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What Do Parents Want From Schools?
Evidence From the Internet

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One of the most contentious policy areas in the United States today is the expansion of school choice. While many dimensions of parental-choice behavior have been analyzed, many of the most enduring questions center on the aspects of schools parents prefer and how these preferences will affect the socioeconomic and racial composition of schools. Using Internet-based methodological tools, we study parental preferences revealed through information search patterns and compare these findings to the standard ones in the literature, which are based largely on telephone interviews. Based on this evidence we suggest that unfettered choice may lead to undesirable outcomes in the distribution of students, and it may also lead to reduced pressure on schools to improve academic performance.

Keywords: information and schools, Internet and schools, parental preferences, school choice, Washington, DC schools

School choice is clearly one of the central themes in today's school reform movement. Grounded in their (often ardent) belief in the power of markets to improve efficiency and performance, proponents of choice marshal strong arguments for its expansion. However, in this article, based on the preferences parents reveal for different components of schools, we show that the unfettered introduction of choice can lead to increased segregation, and perhaps even *less* pressure on schools to improve.

The Foundations of Choice

Ranging from the expansion of inter- and intra-district choice to the rapid diffusion of charter schools and including the hotly contested spread of vouchers, the ability of parents to choose their children's schools is growing. As choice has proliferated, researchers have increasingly focused on the role of parents as "citizen-consumers" and studied how parent-choice behavior will affect schools under more market-like schooling arrangements (see, e.g., Chubb & Moe, 1990; Smith &

Meier, 1995; Henig, 1996; Schneider, Teske, & Marshall, 2000; Moe, 2001).

While many dimensions of parent-choice behavior have been analyzed, one of the most contentious is the question of what aspects of schools parents prefer and how these preferences will affect the socioeconomic and racial composition of schools, as well as their academic performance. At the core of these studies of parental preferences is the debate about whether or not, given choice, parents will select schools on educationally sound dimensions or make choices based on noneducational factors. In this article we use Internet-based methodological tools to study parental preferences revealed through information search patterns and compare these to the standard findings in the literature, which are based largely on telephone interviews.

Can Parents Choose Well?

Despite the rapid expansion of school choice, many doubt the ability of parents to make good choices. The Carnegie Foundation (1992, p. 50) concluded that "many parents base their school

choice decision on factors that have nothing to do with the quality of education," including the availability of day care, convenience, social factors, and the range and quality of interscholastic sports. A Twentieth Century Fund report argued that parents are not "natural 'consumers' of education" and that "few parents of any social class appear willing to acquire the information necessary to make active and informed educational choices" (Ascher, Fruchter, & Berne, 1996, pp. 40–41). But perhaps even more important, many researchers have argued that the tendency to make ill-informed choices is stronger among low-income parents. Again, according to the Carnegie Foundation, "School choice works better for some parents than for others. Those with education . . . may be able to participate in such programs," (Carnegie Foundation, 1992, p. 20, see also, Smith & Meier, 1995; Ascher et al., 1996; Henig, 1994; Henig, 1996; Henig, Moser, Holyoke, & Lacireno-Pacquet, 1999).

A parallel line of research has examined the choice of courses exercised by high school students. In public high schools where students have the freedom to choose from among a wide range of courses, Ravitch (1996) has shown that white and Asian-American students take more academic courses than black and Hispanic students (see also, Bryk, Lee, & Holland, 1993). This evidence suggests that choice within schools can result in increased stratification to the extent that minority students disproportionately enroll in nonacademic courses. Linking these results to school choice, some argue that stratification will be replicated across entire school systems as less advantaged parents choose less rigorous schools.

Moe summarizes the terms of this debate. He argues that a common criticism of parental choice is the idea that "parents cannot be counted on to make choices by reference to sound educational criteria or values." He continues by noting that critics often argue that "parents—especially low-income parents—supposedly care about practical concerns, such as how close the school is or whether it has a good sports team, and put little emphasis on academic quality and other properties of effective schooling" (Moe, 1995, pp. 26–27).

Moe's comments highlight the two dimensions underlying the commonly expressed concern for parental-choice behavior. The first is the broad indictment that *many* parents will fail to choose schools for their children based on educational quality. If, indeed, large numbers of parents do not value appropriate educational values and base their choice on ancillary or irrelevant school characteristics, schools will have incentives to emphasize the "wrong" performance criteria—for example, the number of football games won rather than the number of students reading at grade level or going on to college. To the extent this occurs, school choice could prove disastrous for the quality of learning across the country. In a form of Gresham's Law, we could see bad schools driving out good ones as a large number of parents choose schools for the wrong reason.

While this broad-based criticism is often found in the literature, there is a corollary that *only certain types* of parents will be prone to choosing their children's schools for the wrong reasons. As evident in Moe's statement, this concern is almost always phrased in terms of the particular susceptibility of low-income and less educated parents to fall for the attraction of nonacademic (and thus "wrong") school attributes.

Here, the issue of the values held by different parents and the concern that, given choice, some schools will skim off the best students are joined. If low-income parents are unduly influenced by nonacademic factors while high-income parents focus their choice of schools on academic dimensions, then the schools will become more stratified as higher income individuals with a concern for academics choose better performing schools, leaving the children of lower income parents behind in low performing schools. This bias in the selection process could fuel cumulative intergenerational inequality (Levin, 1989; Wells, 1993; Cookson, 1992).

While this aspect of the debate has usually been focused on the presumed predilection of lower SES parents to choose schools on nonacademic grounds, there is another possibility worth considering that could also have adverse effects on schools: if white and wealthier parents select schools on the basis of racial makeup regardless of a school's instructional quality or curriculum, the end result could be highly segregated schools chosen on the basis of race and not academic achievement. To the extent that demographics displaces academic performance in the choices of higher status parents, this could *reduce* pressure on schools to enhance performance—negating one of the main promises of choice.

The Evidence on What Parents Want From Schools is Mixed

Given the stakes involved in this debate, the empirical evidence about parental preferences is actually less than compelling, and, more importantly, the evidence is often determined by the research method used. Almost all surveys show that parents, including parents with lower socioeconomic status, endorse the "right" academic values when asked about what they care about in the schools. There are numerous examples. Armor and Peiser (1998) found that in the Massachusetts interdistrict choice program, high academic standards, curriculum and facilities were the three most often cited reasons that parents give for exercising their right to choose. Similarly, Vanourek, Manno, and Finn (1998) found that in evaluating charter schools, most students stressed academics—in their list of what they thought important about the charter schools, "good teachers" was number one, followed by "they teach it until I learn it" and "they don't let me fall behind." Greene, Howell, and Peterson (1998) found that the decision to apply for vouchers in Cleveland was motivated by academic concerns, paralleling the results Kleitz, Weiher, Tedin, and Matland (2000) found in Texas. The Public Policy Forum (1998) reported that when asked about what kind of information they most want about schools, 85% of parents surveyed said that they want information on teacher quality. This result comports with the survey data reported by Schneider, Marschall, Teske, and Roch (1998) in which teacher quality was the modal response to a question about what parents valued most in education. In short, there is remarkable consistency in the *verbal reports* of parents about what they value in schools—when asked, parents say that their choice of schools is motivated by academic quality.

Moreover, survey data show that the preference for academic aspects is as strong, if not stronger, among parents with lower socioeconomic status and those from racial minority groups as it is among other parents. Kleitz et al. (2000), studying why parents chose charter schools in Texas, report that parents across all income and ethnic groups say they chose charter schools in the hope of achieving a better education for their children and for smaller classes in particular—if anything the percentage of black and Hispanic parents saying that educational quality motivates their choice of charter schools is higher than that among Anglo parents. Kleitz et al. (2000) also report that support for educational quality is stronger among low-income parents than among higher income parents, a finding similar to that reported by Schneider et al. (1998), see also Weiher and Tedin (2002).

While many analysts take these results as proof that choice will be driven by academic values and that it will not exacerbate segregation or stratification, there is a skunk at the garden party—these optimistic findings are based on survey data. In contrast, the observed choice behavior of parents yields more complicated (and potentially less benign) results.

There are fewer studies based on actual behavior than studies based on survey data. One of the most widely cited is Henig's (1990) study of enrollment patterns in Montgomery County, Maryland magnet schools, in which race and class concerns were found central to parental choices. Henig found that both whites and minorities tended to choose schools in which their children would be less likely to be racially or socioeconomically isolated. But clearly this choice strategy points students in different directions: White families were most likely to request transfer into schools with low proportions of minorities (these schools were also located in higher income neighborhoods), while minority families were more likely to opt for schools with higher proportions of minority students (which tended to be in low-income neighborhoods).

Similar to Henig's results, in a study of school choice in Minneapolis, Glazerman (1997) found evidence for an "own-group preference" among minorities and a strong peer group SES effect. While there was also a tendency of parents to select schools with higher test scores, the racial effect was especially strong when choosers faced the prospect of their child being in a small minority. Weiher and Tedin (2002) show that in their choice of charter schools, Texas parents were likely to "sort themselves along racial/ethnic lines . . . *in spite* of their expressed preferences, rather than in conformity with those expressed preferences."

In their study of the extensive inter-district choice behavior in Massachusetts, Armor and Peiser (1998) found evidence of "skimming" in that families exercising choice were more affluent and more highly educated than the average in the districts they were leaving. The students who changed districts were also less likely to

be minorities and their test scores were higher. Choosers were also more likely to transfer to wealthier districts, a result reported by Fossey (1994) as well.

It should be noted that given the collinearity between socioeconomic status and academic performance, parents choosing to enroll their children in more affluent districts were also enrolling their children in higher performing school districts and sorting out the two effects is therefore difficult. Nonetheless, the bulk of this evidence points to a much stronger effect of race and class on school choice behavior than parents admit to in survey data.

We should note that the evidence of preferences based on actual behavior is constrained by rules governing choice. Henig argues that the existing composition of magnet schools is only partially a reflection of parent preferences, because regulations regarding racial balance rule out transfer requests that would lead to racial imbalance.

In short, research based on surveys tends to find that parents of all races and social classes say they prefer schools that have good teachers and high test scores. And very few admit to being concerned by the racial or class composition of the student body. However, these stated preferences are often not congruent with observed parental behavior, where researchers have found significant effects of race and class.

In our research, we monitored the search behavior of parents as they access information from an Internet site that provides extensive data on all the public schools (both charter and traditional) in Washington, DC. By observing the search behavior of parents, we transcend the bias in survey research toward socially acceptable response patterns, a bias that may account for the strong verbal endorsement of academic criteria compared to the patterns evident in actual choice behavior. Because the search behavior we study is not as "costly" as actually moving a child to another school or school district nor is it constrained by the balancing rules inherent in many choice programs, we may get an even better idea of the place of demographics versus academics in parental preferences than by observing (expensive and constrained) actual choice.

The Research Site

The site we study, http://www.DCSchoolSearch.com, is an Internet resource that provides

information about local schools to parents in Washington, DC. It is important to note that this information can be both useful and usable by parents of school age children in the District of Columbia (DC), who are faced with one of the most rapidly growing choice sets in the country, driven by the expansion of charter schools and an expanding system of intradistrict choice.[1]

DCSchoolSearch.com presents data on all the "traditional" public schools in DC as well as the more than 30 public charter schools that now enroll over 10% of the city's school age children. The site provides a host of information on each school, including location, test scores, student demographics, mission statement, and academic programs. There is a core of information (e.g., test scores and student demographics) available on each and every school, but some information (e.g., before and after school programs) is spottier, since that information is not available centrally and had to be gathered from each school.[2]

When the site was launched, it was supported by an extensive outreach campaign to inform parents about the availability of information and how to access it. For example, DCSchoolSearch.com partnered with the Washington Metropolitan Transit Authority (METRO) system to put posters in more than 300 buses, targeted specifically on bus routes serving low income neighborhoods; had a slide show in the Union Station multiplex cinema, mixing in information about the site with slides for the local laser eye surgery, the local carpet store, and the like; placed posters in local grocery stores, convenience stores, and supermarkets; ran a telephone "hot line" giving callers hands-on help negotiating the site and telling callers where they could find public access to the Internet; worked with local churches and parent organizations to disseminate information about the site; hired a public relations company; and had press coverage, with stories in the *Washington Post* and several local television and radio stations, as well. However, the media campaign was only a sideshow to staff slogging through an endless cycle of community meetings, parent groups, church groups, and school fairs. In short, a great deal of effort was made to publicize the site and to increase the number of visitors.[3]

To gather information about visitors to the site, everyone wishing access had to fill out a short set of questions to generate a user profile. These

questions asked for the status of the visitor (parent, student, other), the education level of the visitor, the person's frequency of Internet use, and the site from which the person was signing on (home, work, or school).

Between November of 1999 and June of 2000, over 2,300 different individuals visited the site. Of these users, the majority, around 60%, were parents, about 10% were current students, and the remaining visitors were in the "other" category, which included District school officials, curious city residents and education researchers. In this analysis, we look at parent search behavior as an indicator of preferences.

First, we need to note that these parents were not reflective of the general population of DC's parents—in fact, they were much more highly educated. In Table 1, we report the level of educational attainment of site visitors compared to that of a random sample of DC parents interviewed during a recently conducted telephone survey.[4]

Given the digital divide, such a skewed distribution is not surprising.[5] In some research, this skewed distribution could cause serious problems. However, we argue that the more educated and motivated parents who are over-represented in our sample are the most relevant group to study because it is their preferences and behavior that matters most in school choice programs such as found in Washington, DC.

Why? Recall that the charter schools create what Elmore (1991) calls an "option-demand" system of choice. Unlike universal choice programs, under an option-demand system new schooling alternatives (such as charter schools) exist alongside neighborhood schools. Option-demand choice does not eliminate traditional schooling arrangements but instead seeks to implement change by offering a set of alternatives to those parents and students who actively choose to opt out of their neighborhood schools. In fact, the vast majority of choice programs currently in place in school districts across the United States are of this option-demand type (see, e.g., Henig 1996).

The characteristic feature of option-demand choice is a two-stage choice process. The first stage involves the decision to leave their zoned neighborhood school (a parent or student "chooses to choose"). At the second stage of option-demand choice, parents and students choose their preferred school from the set of possible alternatives.

Option-demand choice plans place considerable responsibility on individual parents and student to make schooling decisions. Biases in who exercises choice may emerge as a result of disparities within the population. For example, some parents will have access to more and better information about educational alternatives (Bridge, 1978; Henig, 1994; Wells, 1993). In addition, some parents will be more capable of making informed choices as a result of greater involvement and participation in their children's education (Wells, 1993; Witte, Bailey, & Thorn, 1992; Coleman & Hoffer, 1987).

In their study of the option-demand system in New York City's District 4, Schneider et al. (2000) extensively studied the parents who took advantage of choice. They call these choosers "marginal consumers" and they show how the preferences and behavior of this highly motivated subset of parents mattered the most in an option-demand system. They also show that the marginal consumers are more highly educated and of higher social status than the average parent (see also Meier, Wrinkle, & Polinard, 2000).

Building on this work, we believe that the parents using DCSchoolSearch.com reflect the population of "marginal consumers" in the Washington, DC school system. Thus, if we want to know how option demand school choice works and what dimensions are important in the choice process, these are the very parents we should study.

TABLE 1

Education Level Comparison Between DCSchoolSearch.com Users and Telephone Survey Respondents

Education	DCSchoolSearch.com%	Telephone Survey%
12th grade or less	2	12
High school graduate	11	36
Some college/no bachelors degree	28	30
Bachelors degree or higher	59	23

Empirical Results

What do the search data show about the preferences of these consumers? In Figure 1, we report the percentage distribution of school attributes actually looked at by all parents within the first five "steps" or "moves" they made during their visits to DCSchoolSearch.com.

The key assumption of our analysis is that search patterns reveal preferences and, more specifically, that the attributes examined early in a search are more important to the decision maker than dimensions looked at later. We draw this assumption from several prominent psychological theories of judgment and decision-making. For example, the importance of the order of search is the foundation of Tversky's (1972) elimination-by-aspects model and is supported empirically by (Payne, 1976; Payne, Bettman, & Johnson, 1993), in his study of complex decision tasks (which certainly would include school choice). This assumption is also the foundation for the lexicographic decision rule (Hogarth, 1987) and, more broadly, underlies the notion of satisficing (Simon, 1955; Simon, 1957; Simon, 1978).

In Figure 1, we can clearly see a strong bias toward accessing the demographic characteristics of the student population, which is in marked contrast to verbal reports about the importance of race. In Schneider et al.'s (1998) study of expressed preferences, for example, less than five percent of the parents who were surveyed said that the race and economic background of the students in a school were among the most important characteristics of schools. Yet almost 30% of parents looked at student demographic information early in their visit to DCSchoolSearch.com, making it the modal "response" category.

Aside from demographic information, parents were most likely to look at a map showing the location of the school. While the location of a school is important for a variety of obvious reasons (distance from home, access to public transportation, and so on), in a highly segregated and stratified city such as Washington, DC, school location also conveys a considerable amount of information about the student body.

Furthermore, while many parents *say* that they are concerned about high-quality teachers, in their search behavior, very few parents actually visited the part of the school profiles that give that information. On a more positive note, parents did access test score data and program data in fairly high numbers—but nowhere near a level congruent with verbal reports of preferences.[6]

In Figure 2 we look at the effects of education on these patterns. Following Schneider et al. (2000), we divide the population into those with any level of college education and those without college. The concern for student demographics remains the modal category of action for higher educated parents and, indeed, is *more* evident among them than among less educated respondents.[7]

In short, the data presented in Figures 1 and 2 suggest that parents value demographic information much more highly than they admit when responding to surveys.
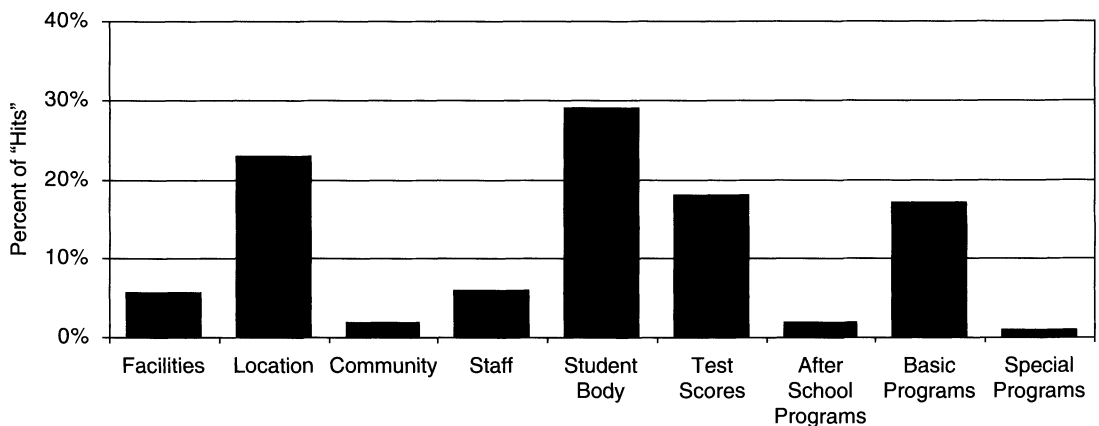

FIGURE 1. *School attributes searched.*
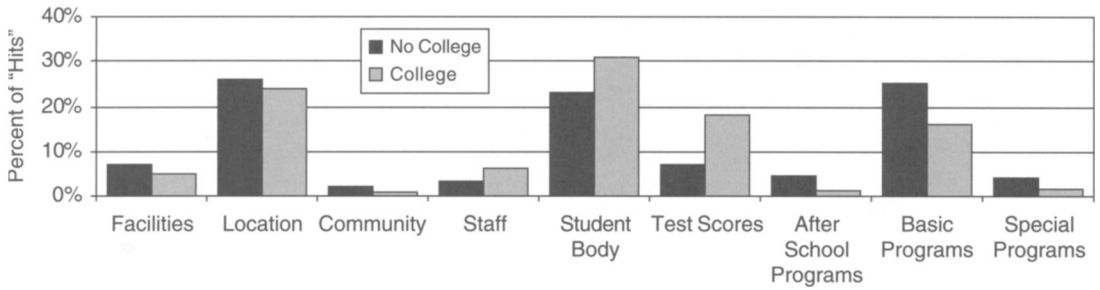
Source: DCSchoolSearch.com

FIGURE 2. *School attributes search by education level.*

Source: DCSchoolSearch.com

Another way of assessing the relative importance of race and academic performance is to look at the search paths of parents over time. While most parents are unlikely to have detailed information *a priori* about many schools on any given dimension, some parents are moderately or even well informed (Schneider et al., 2000). If we study the aggregate search behavior of all parents, the "signal" from these more knowledgeable parents, which reflects their underlying preferences, can be detected amid the random "noise" of the others. In the literature on mass public opinion, this statistical process, in which most people have little information and yet aggregate evaluations are accurate, rational, and reflective of preferences, is often referred to as the "miracle of aggregation" (Kinder, 1998; Stimson, 1991; Converse, 1990).

Thus, in the next stage of analysis, we examine the aggregate search paths of all parents and we focus on the characteristics of the schools they are visiting. We record the academic performance of these schools, reflected in the percentages of math and reading scores below the basic level on the SAT-9 standardized test. And we record the demographic makeup of these schools, reflected in the percentage of black students. We gathered these data for each school visited during the first 10 moves of each parent user and aggregate the results over the entire sample by computing median school characteristics and present the results in Figure 3.[8]

We compare the academic performance and demographic characteristics of the schools parents are visiting to the overall characteristics of all DC schools and we chart the characteristics of the schools visited over time. If the racial composition of the student body does not matter to parents

then, at any given step in the search process, we should see the median percent of the black schools visited approximate the median in DC schools as a whole and we should expect no systematic change in the pattern over the course of search (i.e., there will be no "signal" in the "noise"). But if race matters, we should see a pattern of responses and, by looking at the aggregate search paths over time, we should be able to determine the direction of preferences. The same argument holds for search as an indicator of the importance parents attach to academic performance.

Turning first to academic performance, Figure 3 compares the academic performance of the schools visited by users of DCSchoolSearch.com with the overall levels of performance for all DC schools reported in Table 2. On average, parents are looking at schools that perform better academically: At every point in the search, the median percentages of students scoring below basic for reading and math for the schools "visited" are lower than the actual medians for the entire population of DC schools. In short, a set of parents are using their existing knowledge to cull schools with poor academic performance from their choice set without even looking at the detailed school profiles. Following Tversky's (1972) elimination-by-aspects model of search, we take this as indicative of a "first elimination"—poorly performing schools have been dropped from consideration, confirming that parents are concerned about academics.

Turning to racial composition, we compare Figure 3 with Table 2 and we see that the median percent black of the visited schools is lower at all times than the median for all schools. We argue that this reflects the fact that site visitors care
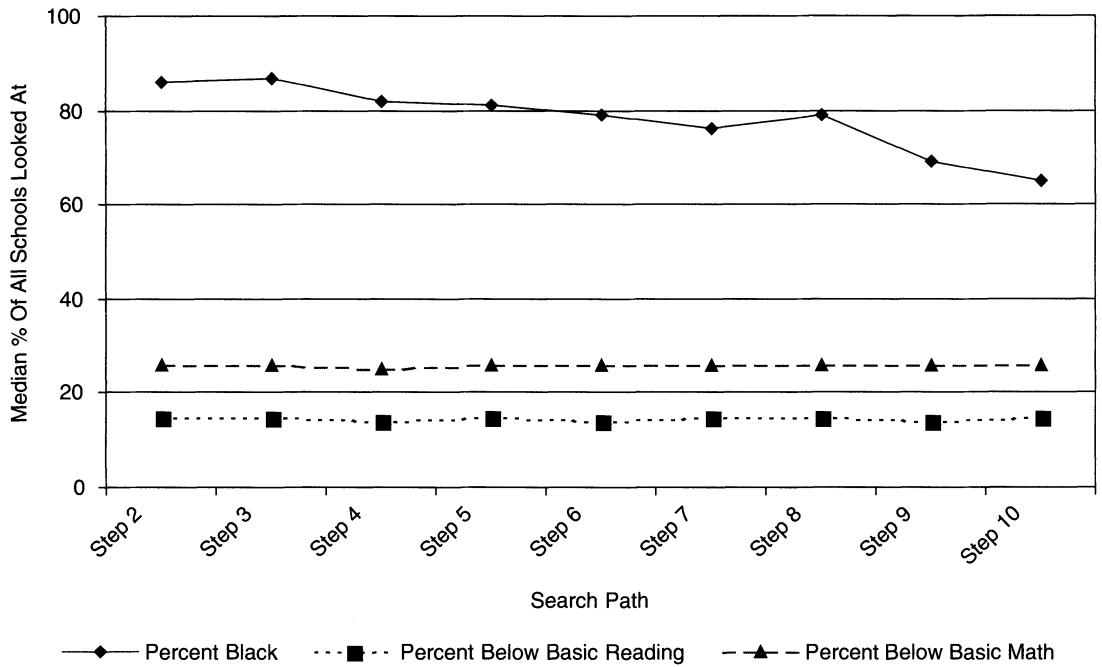
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FIGURE 3. *As search progresses, percent of black schools "visited" decreases.*

Note. Paths begin at step 2 because specific school information is unavailable on the first menu screen. The number of observations also varies (between 860 and 1,662) over steps as some parents travel between search menus and lists of schools repeatedly.

about student body demographics and are coupling this concern with information they already have to choose schools with fewer minority students than found in DC schools overall. But note that, in contrast to the pattern for academic scores, the median percent black has a downward trend as the search proceeds. This, we believe, is a function of how parents learn about schools using the search features of the site.

The number of parents looking at specific school attributes at any given step charted in Figure 3 fluctuates as some of them return to one of the site's several search engines to generate a new list of alternative schools that meet criteria they specify—such as geographic location, test scores

and student-body demographics. Indeed, at any given step, 20–25% of parents are assembling new lists of schools using one of the site's search mechanisms and then, at subsequent steps, delving deeper into the specific characteristics of the schools that met their search criteria.

We believe that a number of these parents are combining the information they already have about the demographic composition of schools and the demographic makeup of DC neighborhoods with new information learned from their search to select a new school to view in depth. As they do this, they focus on specific schools and schools in neighborhoods that they believe have a lower percentage of black students—a selection that is

TABLE 2
Percent Black and Academic Performance Indicators in the DC Public Schools

Indicator	*Mdn*	Minimum	Maximum	*M*	*SD*	Number of schools
Percent black	97	9	100	84	26	166
Percent below basic reading	27	1	82	29	17	161
Percent below basic math	36	1	100	42	24	162

TABLE 3

Comparison of Change in School Demographics and Test Scores as Search Progresses

Indicator	Step Coefficient (Robust *SE*)	*p*	Constant (Robust *SE*)	R^2	Estimated ρ
Percent black	−2.5 (.35)	<.01	93.1 (1.7)	.89	−.17
Percent below basic reading	−.02 (.04)	.57	14.7 (.22)	.99	−.64
Percent below basic math	.04 (.04)	.32	25.7 (.26)	.99	−.27

Note. Each row of Table 3 reports the estimates of a simple regression of the school characteristic of interest on the step in the search process. Since these data are, loosely, time series, we tested for autocorrelation. Since standard diagnostic methods suggest an AR(1) process (ρ measures the amount of first-order autocorrelation in the residuals), the models are estimated using Prais and Winsten (1954) regression with robust (heteroscedasticity-consistent) standard errors to account for the variation in sample size over time. As an additional test, differences between the endpoints (step 2 and step 10) and between each step in the path are tested using a conservative nonparametric test for differences in matched pairs of observations that requires no assumptions about the distributions of the random variables (Arbuthnott, 1710; Snedecor & Cochran, 1989). Results of the tests between each step, as well as summary statistics for the series, are available on request.

often correct. Thus, as the search proceeds, parents increasingly "visit" schools that have lower percentages of black students. As reported in Table 3, in the case of the percent of black students, the median viewed at step 10 is significantly lower than that at step 2 (*p* < .01). For reading and math below basic level these differences are not significant (*p* = .44 and .17 respectively). Furthermore, only the coefficient for percent black is statistically significant (*p* < .01). Substantively our analysis predicts that the median percent of black schools viewed declines from 88% to 68% in 9 steps, while the percent below basic reading and math stay the same over time.

Searching for Schools is a Complex Task

Education is a complex good with many dimensions, and as parents evaluate schools they have to strike a balance between the different attributes of education that schools represent. The complexity of that task is compounded by the fact that the level of existing information they have about schools is often limited (Schneider et al., 2000). In turn, parents using DCSchoolSearch.com are engaged in a complicated search over a large number of schools representing very different combinations of attributes and they are being presented with information that is more comprehensive and more detailed than most parents hold. As any complicated search progresses, searchers have to meld existing information with new information, a process that is structured by existing preferences.

While we would need other techniques developed by behavioral decision researchers to con-

firm this proposition more fully, one possible explanation for our findings is not that parents care *more* about racial composition than academics, but that they are concerned about the level and quality of the information they do have about demographics. In other words, they are engaged in a more intense search for information about student demographics for one of several related reasons: because they have less *a priori* information, because they have less confidence in that information, and-or because they want more accurate information than they already possess. Any combination of these conditions would yield behavior consistent with the elimination-by-aspects theory discussed earlier.

Despite our inability at present to specify which decision and information processing rules actually drive the search strategies of different parents, it is clear from our existing data that parents do care about the racial composition of schools as reflected in their search processes. In short, consistent with verbal reports, DC parents are "visiting" schools with better academic performance—but, despite an unwillingness to admit this in surveys, they are also seeking out schools with a lower percentage of black students. Thus, when we move our research technique away from surveys, in which social desirability clearly affects response patterns, to more anonymous search behavior, the results are not as optimistic as those based on survey data. Moreover, this search behavior is congruent with preferences revealed by the studies of actual choice behavior—parents do care about academics but they also care very much about school demographics—something they will not admit to verbally.

Implications:
An Equity-Efficiency Trade-off?

School choice is a complex and contentious issue. And much of the debate about choice often resembles a shouting match in which, scholars talk around and past each other. Some of this debate is clearly rooted in a fundamental disagreement about the extent to which market-like arrangements will improve education. But some of the debate is based on disagreement about the empirical support for some of the promises made by advocates of choice. To the extent that this debate involves the preferences of parents, our analysis indicates that we need to be careful about the foundations upon which choice (and our arguments about choice) are built.

Schools are complex, multifaceted organizations, and parents' preferences over the many different things that schools do are correspondingly complicated. To fully understand those preferences and how they may affect school systems, we need to employ a host of research techniques. At minimum, our analysis shows that relying simply on survey data to find out how parents will exercise their expanding rights to choose can lead to an overly optimistic view of what will motivate their actual choices. Although parents will almost always say that academics matter in their choice of schools for their children and almost never admit to caring about student demographics, our data show that race is fundamentally important to them. These results are congruent with studies of actual behavior showing that race and class strongly affect choice.

Many advocates believe that choice can pressure schools to deliver better education more efficiently. Moreover, in a system of choice, parents should be able to place their children in schools that emphasize the aspects of education they embrace. Clearly these gains are desirable. However, if, as our data indicate, many parents' decisions are likely to be influenced by race, then a "pure" open market-like choice plan for schools can increase segregation.

Moreover, stratification can also increase if parents with higher levels of education are more likely to exercise choice than less educated parents and are more likely to engage in search activity to gather information about their options. Given the importance of good information to school choice, and given its unequal distribution, special efforts must clearly be made to increase the flow of information to lower status parents. Our experience with DCSchoolSearch.com suggests how difficult it is to expand the flow of information to a broader set of parent-consumers.

Combining the inequality in access to information with the deep-seated concern for the racial composition of schools evident in parent search behavior leads us to a complicated conclusion about markets and school choice. While we believe that the market mechanisms built into expanded choice can increase efficiency, we have two fundamental concerns.

First, at the level of parent behavior, we are concerned that unregulated choice may in fact increase the importance of student demographics in the choice behavior of parents, including the choices of more highly educated marginal consumers who are essential for the effectiveness of option demand systems. This in turn can lead to an adverse outcome at the level of the schools: to the extent that choice is driven by demographics rather than academics, unfettered choice may actually *decrease* the pressure on schools to improve their academic performance and one of the most basic promises of choice may dissipate.

We believe that the task facing advocates of choice is to design a system that can produce a socially acceptable trade-off between a more efficient school system and one that mixes together children of different races and classes. While less theoretically and ideologically appealing than proposals for unrestricted choice, racial and income requirements can be introduced and enforced in choice plans. Indeed, "controlled choice" has been implemented in a number of cities and school districts and is common in admission decisions to magnet schools (see, e.g., Henig, 1994; Henig, 1996). However, controlled choice plans all impose regulations that limit choice and may therefore fail to attract the passionate support of the most ardent (and promarket) proponents of choice. But in every market, we have to strike a balance between equity and efficiency—and the market for schools is no different.

Notes

[1] For an analysis of the charter school movement in DC, see Henig et al. (1999).

² Note too that while providing information on charter schools, DCSchoolSearch.com does not include any information on private schools in the city.

³ A full discussion of this site and a comparison of DCSchoolSearch.com with two other prominent school-based Internet sites, http://www.uwm.edu/EPIC (providing information about Milwaukee schools) and http://www. GreatSchools.net (providing information about schools throughout California and Arizona) can be found in Schneider and Buckley (2000).

⁴ The telephone survey was of approximately 1,000 Washington DC parents, conducted between September and December of 2001. It was conducted by the Survey Research Center at the State University of New York at Stony Brook.

⁵ The survey data also allow us to examine the effect of race on the digital divide for our population of interest. White parents are significantly more likely to use the Internet more often, controlling for education and income. However, since we do not have information on the race of site users, we cannot pursue this dimension of parent search behavior further.

⁶ There is a problem that flows from using a web-based research tool to precisely identify parental preferences. In a laboratory setting, stimuli can be narrowly crafted and responses therefore more highly calibrated, but DCSchoolSearch.com was designed both as an information tool to help parents find appropriate schools for their children as well as a research tool. Because it was based on real data and faced the limits of the Internet, the stimuli presented by the site are much "messier" than in a laboratory setting. For example, there are differences in the quality of the data—locational data, test score data, and racial data are centrally collected and easily understood, but other data, on such things as extended day programs, student-teacher ratios, or other measures of teacher quality are harder to collect and verify. Search patterns may be biased by the *a priori* beliefs that parents have in the validity of the data. In addition, not each "page" of the site was identical— some contained more information than others. This too may have produced some bias, but limiting the analysis to the initial stages of the search should limit this problem (visitors do not yet know much of the details about each page—they only know the titles).

⁷ The differences displayed in Figure 2 are significant at the .01 level.

⁸ We examine median values in the figure instead of means because the data for all three covariates are highly skewed. Nevertheless, similar results are obtained using mean data.

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