

Published in final edited form as:

Sociol Forum (Randolph N J). 2017 September; 32(3): 635-658. doi:10.1111/socf.12352.

Racial/Ethnic Patterns of Kindergarten School Enrollment in the United States

Elizabeth Lawrence¹ and Stefanie Mollborn²

¹Carolina Population Center, University of North Carolina – Chapel Hill, 206 W. Franklin Street, Rm 271, Chapel Hill, NC 27516. lizlaw@unc.edu

²Department of Sociology, Institute of Behavioral Science, University of Colorado Boulder, 483 UCB, Boulder CO 8030. mollborn@unc.edu

Abstract

Enrollment into unequal schools at the start of formal education is an important mechanism for the reproduction of racial/ethnic educational inequalities. We examine whether there are racial/ethnic differences in school enrollment options at kindergarten, the start of schooling. We use nationally representative data from the Early Childhood Longitudinal Study-Birth Cohort (ECLS-B) to model whether parents seek information about their child's school before enrolling, whether parents move to a location so that a child can attend a certain school, or whether parents enroll their child in a school other than the assigned public school. Results indicate that enrollment patterns differ greatly across race/ethnicity. Whereas Black families are the most likely to seek information on a school's performance, White families are the most likely to use the elite option of choosing their residential location to access a particular school. These differences persist when controlling for socioeconomic status and sociogeographic location. Kindergarten enrollment patterns preserve the advantages of White families, perpetuating racial/ethnic disparities through multiple institutions and contributing to intergenerational processes of social stratification. Research should continue to examine specific educational consequences of housing inequities and residential segregation.

Keywords

race/ethnicity; school choice; early childhood; socioeconomic status; United States

Introduction

Race/ethnicity is a major factor in U.S. social stratification and educational inequality. Despite the Supreme Court's rejection of "separate but equal" in the *Brown v. Board of Education of Topeka* decision, schools remain racially segregated, with Black and Hispanic students more likely to attend schools with higher rates of poverty and lower academic performance (Logan et al. 2012; Reardon et al. 2012). Racial/ethnic school enrollment patterns are significant because they indicate broader stratification and serve as key educational and social contexts for children.

Yet, we only have a partial understanding of how children end up in different schools. National patterns of school enrollment across race and ethnicity reflect the role of racial stratification for educational inequality. This study seeks to provide a more comprehensive picture of school enrollment decisions at kindergarten, the start of schooling. Persistent residential segregation and achievement gaps suggest that race/ethnicity is especially important for understanding school enrollment differences. To our knowledge, no study has examined racial/ethnic patterns of school enrollment in a nationally representative sample, nor has any study looked at school enrollment among kindergartners. The results will provide an important context for policies and research on school enrollment and contribute to our understanding of sources of racial/ethnic achievement disparities. Further, this study sheds light on racial/ethnic stratification processes broadly. Multiple institutions shape what schools parents enroll their children in, including schools, school districts, national educational trends, housing policy, and financial institutions. These institutions have a long and deep history of racial differences and prove influential today on various outcomes, which may include school enrollment. We therefore assess: (1) if there are racial/ethnic patterns in school enrollment, and (2) the extent to which these differences are the result of socioeconomic and sociogeographic patterns.

Background

School choice ¹—the process through which parents select the school in which their child enrolls—has been at the forefront of U.S. educational reforms in the last decade. Yet parents have been choosing schools for a long time, through living in a particular neighborhood or sending their children to private instead of public schools. School enrollment options include schools that are privately run but receive public funds (charter schools) and schools that have specialized curricula (magnet schools), as well as enrollment in a non-assigned public school within a district (intra-district open enrollment) or across districts (inter-district open enrollment). School choice has gained in prominence across the United States as state and local policies increasingly accommodate choice, institutions transition to more choice, and legislation allows or expands vouchers or tax credits allowing parents to use public funds towards private school tuition (Santos and Motoko 2013). School choice supporters tout choice as either improving educational quality through reducing bureaucracy and increasing competition, or advancing educational equality through providing better opportunities to disadvantaged students (Ben-Porath 2012).

As school choice gains prominence with policymakers, research on the topic has also grown. The research conducted thus far can be categorized broadly into two types: studies examining the consequences of specific school choice programs, and qualitative studies focusing on how parents engage with school choice. Results of this research have produced mixed results, with different locations, policies, and implementations associated with different results (Fuller et al. 1996; Lubienski et al. 2009; Phillips et al. 2015). We draw no conclusions as to the effectiveness of different school choice policies, but rather note that

¹School choice literature traditionally defines choice as open enrollment, charter schools, or voucher programs. We critically analyze this definition of choice, and use the terms "selection" or "enrollment strategies" to refer to the decision of what school a child goes to. We use "school choice" to refer to the restricted definition that is favored by some educational researchers.

prior research has mostly been limited to individual geographic locations, strengthening the internal validity of these studies but neglecting broader patterns.

Thus, these studies focusing on the specifics of school choice processes and consequences do not have a broader context. To what extent do U.S. parents exercise agency in school enrollment decisions, and does this differ across race/ethnicity? Attendees of private schools are disproportionately non-Hispanic White² or Asian (Keigher 2009), but other types of schools do not exhibit such clear patterns. For example, depending on the study, charter schools may enroll disproportionate levels of White (Renzulli and Evans 2005) or minority students (Rapp and Eckes 2007). Additionally, there is no other information on racial/ethnic patterns of other types of non-automatic school enrollment, such as intra-or inter-district open enrollment or choosing a school through moving to a certain location. We have yet to identify the school enrollment options employed by U.S. families given the many constraints, even though school segregation reflects historical racial legacies (Reece and O'Connell 2016). Further, understanding the racial/ethnic patterns can provide insight into the extent to which racial/ethnic disparities persist across educational reforms such as school choice options.

Why might there be racial/ethnic differences?

Which school a parent enrolls his or her child in is shaped by many factors. Nearly all parents want to see their children succeed. Most parents, across race and class, report academic quality at the top of the list of important characteristics for their children's school (Burgess et al. 2014; Schneider et al. 2000), but families may interpret how they can help their children in different ways. Families have different attitudes, norms, and resources, and thus have different constraints and opportunities. Qualitative research finds that school choice may be motivated by market-based ideologies, but attitudes and behaviors around school selection cannot be explained by a rational choice approach (Bulman 2004; Goldring and Phillips 2008). Ball and Vincent (1998) find that parents often prioritize "hot" (informal) knowledge from their social network over "cold" (formal) information published about the school's characteristics or performance. Other research reports that parent perceptions of quality usually reflect available information on student achievement (Chingos et al. 2012) and that receiving information increases choice of higher performing schools (Hastings and Weinstein 2008).

The systemic racism that encompasses individual preferences and the institutional racism inherent in the educational and housing systems (Feagin 2006) likely shape the school enrollment of families of different racial/ethnic backgrounds. Research shows that race/ethnicity is an important consideration for individual decision-making, as parents' perceptions of school status reflect the status of children attending the school, with Whites generally associating schools with high proportions of non-White children as undesirable (Holme 2002; Saporito and Lareau 1999). A recent study highlights the preference of White parents for a school with few Black students (Billingham and Hunt 2016). Cooper (2007) found that access to power, shaped by gender and race, contextualized women's view of the

²We capitalize "Black" and "White" to distinguish their use as racial groups rather than color.

educational marketplace, leading low-income African American mothers to a defensive position that precipitated active choosing but was also constrained in translating this selection to enrollment.

Further, school enrollment may vary due to housing discrimination or neighborhood racial composition preferences (Krysan et al. 2014). Despite the passing of the Fair Housing Act in 1968, racial segregation has endured, and housing discrimination against minorities remains pervasive (Massey 2015; Pager and Shepherd 2008). Measures of segregation depend on conceptual definitions and geographic scale, but research indicates that segregation has not decreased in the last decades (Reardon and Owens 2014). And Black families in particular face many obstacles to moving (Sharkey 2013). Whereas minority status may impede families from using residential location as a way to choose their child's school, this option may be not only more attainable for White families, but may be also be more appealing since moving to a school with more White students may also mean moving to a neighborhood with more White residents, which may be seen as preferable (Emerson et al. 2001). Private school enrollment does not necessarily have the same obstacles, so higher-SES minority families (such as some groups of Asians/Pacific Islanders) may use this strategy.

Additionally, the historically entrenched differences in socioeconomic status and geographic locations may be important to understanding racial/ethnic differences in school enrollment. Socioeconomic resources shape the ability of minority families to afford housing in certain communities, buy a home, or change rentals. In particular, the wealth gap between racial groups is wider than income gaps (Johnson 2006; McKernan et al. 2013). The lower levels of wealth among Blacks, Hispanics, and Asians (Campbell and Kaufman 2006) may prevent the use of residential location as school selection for these groups because housing prices are closely linked to school quality.

Because of the relationship between schools and neighborhoods both for families and for the larger educational institution, it is also important to consider geographic stratification (Goyette 2014). Local property taxes fund schools, linking neighborhood differences to school disparities. Similarly, residential segregation is a key factor shaping school segregation, as school enrollment often reflects the residential population. A recent study showing that differences in racial distribution across districts is most consequential to school-level racial segregation further highlights the importance of residential segregation on school enrollment patterns (Fiel 2013).

Residential location constrains families spatially and culturally (Lubienski et al. 2009). Where one lives determines a child's assigned school and also limits the availability of other schools, especially through distance (Theobald 2005). Prior research indicates that proximity is an important consideration for parents when enrolling children in a school (Hastings, Kane, and Staiger 2005). While some families may be able to use resources to overcome such obstacles, including time and money for transportation, others may be limited. Rural families in particular may be particularly constrained, with fewer nearby options for alternative schools. Heterogeneity in the racial/ethnic compositions across locations in the United States may contribute to differences in school selection opportunities and constraints.

For example, the South has the greatest proportion of Black residents compared to other regions (Rastogi 2011) and over half of Hispanic residents reside in California, Florida, or Texas (Ennis et al. 2011). Residential location and educational outcomes have a complicated and interconnected relationship, but this relationship is also key for understanding how enrollment patterns emerge. Research looking at school choice often limits studies to one location in order to control for the many causes and effects of residential location. Such an approach has the advantages of strengthening causal conclusions, but it also has the disadvantage of staying silent about the crucial role of residential location.

There are also other factors that may lead parents to seek a particular school experience for their child. Religious affiliation of a school is an important consideration, particularly for private school enrollment. Although many factors appear influential on enrollment in private religious schools, religious affiliation and religiosity are associated with an increased likelihood of choosing private religious schools for their children (Cohen-Zada and Sander 2008; Yang and Kayaardi 2004).

School Enrollment Strategies

School enrollment strategies require different resources and impart different advantages, and we therefore propose that these strategies be conceptualized as either elite or non-elite. Elite strategies are resource-intensive but likely produce greater educational opportunities, while non-elite strategies require fewer resources and yield fewer benefits. Non-elite strategies involve staying in one's residential location and attending either one's assigned or chosen public school. Attending one's assigned school is the default strategy, requiring no additional resources on the part of parents or children. The other non-elite strategy is attending a public school other than one's assigned school, which includes charter, magnet, or open enrollment schools that may or may not be within one's assigned district. These options do not require many additional financial resources, but do demand parents' time, energy, knowledge of schools, ability to navigate the school enrollment systems, and possibly transportation of the child to and from school.

The elite strategies are more resource-intensive than the first two and likely improve the child's school environment: attending a private school, and choosing a residential location so that a child can attend a certain school. Private schools cost money and also require additional resources, since they may not offer the same services as public schools. For example, private schools may not offer free lunch or bus services (Cooper et al. 2012). Moving to a particular location for the school also requires additional resources, such as financial resources, moving costs, and knowledge and skills in navigating real estate markets and school locations. Moving to a particular location has further benefits for a family, since home prices and rental markets are tied to school characteristics (Black and Machin 2011), making the purchase of a home within the catchment area of a high-quality school a good financial investment. Further, choosing a residential location not only requires the most resources, but it also has the most potential constraints, as housing policies, banking practices, and discrimination may be obstacles to residential selection for families of color.

We first examine differences in achievement levels across these strategies to determine whether the strategies that we expect to be elite are associated with better educational

outcomes. Achievement levels only provide an average level of test scores and are likely a poor proxy for the pedagogical quality of the school. Prior research suggests that attending a higher scoring school may increase student test scores (Hastings and Weinstein 2008), but other research examining seasonal differences in learning achievement demonstrates that average achievement levels are often quite different from the growth in learning during the school year (Downey et al. 2008). We argue that an average achievement level, rather than indicating school quality, represents a social and educational environment such that high achievement levels are desirable from the perspective of parents and policymakers. We then analyze the different enrollment strategies at kindergarten as this study's outcome of interest.

School enrollment spans childhood and adolescence, and findings may be sensitive to the time period examined. Further, educational attainment is a sequence of transitions (Mare 1981). From the perspective of the educational transition model, each successive accomplishment is contingent on completing the prior transition. For example, one must graduate high school to enter college, and enter college to graduate from college. Discussion of the statistical specifications of this model are beyond the scope of this paper, but conceptually, the model highlights the progression of education over the life course. Through examining the transition to kindergarten, this study focuses on the start of the process of formal education, which sets in motion all future decisions on school enrollment.³ As most kindergartens are contained within K-5 or K-8 schools, choosing a child's kindergarten is a decision that lasts for six or nine years unless the child transfers schools. The focus on the transition to school is an important contribution because parents have not yet been influenced by positive or negative experiences at school or external factors that may have prompted a school transfer or a residential move. The transition to school also foregrounds the parents' decision, limiting the agency of the child since he or she is too young to have much input into the selection of the school. Furthermore, kindergarten and elementary school are influential, as research indicates that the social contexts and resources of first graders are strongly linked to educational attainment throughout schooling (Entwisle et al. 2005). Thus, we focus on kindergarten enrollment.

Hypotheses

Our hypotheses are therefore:

- 1. School enrollment strategies are elite or non-elite, and elite strategies result in generally higher achievement levels.
- **2.** White families are more likely to use elite enrollment strategies compared to Black and Hispanic families.
- **3.** Socioeconomic and geographic variation explain some of the racial/ethnic differences in school enrollment, but some racial/ethnic differences persist beyond this variation.

³Kindergarten, like all school grades, is not compulsory at the national level, but nearly all U.S. children attend kindergarten. Forty-five states and the District of Columbia require districts to offer kindergarten, and 15 states and the District of Columbia require children to attend kindergarten. The compulsory age of schooling ranges from 5 to 7 across states (Workman 2013).

Methods

Data and Sample

We use the 1998 Early Childhood Longitudinal Study – Kindergarten (ECLS-K) to evaluate differences in school enrollment strategies and the Early Childhood Longitudinal Study – Birth (ECLS-B) to assess our research questions. These sister studies examine nationally representative cohorts of children over time, with the ECLS-K following children from kindergarten to 8th grade (1998–2007) and the ECLS-B following individuals from infancy to kindergarten entry (2001–2007).

To test achievement levels across school enrollment strategies, we use ECLS-K school-level achievement data and parent reports of school enrollment for the kindergarten year. Compared to the ECLS-B, the data are older, but they have the same school selection outcomes, with the exception of not distinguishing between attendance at a chosen school within versus outside of the assigned district.

For all other analyses, we use the last (kindergarten) wave of data from the ECLS-B. This wave comes from two points of data collection since some children had not entered kindergarten in the fall of 2006 and were surveyed again in the fall of 2007. At each wave of data collection, the ECLS-B administrators conducted analyses of nonresponse bias, finding little evidence for potential bias and concluding that sampling weight adjustment reduces or eliminates such bias (Snow et al., 2009). Our sample includes only those children who completed the kindergarten wave. We have excluded children who are homeschooled because there is a small number of these children (N≈150), and because parents who homeschool have different resources and beliefs about their parental role (Green and Hoover-Dempsey 2007). From the pool of about 6,700⁴ children who have kindergarten data and are not homeschooled, about 750 (11%) have missing data. For descriptive analysis, we include cases with no missing data ($N \approx 5,950$). For multivariate analysis, we multiply impute missing data to retain the full sample of 6,700. All independent and dependent variables inform imputation, and we also include several auxiliary variables (prekindergarten ZIP code characteristics, low or very low birth weight status, biological mother's marital status at birth, scale of assets at kindergarten, child sex, and child age at kindergarten interview) to inform imputation. No variable was missing on more than 4% of cases, and most variables were missing on less than 1% of cases. Comparison of results from imputed and complete case models (available upon request) revealed no substantive differences.

Measures

School-level achievement data for the kindergarten year of the ECLS-K test differences in school enrollment strategies. These data reflect the percentage of elementary school children testing at or above grade level nationally in reading or verbal skills and mathematics or quantitative skills (Tourangeau et al. 2009). Since school administrators provided these percentages, there are missing data, but analysis did not reveal any significant differences across school enrollment outcomes for those with or without these data.

⁴All Ns are rounded to the nearest 50 due to confidentiality requirements of the dataset.

Outcomes—To understand the social determinants of school selection, we examine two measures as outcomes from the kindergarten wave of the ECLS-B. The first outcome reflects whether the parent seeks information on schools, taken from the parent's dichotomous yes/no response to the following question: "In deciding between schools, did you seek information on the performance of schools you were considering, like test scores, dropout rates, and so on?" This question refers specifically to school performance, but parents might interpret this question to refer to formal information produced by institutions and/or informal information that can be gathered from friends, family members, or neighbors.

Second, we examine categories of school enrollment: attending one's assigned school (referent), a chosen school in district, a chosen school out of district, a private school, or choosing a residential location to attend the current school. The categories combine responses from multiple questions asking parents about the child's school. All parents with kindergarteners reported whether the school is private or public, and for those with children in public schools, parents reported whether the school was chosen or assigned and whether the school was within or outside of the assigned district. All parents with kindergartners were also asked: "Did you choose where to live so that {CHILD} could attend {his/her} current school?" This question is worded broadly without specifying a time period, but parents could interpret the question differently. Parents reporting both choosing a residence for the school and attending a chosen school in or out of district are categorized as attending the chosen school rather than chosen residence. Parents with children in private school are assigned to private school regardless of whether they chose their residence for the school. The approximately 100 parents reporting that their assigned school was their chosen school are coded as being in an assigned school, since there is no effective change. We make no theoretical distinction between chosen schools in and out of district, but we retain these categories because the results differed across them and future research can explore these differences. Whereas one mutually exclusive categorical variable may omit some of the nuances in school enrollment, it allows for more direct interpretation of the results.

Independent variables—The main independent variable of interest is the race/ethnicity of the reporting parent or guardian taken from the kindergarten survey. This measure is captured in the mutually exclusive categories of Non-Hispanic White, Non-Hispanic Black, Hispanic, Asian/Pacific Islander, and other race. Other race combines American Indians, Alaska Natives, and multiracial individuals because these categories are too small to include separately.

Socioeconomic status is represented through income, education, and wealth (home ownership and car ownership). Income is a continuous indicator from the kindergarten wave reflecting the income-to-needs ratio of the family, calculated by dividing the household income by the U.S. Census poverty threshold defined by that year and household size. Mother's education is a categorical indicator of the highest degree earned by the kindergarten wave of data collection: less than high school, high school diploma, some college, and college degree or more (referent). We include the same measures for the education of the residential father (biological or social), with an additional category representing families without a residential father. For wealth, we include dichotomous indicators for whether the household owns their residence (either outright or through a

mortgage) and whether the household owns a car, both from wave 4 since these measures are not available at wave 5.

Variables on religion capture a particular "pull" factor: parents seeking out a certain religious experience for their children through school selection (Goldring and Phillips 2008). As questions on religiosity were not consistently asked across the waves, we use two different indicators, religious attendance asked in wave 2 and the importance of religious beliefs in raising a child asked in wave 3. Both are continuous indicators reflecting five-point scales ranging from never attending services to attending services every week for religious attendance and from no religion to very important for importance of religious beliefs. The outcome of "information seeking" is also used as an independent variable in analyses of the enrollment strategy outcome.

Sociogeographic measures include urbanicity, region, ZIP code characteristics, mobility, and distance to school, all from the kindergarten wave. Urbanicity compares families living in suburban areas to those living in cities, towns, and rural areas, and region indicates whether the family lives in the Northeast (referent), Midwest, South, or West. ZIP code measures are a proxy for neighborhood characteristics. The following measures were extracted from the 2000 Census SF3: percentage of residents in poverty, percentage of residents with a college degree, and percentage of White residents. From Census data on unemployment, non-car ownership, non-home ownership, and overcrowding, we create a Townsend index that indicates relative deprivation (Townsend et al. 1988). Lastly, we use continuous measures of the number of residential moves reported across all waves of the ECLS-B and the distance from the family home to the school in miles. Distance to school is a measure of the parent-reported number of miles from school to the home. The categorical responses were recoded to the midpoint to create a continuous indicator.

Control variables (all from the kindergarten wave) include likely influences on parenting or parenting decisions. Because race/ethnicity is the independent variable of interest, we control for nativity and acculturation through a dichotomous measure indicating if the responding parent is foreign born or if the household primarily speaks a language other than English. To further characterize family context that may shape school enrollment, continuous variables reflect the age of the responding parent and the size of the household, and dichotomous measures capture whether the respondent is married and if there are older siblings present in the household (identified as a household member that is a sibling with a greater age than the focal child).⁵

Analysis

We first examine school-level achievement across enrollment strategies. Next, descriptive analyses determine bivariate patterns between the independent and dependent variables. Multivariate analyses use logistic regression to predict parents' information seeking and multinomial logistic regression to examine the categorical enrollment indicator. Independent variables are introduced successively, starting with controls and the reported racial/ethnic

⁵The following variables were excluded because they were not found to significantly differ across outcomes (in bivariate comparisons or multivariate models): year attended kindergarten, sex of child, and whether the respondent was the child's biological mother.

identity of the respondent. Equation 1 illustrates the full model for information seeking and Equation 2 illustrates the full model for school enrollment types, with Y representing the dichotomous outcome for all individuals i, and each β representing a vector of coefficients.

$$Y_{1i} = \alpha + \beta_1 \text{controls}_i + \beta_2 \text{race}_i + \beta_3 \text{SES}_i + \beta_4 \text{religion}_i + \beta_5 \text{geography}_i$$
 (1)

$$Y_{2i} = \alpha + \beta_1 \text{controls}_i + \beta_2 \text{race}_i + \beta_3 \text{SES}_i + \beta_4 \text{religion}_i + \beta_5 \text{soughtinfo}_i + \beta_6 \text{geography}_i$$
 (2)

Although individual coefficients from logistic regression should not be compared across models, we describe general trends and avoid comparing exact coefficients/odds ratios (Karlson et al. 2012). All analyses account for complex sampling design using probability and replication weights with the "svy" commands available in Stata (StataCorp 2011). To multiply impute data, we use the mi package in Stata 12.0 (Statacorp, 2011). We use Markov Chain Monte Carlo (MCMC) approach and create ten datasets.

Results

We first present empirical evidence assessing achievement level differences in elite and non-elite enrollment strategies. Descriptive statistics comparing school-level achievement data from the base year of the ECLS-K (when children were in kindergarten) are displayed in Table 1. The findings reveal that families with children enrolled in schools with the highest achievement scores have used elite strategies: private school enrollment and choosing a residential location so the child could attend a particular school. Families with children enrolled in schools with lower scores have used non-elite strategies of attending assigned schools or chosen schools (in or out of district), and there is little difference between these categories. Comparisons between scores for a child's chosen school and the school she would have been assigned to are not possible with these data. However, confirming our two-tiered system of school enrollment, the comparison here indicates that attending a chosen or assigned school may be a less advantageous option on average than attending a private school or moving to access a particular school.

Turning to differences across enrollment strategies, Table 2 displays descriptive statistics overall, for those who reported seeking information on schools, and for each school enrollment category. Adjusted Wald Tests identify significant differences across the five school enrollment types. Fewer than half (44.2%) of the parents reported seeking information on schools. For those who sought information, the racial/ethnic composition is similar to the overall sample, but they have generally higher SES and are more likely to be in urban or suburban locations.

For the school enrollment types, the largest proportion (46.6%) of children attended their assigned school for kindergarten, followed by those choosing their residence for the school, private schools, chosen schools in district, and chosen schools out of district. Notably, these groups vary significantly across race/ethnicity and almost all other covariates. White families are overrepresented in the elite strategies of private school enrollment and choosing

one's residence for the schools and underrepresented in non-elite strategies of choosing public schools in or out of district. In contrast, Black and Hispanic parents and parents of other racial background display disproportionately large percentages for choosing public schools and small percentages for private schools and choosing one's residence for the school. Parents of Asian/Pacific Islander heritage have a larger proportion of private school attendance and smaller proportions for assigned and chosen out of district schools. Other covariates display mostly expected patterns. Private school attendees have the highest SES, followed by those choosing their residential location for the school. Interestingly, families choosing schools within district have the lowest SES and live in ZIP codes that have higher than average levels of disadvantage. The out of district group displays the highest rates of information seeking and the greatest average distance between home and school.

Turning to the multivariate models, Table 3 presents odds ratios from binary logistic regression models predicting whether parents reported seeking information on the performance of their child's school. Results demonstrate that there are important racial/ ethnic differences for this outcome. With odds ratios that are significantly above one, Black and Asian parents are more likely to seek information on school performance, net of controls (Model 1). The difference for Black parents increases with the inclusion of SES (Model 2), attenuates with religion and geographic covariates, but remains significant in the final model. Black parents are 47% more likely to seek information on school performance. Hispanic parents are more likely to seek information net of socioeconomic and other controls, but this pattern appears to be driven by residential location, as the difference is not significant when geography is considered (Model 4). Parents of other races are significantly less likely to seek information than White parents, but this difference does not persist beyond controls for SES. Interestingly, families in neighborhoods with higher proportions of White residents are much less likely to seek information on school performance, controlling for both household and neighborhood SES, with 1% increased odds for each additional percent White. It may be that families do not feel the need to seek information on schools in predominantly White areas.

Table 4 presents results from multinomial regression models predicting the odds of various *school enrollment strategies* compared to attending the assigned public school. We describe the results for each of the outcome categories in turn. Generally, nonwhites are more likely to send their children to schools other than their assigned school (in and out of district). Black, Hispanic, and Asian parents are particularly different from White parents in selecting in or out of district schools, as these groups display increased odds of 55% to 102% for these outcomes, compared to assigned schools (Model 1). These effects remain similar when SES and religion are included, although Asians are no longer statistically different from Whites in selecting out of district schools. When location is considered (Model 4), differences across race/ethnicity are reduced and no longer significant. Further, patterns displaying differential likelihood of school selection across urbanicity and region suggest that selections may be constrained through geographic availability.

Asian/Pacific Islander parents are also more likely to select private schools for their children, a difference that persists beyond all other covariates. Descriptively, private schools are more than three times as common for Asian compared to White children (Model 1), and when all

covariates are considered, Asian parents are more than twice as likely to use this strategy. Black, Hispanic, and parents of other race are all similar in their likelihood of enrolling children in private school when all covariates have been considered. SES appears to be the most important for this strategy, as income-to-needs shows a strong, significant effect, as does homeownership and mother's education.

Perhaps most strikingly, Black, Hispanic, and families of other races are far less likely to choose a residence for the school compared to Whites. Overall, Black parents are only 60% as likely to choose their residence for the school compared to White parents, and Hispanic families and families of other races are less than half as likely (Model 1). Comparing the odds ratios across models, the results are similar, with families of Black, Hispanic, and other race/ethnic descent far less likely to choose a residence for the school compared to White families (Model 4). Despite the financial resources required to choose and move to a residence, the racial/ethnic differences in this elite strategy does not change when SES is considered, nor do they respond to geographic controls. Interestingly, this outcome is only modestly associated with income-to-needs and is not significantly associated to other socioeconomic indicators.

To summarize, Black and Hispanic families are more likely to choose schools other than the assigned school compared to White families, but these differences do not persist once sociogeographic context is accounted for. Asian families are more than twice as likely to enroll kindergartners in private school, net of all covariates. And finally, families of Black, Hispanic, and other race/ethnic descent are far less likely to choose their residence so the child can attend a particular school.

Supplementary models (not shown) separately added interactions between race and mother's education, father's education, income-to-needs ratio, car ownership, home ownership, urbanicity, region, ZIP code characteristics (percent in poverty, percent with college degree, percent White, and Townsend index), and number of residential moves to the full model. Because of the small cell sizes for Asian and other race, these models were restricted to White, Black, and Hispanic parents. These interactions across the categorical outcome produced four interesting results. First, significant odds ratios below one for interactions between Hispanic ethnicity and mother's and father's educational attainment below college degree for private school enrollment demonstrate that the lower likelihood of private school enrollment for less educated families is further reduced for Hispanics. Second, odds ratios above one for interactions between both Black and Hispanic and income-to-needs ratios for private school attendance suggest that the positive effect of income is amplified for these families, compared to White families. Third, terms interacting Black and the Southern region were below one and significant for chosen in-district, chosen out of district and private school enrollment. The increased odds of attending in and out of district schools for Southern residents are reduced among Black families, while the reduced odds of private school attendance are further diminished among Black families. Fourth, the lower odds of having chosen a residence for the school among Black and Hispanic parents are even less likely among those living in ZIP codes with greater proportions of White residents.

Discussion

This study demonstrates the importance of race/ethnicity in U.S. kindergarten school enrollment. The results highlight the importance of macro-level trends in understanding the relationship between schooling and social stratification. Across generations, systemic racism reproduces the power and privilege of Whites (Feagin 2006), and in this case, the educational advantages of White families. Further, racial/ethnic disparities persist even when the educational system makes changes such as expanding school choice options.

Proponents of school choice (in the form of charter schools, open enrollment, and vouchers) argue that it will improve educational inequality, and it appears that parents of color are using these options to seek better educational experiences for their children. Black parents are 47% more likely to seek information about school performance compared to White parents, with all other variables controlled. Black parents appear to be exercising agency at this step, but this agency may be constrained at the next step of adopting a school enrollment strategy.

Black, Hispanic, and Asian parents are much more likely than Whites to engage in the two non-elite school enrollment strategies: choosing an alternative within- or out-of-district public school for their child. And Asian parents demonstrate the highest rates of private school enrollment. Yet, White families maintain their advantages. White families bypass the school choice process through selecting a residence so their child could attend a particular school. Whites are between 61% and 144% more likely than Blacks, Hispanics, or individuals of other race/ethnicity to select their residence. This resource-intensive option not only appears to provide White children with the best educational environment, but the residence likely yields collateral financial benefits through property investment in an attractive neighborhood.

Interestingly, the racial/ethnic disparities in choosing a residential location for the schools are not explained by SES or geography. Although prior research has indicated that parents create and maintain boundaries through both residential and school selection (Kendall 2006), the "choice" of a residential location for the school the child will attend appears to be an understudied contemporary factor in the reproduction of racial segregation of both schools and neighborhoods (Goyette 2008). In her qualitative study of about 200 families in five cities, Heather Beth Johnson (2006) found that racial differences in wealth explained why White, but not Black, families were able to either move residences to access a particular school or to pay private school tuition. Among these families, White parents received substantial financial help from their families (whether they realized it or not), while Black families not only did not receive the same help, but often themselves provided assistance to others. Our study was not able to capture the effect of this type of intergenerational wealth, but the pattern of differences in the different enrollment strategies supports Johnson's findings.

The results here point to underlying racial/ethnic stratification as the driver of school enrollment differences, perhaps in contrast to other research identifying class as the salient source of parenting differences. For example, Annette Lareau (2003) reports that cultural

logics of childrearing differ across class, but not race. Yet, parents' individual cultural logics may play out differently across institutional contexts. Parents of different race/ethnicity who have similar motivations and behaviors may have distinct constraints because of historical and contemporary practices of educational, housing, and banking institutions. The results of this study highlight the importance of considering the broader social context of parents' attitudes and behaviors.

This study also highlights the importance of geography in the influence of stratification on school enrollment (Roscigno et al. 2006). The racial/ethnic differences for choosing public schools other than the assigned school did not persist once the geographic variables were added to the model, pointing to the importance of residential location for race/ethnic stratification. Further, the influence of residential location is complex; enrollment differs across urbanicity, region, and ZIP code characteristics, but without a clear systematic pattern. We did not theorize as to why characteristics might operate differently for different enrollment strategies, but future research should further examine these specific relationships.

Additionally, future research should examine the policies and conditions at the school district or community level which may be able to shed light on the mechanisms of these macro-level trends. This study is not able to distinguish what kinds of constraints and opportunities differ across race/ethnicity that would contribute to the reported associations, except socioeconomic status and sociogeographic location. In examining individual-level, nationally representative data, we demonstrate existing inequalities that likely are the result of complex, overlapping, and diverse policies and programs that should be further explored. Additionally, future research should examine other findings that space prevents us from parsing in detail. We did not theorize about differences in non-assigned public schools that are within versus out of district, nor did we focus on the effects of religiosity on enrollment strategies.

We note three important limitations to our study. We focused on a particular age group and time period. Kindergarten enrollment provides insight into processes occurring at the start of schooling, when children exercise the least agency and specific school experiences have not yet occurred. Future research should not only include the range of ages and grades across childhood and adolescence, but also interpret findings in light of developmental and social changes. This study provides a recent picture of school enrollment patterns, but research should continue to describe and explain changing options and attitudes. Second, we used available measures for the outcomes, which rely on self-reports. Parents may interpret questions differently and responses could have recall bias. Finally, we examined average achievement levels across the types of school enrollment, using these as proxies for schools' educational and social environments. However, this approach does not indicate the extent to which a student would benefit academically from attending one school versus another. We hope that this study will spur future endeavors in extending our understanding of the school enrollment process.

Structural constraints and opportunities shape racial/ethnic disparities in kindergarten enrollment, an outcome that sets up future schooling decisions and has important implications for educational achievement and attainment. The findings of this study suggest

that educational stratification reproducing major social dividing lines such as race is firmly in place. Because children are sorting into schools with very different achievement levels, the inequalities initiated through school enrollment will likely endure. Charter or magnet schools or open enrollment may be constrained options that offer some improvements but do not challenge broader stratification (Bonastia 2015). Whereas school choice may challenge some between-school boundaries by offering enrollment options to a wider population, it is a within-system reform that is unlikely to upset existing educational structures of inequality (Rich and Jennings 2015). Further, the link between housing and school systems maintains White privilege and consequently puts families of color at a disadvantage (Roithmayer 2014).

Black and Hispanic families appear to be trying to improve their children's educational chances through seeking information or enrolling their children in other schools, but alternatives may be constrained by social stratification, segregation, and resource differences. Families may feel responsible for ensuring a quality educational environment for their children, but individual-level responsibility such as seeking information may not be enough to combat broader inequalities. At the very least, educational reforms focused on increasing school enrollment options should also address families' housing (Schwartz and Stiefel 2014). U.S. policies seeking to shape the school selection process should be informed by the inherent inequalities existing within it and the disparate social forces that shape these inequalities. National patterns of school enrollment is a fruitful area for future research into mechanisms of the reproduction of social advantage and disadvantage across generations.

Acknowledgments

This research is based on work supported by a grant from the National Science Foundation (SES 1061058) and a fellowship from the National Institutes of Health (NICHD F32 HD 085599). Research funds were also provided by the NIH/NICHD funded CU Population Center (P2C HD066613). We are grateful for support from the Population Research Infrastructure Program (P2C HD050924) awarded to the Carolina Population Center at The University of North Carolina at Chapel Hill.

References

- Ball, Stephen J., Vincent, Carol. 'I Heard It on the Grapevine': 'Hot' Knowledge and School Choice. British Journal of Sociology of Education. 1998; 19(3):377–400.
- Ben-Porath, Sigal. School Choice and Educational Opportunity: Rationales, Outcomes, and Racial Disparities. Theory and Research in Education. 2012; 10(2):171–189.
- Billingham, Chase M., Hunt, Matthew O. School Racial Composition and Parental Choice New Evidence on the Preferences of White Parents in the United States. Sociology of Education. 2016; 89(2):99–117.
- Black, Sandra, Machin, Stephen. Housing Valuations of School Performance. Handbook of the Economics of Education. 2011; 3:485–519.
- Bonastia, Christopher. Low-Hanging Fruit: The Improverished History of Housing and School Desegregation. Sociological Forum. 2015; 30(S1):549–570.
- Bulman, Robert C. School-Choice Stories: The Role of Culture. Sociological Inquiry. 2004; 74(4): 492–519.
- Burgess, Simon, Greaves, Ellen, Vignoles, Anna, Wilson, Deborah. What Parents Want: School Preferences and School Choice. The Economic Journal. 2014; 125(587):1262–1289.
- Campbell, Lori Ann, Kaufman, Robert L. Racial Differences in Household Wealth: Beyond Black and White. Research in Social Stratification and Mobility. 2006; 24(2):131–152.

Chingos, Matthew M., Henderson, Michael, West, Martin R. Citizen Perceptions of Government Service Quality: Evidence from Public Schools. Quarterly Journal of Political Science. 2012; 7(4): 411–445.

- Cohen-Zada, Danny, Sander, William. Religion, Religiosity and Private School Choice: Implications for Estimating the Effectiveness of Private Schools. Journal of Urban Economics. 2008; 64(1):85– 100.
- Cooper, Camille Wilson. School Choice as 'Motherwork': Valuing African-American Women's Educational Advocacy and Resistance. International Journal of Qualitative Studies in Education. 2007; 20(5):491–512.
- Cooper, Bruce S., McSween, Rose Byron, Murphy, Peter. Finding a Golden Mean in Education Policy: Centering Religious and Public Schools. Peabody Journal of Education. 2012; 87(3):368–382.
- Downey, Douglas B., Von Hippel, Paul T., Hughes, Melanie. Are "Failing" Schools Really Failing? Using Seasonal Comparison to Evaluate School Effectiveness. Sociology of Education. 2008; 81(3):242–270.
- Emerson, Michael O., Chai, Karen J., Yancey, George. Does Race Matter in Residential Segregation? Exploring the Preferences of White Americans. American Sociological Review. 2001; 66(6):922–935
- Ennis, Sharon R., Ríos-Vargas, Merarys, Albert, Nora G. The Hispanic population: 2010. US Department of Commerce, Economics and Statistics Administration, US Census Bureau; 2011.
- Entwisle, Doris R., Alexander, Karl L., Olson, Linda S. First grade and Educational Attainment by Age 22: A New Story. American Journal of Sociology. 2005; 110(5):1458–1502.
- Feagin, Joe R. Systemic Racism: A Theory of Oppression. New York: Routledge; 2006.
- Fiel, Jeremy. Decomposing School Resegregation: Social Closure, Racial Imbalance, and Racial Isolation. American Sociological Review. 2013; 78(5):828–848.
- Fuller, Bruce, Elmore, Richard F., Orfield, Gary. Policy-making in the Dark: Illuminating the School-Choice Debate. In: Fuller, B.Elmore, RF., Orfield, G., editors. Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice. New York: Teachers College Press; 1996. p. 1-21.
- Goldring, Ellen B., Phillips, Kristie JR. Parent Preferences and Parent Choices: The Public-private Decision about School Choice. Journal of Education Policy. 2008; 23(3):209–230.
- Goyette, Kimberly A. Race, Social Background, and School Choice Options. Equity & Excellence in Education. 2008; 41(1):114–129.
- Goyette, Kimberly A. Setting the Context. In: Lareau, A., Goyette, K., editors. Choosing Homes, Choosing Schools. New York: Russell Sage Foundation; 2014. p. 1-24.
- Green, Christa L., Hoover-Dempsey, Kathleen V. Why Do Parents Homeschool? A Systematic Examination of Parental Involvement. Education and Urban Society. 2007; 39(2):264–285.
- Hastings, Justine S., Kane, Thomas J., Staiger, Douglas O. Parental Preferences and School Competition: Evidence from a Public School Choice Program. National Bureau of Economic Research; 2005. No. w11805
- Hastings, Justine S., Weinstein, Jeffrey M. Information, School choice, and Academic Achievement: Evidence from Two Experiments. The Quarterly Journal of Economics. 2008; 123(4):1373–1414.
- Holme, Jennifer J. Buying Homes, Buying Schools: School Choice and the Social Construction of School Quality. Harvard Educational Review. 2002; 72(2):177–205.
- Johnson, Heather B. The American Dream and the Power of Wealth. New York: Routledge; 2006.
- Karlson, Kristian Bernt, Holm, Anders, Breen, Richard. Comparing Regression Coefficients Between Same-sample Nested Models Using Logit and Probit A New Method. Sociological Methodology. 2012; 42(1):286–313.
- Keigher, Ashley. Characteristics of Public, Private, and Bureau of Indian Education Elementary and Secondary Schools in the United States: Results from the 2007-08 Schools and Staffing Survey (NCES 2009-321). Washington D.C.: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education; 2009. Retrieved from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009321.
- Kendall, Diana. Class in the United States: Not Only Alive But Reproducing. Research in Social Stratification and Mobility. 2006; 24(1):89–104.

Krysan, Maria, Crowder, Kyle, Bader, Michael DM. Pathways to Residential Segregation. In: Lareau, A., Goyette, K., editors. Choosing Homes, Choosing Schools. New York: Russell Sage Foundation; 2014. p. 27-63.

- Lareau, Annette. Unequal Childhoods: Class, Race, and Family Life. Los Angeles: University of California Press; 2003.
- Logan, John R., Minca, Elisabeta, Adar, Sinem. The Geography of Inequality: Why Separate Means Unequal in American Public Schools. Sociology of Education. 2012; 85(3):287–301.
- Lubienski, Christopher, Weitzel, Peter, Lubienski, Sarah Theule. Is There a 'Consensus' on School Choice and Achievement? Advocacy Research and the Emerging Political Economy of Knowledge. Educational Policy. 2009; 23(1):161–193.
- Mare, Robert D. Change and Stability in Educational Stratification. American Sociological Review. 1981; 46(1):72–87.
- Massey, Douglas S. The Legacy of the 1968 Fair Housing Act. Sociological Forum. 2015; 30(S1):571–588. [PubMed: 27034538]
- McKernan, Signe-Mary, Ratcliffe, Caroline, Steuerle, Eugene, Zhang, Sisi. Less than Equal: Racial Disparities in Wealth Accumulation. Washington D.C.: Urban Institute; 2013. Retrieved September 26, 2016 from http://www.urban.org/UploadedPDF/412802-Less-Than-Equal-Racial-Disparities-in-Wealth-Accumulation.pdf.
- Pager, Devah, Shepherd, Hana. The Sociology of Discrimination: Racial Discrimination in Employment, Housing, Credit, and Consumer Markets. Annual Review of Sociology. 2008; 34:181–209.
- Phillips, Kristie JR., Larsen, Elisabeth S., Hausman, Charles. School Choice and Social Stratification:How Intra-District Transfers Shift the Racial/Ethnic and Economic Composition of Schools. Social Science Research. 2015; 51:30–50. [PubMed: 25769850]
- Rapp, Kelly E., Eckes, Suzanne E. Dispelling the Myth of 'White Flight': An Examination of Minority Enrollment in Charter Schools. Educational Policy. 2007; 21(4):615–661.
- Rastogi, Sonya. The Black Population: 2010. US Department of Commerce, Economics and Statistics Administration, US Census Bureau; 2011. 2011
- Reardon, Sean F., Grewal, Elena Tej, Kalogrides, Demetra, Greenberg, Erica. Brown Fades: The End of Court-Ordered School Desegregation and the Resegregation of American Public Schools. Journal of Policy Analysis and Management. 2012; 31(4):876–904.
- Reardon, Sean F., Owens, Ann. 60 Years After Brown: Trends and Consequences of School Segregation. Annual Review of Sociology. 2014; 40:199–218.
- Reece, Robert L., O'Connell, Heather A. How the Legacy of Slavery and Racial Composition Shape Public School Enrollment in the American South. Sociology of Race and Ethnicity. 2016; 2(1):42–57
- Renzulli, Linda A., Evans, Lorraine. School Choice, Charter Schools, and White Flight. Social Problems. 2005; 52(3):398–418.
- Rich, Peter M., Jennings, Jennifer L. Choice, Information, and Constrained Options School Transfers in a Stratified Educational System. American Sociological Review. 2015; 80(5):1069–1098.
- Roithmayr, Daria. Reproducing Racism: How Everyday Choices Lock in White Advantage. New York: NYU Press; 2014.
- Roscigno, Vincent J., Tomaskovic-Devey, Donald, Crowley, Martha. Education and the Inequalities of Place. Social Forces. 2006; 84(4):2121–2145.
- Santos, Fernanda, Rich, Motoko. With Vouchers, States Shift Aid for Schools to Families. New York Times. 2013 Mar 27. Retrieved May 14, 2013 online at: http://www.nytimes.com/2013/03/28/education/states-shifting-aid-for-schools-to-the-families.html?ref=education.
- Saporito, Salvatore, Lareau, Annette. School Selection as a Process: The Multiple Dimensions of Race in Framing Educational Choice. Social Problems. 1999; 46(3):418–439.
- Schneider, Mark, Teske, Paul, Marschall, Melissa. Choosing Schools: Consumer Choice and the Quality of American Schools. Princeton, NJ: Princeton University Press; 2000.
- Schwartz, Amy E., Stiefel, Leanna. Linking Housing Policy and School Reform. In: Lareau, A., Goyette, K., editors. Choosing Homes, Choosing Schools. New York: Russell Sage Foundation; 2014. p. 295-314.

Sharkey, Patrick. Stuck in Place: Urban Neighborhoods and the End of Progress toward Racial Equality. Chicago: University of Chicago Press; 2013.

- Snow, Kyle, Derecho, Azucena, Wheeless, Sara, Lennon, Jean, Rosen, Jeff, Rogers, James, Kinsey, Susan, Morgan, Karen, Einaudi, Peter. Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Kindergarten 2006 and 2007 Data File User's Manual. Washington, D.C.: National Center for Education Statistics; 2009.
- StataCorp. Stata statistical software: Release 12. College Station, TX: StataCorp LP; 2011.
- Theobald, Rebecca. School Choice in Colorado Springs: The Relationship between Parental Decisions, Location and Neighbourhood Characteristics. International Research in Geographical & Environmental Education. 2005; 14(2):92–111.
- Tourangeau, Karen, Nord, Christine, Lê, Thanh, Sorongon, Alberto G., Najarian, Michelle. Early Childhood Longitudinal Study, Kindergarten class of 1998–99 (ECLS-K), Combined User's Manual for the ECLS-K Eighth-Grade and K–8 Full Sample Data Files and Electronic Codebooks (NCES 2009–004). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education; 2009.
- Townsend, Peter, Phillimore, Peter, Beattie, Alastair. Health and Deprivation: Inequality and the North. London, England: Routledge; 1988.
- Workman, Emily. Inequalities at the Starting Line: State Kindergarten Policies. 2013. Education Commission of the States. Retrieved May 14, 2013 at http://www.ecs.org/clearinghouse/01/06/78/10678.pdf
- Yang, Philip Q., Kayaardi, Nihan. Who Chooses Non-Public Schools for their Children? Educational Studies. 2004; 30(3):231–249.

Lawrence and Mollborn

Table 1

Weighted means of school-level achievement, by parent-reported enrollment strategy

	Assigned	Chosen in/out District	Private	Home chosen for school	Sig diff?
Reading ^a	57.02	57.52	79.53	63.95	***
$Math^b$	58.58	58.42	77.99	64.77	**

Source: Early Childhood Longitudinal Study - Kindergarten 1998-99

Notes: Means account for complex survey design.

*** p<.001 $^{a}_{\rm N=11889}$

 $b_{N=11777}$

Page 19

Lawrence and Mollborn Page 20

Table 2

Weighted means of independent variables across school selection outcomes

	IIV		Sought) H	Assigned	pəu	Chosen in District	n in ict	Chosen out of district	sen of ict	Private	ate	Chose residence for school	se nce nool	Adj. Wald Test
Population share			44.2	%	46.6	%	10.7	%	7.7	%	11.8	%	23.1	%	
Respondent race/ethnicity															
NH White	57.4	%	58.1	%	56.4	%	39.0	%	42.1	%	66.2	%	68.2	%	*
NH Black	13.8	%	15.5	%	13.1	%	1.9	%	22.7	%	12.0	%	9.3	%	**
Hispanic	22.8	%	20.2	%	24.7	%	31.8	%	29.5	%	14.1	%	17.4	%	**
A/PI	3.4	%	4.1	%	2.6	%	3.6	%	2.4	%	5.9	%	3.9	%	*
Other race	2.6	%	2.0	%	3.2	%	3.7	%	3.4	%	1.7	%	1.2	%	*
Socioeconomic status															
Mother's education															
Less than HS	14.8	%	10.4	%	16.6		23.8		11.1		2.0		15.0		*
High school	27.1	%	23.7	%	31.2		32.5		29.4		12.6		23.6		**
Some college	30.8	%	30.3	%	30.8		27.0		38.1		35.8		27.6		*
College degree or more	27.3	%	35.6	%	21.4		16.7		21.4		49.6		33.9		*
Father's education															
No residential father	21.5	%	20.5	%	21.1	%	32.7	%	29.0	%	14.7	%	18.2	%	**
Less than HS	12.6	%	8.4	%	15.0	%	16.1	%	10.9	%	3.9	%	11.4	%	*
High school	20.5	%	15.9	%	23.5	%	18.0	%	20.5	%	12.8	%	19.6	%	*
Some college	20.9	%	23.6	%	21.3	%	18.0	%	23.8	%	21.1	%	20.4	%	
College degree or more	24.6	%	31.6	%	19.1	%	5.2	%	15.8	%	47.6	%	30.3	%	*
Household income to needs ratio	3.3		4.0		2.8		2.2		2.8		5.5		3.8		*
Household owns car	92.4	%	93.0	%	92.3	%	86.3	%	7.06	%	96.4	%	93.7	%	*
Household owns home	59.4	%	62.3	%	57.1	%	43.5	%	46.8	%	80.3	%	64.1	%	**
Religiosity															
Religious attendance	1.5		1.6		1.5		1.5		1.5		1.8		1.4		*
Importance of religion for childraising	3.1		3.2		3.0		3.2		3.1		3.3		3.0		*
Information seeking															
Sought info on school	44.2	%			27.8	%	54.3	%	62.9	%	52.5	%	61.0	%	*

or Manuscript
Author Manuscript

Author Manuscript

Author Manuscript

	All	_	Sought info	tht o	Assigned	peu	Chosen in District	n in ict	Chosen out of district	sen of ict	Priv	Private	Chose residence for school	se ence hool	Adj. Wald Test
Sociogeographic context															
Distance from school	2.9		3.1		2.4		2.7		0.9		4.6		2.1		*
Urbanicity															
City	29.4	%	31.2	%	25.0	%	37.7	%	45.1	%	37.6	%	24.8	%	*
Suburban	41.9	%	47.0	%	40.1	%	35.6	%	35.5	%	48.9	%	47.0	%	*
Town	12.0	%	8.5	%	14.8	%	13.6	%	10.2	%	5.5	%	10.0	%	*
Rural	16.6	%	13.3	%	20.1	%	13.1	%	9.3	%	8.0	%	18.3	%	*
Region															
Northeast	17.0	%	18.4	%	16.7	%	11.3	%	0.3	%	19.9	%	20.7	%	*
Midwest	22.0	%	19.3	%	20.1	%	19.3	%	22.6	%	26.1	%	24.5	%	
South	37.0	%	38.6	%	37.7	%	36.9	%	40.9	%	32.7	%	36.8	%	
West	24.0	%	23.7	%	25.5	%	32.5	%	26.1	%	21.3	%	18.0	%	*
ZIP Code characteristics															
Percent in poverty	12.3	%	11.2	%	12.7	%	16.4	%	15.5	%	9.7	%	6.6	%	*
Percent with college degree	23.6	%	26.2	%	21.2	%	19.2	%	20.5	%	30.4	%	27.6	%	*
Percent White	9.79	%	67.4	%	68.1	%	56.0	%	55.1	%	69.5	%	75.2	%	*
Townsend index	1.3		1.2		1.3		2.2		2.3		1.0		0.7		*
Number of residential moves	1.7		1.7		1.6		1.9		1.8		1.2		1.9		*
Controls															
Respondent is foreign born	20.2	%	18.7	%	20.4	%	25.9	%	19.0	%	15.1	%	20.2	%	*
HH primary language is not English	19.1	%	16.7	%	20.0	%	25.5	%	17.9	%	11.8	%	18.6	%	*
Respondent age	33.3		34.0		33.0		31.4		32.1		35.8		33.8		*
Respondent married	70.0	%	72.7	%	69.2	%	58.1	%	59.0	%	81.6	%	74.5	%	*
Older siblings in household	57.7	%	55.7	%	59.1	%	53.6	%	53.3	%	51.8	%	61.5	%	*
Household size	4.6		4.4		4.7		4.6		4.5		4.3		4.6		**

Source: Early Childhood Longitudinal Study - Birth Cohort, 2001–2005. N $\approx\!5950$

Notes: Results adjust for complex sampling design. Respondent refers to the parent/guardian reporting information for the survey.

** p<.01

Page 21

Lawrence and Mollborn Page 23

Table 3

Odds ratios from logistic regression models predicting if parents of kindergarteners sought information on school's performance

	Model 1	lel 1	Model 2	el 2	Model 3	lel 3	Model 4	el 4
Respondent race/ethnicity (NH White)								
NH Black	1.55	* *	1.86	* *	1.75	**	1.47	*
Hispanic	1.20		1.49	*	1.47	*	1.27	
Asian	1.67	*	1.29		1.32		1.16	
Other race	0.65	*	0.78		0.78		0.78	
SES								
Mother's education (BA+)								
Less than HS			0.52	*	0.53	**	0.56	*
High school			99.0	*	99.0	*	69.0	*
Some college			0.72	*	0.73	*	0.75	*
Father's education (BA+)								
No residential father			0.68	*	0.70	*	0.74	
Less than HS			0.57	*	0.59	*	0.64	*
High school			0.58	*	0.61	*	0.65	*
Some college			96.0		0.98		1.02	
Household income to needs ratio			1.10	*	1.11	**	1.08	*
Household owns car			0.92		0.90		0.87	
Household owns home			0.77	*	0.76	*	0.82	
Religion								
Religious attendance					1.04		1.04	
Importance of religion for childraising					1.10	*	1.10	*
Sociogeographic context								
Urbanicity (suburban) WK								
City							1.12	
Town							0.61	*
Rural							0.80	
Region (northeast) WK								
Midwest							0.76	

Lawrence and Mollborn

	Model 1	el 1	Model 2	el 2	Model 3	el 3	Model 4	el 4
South							1.00	
West							0.91	
ZIP Code characteristics								
Percent in poverty							0.99	
Percent with college degree							1.00	
Percent White							0.99	*
Townsend index							96.0	
Number of residential moves							1.05	*
Controls								
Respondent is foreign born	1.09		1.16		1.16		1.09	
Household primary language is not English	0.67	*	0.81		0.80		0.77	
Respondent age	1.02	*	1.00		1.00		1.00	
Respondent married	1.41	*	1.08		1.04		1.06	
Older siblings in household	0.87		0.95		0.94		96.0	
Household size	0.87	*	0.93	*	0.93	*	0.92	*
Constant	0.64		1.46		1.13		2.03	

Source: Early Childhood Longitudinal Study - Birth Cohort, 2001–2005. N $\approx\!6700$

Notes: Results adjust for complex sampling design. Respondent refers to the parent/guardian reporting information for the survey.

*
p<.05

**
p<.01

p<.01

p<.001

Page 24

Author Manuscript

Lawrence and Mollborn Page 25

Table 4

Relative risk ratios from multinomial regression models predicting whether the school is chosen and in district, chosen and out of district, private, or if parent chose the residence for the school, compared to assigned schools

				Model 1	el 1							Mod	Model 2			
	Chos	Chosen in district	Chosen out of district	of ct	Private	te	Chose residence	se ance	Chosen in district	n in ict	Chosen out of district	n out trict	Priv	Private	Chose residence	se
Respondent race/ethnicity (NH White)	Vhite)															
NH Black	1.93	*	2.00	*	1.04		09.0	*	1.79	*	2.04	*	1.56	*	0.67	*
Hispanic	1.55	* * *	2.02	*	96.0		0.48	**	1.52	*	2.10	*	1.40		0.53	*
Asian	1.86	*	1.91	*	3.10	*	1.05		1.80	*	1.68		2.14	*	0.94	
Other race	1.42	*	1.41		0.61		0.34	**	1.38		1.44		0.91		0.38	* *
SES																
Mother's education (BA+)																
Less than HS									1.00		0.38	*	0.21	**	0.91	
High school									0.80		0.57	*	0.44	*	0.69	*
Some college									0.82		98.0		1.06		0.76	
Father's education (BA+)																
No residential father									0.80		1.04		0.91		0.88	
Less than HS									0.72		96.0		09.0		0.83	
High school									0.59	*	1.06		09.0	*	0.82	
Some college									0.87		1.16		0.67		0.78	
Household income to needs ratio									0.93		1.00		1.18	**	1.10	*
Household owns car									0.97		1.15		0.81		1.01	
Household owns home									0.80		0.70	*	1.53	*	0.82	
Religion																

Religious attendance

Importance of religion for childraising

Sought info

Sociogeographic context

Distance to school

Urbanicity (suburban)

Lawrence and Mollborn

City Private					Model 1	11						Mod	Model 2			
n in courtbeast) west th th th th th th th th th		Choser distri	in to	Chos out distr	sen of ict	Priv	/ate	Ch	ose lence	Chosen		nosen out f district	Privat	9	Chose	<u>۾</u>
n or or or contenst) by evest hy the contenst contens conten	City															
west west by the contenant) In district Chosen Li 2 2 2 2 2 2 2 2 2 2	Town															
west the high property of the	Rural															
ht to colege degree ent White ent with college in Early State ent White ent with college in Early State ent White ent with college ent with college ent with part of the series of the series of the series of the series ent with college ent with part of the series o	Region (northeast)															
ht bode characteristics ent in poverty ent with college degree ent with college ent with a serie ent with college ent with college ent with college ent with a serie ent with college ent wit	Midwest															
ntuin poverty ent with college degree ent with college ent part of the set o	South															
ent in poverty ent with college degree ent with college ent with particle and with college ent	West															
ent with college degree ent with with college degree ent with college	ZIP Code characteristics															
ent White change degree ent White shared index bern dindex bern dindex bern dindex and residential moves and r	Percent in poverty															
ent White head index bern of residential moves and to discrete college bern of the sidential moves and to discrete college bern of the sidential moves and to discrete college bern of the sidential moves and to discrete college bern of the sidential moves and to discrete college bern of the sidential moves and to discrete college bern of the sidential moves and the	Percent with college degree															
neu diridex ant 0.36 \$ 0.11 *** 0.73 1.17 0.48 0.17 *** 1.08 Ander 1 Ander 1 Ander 1 Ander 1 Ander 1 *** 1.08 ** 1.19 0.01 ** 1.08 Chosen out of indistrict in district in	Percent White															
er of residential moves ant 0.68 0.36 0.36 0.15 Anodel 4 Indistrict 0.10 Indistrict Indistrict Indistrict Indistrict Indistrict Indistrict	Townsend index															
Automatic Colore	Number of residential moves															
Model 3 Model 4 Chosen in district																

Page 26

		M	Model 3						Model 4	el 4			
	Chosen in district	Chosen out of district	Private	ate	Chose residence		Chosen in district	Chosen out of district	Chosen out of district	Private	ate	Chose residence	se ince
No residential father	08.0	1.04	96.0		0.87	0	0.85	1.09		96.0		1.18	
Less than HS	0.72	96.0	99.0		0.82	0	0.75	0.80		0.61		1.14	
High school	* 09.0	1.06	99.0		0.81	0	0.65	1.10		89.0		1.12	
Some college	0.87	1.16	0.70		0.77	0	0.84	1.10		99.0		0.90	
Household income to needs ratio	0.94	1.00	1.20	*	1.10	0 ***	0.92 *	0.97		1.16	**	1.06	*
Household owns car	96.0	1.15	0.78		1.02	1	1.11	1.67		1.08		96.0	
Household owns home	0.80	. 07.0	1.50	*	0.83	0	06.0	0.77		1.70	*	1.00	
Religion													
Religious attendance	86.0	1.00	1.15	*	96.0	0	0.97	0.99		1.16	*	0.97	
Importance of religion for childraising	1.10	86.0	1.21	*	1.03	-	1.07	0.91		1.21	*	1.02	
Sought info						33	3.10 ***	3.62	**	1.52	*	3.88	*
Sociogeographic context													
Distance to school						Т	1.07 **	1.46	**	1.35	*	0.92	*
Urbanicity (suburban)													
City						-	1.22	1.47	*	1.69	*	1.03	
Town						_	1.08	0.61		0.43	*	0.82	
Rural						0	0.78	0.26	*	0.25	*	0.95	
Region (northeast)													
Midwest						_	1.43	2.39	*	1.18		1.16	
South						_	1.01	1.73		09.0	*	0.87	
West						_	1.62	1.59		0.64	*	99.0	
ZIP Code characteristics													
Percent in poverty						1	1.04 **	1.01		0.99		1.01	
Percent with college degree						-	1.01	1.00		1.01	*	1.02	*
Percent White						_	1.00	0.99		0.99		1.00	
Townsend index						0	0.97	1.12	*	1.08		0.94	
Number of residential moves						0	0.99	0.97		0.95		1.12	*
Constant	0.97	0.50	0.09	*	*** 1.08	0	0.36	0.05	*	0.08	*	0.16	*

Source: Early Childhood Longitudinal Study - Birth Cohort, 2001–2005. N $\approx\!6700$

Page 27

** p<.01 * p<.05

Notes: Results adjust for complex sampling design. All models also control for nativity status of respondent, household primary language, respondent age, respondent marital status, siblings in household, and household size. Respondent refers to the parent/guardian reporting information for the survey.