (Harris, 1999).

But the role race plays in neighborhood desirability is still hotly debated. Crowder

(2001) argues that individual whites, particularly those in predominantly white neighborhoods, seem to be especially sensitive to changes in the racial makeup of their neighborhoods. When asked to rate the desirability of real neighborhoods, whites consistently ranked integrated neighborhoods below homogeneously white neighborhoods in terms of a preferred location. Additionally, the threshold of desirable racial heterogeneity was much lower among whites than other racial groups (Krysan 2002).

All of these authors seem to agree that whites consider race when making mobility decisions. These considerations could involve prejudice, as Crowder (2001) suggests, or they may be a result of race being used as a proxy for more specific, class based behaviors as Harris (1999) suggests. The bottom line is that race plays a role. The questions that remain are how and why? Recent research provocatively suggests that perceptions of school quality may play a role in explaining the importance of race in housing decisions. Krysan (2002) found that when discussing neighborhood desirability, whites often pointed to sub-standard schools as an important factor leading to a poor rating. This was particularly true of whites that lived in transitional or integrated neighborhoods. It is possible that whites are less satisfied with schools with high concentrations of minorities. If whites disproportionately flee neighborhoods because of dissatisfaction with public schools that have higher concentrations of minorities, racial segregation in neighborhoods may be exacerbated.

In this research, we measure the influence of both observed and perceived school "quality" on four aspects of the residential choice process. First, we look at neighborhood satisfaction. It has been suggested that neighborhood satisfaction is the most important determinant of the desire to move (Bach and Smith 1977). Few studies of neighborhood satisfaction have directly measured the influence of perceived school quality on neighborhood

satisfaction. We do so here. The second aspect of residential choice we explore is motivation to move. While neighborhood satisfaction has been seen as the primary motivator for potential moves, we explore the extent to which perceptions of school quality effect the motivation to move net of the effect of neighborhood satisfaction and other factors that might contribute to the desire to move. We also examine those with the intention to move; that is, those who have said it is either likely or very likely that they will move within the next two years. Does the "observed" or perceived quality of local schools have a specific influence on who actually has the intention to move? Finally, we look at those who have already moved and said that school quality was important in determining the selection of their neighborhood. What are the characteristics of people for whom schools were an important factor and for whom schools were the most important factor? To answer these questions we use a new data set collected within the Philadelphia Metropolitan area.

The Philadelphia Area Survey

The Philadelphia Area Survey was administered to the heads of 2000 households in the Philadelphia Metropolitan region by telephone over 2003 and 2004. The sample was selected through random digit dial technology and is representative of all households in the region with a residential telephone number. The survey was approximately 35 minutes in length and respondents were paid $10 for their participation. The survey has a 36% response rate and preliminary analysis of the respondents indicates that respondents do not differ significantly in median income and educational attainment from the population of the region.

The survey has ten sections that deal with respondents' opinions of different aspects of community life in the Philadelphia region. Among the topics covered are residential history, public services and transportation, crime and safety, community participation, schools, taxation,

residential mobility, employment, and demographics of the respondent. We use several questions from the education and residential mobility sections of the survey as the primary variables in this analysis, while using questions from each of the other sections to control for respondent's satisfaction with his or her neighborhood.

All of the respondents to the survey were asked to provide the address of the house in which they live. If respondents were reluctant to provide an address, they were asked to give the nearest major intersection. Using a Geographic Information System (GIS) each respondent was mapped and matched to the school districts in which he or she resides. The responses were weighted to account for slight differences between the sample and the general population. The overall weighted N of the sample is 2,011. The PAS sample is 75.8% white and 19.0% African American.

In this research, we recognize a distinction between the desire to move in the ideal situation and the motivation to move in the near future. While the motivation to move and the intention to move are not perfect predictors of actual movement (Lee at al. 1994) we believe they are still important in the overall process of residential decision making. We use both variables in our analyses. Multivariate logistic regression models assess the influence of observed school characteristics and perceived school quality on three dependent variables: neighborhood satisfaction, the likelihood that a person desires to move, and the likelihood that s/he will "definitely or probably move" in the next 2 years. In the PAS sample, 11.3% of the respondents reported being dissatisfied with their neighborhood, 39% said they would move if they could and 31% said they would probably move within the next two years.

Our first analysis uses ordinal logit regression to model respondent's satisfaction with his or her neighborhood based on the demographic characteristics of the respondent, his or her

perceptions of the quality of life in the neighborhood in areas such as crime, friendliness of the neighbors, and the quality of their local government, and on characteristics of both the Census tract and the school district in which he or she live. All models adjust standard errors for clustering within schools and neighborhoods. Because it has been proposed that neighborhood satisfaction is an important determinant of subsequent residential decisions (Speare 1974; Bach and Smith 1977) it is important to gain some insight into which factors play a role in neighborhood satisfaction before investigating subsequent decisions. We also look for variation in the impact of perceived school quality by race and parents' education by considering interactions between them.

We use two sets of nested logistic regression models to assess the role of perceived school quality on the desire to move and on the likelihood of movement in the next two years. In the first model, we include demographic factors and perceptions of school quality, while subsequent models neighborhood and school district characteristics, satisfaction with neighborhoods, and interactions between perceived school quality, and respondent's race and education level. We repeat this analysis for the dependent variable, the likelihood of movement in the next two years.

Our final analysis again uses logistic regression to predict the likelihood that a respondent who had moved within the last 10 years said that "quality of schools" was an important factor determining his or her location. We use another logistic regression to predict the likelihood that the respondent considered quality schools to be the most important factor in determining where he or she lives. In each of these models, we consider differences in the demographic characteristics of the respondents who reported that the quality of the local schools was either an important or the most important determinant of their residential location decisions.

Variables and their Measures

We consider five separate dependent variables in this paper. The first of these dependent variables is satisfaction with the neighborhood, derived from a question that asks respondents to rate their satisfaction on a scale of 1 for "very unsatisfied" to 7 "very satisfied." The second dependent variable is motivation to move. The answer to the question, "Would you move if you could?" is coded "yes" or "no." Third is the intention to move from the survey question "How likely is it that you will move in the next two years?" A Likert scale is used to categorize the responses from (1) "very unlikely" to (5) "very likely." This question is recoded into the dichotomous categories (1) "somewhat or very likely," and (0) "not likely." Finally, we explore two questions asked of respondents who had moved within the previous 10 years. The first question asks the importance of "school quality" in determining where the respondent moved. The "very important" and "somewhat important" answer categories are given a value of one and the rest of the answers are given a zero. The final dependent variable is derived from a yes or no question asking if school quality was the most important factor in determining the location of a move.

Though most independent variables are from the PAS survey, we include some measures from Census data and information from the Pennsylvania and New Jersey Departments of Education. Means and standard deviations for all variables are listed in Table 1. Our main independent variable gauges perceptions of school quality. The PAS survey asked respondents about the quality of their local public schools on a scale of (1) "very good" to (5) "very bad." We recode these categories such that "bad" and "very bad" have a value of one and all other responses are zero.

From the PAS survey, we include several individual demographic characteristics. Race is dichotomized into white and non-white. About 75% of this sample was white. We incorporate another dichotomous variable for whether the respondent has their bachelor's degree or higher or not to measure education level. We include measures for the presence of children under the age of 18 and household income over $80,000. Because life-course has often been found to be an important factor in determining residential mobility, we include un-recoded age.

We use three "objective" measures to represent the neighborhood and school district context. For neighborhood context, we consider the percent of people in the respondent's census tract who live below the poverty line, and the median home value of the census tract. For school district context, we explore the influence of the percentage of students failing to reach the minimum state standard on the state mandated standardized reading tests on our dependent variables.

In addition to these "objective" measures, we also take into account several measures of respondents' perceptions of conditions in their neighborhoods. The first question asks about satisfaction with the respondent's personal safety. Respondents are asked to rate their satisfaction on a scale of (1) "very dissatisfied with safety" to (7) "very satisfied with personal safety." The second measure is derived from a question that asks respondents if they agree or disagree with the statement that "there is a strong sense of community in my neighborhood." Responses from this are dichotomized into (1) "yes" and (0) "no" categories. Satisfaction with the performance of local government officials (1="very unsatisfied"; 7="very satisfied") is used as a control variable in this analysis, as is a yes or no question about the fairness of local income taxes. We account for the respondent's satisfaction with her or his home, which, like the other satisfaction variables is categorized on scale from (1) to (7), with higher numbers indicating

greater degrees of satisfaction. We also include two yes or no questions to represent respondents' feelings about their neighborhood living conditions: whether or not yards are poorly kept, and whether there are noisy neighbors in the neighborhood or not.

Results

Because perceptions of school quality may be related to a number of demographic characteristics and other measures of neighborhood satisfaction and context, the following tables present results from multivariate regression models of four aspects of the residential choice process.

Satisfaction with Neighborhood

Table 2 shows the results of nested ordinal logit regression models of the neighborhood satisfaction ratings on the independent and control variables. Standard errors in these models are adjusted for clustering within school districts. The first model includes perceptions of school quality in addition to the respondent's individual demographic characteristics. Here we see that the perception of school quality, that is, whether schools are considered bad or very bad, is negatively and significantly related to satisfaction with the neighborhood. Those who report low school quality are 60% less likely to report a higher level of neighborhood satisfaction. It is notable that the effect of perception of school quality is also net of the presence of school age children in the house. This suggests that the quality of schools is an important determinant of people's satisfaction with their neighborhood even when they do not have children that they might be sending to those schools. In addition, whites are significantly more satisfied with their neighborhood, as are people who own their own homes. Older respondents also report a higher level of neighborhood satisfaction. People with children under the age of 18 and people who

have a bachelor's degree or better are less satisfied with their neighborhoods, though not significantly so.

In the next model, we add measures of neighborhood and school district context. The median value of homes in the Census tract is positively and significantly associated with neighborhood satisfaction, while the percentage who fall below the poverty line in a neighborhood negatively and significantly influences neighborhood satisfaction. In addition, those who reside in school districts with a larger percentage of students failing the standardized reading examinations report significantly lower levels of satisfaction. After accounting for these objective measures of neighborhood and school context, perceptions of low school quality remain negatively and significantly associated with neighborhood satisfaction.

When perceptions of other neighborhood qualities are added to the model, in Model 3, the coefficient for low school quality decreases, but remains significant. However, the coefficient for the percentage in the school district failing reading standardized tests becomes insignificant.[1] Sense of community and perceptions of safety are both strongly associated with neighborhood satisfaction, while having noisy neighbors is negatively associated with residential satisfaction. Satisfaction with government officials is also positively and significantly associated with neighborhood satisfaction. In the final model, Model 4, we add two interaction terms to determine if perceptions of school quality have a stronger or weaker on influence neighborhood satisfaction for whites versus non-whites, and those with bachelor's degrees or more versus those without. Neither interaction term achieves significance at the 0.05 level of confidence.[2]

[1] We experimented with adding a measure of satisfaction with the resident's home in this model. Because it is difficult to determine the causal direction between home and neighborhood satisfaction, and because we believe that these two concepts are highly related (correlated over 0.5), we ultimately left satisfaction with one's home out of this model. If it is included, the coefficient for perceived school quality loses significance. We include satisfaction with home, as well as neighborhood satisfaction, in later models of the motivation and intention to move.

[2] We also included an interaction between whether or not the household includes children under the age of 18 and perceptions of school quality, but it also was not found to be significant.

These results are consistent with previous studies of neighborhood satisfaction, suggesting that satisfaction is a complex process reliant on many factors. People who feel safe, are satisfied with their local elected officials, and feel comfortable around their neighbors tend to be more satisfied with the quality of life in their neighborhoods. And, schools also play a role in this satisfaction. Schools, or more importantly, the perception of the quality of schools, are also very important. If people think their local schools are of poor quality, their overall neighborhood satisfaction declines significantly.

Motivation to Move

Table 3 presents results concerning the motivation to move. Models 1 and 2 show that controlling first for demographic characteristics, and next for neighborhood and school district context factors, perceived school quality significantly influences motivation to move. In Model 1, those who believe schools are of low quality are almost 90% more likely to desire to move, and in Model 2, they are almost 50% more likely to desire to move. In Model 1, whites and those who own their own homes are significantly less likely to desire to move, as are older people. In Model 2, the higher the median home value in the Census tract, the less likely a resident is to desire to move. The greater percentage of students failing standardized reading tests in the district is positively and significantly associated with the motivation to move.

In the next model, Model 3, subjective measures of satisfaction are added to the model. Both neighborhood dissatisfaction and dissatisfaction with the resident's home are strong predictors of the respondent's desire to move. In addition, a sense of community is negatively and significantly associated with the desire to move, while poorly kept yards are positively associated with the desire to move. The median home value of the Census tract remains significantly and negatively associated with the desire to move, as does the respondent's age.

However, respondents' perceptions of school quality and the percentage of students failing standardized reading tests both lose significance in this model. It appears that, above and beyond the respondent's satisfaction with his or her neighborhood and home, school quality does not influence a respondent's motivation to move. In the final model, Model 4, interactions between race and perceptions of school quality, and education and perceptions of school quality are not found to be significant.

Intention to Move

Results from logistic regression models of the intention to move are similar to those modeling the motivation to move. Again, race, age, and owning one's own home are significantly related to the intention to move. Perception of school quality is also significantly related to the intention to move, but the effect appears more muted in the model of intention to move compared to desire to move. In Model 2, when neighborhood and school district context measures are added, the percentage failing standardized reading tests is positively associated with the intention to move. Perceptions of school quality become insignificant in this model, suggesting that living in a school district with high failing rates on standardized test scores is important in a person's intention to move, above and beyond his or her perceptions of schools.

In Model 3, both perceived and observed school quality are not significant when neighborhood and home satisfaction are added to the model. Finally, as in the previous models, interactions between race and education, and perceived school quality are not significant. Again, in these models, it appears that once satisfaction with home and neighborhood are accounted for, perceived school quality has little remaining influence on people's desires or intentions to move from neighborhoods. The results from all three sets of models, taken together, suggest school quality is indirectly related to the desire and motivation to move through the measure of

neighborhood satisfaction. People who perceive low school quality are less satisfied with neighborhoods and that, bundled with other neighborhood satisfaction measures, influence respondents' desires and intentions to move. The lack of a remaining significant, direct effect of perceived school quality on the desire and intention to move suggests that people are unlikely to leave neighborhoods and homes that they are satisfied with because they perceive schools to be bad.

Schools as "Pulls" to Neighborhoods

While thus far we have discussed the extent to which perceived school quality pushes people out of neighborhoods, here we also present some information on who gets "pulled" to neighborhoods because of school quality. We present two simple logistic regression models. In the first the dependent variable represents those who report that schools were an important consideration in their residential decision-making. Here we see that the only significant demographic factor distinguishing those who report that schools were important in their residential decision-making is whether or not the respondent reported children under 18 in the household. These respondents were almost 8 times more likely to report schools as an important pull factor.

The respondents who reported that schools were the most important factor in their decision-making differed in one other respect from their peers who did not: respondents who had incomes of over $80,000 were 60% more likely to report that schools were the most important factor in their decision-making. Wealthier respondents may have had the luxury of choosing from all available neighborhoods, and those with high quality schools are among the most desirable. Those respondents with lower incomes may have had to sacrifice desires for school

quality because they could not afford to live in areas where they perceive the highest quality schools.

Conclusion

The above results indicate that perceived school quality and the percentage of students failing standardized reading tests are important components of how satisfied respondents are with their neighborhoods. Neighborhood satisfaction, then, influences the likelihood that a resident desires or intends to move from his or her neighborhood. So, schools do appear to have an indirect influence on moving behaviors through neighborhood satisfaction, though not a direct influence.

Though this research allows us to better understand the ways in which schools may push residents out of and pull people into neighborhoods, it represents only a very modest beginning. There are numerous ways that future research could enhance our understanding of the role of schools in residential decision-making. For example, in this research we use only one "objective" indicator of school quality, the percentage failing standardized reading tests in schools. Though policy-makers may assume that neighborhood residents gauge quality by indicators such as test scores, these results suggest that other less tangible factors may be shaping residents' perceptions of quality. Unfortunately, because standardized test score failing rates and the percentage that is African American in a district are so highly correlated (at about 0.9, a depressing results in itself), this research is unable to include both measures in multivariate models to assess the extent to which each influences neighborhood satisfaction. Other research with more variability between these characteristics might be able to gauge the extent to which residents use the percentage of a school that is minority as a "proxy" measure for quality.

Future work with this data should provide more illuminating results on the extent to which residents react to the racial composition of a school, rather than objective measures of quality like failing rates on standardized tests, in their moving behaviors. In addition to matching respondents with their school districts, future work will match residents with their neighborhood schools. This will ideally introduce more variation, and hopefully, allow us to separate the percentage of a school body that is African American from indicators of quality such as the percentage meeting minimum reading standards, the percentage of disciplinary actions, and other potential quality measures.

This work is only a beginning. While the results indicate that perceived school quality does shape neighborhood satisfaction, much more work can be done concerning how residents judge school quality. Which factors are most important in parents' judgments? How do perceptions of quality relate to race and class? Exploration of the factors that influence perceptions of school quality and how these may vary across demographic characteristics may also lead to insight into how neighborhoods become segregated by race and class. Since these results suggest that perceived school quality plays an indirect role in pushing people out of neighborhoods and pulling people into neighborhoods, extended investigation into the influences of race, class, and neighborhood context on perceived school quality is warranted.

References

Alonso, W. 1964 *Location and Land Use*. Cambridge, MA: Harvard University Press.

Bach, R.L. and J. Smith. 1977. "Community Satisfaction, Expectations of Moving, and Migration." *Demography* 14:147-67.

Cho, Cheol-Joo. 2001. "Amenities and Urban Residential Structure: An Amenity-Embedded Model of Residential Choice." *Papers in Regional Science* (80) 4: 483-99.

Crowder, Kyle D. 2001. "Racial Stratification in the Actuation of Mobility Expectations: Microlevel Impacts of Racially Restrictive Housing Markets." *Social Forces* 79:4.

Harris, David R. 1999. "Racial and SES Determinants of Neighborhood Desirability." *American Sociological Review* 64(3):461-79.

Kasarda, John D. 1988. "A Tale of Dual Cities." *New Perspectives Quarterly* (5) 3:19-22.

Krysan, Maria. 2002. "Whites Who Say They'd Flee: Who Are They, and Why Would They Leave?" *Demography* 39(4): 675-96.

Landale, Nancy S. and Avery Guest. 1985. "Constraints, Satisfaction, and Residential Mobility: Speare's Model Reconsidered." *Demography* 22:199-222.

Lee, Barrett, R.S. Oropesa and James W. Kanan. 1994. "Neighborhood Context and Residential Mobility." *Demography* 31 (2): 249-270.

Logan, John R. and Mark Schneider. 1981. "Suburban Municipal Expenditures: The Effect of Business Activity, Functional Responsibility, and Regional Context." *Policy Studies Journal* 9 (7): 1039-1051.

Margulis, Harry L.. 2001. "Household Mobility, Housing Traits, Public Goods, and School Quality in Cleveland's Metropolitan Statistical Area." *Urban Affairs Review*, 36 (5): 646-78.

McHugh, K.E., P. Gober and N. Reid. 1990. "Determinants of Short- and Long-term Mobility Expectations for Home Owners and Renters." *Demography* 27: 81-95.

Phe, Hoang Huu and Patrick Wakely. 2000. "Status, Quality, and the Other Trade-off: Toward a New Theory of Urban Residential Location." *Urban Studies* (37)1:7-36.

Rossi, Peter H. 1955. *Why Families Move.* New York: Free Press.

Saporito, Salvatore. 2003. "Private Choices, Public Consequences: Magnet School Choice and Segregation by Race and Poverty." *Social Problems* (50) 2:181-203.

South, Scott J. and Kyle D. Crowder. 1998. "Leaving the 'Hood: Residential Mobility between Black, White, and Integrated Neighborhoods." *American Sociological Review* (63) 1: 17-26.

South, Scott J. and Glenn D. Deane. 1993. "Race and Residential Mobility: Individual Determinants and Structural Constraints." *Social Forces* 72 (1):147-168.

Speare, Alden. 1974. "Residential Satisfaction as an Intervening Variable in Residential Mobility." *Demography* 11:173-188.

Tiebout, C. 1956. "A Pure Theory of Local Expenditure." *Journal of Political Economy* 64: 416-24.

Table 1: Means and Standard Deviations of all variables

	Mean	Std. Deviation	N
Would move if they could (1=yes, 0=no)	0.39	0.49	1,978
Would probably or definitely move within 2 years (1=yes, 0=no)	0.31	0.46	2,011
Satisfaction with neighborhood (1=completely dissatisfied, 7=completely satisfied)	5.90	1.32	2,010
Schools are an important factor in deciding current residential location (1=yes, 0=no)	0.67	0.47	1,126
Schools the most important factor in deciding current residential location (1=yes, 0=no)	0.20	0.40	1,133
White (1=white, 0=nonwhite)	0.75	0.44	2,011
Education level (1= bachelor's degree or more, 0=less than bachelor's)	0.37	0.48	2,011
Children under 18 (1= children under 18 are present, 0=children under 18 not present)	0.41	0.49	2,011
Income (1=HH income $80,000 or above, 0=HH income below $80,000)	0.24	0.42	2,011
Own home (1=own, 0=rent or other)	0.76	0.43	2,011
Perception of school quality (1=bad or very bad, 0=neutral, good, very good)	0.23	0.42	2,011
Median home value in Census tract (in thousands)	131.37	81.17	1,855
Percent poverty in Census tract	10.66	11.51	1,855
Percent of district students failing minimum reading standardized test	24.49	17.13	1,823
Rating of job done by local government (1=completely dissatisfied, 7=completely satisfied)	4.65	1.54	1,957
Satisfaction with home (1=completely dissatisfied, 7=completely satisfied)	5.99	3.45	2,011
Strong sense of community (1=agree, 0=disagree)	0.67	0.47	2,011
Satisfaction with personal safety (1=completely dissatisfied, 7=completely satisfied)	6.17	1.38	2,009
Yards are poorly kept in the neighborhood (1=yes, 0=no)	0.16	0.37	1,996
There are noisy neighbors in the neighborhood (1=yes, 0=no)	0.14	0.35	2,010
Fairness of local taxes (1=local taxes are fair, 0=local taxes unfair)	0.58	0.49	1,851
White * Schools are bad	0.14	0.35	2,011
Education * Schools are bad	0.10	0.30	2,011

*p<.05; **p<.01; ***p<.001

Table 2: Ordinal Logit Regression of Neighborhood Satisfaction (Odds Ratios and standard errors)

	Model 1	Model 2	Model 3	Model 4
White (1=white, 0=nonwhite)	2.008 (0.088)***	1.186 (0.124)	1.094 (0.099)	1.089 (0.134)
Education level (1= bachelor's degree or more, 0=less than bachelor's)	0.902 (0.116)	0.773 (0.110)*	0.754 (0.105)**	0.696 (0.133)**
Children under 18 (1= children under 18 present, 0=children under 18 not present)	0.967 (0.113)	0.945 (0.108)	0.899 (0.124)	0.904 (0.123)
Age	1.017 (0.003)***	1.017 (0.003)***	1.016 (0.003)***	1.016 (0.003)***
Income (1=HH income $80,000 or above, 0=HH income below $80,000)	1.313 (0.148)	1.158 (0.142)	0.968 (0.139)	0.975 (.139)
Own home (1=own, 0=rent or other)	1.377 (0.118)**	1.294 (0.132)	1.376 (0.132)*	1.398 (.134)*
Perception of school quality (1=bad or very bad, 0=neutral, good, very good)	0.401 (0.123)***	0.549 (0.122)***	0.766 (0.123)*	0.693 (.137)**
Median home value in Census tract		1.002 (0.001)***	1.002 (0.001)***	1.002 (.001)***
Percent poverty in Census tract		0.980 (0.005)***	0.992 (0.004)	0.992 (.004)
Percent of district students failing minimum reading standardized test		0.999 (0.004)**	0.996 (0.003)	0.996 (.003)
Rating of local government officials (1=completely dissatisfied, 7=completely satisfied)			1.298 (0.065)***	1.301 (.066)***
Strong sense of community (1=agree, 0=disagree)			2.098 (0.195)***	2.096 (.195)***
Satisfaction with personal safety (1=completely dissatisfied, 7=completely satisfied)			1.795 (0.050)***	1.791 (.049)***
Fairness of local taxes (1=local taxes are fair, 0=local taxes unfair)			0.971 (0.132)	0.980 (.130)
Yards are poorly kept in the neighborhood (1=yes, 0=no)			0.726 (0.172)	0.729 (.172)
There are noisy neighbors in the neighborhood (1=yes, 0=no)			0.573 (0.129)***	0.576 (.130)***
White * Schools are bad				0.986 (.181)
Education * Schools are bad				1.413 (.267)
Cut 1	0.070 (0.338)	0.035 (0.296)	3.838 (0.393)	3.815 (0.421)
Cut 2	0.095 (0.334)	0.047 (0.292)	5.479 (0.398)	5.458 (0.425)
Cut 3	0.205 (0.354)	0.103 (0.312)	14.381 (0.421)	14.368 (0.444)
Cut 4	0.446 (0.307)	0.227 (0.285)	39.017 (0.431)	39.095 (0.459)
Cut 5	1.768 (0.281)	0.935 (0.266)	229.982 (0.446)	230.904 (0.473)
Cut 6	6.067 (0.254)	3.333 (0.263)	1035.873 (0.475)	1038.985 (0.508)
Number of Observations	1728	1728	1728	1728
Wald Chi-Square	309.88***	534.98***	1031.92***	1123.49***

*p<.05; **p<.01; ***p<.001

Table 3: Logistic Regression of Motivation (Odds Ratios and standard errors)

	Model 1	Model 2	Model 3	Model 4
White (1=white, 0=nonwhite)	0.546 (0.048)***	0.710 (0.106)*	0.747 (0.105)*	0.782 (0.123)
Education level (1= bachelor's degree or more, 0=less than bachelor's)	0.816 (0.099)	0.931 (0.121)	0.851 (0.117)	0.905 (0.183)
Children under 18 (1= children under 18 present, 0=children under 18 not present)	0.952 (0.110)	0.949 (0.114)	0.911 (0.122)	0.907 (0.123)
Age	0.979 (0.004)***	0.979 (0.004)***	0.986 (0.004)**	0.985 (0.004)***
Income (1=HH income $80,000 or above, 0=HH income below $80,000)	0.748 (0.114)	0.834 (0.126)	0.956 (0.161)	0.952 (0.160)
Own home (1=own, 0=rent or other)	0.555 (0.149)*	0.541 (0.152)*	0.616 (0.174)	0.609 (0.166)
Perception of school quality (1=bad or very bad, 0=neutral, good, very good)	1.865 (0.224)***	1.470 (0.200)**	1.089 (0.161)	1.285 (0.170)
Median home value in Census tract		0.997 (0.001)***	0.997 (0.001)*	0.997 (0.001)*
Percent poverty in Census tract		0.992 (0.009)	0.980 (0.011)	0.979 (0.011)
Percent of district students failing minimum reading standardized test		1.011 (0.006)*	1.010 (0.006)	1.011 (0.006)
Satisfaction with neighborhood (1=completely dissatisfied, 7=completely satisfied)			0.735 (0.056)***	0.737 (0.057)***
Rating of local government officials (1=completely dissatisfied, 7=completely satisfied)			0.978 (0.063)	0.977 (0.065)
Satisfaction with home (1=completely dissatisfied, 7=completely satisfied)			0.654 (0.036)***	0.653 (0.038)***
Strong sense of community (1=agree, 0=disagree)			0.680 (0.105)*	0.681 (0.105)*
Satisfaction with personal safety (1=completely dissatisfied, 7=completely satisfied)			0.931 (0.062)	0.933 (0.064)
Fairness of local taxes (1=local taxes are fair, 0=local taxes unfair)			1.068 (0.155)	1.062 (0.156)
Yards are poorly kept in the neighborhood (1=yes, 0=no)			1.493 (0.238)*	1.486 (0.236)*
There are noisy neighbors in the neighborhood (1=yes, 0=no)			1.220 (0.186)	1.217 (0.186)
White * Schools are bad				0.875 (0.214)
Education * Schools are bad				0.751 (0.279)
Number of Observations	1728	1728	1728	1728
Wald Chi-Square	165.43***	229.23***	471.38***	516.98***

*p<.05; **p<.01; ***p<.001

Table 4: Logistic Regression of Intention (Odds Ratios and standard errors)

	Model 1	Model 2	Model 3	Model 4
White (1=white, 0=nonwhite)	0.510 (0.049)***	0.611 (0.077)***	0.649 (0.087)**	0.620 (0.106)**
Education level (1= bachelor's degree or more, 0=less than bachelor's)	1.243 (0.226)	1.252 (0.251)	1.240 (0.250)	1.396 (0.265)
Children under 18 (1= children under 18 present, 0=children under 18 not present)	0.806 (0.098)	0.830 (0.101)	0.821 (0.099)*	0.811 (0.099)
Age	0.969 (0.005)***	0.969 (0.005)***	0.974 (0.005)***	0.974 (0.006)***
Income (1=HH income $80,000 or above, 0=HH income below $80,000)	0.939 (0.126)	0.929 (0.125)	1.020 (0.144)	1.009 (0.138)
Own home (1=own, 0=rent or other)	0.287 (0.040)***	0.302 (0.048)***	0.318 (0.045)***	0.312 (0.043)***
Perception of school quality (1=bad or very bad, 0=neutral, good, very good)	1.374 (0.158)**	1.188 (0.153)	1.011 (0.155)	1.059 (0.127)
Median home value in Census tract		1.001 (0.001)	1.002 (0.001)	1.002 (0.001)
Percent poverty in Census tract		1.008 (0.007)	1.000 (0.005)	1.000 (0.005)
Percent of district students failing minimum reading standardized test		1.010 (0.005)*	1.012 (0.006)	1.012 (0.006)*
Satisfaction with neighborhood (1=completely dissatisfied, 7=completely satisfied)			0.833 (0.040)***	0.838 (0.042)***
Rating of local government officials (1=completely dissatisfied, 7=completely satisfied)			1.057 (0.045)	1.054 (0.047)
Satisfaction with home (1=completely dissatisfied, 7=completely satisfied)			0.831 (0.039)***	0.828 (0.039)***
Strong sense of community (1=agree, 0=disagree)			0.742 (0.098)*	0.744 (0.098)*
Satisfaction with personal safety (1=completely dissatisfied, 7=completely satisfied)			1.994 (0.052)	0.994 (0.051)
Fairness of local taxes (1=local taxes are fair, 0=local taxes unfair)			1.228 (0.159)	1.213 (0.156)
Yards are poorly kept in the neighborhood (1=yes, 0=no)			1.366 (0.231)	1.371 (0.238)
There are noisy neighbors in the neighborhood (1=yes, 0=no)			1.224 (0.209)	1.122 (0.211)
White * Schools are bad				1.176 (0.280)
Education * Schools are bad				0.602 (0.315)
Number of Observations	1728	1728	1728	1728
Wald Chi-Square	309.09***	377.78***	497.74***	540.96***

*p<.05; **p<.01; ***p<.001

Table 5: Logistic Regression of schools were important and most important in choosing location

	Model 1- Quality important	Model 2 - Quality Most Important
White (1=white, 0=nonwhite)	1.038 (0.188)	1.025 (0.169)
Age	0.994 (0.005)	0.997 (0.006)
Children under 18 (1= children under 18 are present, 0=children under 18 not present)	7.854 (1.442) ***	9.085 (2.324) ***
Income (1=HH income $80,000 or above, 0=HH income below $80,000)	1.361 (0.311)	1.621 (0.367)*
Education level (1= bachelor's degree or more, 0=less than a bachelor's)	0.719 (0.136)	0.904 (0.198)
Number of Observations	1091	1102
Wald Chi-Square	143.70***	80.28***

*p<.05; **p<.01; ***p<.001