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Choice in a World of New School Types

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Abstract

Restricted-access data from the *Early Childhood Longitudinal Study (ECLS)* allow us to identify household location from a nationally representative sample of individuals and to match the household to the actual school attended and other nearby schools. We construct school choices by considering distance of all school types from the household. With these matched data, we address a very basic question that few have been able to answer: in an environment of increased choice of public and private school types, what are the factors influencing the household choice of which type of school to attend? We focus particularly on the factors influencing the choice among the new types of public schools.

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I. Introduction

In recent years, we have witnessed a growth in the choice of school types that confront households. Families can choose between traditional public schools, charter schools, magnet schools, and out-of-district public schools in addition to the religious and nonsectarian private schools. With the new types of public schools, there are many interesting questions unanswered by the existing literature on school choice. At a most fundamental level, what factors influence who attends these alternatives to the traditional public schools? While there have been many studies looking at who enrolls in private schools versus the traditional public ones, there is little or no literature that expands the choice set to distinguish among all types of public schools as well as the private alternatives. Understanding the household's school decision holds implications for the residential choices families make, especially as these school choice options continue to evolve. The factors influencing choice also have implications for tax base of school districts and policies relating to composition and peer groups within neighborhoods.

This paper exploits a restricted access version of the nationally representative data set, the *Early Childhood Longitudinal Study (ECLS),* which identifies the location of the household residence and identifies the school attended by the child. Using data from the National Center for Education Statistics (NCES) that allow geo-mapping of schools, we offer insights into the school choice sets available to households in the U.S. as well as insights into the factors that influence a household's decision to attend a particular school type. One of the factors we consider is the willingness to travel to consume the school that most closely satisfies preferences. Our results suggest that households appear to trade longer distances for other attributes to attend schools without defined attendance zones. We also find that socioeconomic conditions of the

household as well as racial composition of the school influence the type of school chosen even within the public sector.

II. The literature

Much of the literature relating to the new public school options centers on the achievement consequences of school type. The studies examine the performance of charter schools relative to traditional public schools as well as the achievement effects of vouchers (Metcalf, 1999; Peterson, Howell, and Greene, 1999; Witte, 2000; Booker, Zimmer, and Buddin, 2005; Betts et al., 2006; Bifulco and Ladd, 2007; Lauren, 2007; Figlio et al., 2009; Zimmer et al., 2009).[1] This growing literature also examines the effect of choice mechanisms such as vouchers, charter schools, and magnet schools on the distribution of students in the schools of choice as well as the traditional public schools (Zimmer et al, 2009; Bifulco and Ladd, 2007; Booker, Zimmer, and Buddin, 2005; Greene, 2000; Wolf, et al, 2000; Howell and Peterson, 2000; Witte, 2000). But in all these studies, there are always lingering questions concerning whether the analysis sufficiently accounts for the underlying factors that influence a household's decision to choose one of these school types and whether these factors, rather than the school type are driving the outcomes of the models. For that reason as well as for policy implications that we address later, understanding the choice decision is extremely important.

Over the years, a number of scholars have attempted to use observed data to draw inferences about how families choose among school options. One of the earliest papers looked at the choice among two types of schools – public or private – and used Census of Population data for households (Long and Toma, 1988). The study combined household level data on type of

[1] In addition, there is research that has examined what information families have in making choices (Schneider et al., 1998)

school chosen and socioeconomic characteristics with aggregate data on the attributes of schools. Extensions and refinements to this model added more types of private schools such as religious or nonreligious (Downes, 1993; Lankford and Wyckoff, 1992; Lankford, Lee, and Wyckoff, 1995; Lankford and Wyckoff, 2001; West and Palsson, 1988) but most have continued to grapple with the inability to match individual households, the school enrollment decision, and the attributes of individual schools that constitute the household choice set.[2] Recently, Lankford and Wyckoff (2006) examined school choice in metropolitan areas of upstate New York with restricted access census data that allowed matching of household location, school enrollment, and neighborhoods. Aggregate data on private enrollments were substituted for individual private school enrollment information. The public school choice was defined by the district boundaries of the household. The latter represents the best effort to date to address data obstacles but public schools were not categorized by type and the data covered a small geographic area.

The data issue is of great importance because understanding fully the household's decision to enroll in a particular school or school type requires knowing not only the attributes of the household but also the characteristics of the schools in the household's choice set. Past studies have tended to make (rather bold) assumptions to generate school choice sets because the data prohibited identifying the true set. For example, it has generally been assumed that the child lives in the public school district in which the public or private school currently attended is located. Often, a composite measure of the public school attributes or a similar composite of the private school attributes in that same district are assumed to constitute the household's choice set. But private schools and some of the nontraditional public schools attract students from

[2] See Lankford and Wyckoff (2006) for a description of various national data sets and the particular missing elements of each that have precluded these analyses.

districts other than where the school is located and individual schools within an area may differ significantly. Furthermore, and most important for this paper, these studies do not allow us to understand the characteristics of households that choose the new public charter schools versus the traditional public schools.

This study represents an important contribution to the literature in that it expands enrollment choices to the full array of household choices among types of private schools and types of public schools.[3] More important, the paper uses a restricted access nationally representative sample of households with identifiers of household location so that the set of schools constituting a choice set can be linked to the enrollment decision. With these data, we can also measure distance to the various school choices, and sensitivity of households to distance of alternatives can be tested. We are particularly interested in the factors influencing choice among the new public options in schooling.

III. The choice model

In this section, we assume a utility-maximizing household decision model of school choice to include a complex array of choices among the general categories of public or private schooling and then among specific types of public or private choices.[4] For classification purposes, assume the general category of public and private schools is represented as type *t, t* = 1, 2. Within each general category, however, household *i* may choose a mutually exclusive set of options *j,* j=1,….n. Each household chooses the general category *t* and the specific alternative within that category, *j*, that provides it the greatest utility, U_{itj}. For example, a household

[3] Note that this study does not include home schooling as a choice. We were unable to match a small number of students in the data set to a school and some of these may be home schooled but we were not able to verify. Furthermore, the distance question should be irrevelant to the extent instruction occurs in the household.
[4] Houston and Toma (2003), Lankford and Wyckoff (1992), Lankford, Lee, and Wyckoff (1995), Lankford and Wyckoff (2006), and Toma, Zimmer, and Jones (2006) have used the same general utility-maximizing frameworks.

chooses school general category 1, type 4 among the finite alternatives if the utility $U_{i1,4} > U_{itj}$ for all alternatives with i≠1 and j≠4. The household utility from any general category *t* and specific type *j*, depends on a vector of household attributes, X_i representing socioeconomic characteristics, the child's ability, and tastes for schooling relative to a composite package of consumption goods, C_i. Utility also depends on a vector of school attributes, S_{tj}, of all schools within the household's choice set. These attributes may include quality of the school as perceived through test scores, socioeconomic characteristics of peers, and religious or nonreligious aspects of the school.

More formally,

(1) $U_{itj} = U(X_i, C_i, S_{tj}, \varepsilon_{itj})$

where ε_{itj} is a scalar composite of all relevant but unmeasured factors in the school choice decision. The inclusion of this random disturbance term captures both unmeasured school specific characteristics and the perception of these characteristics by each household. Each household maximizes utility by allocating its budget between schooling and all other goods and services. All households pay the tax price of public schooling whether they enroll or not.[5] Those who choose the general category of private schooling incur a higher price than choosing the public system because they also must pay tuition to the private school. Of particular interest for the purpose of this paper is the array of specific choices, traditional public, magnet, or charter within the public vector of schools that each entails the same sunk cost.

In addition, each school, public or private, involves varying costs to the household related to the distance that must be traveled to attend the school. The expected role of distance to the school is complex. Other things equal, greater distance implies greater time and travel cost to

[5] Empirically, we assume local tax price differences are captured in attributes of the schools such as test scores and socioeconomic measures and differences across states are included in the state fixed effects.

school. But certain school types (traditional public, some magnets, and Catholic schools) have catchment areas that define who can enroll in the schools. For these schools, there is an implicit cost of exclusion from a school if the household is located outside the catchment boundary. This implies that catchment area schools will have not only a linear distance cost but also a non-linear effect of distance on the school choice decision. Households are presumed to value shorter distances to school, all other things constant, but we expect households, at the margin, to be willing to trade longer distance for other preferred attributes of the schooling package. This paper will examine this tradeoff by looking at types of schools and/or attributes of those that households are willing to travel farther distances to acquire.[6]

Households choose the school alternative, *tj*, if that choice maximizes utility. In other words, households choose type *tj* if $U_{ijt} > U_{irs}$ for all $j \neq r$ or $t \neq s$. The probability that a household will choose a particular type of schooling is given by

(2) $P_{tj} = \text{Prob}\,[U_{ijt} > U_{irs}]$ for all $j \neq r$ or $t \neq s$.

This basic model will guide our empirical analysis in this paper as we look at the choice of particular school types.

IV. Data

This study will use two major data sources. First and most important for this research are data on children and their families from the NCES *Early Childhood Longitudinal Program (ECLS-K.)* The data are weighted to constitute a nationally representative sample of households and their children. The children in the data set attend both public and private schools and

[6] The catchment area requirement implies that the residential location and school choice may be simultaneously determined. Although we are unable to identify the factors that influence residential choice in this paper, our findings are consistent with the hypothesis that locating near the school is less important than locating within the boundary of catchment-zoned schools.

represent diverse socioeconomic and racial/ethnic backgrounds. The *ECLS* is a longitudinal study that follows students enrolled in kindergarten in the fall of 1998 through 8th grade. While future questions will exploit the longitudinal nature of these data, this paper focuses on the 5th grade survey. In particular, we examine students who are enrolled in 5th grade in spring, 2004. The data provide a rich set of information on each student including the student's own test scores, his or her household characteristics, and the school attended by the student. The restricted access *ECLS* data also provide the home address of the student.

For purposes of this paper, we match the *ECLS* household data to NCES *Common Core Data (CCD).* The *CCD* provides information on each school including the address of the school and characteristics of the school including size and racial, ethnic, and gender diversity of the student body. In addition, we have standardized test scores in reading and math for each public school.[7] We identify the longitude and latitude of each school in the U.S. that offers fifth grade classes as well as the geographical information of each household and school attended in the *ECLS* sample. By matching the household residences to the universe of schools, we can obtain the full set of possible school choices available to a household at a given time.[8]

The *ECLS* data set contains information on 11,820 students who were fifth graders in 2004.[9] In the CCD data set, we identify 69,768 schools offering fifth grade instruction. Due to missing school district data, school identifiers, student residence, or school identifiers, the sample of matched 5th graders to school attended falls to 10,104. The *ECLS* data both over and

[7] These scores were developed by researchers at Rand Corporation. Hastings and Weinstein (2008) find that information about test scores influence choice of schools in Charlotte, North Carolina.
[8] Lankford and Wyckoff (2006) include the simultaneous choice of residence and school. As we illustrate later in the paper, estimating distance between residence and school (i.e., distance as the dependent variable) did not prove fruitful in this paper due to the lack of successful instruments. .
[9] Weights are provided in the data for statistical purposes and are used for making nationally representative assignments. The statistics presented in this paper use the student weights.

under samples students in particular school types and the resulting weighted numbers by school type are illustrated in Table 1.

[Table 1 About here]

Because little is known about distance traveled to school, Table 2 provides descriptive information about the relationship between the household residence, the type of school attended by this representative sample of students, and the distance they travel to that school type. In particular, the students are again grouped into categories by type of school attended (see Table 1). The household location and the location of the school actually attended are geographically matched. Table 2 compares the number and percent of matches by school type in terms of the distance to the school. Begin with row 1, or the traditional public school. The matched data show that less than 50 percent of fifth graders who attend traditional public schools, enroll in the one nearest their home. In particular, 46 percent attend the traditional public school nearest home. Almost 17 percent of traditional public school students enroll in the public school that is 2nd in distance from their home. Combining numbers across the row, the results illustrate that over 25 percent of students who attend traditional public schools do not attend one of the three public 5th grade schools nearest their home. To the extent that many traditional public schools continue to operate under a system of catchment areas, this number appears rather surprising.

[Table 2 About Here]

The last column of table 2 indicates the median distance between the students' home and the school attended. With all private schools, the median distance traveled from home to school is farther than with any public type including charter schools. Table 2 shows that students in magnet schools choose schools closer to home than any other school type. Nonsectarian private schools win the competition for greatest distance between home and school of any of the 6

school types. Appendix A provides more information about the relationship between distance traveled to school and school type with illustrations of the kernel density functions for each distinct school type.

In our analysis of the factors influencing the school choice decision, it is not possible, nor does it seem conceptually reasonable, to look at every permutation of distance to every 5th grade school for each student. [10] Instead, we made some assumptions to restrict the student's choice set to a conceptually realistic set. We assume that households consider all school *types* initially. We also assume the household chooses only those schools within 25 miles and, for traditional public schools, we alternatively restrict the choice set so that the school must be within the public district in which the household is located and allow the student to choose a public school outside the district boundary.[11, 12] Within each of the six types, the household is assumed to consider the school located nearest their home and at least one other school of that type that is some random distance from the home.[13] As described later in the empirical section, estimating the model for the more restrictive sample of households that do not choose the nearest school of the type chosen provides one means of addressing the potential endogeneity of residential location and school choice because we explicitly identify those families that do not locate nearest their chosen school.

[10] Initially, no *a priori* restriction on school and student matches was imposed; every 5th grade student was potentially matched with every 5th grade school as a possible choice, regardless of distance to school. A match of the full sample of schools to the sample of students, however, yielded over 700 million possible pairings. On average, restricting the choice set to all schools within 25 miles still presents the average student with approximately 46 schools of various types.

[11] Some states allow across district choice but an examination of inter-district choice programs is beyond the scope of the paper. We include state fixed effects to account for state policy differences regarding choice. Our estimates do not qualitatively change with the two estimations. Results are available upon request.

[12] There are a small number of households in the data who choose a school more than 25 miles from the residential location. These may be attributed to divorced parents, boarding schools, or other such factors and we drop these observations from the data.

[13] The random distance school is included to avoid automatically making the choice endogenous to distance. If long (or short) distance schools are included only when they are the school chosen, the data then indicate that long (or short) distance is attractive.

In addition to broaden the set as large as conceptually reasonable, for the school type chosen, we include up to four additional schools of that type if they meet the distance constraint (25 miles). Finally, if these 16 schools do not include the actual school chosen, we include the school actually chosen. Because the choice across all school types (the new public choices as well as private) is not typically available to students in rural areas, we drop rural households when estimating the models. With this definition of a choice set, our students have an average of 8.5 schools in their set with the actual choices ranging from only one to a maximum of sixteen; seventeen is technically possible but never found.

V. Empirical model and results of the decision to choose a school

As we described in section III, household utility from the alternative school types is a function of the observed household and school attributes and unobserved attributes and perceptions, $\varepsilon_{itj..}$ The probability that a randomly chosen household will choose school option *j* is given by

(3) $P_j = \text{prob}[V_{ijt} + \varepsilon_{itj} > V_{irs} + \varepsilon_{irs}]$

for all $j \neq r$ or $t \neq s$ and where V is a linear function of the observed attributes and characteristics. Assuming the errors are independent and identically distributed, the probability that a student enrolls in alternative *j* depends on the assumed probability distribution of the disturbance ε. If that distribution is uniform, a linear probability model is appropriate. If it is a Weibull distribution, a multinomial logit results. Alternatively, any complex theoretical distribution of probabilities can be approximated by a linear function. This paper estimates both the linear probability model and the multinomial logit model with varying choices on the part of the households.

In this paper, we emphasize the linear results because the estimates are easily interpretable. However, it should be noted, the multinomial logit results (reported in Appendix B) are essentially the same with respect to the signs of the coefficients and somewhat weaker in t-values, which is a result of the exponential form used in the multinomial logits. If the linear probability model is construed as an approximation, then extrapolations far beyond the data, e.g. to a world in which few students attend traditional public schools, would be invalid.[14] Note that we also estimated, but not report, the model using instrumental variables to correct for the potential endogeneity of distance to school.[15]

The dependent variable, School Choice, includes all school choices (up to 16 schools) as defined for our choice set for student *i*. The variable takes a value of 1 if the student chooses a particular school and 0 if the school is not chosen. The dependent variable is estimated as a function of household attributes and school attributes for each school in the choice set, including the distance between the residential location and each school in the choice set for that student. The distance variable represents the flat-earth distance between each school in the choice set and the residential location. Because we predict a nonlinear relationship between school choice and distance for certain school types, distance squared is included in the linear probability estimates.

In addition to distance, there is a vector of 9 independent variables describing school characteristics in the household's choice set; a vector of 27 variables representing attributes of the household making the choice decision; and state fixed effects for the ten biggest states, which constitute half the sample, and a dummy variable for all others, to account for different state laws regarding open enrollment, charter school possibilities, and other unobserved state level

[14] Linear probability models can yield predicted probabilities outside the 0-1 interval, but that problem is unlikely near the average data used; the relative odds of the choice with a multinomial logit do not have that problem.
[15] The various instruments including size of district and other expected influencing variables to explain distance to school were only weakly significant. Our inability to predict distance to school does not rule out endogeneity but it explains why we did not report IV results.

characteristics that might influence the school choice decision. We limit the state fixed effects to ten to keep the list of coefficients manageable. The explanatory variables are all interacted with each of the six school types. For example, every traditional public school has the same coefficients, but every coefficient differs from the corresponding Catholic school coefficient. Tables 3 and 4 list the variables separately for public and private school options within these vectors and provides descriptive statistics for each.[16] While these tables do highlight some interesting patterns, our formal analysis provides more definitive insights as we consider all these variables simultaneously.

[Table 3 About Here]

[Table 4 About Here]

The estimated coefficients of the linear probability model tell us the marginal effect of a particular household attribute or a particular school characteristic on the household's decision to choose each of the six school types. While all variables were included in one model, we present the results across tables 5 through 8 with each table having a different focus. We discuss the results both across school types and for a particular school type. We are particularly interested in the traditional public schools versus the alternative public types of school choice.

To begin, we consider the effect of distance on the type of school chosen. Estimated coefficients in Table 5 illustrate that a school's distance from home is a significant and negative factor in choosing a school in all public school types and in Catholic schools. But as illustrated in Table 5, although distance matters in all types of schools, the magnitude of the effect of

[16] The results reported here are only for those households who reported a 9-digit zip code in their home address. This reduces the sample to slightly over 58,000 household-school matches from over 90,000 originally. For robustness, we also estimated the full sample which includes 9-digit and 5-digit zip codes (P.O. box addresses and other). We assume our estimates of distance may contain more measurement error for the 5-digit addresses. Surprisingly, the results on distance are qualitatively unchanged under the two sample estimates although the magnitudes of the coefficients are larger with the full sample which is consistent with the expectation of greater measurement error.

distance is greatest for the traditional public school choice. The estimates show that, at the margin, increasing the distance from the household by one mile decreases the probability of enrolling in a traditional public school by over 6 percent. In magnet schools, distance has a marginal effect on enrollment of just over 2 percent. For Catholic and Charters, distance has a negative marginal effect on school choice of less than 1 percent. It appears that households are willing to trade off distance for other school attributes to a greater extent in all school types than in the traditional public school. These results are consistent with the assumption that households must live nearer these schools because catchment zones require it.

[Table 5 About Here]

Recall the nonlinear effect of distance is included in the model because of the exclusionary cost of attendance zones. We see in Table 5 that there is no significant effect for the quadratic distance coefficient in the Other Religious or the Nonsectarian school types. At the other extreme, the quadratic coefficient is highly significant for the traditional public school choice. The coefficients on the other three types are significant but as with the linear effect of distance, are small in magnitude. The results on the two distance coefficients together suggest that importance of distance in a household's decision is directly related to the extent to which location is a requirement for attendance.

Distance in the school choice decision is interesting largely because others have not been able to include it as a factor in the school choice decision. But other attributes of the schools and family also are expected to differentially affect the decision among the public types as well as the private schools. Consider the estimated coefficients on the racial composition of the school as well as the racial composition of the household. The significant and negative coefficient on Hispanic and Black (White is the omitted category) in Table 5 suggests that higher percentages

of Hispanics and Blacks in a magnet school make it less attractive to households, ceteris paribus. On the other hand, the results indicate that, on average, a Black or Hispanic household is more likely to choose the magnet school than are White households while households attending charter schools do not appear race sensitive either in terms of the composition of the school or in terms of individual household choice. Proceeding down the rows, Black households are less likely to choose a Catholic school, ceteris paribus, than are White households although the racial composition of the Catholic schools does not appear to influence choice.

Households are influenced positively by the percentage of American Indians in other religious (i.e., non-Catholic) schools although the only category for the individual's own race that enters the decision to attend another religious, private school is if the student is Hispanic. Hispanics are less likely to choose Non-Catholic, religious private schools than are white students. The nonsectarian private schools resemble the charter schools in terms of racial influences. Here, too, neither the racial composition of the school or the race of the household appears to significantly influence the decision to attend the nonsectarian, private schools.

Finally, as with distance, it is the traditional public school that appears to be most unique with respect to race. Increasing percentages of Hispanic or Black students enrolled in the school decreases the probability that a given household will choose to enroll in the traditional public school. On the other hand, both Blacks and Hispanics are significantly more likely to choose the traditional public school. While the magnitude of the peer composition effects is quite small, the effect of race of the household on choosing a traditional public school is large. Indeed, the coefficient on black is approximately equal to that of the distance coefficient.

Other demographic and socioeconomic conditions prove equally interesting in the school choice decision and especially in the differential decision with the traditional public schools and

other types. In particular, Table 6 single parent households appear to have strong preferences for the traditional public school, even after controlling for income level, education level of the parent, and the poverty status of the household. More specifically, the absence of a Dad in the household is not only statistically significant in explaining the choice to enroll in a traditional public school but has the largest absolute effect of any variable. The probability of enrolling in a traditional public school rises by 23 percent for households with no Dad present. Magnet schools are also attractive to the absentee Dad household but to a lesser extent. On the other hand, the absence of a Dad significantly decreases the probability (8 percent decrease) of attending the newest alternative public type, the charter school. No Dad in the household also decreases the probability of enrolling in either type of private school. Note that No Mom in the household does not have the same effects. It is the lack of a Dad in the household that is significantly influencing household choices of school types, including the newest alternative to the traditional public schools, the charter schools.

[Table 6 About Here]

Consider other school characteristics and how they influence the household's decision to attend different school types. The tables present the results for size of the school, the student-teacher ratio, test scores in math and reading[17], as well as the location of the school. Perhaps the most noticeable result is the lack of systematic results across the school characteristics. For example, the school enrollment does not appear to be a significant factor in the choice to attend magnet or charter schools. Larger student-teacher ratios negatively influence the probability of attending both the magnet and traditional public schools but the magnitude of the effects are very small. The school test scores appear to help retain families in the traditional public schools. The

[17] Test scores are available only for public schools. However, parents will generally not have access to test scores for private schools in making their decisions.

results in Table 7 illustrates that higher math scores make the traditional public school more attractive. At the same time, the school's test scores in math or reading do not influence the decision to enroll in the public magnet or charter schools.

[Table 7 About Here]

Turn now to other characteristics of the household. Our data include variables representing the mother's education level, father's education level, the size of the household, income level of the household, and the religiosity of the household. Similar to previous findings in the public-private choice literature, the education level of the parents influences the type of school chosen. As can be seen here, the education level of parents works differently for the various types of private schools suggesting that the types of private schools are clearly not perfect substitutes for one another. The decision to attend Catholic schools, in particular, appears to be least influenced by parental education. But it is also true that education levels of the parents work differently for the choice among public types. Households with lower parental education levels (relative to the omitted most educated level) are more likely to choose the traditional public schools and less likely to choose an alternative public (magnet or charter). The education level of parents not only has statistical significance, but again, the magnitude on several measures of parental schooling levels is economically large.

The last set of variables to highlight, shown in Table 8, deals with religiosity. Cohen-Zada and Sander (2007) found that the failure to take account of religiosity in studies of school choice leads to biased estimates of the school choice decision. The *ECLS* survey asks the households a series of questions about religion. We include two sets of variables of how often families *discuss* and *argue* as a measures of religiosity. In both categories of variables, the omitted variable is "frequent."

[Table 8 About Here]

Again, the coefficient estimates differ across school types. Religiosity does not explain the decision to enroll in charter schools but two of the discuss measures do appear to influence the decision to attend magnet public schools. But the discuss variables are consistently positive and significant in influencing the choice to attend traditional public schools. The positive sign on the coefficients suggests that households who discuss religion less frequently are more likely to choose traditional public schools. In contrast, three of the four discuss religion category are significant but negative for households choosing Catholic schools suggesting that less frequent discussion of religion leads to a lower probability of attending Catholic schools. This too is consistent with previous work in school choice. The same findings hold for households who choose other religious schools as well. Not only are the estimated coefficients significant but they are relatively large in terms of marginal effects. In contrast to households who choose any of the religious private schools, no measure of religiosity is significant in explaining who chooses to enroll in the nonsectarian private school. Taken together and viewed across school types, the religiosity variables affect the school choice decision not only between the public and private sectors but within the particular types of schools, both within the public and within the private sector.

VI. Concluding comments and future research

This paper represents a first attempt to look at the factors that influence households' choice across all types of schools. The paper contributes to the existing school choice literature not only in using a nationally representative data set but also by identifying the different types of schools within both the private and public sectors. The paper is able to identify, by school, the

schools within a household's choice set by identifying the characteristics of the school as well as by controlling for distance from the home to the various alternatives. While this paper does not purport to definitively assess the role of distance in a household's decision to enroll in a school, the results suggest that distance is a bigger factor in choosing to attend schools with a catchment area than those without. Also, it is clear that distance has less of an influence of new school choice alternatives such as charter schools and religious private schools than the more traditional schooling options of neighborhood public, catholic, and magnet schools.

As these choices increase in popularity, this finding relating to distance may have implications for residential locations of families and ultimately for issues such as racial/ethnic integration of neighborhoods and property taxes. For instance, if families that choose to attend religious private schools do not feel compelled to live near these schools, they may shop around for residential locations that have lower taxes. Whether this creates greater racial diversity of neighborhoods may be a function of whether neighborhoods with lower taxes are associated with lower or higher taxes.

This research also suggests that the persons who attend the new public school options, magnet and charter schools, are different than those who attend the traditional public schools. At least in the fifth grade in the U.S., lower socioeconomic status as reflected in the absence of a father in the household and lower education level of the parent(s) appears to stifle the likelihood that children will enroll in the new public options. This finding not only has implications for policy, but also has implications for research. Much of the school choice research focuses on the effectiveness of the various types of schools. To the degree that this research does not take into the differences in populations attending these schools, the results could be driven by these

differences rather than the differences in quality of schooling. Because of the potentially large research and policy implications of this finding, this calls for yet further research.

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Table 1: Weighted Number of Students Enrolled by School Type

School Type	Number of Students Enrolled (using student weights, not counts)
Traditional Public	8793.2
Public Magnet	254.8
Public Charter	78.4
Catholic	479.1
Other Religious	390.7
Nonsectarian	107.8

Table 2: School Attendance Distance from Home by Type (using student weights, not counts)

School Type	1st Nearest	2nd Nearest	3rd Nearest	Median Miles
Traditional Public	4001.8 (45.5%)	1459.7 (16.6%)	687.3 (7.8%)	1.4
Public Magnet	103.6 (40.7%)	60.9 (23.9%)	29.6 (11.6%)	1.1
Public Charter	39.1 (49.9%)	18.3 (23.3%)	8.2 (10.5%)	1.8
Catholic	251.9 (52.6%)	8 (17.4%)	61.6 (12.9%)	1.9
Other Religious	129.9 (33.2%)	68.6 (17.6%)	18.6 (4.8%)	2.7
Nonsectarian	39.5 (36.6%)	24.0 (22.3%)	12.4 (11.5%)	4.2

Table 3: Descriptive Statistics for Public School Types

			Magnet		Charter		Traditional Public	
			Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Dependent Variable			0.07	0.25	0.01	0.10	0.35	0.48
School Characteristics	Distance to School		8.6	7.7	9.6	7.3	6.1	7.3
	Distance Squared		133.7	177.0	144.2	173.9	90.4	157.4
	School Enrollment		855	789	333	300	551	314
	Free Lunch %		45.18	27.35	26.42	29.34	34.28	28.77
	School Math Scores		39.20	35.68	24.96	33.32	43.90	32.25
	School Reading Scores		36.81	34.55	28.55	34.24	44.03	32.21
	Student/Teacher Ratio		16.4	7.0	13.5	14.9	16.4	22.1
	Midsize City Location		0.29	0.46	0.53	0.50	0.54	0.50
	School Racial Composition	% American Indian	0.58	1.59	0.61	2.57	1.03	6.08
		% Asian	6.49	9.56	3.50	7.35	4.79	9.11
		% Hispanic	26.75	30.97	20.35	26.46	19.80	27.22
		% Black	37.03	32.68	33.46	36.50	20.15	27.44
Student Characteristics	Student Math Score		107	25	112	23	111	24
	Student Reading Score		133	30	137	27	136	27
	Race of Student	Asian	0.05	0.22	0.04	0.21	0.04	0.19
		Hispanic	0.25	0.43	0.29	0.45	0.24	0.43
		Black	0.34	0.47	0.19	0.40	0.22	0.41
Household Characteristics	Household Income		51486	64218	59503	68043	54088	62580
	HH in Poverty		0.29	0.45	0.22	0.41	0.24	0.43
	Number of Siblings		1.61	1.25	1.59	1.17	1.59	1.17
	Mother's Age		37	10	38	9	38	9
	No Mother at Home		0.03	0.18	0.02	0.15	0.03	0.16
	Mother's Education	Less than HS	0.14	0.35	0.13	0.33	0.12	0.32
		High School	0.24	0.42	0.24	0.43	0.25	0.43
		Some College	0.33	0.47	0.34	0.47	0.36	0.48
		College Degree	0.18	0.38	0.17	0.37	0.16	0.37
	Father's Age		28	21	31	19	30	20
	No Father at Home		0.33	0.47	0.26	0.44	0.28	0.45
	Father's Education	Less than HS	0.11	0.31	0.10	0.31	0.11	0.31
		High School	0.17	0.38	0.18	0.38	0.19	0.40
		Some College	0.17	0.37	0.20	0.40	0.19	0.39
		College Degree	0.11	0.31	0.13	0.34	0.12	0.33
	Discuss Religion	Never	0.07	0.25	0.06	0.25	0.07	0.26
		Almost Never	0.07	0.26	0.07	0.25	0.06	0.25
		Several Times a Year	0.18	0.38	0.16	0.37	0.16	0.37
		Several Times a Month	0.22	0.41	0.26	0.44	0.26	0.44
	Argue About Religion	Sometimes or Often	0.01	0.08	0.01	0.10	0.01	0.09
		Hardly Ever	0.04	0.19	0.05	0.21	0.04	0.21
		Never	0.07	0.25	0.09	0.29	0.09	0.28

Table 4: Descriptive Statistics for Private School Types

			Catholic		Other Religious		Nonsectarian	
			Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Dependent Variable			0.03	0.17	0.02	0.13	0.00	0.07
School Characteristics	Distance to School		8.0	7.6	7.5	7.1	8.1	6.6
	Distance Squared		121.8	170.6	105.6	159.7	110.0	151.9
	School Enrollment		353	183	210	234	219	261
	Free Lunch %		0.00	0.00	0.00	0.00	0.00	0.00
	School Math Scores		0.00	0.00	0.00	0.00	0.00	0.00
	School Reading Scores		0.00	0.00	0.00	0.00	0.00	0.00
	Student/Teacher Ratio		18.3	5.4	12.2	9.1	10.4	38.3
	Midsize City Location		0.55	0.50	0.56	0.50	0.59	0.49
	School Racial Composition	% American Indian	0.85	7.09	0.51	2.90	0.86	4.26
		% Asian	5.16	9.83	3.71	9.59	6.92	12.11
		% Hispanic	16.85	25.57	9.11	17.93	8.28	14.96
		% Black	8.72	20.22	18.22	29.76	16.58	25.56
Student Characteristics	Student Math Score		112	23	112	24	113	23
	Student Reading Score		137	26	138	27	138	26
	Race of Student	Asian	0.04	0.19	0.04	0.20	0.04	0.20
		Hispanic	0.23	0.42	0.22	0.42	0.23	0.42
		Black	0.20	0.40	0.19	0.39	0.20	0.40
Household Characteristics	Household Income		58287	65857	57876	62734	63925	71151
	HH in Poverty		0.22	0.41	0.21	0.41	0.20	0.40
	Number of Siblings		1.59	1.16	1.55	1.15	1.58	1.12
	Mother's Age		38	9	38	9	38	9
	No Mother at Home		0.03	0.16	0.02	0.15	0.02	0.14
	Mother's Education	Less than HS	0.11	0.32	0.11	0.31	0.12	0.33
		High School	0.24	0.43	0.24	0.43	0.23	0.42
		Some College	0.35	0.48	0.36	0.48	0.34	0.47
		College Degree	0.17	0.37	0.17	0.38	0.17	0.38
	Father's Age		31	19	31	19	32	19
	No Father at Home		0.27	0.44	0.26	0.44	0.24	0.43
	Father's Education	Less than HS	0.10	0.30	0.10	0.29	0.10	0.30
		High School	0.19	0.39	0.19	0.39	0.19	0.39
		Some College	0.19	0.39	0.20	0.40	0.20	0.40
		College Degree	0.13	0.34	0.14	0.34	0.14	0.35
	Discuss Religion	Never	0.06	0.25	0.07	0.25	0.06	0.23
		Almost Never	0.06	0.24	0.07	0.25	0.07	0.25
		Several Times a Year	0.17	0.38	0.17	0.38	0.17	0.38
		Several Times a Month	0.27	0.44	0.27	0.44	0.27	0.44
	Argue About Religion	Sometimes or Often	0.01	0.09	0.01	0.09	0.01	0.09
		Hardly Ever	0.05	0.21	0.04	0.21	0.05	0.21
		Never	0.09	0.29	0.09	0.29	0.11	0.31

Table 5: Linear Estimates for Distance and Race

		Magnet			Charter			Traditional Public		
		Coef.	P		Coef.	P		Coef.	P	
Distance to School		-0.0230	<.000	**	-0.0067	<.000	**	-0.0655	<.000	**
Distance Squared		0.0006	<.000	**	0.0002	0.002	**	0.0017	<.000	**
School Racial Composition	% American Indian	-0.0042	0.1		-0.0009	0.632		-0.0035	<.000	**
	% Asian	-0.0005	0.412		-0.0003	0.548		-0.0009	0.003	**
	% Hispanic	-0.0009	0.02	*	-0.0001	0.724		-0.0019	<.000	**
	% Black	-0.0016	<.000	**	-0.0001	0.39		-0.0026	<.000	**
Race of Student	Asian	0.0305	0.199		-0.0134	0.389		0.0230	0.057	
	Hispanic	0.0254	0.116		-0.0015	0.866		0.0482	<.000	**
	Black	0.0623	<.000	**	-0.0052	0.617		0.0619	<.000	**

		Catholic			Other Religious			Nonsectarian		
		Coef.	P		Coef.	P		Coef.	P	
Distance to School		-0.0061	<.000	**	-0.0015	0.201		-0.0008	0.485	
Distance Squared		0.0002	0.006	**	0.0000	0.697		0.0000	0.712	
School Racial Composition	% American Indian	0.0000	0.904		0.0023	0.013	*	-0.0001	0.821	
	% Asian	0.0004	0.195		-0.0002	0.395		0.0000	0.83	
	% Hispanic	0.0000	0.751		-0.0001	0.346		-0.0001	0.671	
	% Black	0.0002	0.146		-0.0001	0.35		-0.0001	0.519	
Race of Student	Asian	-0.0042	0.744		-0.0163	0.153		-0.0063	0.546	
	Hispanic	-0.0070	0.359		-0.0215	0.001	**	-0.0125	0.053	
	Black	-0.0357	<.000	**	-0.0069	0.334		-0.0050	0.438	

* = P < .05 ** = P < .01

Table 6: Linear Estimates for School Characteristics

	Magnet		Charter		Traditional Public	
	Coef.	P	Coef.	P	Coef.	P
School Enrollment	0.0000	0.069	0.0000	0.102	0.0000	<.000 **
Free Lunch %	0.0016	<.000 **	-0.0001	0.672	0.0003	0.041 *
School Math Scores	0.0006	0.18	0.0001	0.573	0.0006	<.000 **
School Reading Scores	-0.0003	0.443	0.0001	0.667	-0.0002	0.231
Student/Teacher Ratio	-0.0035	0.043 *	-0.0002	0.457	-0.0004	0.017 *
Midsize City Location	0.0079	0.495	0.0004	0.959	0.0710	<.000 **

	Catholic		Other Religious		Nonsectarian	
	Coef.	P	Coef.	P	Coef.	P
School Enrollment	0.0000	0.003 **	0.0000	<.000 **	0.0000	0.441
Free Lunch %	(dropped)		(dropped)		(dropped)	
School Math Scores	(dropped)		(dropped)		(dropped)	
School Reading Scores	(dropped)		(dropped)		(dropped)	
Student/Teacher Ratio	-0.0013	0.015 *	0.0001	0.827	0.0000	0.666
Midsize City Location	-0.0310	<.000 **	-0.0241	<.000 **	-0.0073	0.105

* = P < .05 ** = P < .01

Table 7: Linear Estimates for Household Characteristics

		Magnet			Charter			Traditional Public		
		Coef.	P		Coef.	P		Coef.	P	
Mother's Age		-0.0008	0.412		-0.0004	0.514		-0.0008	0.063	
No Mother at Home		-0.0614	0.218		-0.0345	0.294		0.0210	0.374	
Mother's Education	Less than HS	-0.0627	0.023	*	-0.0113	0.511		0.0675	<.000	**
	High School	-0.0299	0.196		0.0051	0.695		0.0245	0.01	*
	Some College	-0.0496	0.016	*	-0.0077	0.494		0.0079	0.35	
	College Degree	-0.0271	0.194		0.0212	0.066		-0.0188	0.032	*
Father's Age		0.0021	0.032	*	-0.0013	0.045	*	0.0035	<.000	**
No Father at Home		0.1085	0.021	*	-0.0874	0.003	**	0.2309	<.000	**
Father's Education	Less than HS	-0.0051	0.846		-0.0336	0.043	*	0.1092	<.000	**
	High School	0.0163	0.486		-0.0248	0.056		0.1050	<.000	**
	Some College	-0.0261	0.233		-0.0327	0.006	**	0.0919	<.000	**
	College Degree	0.0137	0.508		-0.0278	0.014	*	0.0486	<.000	**
Student Math Score		-0.0012	0.001	**	0.0000	0.949		0.0006	0.001	**
Student Reading Score		0.0016	<.000	**	-0.0001	0.76		0.0006	<.000	**
Household Income		0.0000	0.106		0.0000	0.051		0.0000	0.137	
HH in Poverty		0.0207	0.177		-0.0072	0.51		0.0343	<.000	**
Number of Sibilings		-0.0027	0.526		0.0007	0.823		0.0030	0.168	

		Catholic			Other Religious			Nonsectarian		
		Coef.	P		Coef.	P		Coef.	P	
Mother's Age		0.0005	0.358		0.0000	0.96		-0.0004	0.383	
No Mother at Home		0.0214	0.419		-0.0125	0.601		-0.0311	0.178	
Mother's Education	Less than HS	0.0125	0.372		-0.0116	0.353		-0.0154	0.17	
	High School	0.0170	0.102		-0.0126	0.173		-0.0137	0.098	
	Some College	0.0186	0.043	*	-0.0046	0.576		-0.0137	0.059	
	College Degree	0.0239	0.011	*	-0.0128	0.13		-0.0074	0.315	
Father's Age		-0.0008	0.102		-0.0011	0.011	*	-0.0006	0.138	
No Father at Home		-0.0564	0.014	*	-0.0653	0.002	**	-0.0501	0.01	*
Father's Education	Less than HS	-0.0326	0.011	*	-0.0346	0.003	**	-0.0250	0.016	*
	High School	-0.0146	0.153		-0.0295	0.001	**	-0.0226	0.007	**
	Some College	0.0005	0.958		-0.0348	<.000	**	-0.0186	0.015	*
	College Degree	0.0092	0.314		-0.0206	0.011	*	-0.0153	0.035	*
Student Math Score		-0.0009	<.000	**	0.0000	0.967		0.0000	0.983	
Student Reading Score		0.0003	0.041	*	-0.0002	0.204		-0.0004	0.003	**
Household Income		0.0000	0.003	**	0.0000	0.033	*	0.0000	0.86	
HH in Poverty		-0.0129	0.128		-0.0124	0.108		-0.0050	0.503	
Number of Sibilings		-0.0024	0.321		-0.0020	0.346		-0.0021	0.285	

* = P < .05 ** = P < .01

Table 8: Linear Estimates for Religion in the Home

		Magnet		Charter		Traditional Public	
		Coef.	P	Coef.	P	Coef.	P
Discuss Religion at Home	Never	-0.0255	0.261	-0.0209	0.132	0.0658	<.000 **
	Almost Never	-0.0243	0.266	-0.0176	0.199	0.0418	<.000 **
	Several Times a Year	-0.0329	0.036 *	-0.0009	0.926	0.0415	<.000 **
	Several Times a Month	-0.0263	0.037 *	0.0019	0.803	0.0382	<.000 **
Argue About Religion at Home	Sometimes or Often	0.0327	0.619	-0.0084	0.813	0.0152	0.589
	Hardly Ever	-0.0153	0.504	-0.0092	0.517	0.0351	0.001 **
	Never	0.0222	0.223	0.0024	0.816	0.0143	0.058

		Catholic		Other Religious		Nonsectarian	
		Coef.	P	Coef.	P	Coef.	P
Discuss Religion at Home	Never	-0.0372	0.001 **	-0.0323	0.001 **	0.0029	0.757
	Almost Never	-0.0267	0.016 *	-0.0260	0.006 **	0.0022	0.803
	Several Times a Year	-0.0207	0.004 **	-0.0282	<.000 **	0.0038	0.517
	Several Times a Month	-0.0061	0.317	-0.0223	<.000 **	-0.0040	0.425
Argue About Religion at Home	Sometimes or Often	0.0070	0.815	0.0405	0.127	-0.0019	0.934
	Hardly Ever	0.0019	0.872	-0.0092	0.372	-0.0030	0.745
	Never	-0.0105	0.192	0.0003	0.962	0.0057	0.362

* = P < .05 ** = P < .01

Appendix A: Kernel density functions of distance from home and school type

Figure A.1: Catholic Schools

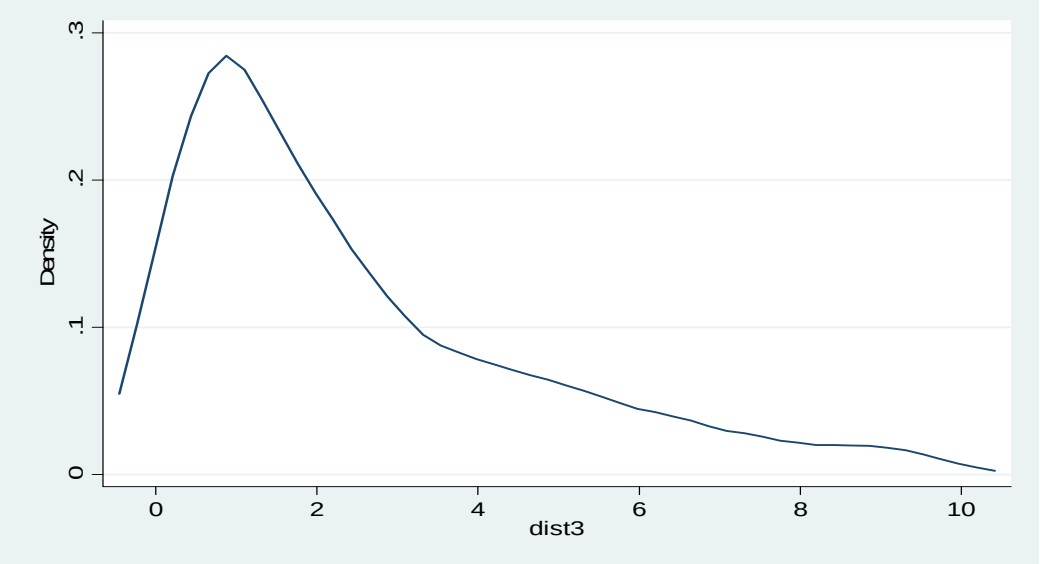


Figure A.2: Non-Catholic Religiously Affiliated Private Schools

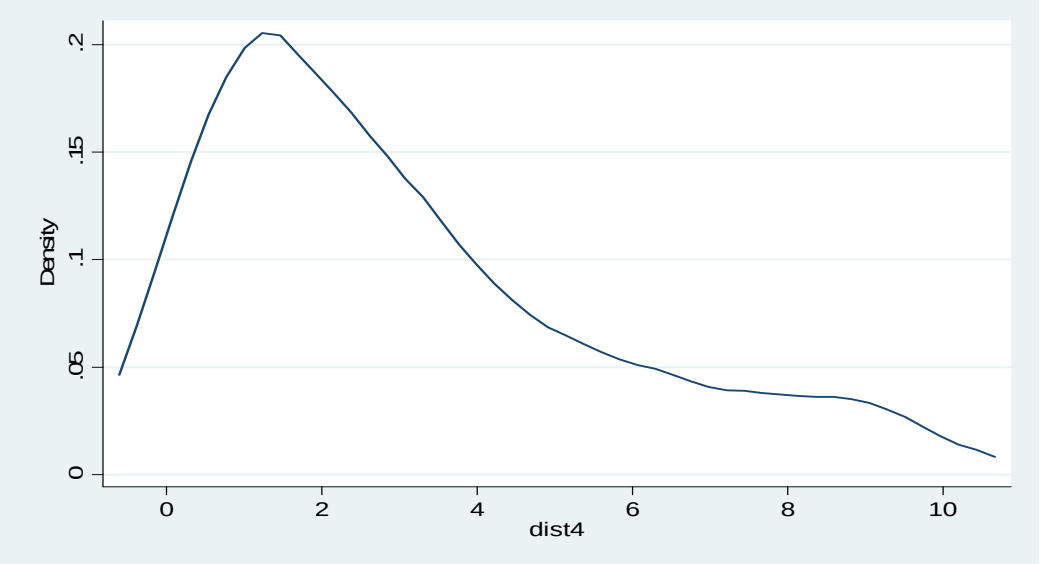


Figure A.3: Private Schools With No Religious Affiliation

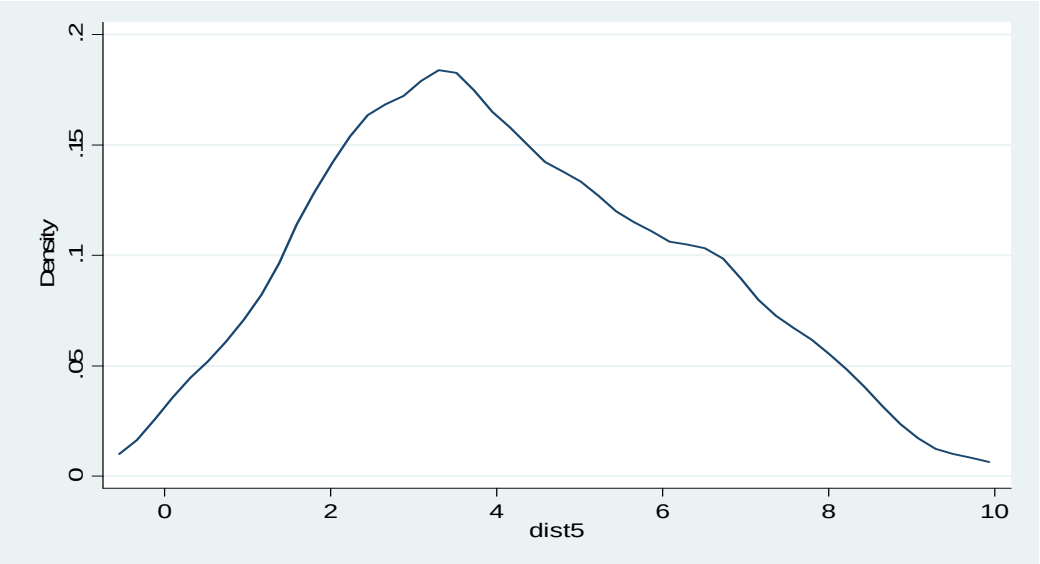
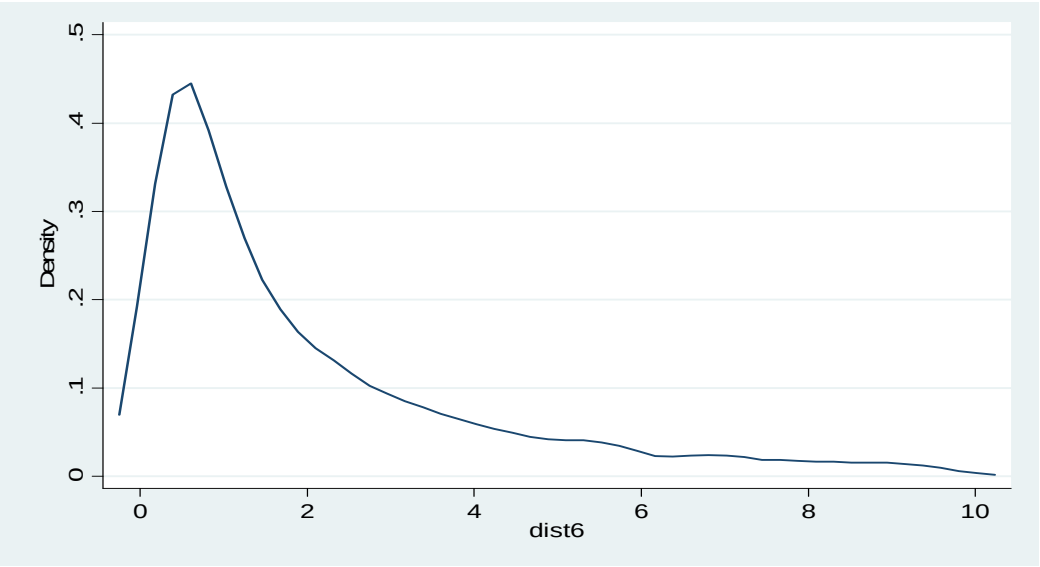


Figure A.4: Traditional Public Schools



Appendix B: Logit Estimates

Table B.1: Logit Estimates for Distance and Race

		Magnet		Charter		Traditional Public	
		Coef.	P	Coef.	P	Coef.	P
Distance to School		-0.275	<.000 **	-0.549	0.001 **	-0.299	<.000 **
School Racial Composition	% American Indian	-0.052	0.146	-0.202	0.387	-0.065	0.021 *
	% Asian	-0.018	0.351	-0.073	0.281	-0.006	0.326
	% Hispanic	-0.021	0.100	0.009	0.494	-0.013	<.000 **
	% Black	-0.043	<.000 **	-0.010	0.457	-0.017	<.000 **
Race of Student	Asian	0.385	0.544	(dropped)		0.144	0.459
	Hispanic	0.118	0.821	0.445	0.542	0.216	0.171
	Black	1.096	0.070	0.033	0.978	0.433	0.037 *

		Catholic		Other Religious		Nonsectarian	
		Coef.	P	Coef.	P	Coef.	P
Distance to School		-0.165	<.000 **	-0.089	0.012 *	-0.056	0.148
School Racial Composition	% American Indian	0.008	0.387	0.066	<.000 **	-0.069	0.588
	% Asian	0.011	0.303	-0.020	0.217	0.002	0.794
	% Hispanic	-0.001	0.876	-0.002	0.779	0.001	0.970
	% Black	0.010	0.060	-0.004	0.453	-0.005	0.638
Race of Student	Asian	-0.234	0.495	-0.752	0.109	-0.714	0.087
	Hispanic	-0.257	0.287	-1.392	<.000 **	-0.856	0.135
	Black	-1.620	<.000 **	-0.231	0.471	0.837	0.077

* = P < .05 ** = P < .01

Table B.2: Logit Estimates for School Characteristics

	Magnet		Charter		Traditional Public	
	Coef.	P	Coef.	P	Coef.	P
School Enrollment	0.000	0.283	0.002	0.012 *	0.000	0.292
Free Lunch %	0.034	0.003 **	-0.008	0.373	0.001	0.849
School Math Scores	0.011	0.476	0.019	0.055	0.003	0.372
School Reading Scores	-0.005	0.792	-0.002	0.836	0.000	0.957
Student/Teacher Ratio	-0.095	0.031 *	-0.098	0.067	-0.007	0.062
Midsize City Location	-0.277	0.518	0.426	0.453	0.312	0.008 **

	Catholic		Other Religious		Nonsectarian	
	Coef.	P	Coef.	P	Coef.	P
School Enrollment	0.001	0.027 *	0.002	<.000 **	0.002	0.014 *
Free Lunch %	(dropped)		(dropped)		(dropped)	
School Math Scores	(dropped)		(dropped)		(dropped)	
School Reading Scores	(dropped)		(dropped)		(dropped)	
Student/Teacher Ratio	-0.041	0.090	0.008	0.190	-0.027	0.526
Midsize City Location	-0.928	<.000 **	-1.257	<.000 **	-1.168	0.008 **

* = P < .05 ** = P < .01

Table B.3: Logit Estimates for Household Characteristics

		Magnet		Charter		Traditional Public	
		Coef.	P	Coef.	P	Coef.	P
Mother's Age		-0.011	0.670	0.012	0.888	-0.012	0.245
No Mother at Home		-0.901	0.577	(dropped)		-0.342	0.545
Mother's Education	Less than HS	-1.003	0.209	-0.336	0.834	0.299	0.229
	High School	-0.580	0.448	2.731	0.006 **	0.052	0.801
	Some College	-0.871	0.235	1.047	0.295	-0.049	0.787
	College Degree	-0.561	0.504	2.617	0.013 *	-0.170	0.348
Father's Age		0.026	0.379	-0.117	0.164	0.012	0.247
No Father at Home		1.389	0.348	-7.078	0.031 *	0.870	0.074
Father's Education	Less than HS	0.014	0.989	-2.514	0.058	0.518	0.066
	High School	0.224	0.794	-2.230	0.019 *	0.505	0.011 *
	Some College	-0.502	0.522	-2.129	0.033 *	0.417	0.029 *
	College Degree	-0.076	0.940	-1.627	0.022 *	0.182	0.310
Student Math Score		-0.017	0.094	0.015	0.351	0.002	0.535
Student Reading Score		0.021	0.024 *	0.008	0.558	0.001	0.852
Household Income		0.000	0.567	0.000	0.251	0.000	0.287
HH in Poverty		0.219	0.639	-0.379	0.606	0.181	0.312
Number of Sibilings		-0.083	0.512	-0.089	0.681	-0.015	0.739

		Catholic		Other Religious		Nonsectarian	
		Coef.	P	Coef.	P	Coef.	P
Mother's Age		0.024	0.136	0.008	0.815	0.051	0.433
No Mother at Home		0.667	0.463	0.065	0.964	1.947	0.540
Mother's Education	Less than HS	0.127	0.814	-2.064	0.073	(dropped)	
	High School	0.605	0.088	-0.351	0.478	-2.130	0.016 *
	Some College	0.536	0.030 *	0.014	0.972	-1.141	0.252
	College Degree	0.664	0.003 **	-0.291	0.425	-0.625	0.176
Father's Age		-0.029	0.082	-0.041	0.379	0.005	0.908
No Father at Home		-1.955	0.011 *	-2.010	0.362	-3.049	0.153
Father's Education	Less than HS	-1.448	0.007 **	-2.836	0.001 **	(dropped)	
	High School	-0.196	0.556	-0.943	0.048 *	-3.449	0.001 **
	Some College	0.182	0.508	-1.631	<.000 **	-1.255	0.070
	College Degree	0.230	0.346	-0.607	0.078	-0.677	0.316
Student Math Score		-0.028	<.000 **	-0.002	0.859	0.018	0.313
Student Reading Score		0.012	0.016 *	-0.003	0.744	-0.042	0.010 *
Household Income		0.000	<.000 **	0.000	0.120	0.000	0.550
HH in Poverty		-1.376	0.003 **	-1.318	0.064	(dropped)	
Number of Sibilings		-0.051	0.609	-0.009	0.961	0.021	0.910

* = P < .05 ** = P < .01

Table B.4: Logit Estimates for Religion in the Home

		Magnet		Charter		Traditional Public	
		Coef.	P	Coef.	P	Coef.	P
Discuss Religion at Home	Never	-0.465	0.438	(dropped)		0.405	0.088
	Almost Never	-0.191	0.824	(dropped)		0.234	0.300
	Several Times a Year	-0.774	0.100	-0.720	0.352	0.196	0.166
	Several Times a Month	-0.192	0.599	0.856	0.186	0.206	0.100
Argue About Religion at Home	Sometimes or Often	0.402	0.686	(dropped)		0.074	0.817
	Hardly Ever	-0.252	0.703	(dropped)		0.213	0.229
	Never	0.379	0.466	-0.221	0.744	0.041	0.804

		Catholic		Other Religious		Nonsectarian	
		Coef.	P	Coef.	P	Coef.	P
Discuss Religion at Home	Never	-2.533	<.000 **	-3.394	0.002 **	1.242	0.130
	Almost Never	-1.304	<.000 **	-1.420	0.123	0.532	0.486
	Several Times a Year	-0.834	0.023 *	-1.854	<.000 **	0.319	0.525
	Several Times a Month	-0.232	0.268	-1.057	0.002 **	-1.056	0.126
Argue About Religion at Home	Sometimes or Often	0.431	0.359	1.467	0.022 *	(dropped)	
	Hardly Ever	0.043	0.907	-0.627	0.152	-1.144	0.151
	Never	-0.301	0.283	0.120	0.750	1.104	0.047 *

* = P < .05 ** = P < .01

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