

**School Choice in Chile:
An Analysis of Parental Preferences and Search Behavior**

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Abstract: Skeptics of school choice are concerned that parents, especially low-income parents, will not choose schools based on sound academic reasoning. Many fear that, given a choice, parents will sort themselves into different schools along class lines. Most surveys find that parents of all socioeconomic groups cite academic aspects as important when choosing a school. Moreover, almost no parents refer to the social composition of the student body. These results may not be reliable since they are simply responses to survey items rather than actual behavior. We monitor search behavior in the Metropolitan Region of Santiago, Chile, by examining how parents construct their school choice sets. By observing the search behavior of parents, we are able to go beyond the survey data where parents are likely to mention socially acceptable school preferences. The data indicates that parents' decisions are influenced by demographics rather than academic performance. Based on this evidence, we argue that unfettered choice may reduce the pressure on schools to improve their performance and could potentially increase stratification.

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INTRODUCTION

Expanding school choice is one of the major themes of current educational reform initiatives. In countries on every continent, governments have determined that giving parents more options among schools is an appropriate policy response to local educational problems (Wolf and Macedo, 2004; Plank and Sykes, 2003). The proponents of school choice have argued that many benefits will flow from empowering parents to choose the schools their children attend, ranging from increasing the efficiency of schools (Hoxby, 2000) to improving the education of the most disadvantaged students in the worst performing schools (Sugarman, 1999) to improving the satisfaction of parents and students with the schools their children attend (Goldring and Shapira, 1993).

However, as the push for school choice has intensified, a series of critiques have identified the costs of choice. Perhaps the most persistent criticism is that choice increases the risk of stratification by race and class (Levin, 1998; Henig, 1994). Research has identified two ways choice can lead to stratified schools. First, families can differ in their motivation to utilize choice. Most empirical studies of school choice confirm that choosers are disproportionately higher-income, higher-socioeconomic status, and higher-ability than non-choosers.¹

The second way that choice can increase stratification is through parental preferences (Ascher et al., 1996; Smith and Meier, 1995). School choice might lead to stratified schools if parents' school preferences differ systematically by socioeconomic status. The concern is that parents will select schools based on the race or class composition of their student bodies, and not on their academic quality. Thus, our central

¹ For the United States see, for example, Epple et al. (2004). For New Zealand, see Fiske and Ladd (2000). For Scotland, see Willms (1996). For Chile, see Hsieh and Urquiola (2003).

question is whether or not, given choice, parents will sort themselves into different schools along class lines.

Most studies that have focused on the implications of family preferences on stratification usually suffer from thin data (Jellison, 2002; Wells, 1996) or rely solely on survey responses (Schneider et al. 2000; *Centro de Estudios Publicos*, 1997) rather than observe parental choice behavior, which often yields different results (Saporito, 2003; Weiher and Tedin, 2002).

This study focuses on the effect of differing preferences on school stratification. We study the behavior of first grade parents in the Metropolitan Region (R.M.) of Santiago, Chile. Using face-to-face interviews conducted with a random sample of parents, we analyze the distribution of preferences. In addition to the parental survey data, we collected objective indicators for each school in a parents stated choice set. With these data, we have a means of determining whether parental choice behavior is congruent with their stated preferences. Analysis of the data in Chile suggests that unfettered school choice may lead to more stratified schools.

SCHOOL CHOICE IN CHILE

The Chilean education system provides a unique institutional context in which to explore parental behavior when given choice. During the 1980s the school system in Chile experienced a sweeping reform program enacted by the military government (1973-1990). First, the government decentralized the administration of schools, transferring responsibility for public school management from the Ministry of Education to local municipalities. Second, the government altered the financing of public and most private

schools. Public schools continued to be funded centrally, but municipalities started to receive a per-student payment for every child attending their schools. As a result, enrollment losses came to have a direct effect on their education budgets. Most importantly, private schools that did not charge tuition began receiving the same per-student payment as the public schools. Tuition-charging private schools mostly continued to operate without public funding.

The reform sparked a massive redistribution across private and public schools, as well as the creation of many new private schools. In 1980, 14% of Chilean K-12 students attended private schools that received some public subsidy, and another 6% attended more elite, unsubsidized private schools. By 1990, 34% of students attended private voucher schools. By 2003, enrollment in such schools had reached almost 40% of total enrollment. Most of these gains were at the expense of public school enrollments. Adding in the 9% of students in elite private non-voucher schools leaves a slight majority of Chilean students in public schools (see Figure 1). In the more densely populated areas, particularly in the Metropolitan Region of Santiago, total private school enrollment (voucher and non-voucher) is much higher, closer to 65%.

Figure 1 Here

The students who enroll in each type of school are different in many respects. Those attending private voucher and private non-voucher schools come from families that have much higher incomes, on average, and are headed by parents with substantially more schooling (see Table 1). Private voucher schools are both religious (mostly Catholic) and non-religious. The latter, mostly for-profit schools, account for

approximately one-fourth of private voucher school enrollment (Elacqua, 2004). For-profit voucher schools also accounted for most of the substantial growth of the private enrollment share after 1980.

Table 1 Here

Finally, it is worth noting that the essential features of this system have remained in place for almost a quarter-century. The center-left coalition in power since 1990 has chosen to focus on improving the quality of poor primary schools through direct resource investments, while maintaining the organizational and funding components of choice introduced in the eighties (OECD, 2004).

CAN PARENTS MAKE GOOD CHOICES?

One of the key issues that researchers must investigate in order to understand the effects of school choice and stratification in Chile is whether or not parents will select schools on educationally sound or on non-academic dimensions of schools that they value. Critics argue that parents do not have the ability to make good choices. Consider a Twentieth Century Fund report. The authors 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 et al., 1996: 40-41). The Carnegie Foundation (1992) concluded that parents will base their decisions on non-academic aspects of education, including the availability of day care, sports, and other extracurricular activities. In contrast to this broad indictment of parental search behavior, more commonly the argument about parent information

levels focuses on potential race and class biases in the quality of parental decisions. Some are concerned that parents, especially low-income parents, will fail to choose schools based on academic quality. Rather, choice skeptics argue that these parents are more likely to embrace non-academic school attributes (Ascher et al., 1996; Carnegie Foundation, 1992).

Here, the concern is that if low-income families choose schools based on non-academic factors while high-income parents focus their choice of schools on measurable performance indicators, then schools will become more stratified as higher income families choose better performing schools, leaving the children of lower income parents behind in low performing schools. Thus, many analysts who criticize choice argue that not only will less educated parents have great difficulty making good decisions about schools but the differences in decision making capabilities will directly lead to increased social stratification (Henig, 1994; Levin, 1989; Bridge, 1978).

While this debate has focused on the concern for low-income parents' preferences for non-academic dimensions, there is another aspect worth examining that may also increase stratification.² If higher income families are concerned about their children's peer groups, will school choice exacerbate stratification by class? If wealthier parents select schools on the basis of student demographics despite a school's academic performance, the outcome could be highly stratified schools chosen on the basis of class rather than academic achievement, with adverse learning outcomes. As Buckley and Schneider (2002) note "to the extent that demographics displaces academic performance

² A parallel line of research, beyond the scope of this paper, examines the choice of courses selected by high school students. Most research suggests that minority students disproportionately enroll in non-academic courses (Ravitch, 1996; OECD, 2004 for Chile).

in the choices of economically advantaged parents, this could lower pressure on schools to enhance performance – negating one of the promises of choice” (p. 6).

An even more disconcerting effect of parent’s choosing on the basis of student body characteristics is the adverse effects it could have on learning outcomes. A body of literature has documented the importance of peer effects on educational achievement (e.g. Zimmer and Toma, 2000). There are positive spillover effects of having high-ability peers and negative effects of being surrounded by disadvantaged students, who often draw disproportionately from a teachers’ time and pressure each other away from learning (Cook and Ludwig, 1998). Thus, if parents are concerned about demographics, their choices could potentially lead to greater stratification and the separation of low-ability, economically disadvantaged children from more motivated peers with higher academic aspirations.

SURVEY DATA SUPPORT THE IMPORTANCE OF ACADEMIC QUALITY

Most surveys find that parents across the board say that their choice of schools is motivated by academic quality. There are numerous examples. Armor and Peiser (1998) found that in the Massachusetts inter-district choice program, parents cited academic quality as the most important when making a choice. They also found few differences in the distribution of parental preferences across ethnic groups. Similarly, both Greene et al. (1998), in Cleveland, Ohio, and Kleitz et al. (2000), in Texas, found that parents of all racial and income groups stressed academic dimensions in their list of what they thought was important about schools. Tedin and Weiher (2002) found similar results in charter

school parents in Texas. Furthermore, Schneider et al. (2000) found that preferences for academic dimensions were stronger among low-income families and racial minorities.

Survey data in Chile also show that, across the board, preferences for academic aspects are strong. The *Centro de Estudios Públicos* (1997) report that when asked about the dimensions families value most when choosing a school, over 50% of parents surveyed cited academic quality. This finding conforms with the more recent survey data reported by the Ministry of Education (2003, 2002) in which academic aspects were the second most cited preference by parents when choosing a school after location. These surveys find little difference by education level in the preferences of parents, with the exception of location, which is cited more by parents with less than a high school education. Moreover, one of the least important concerns for parents in both surveys was that their children attend schools with students who are predominantly of the same social class. This is consistent with survey evidence in the United States (Weiher and Tedin, 2002; Schneider et al., 2000; Orfield, 1995).

WHAT DO PARENTS WANT FROM SCHOOLS IN CHILE?

These patterns are also found in the responses of parents in the Metropolitan Region of Santiago (R.M.), Chile. In the spring of 2004, we conducted face-to-face interviews with a sample of first grade parents in the R.M. to explore the effects of school choice on parental behavior. We chose first grade parents because this is the point at which all parents must make a choice about which school to enroll their child. Therefore, it is the point at which the incentives to gather information about the schools is at the highest and is a critical point around which the entire system of choice hinges.

We constructed the sample frame by first stratifying schools by size, socioeconomic status, and school type (public, private voucher, private non-voucher). Then, blocks within the schools were selected and finally first grade parents within the schools were randomly selected from lists provided by the Ministry of Education. The sample was weighted to bring the proportions of the strata into agreement with their representation in the population. Table 2 reports the demographic data for our sample of first grade parents in the R.M. by school type.³

Table 2 Here

To examine what parents want from schools, in our survey instrument, we asked an open-ended question: “Parents choose schools for their children for different reasons. What was the most important reason for choosing your child’s school?” We recoded these answers into 8 categories.

We begin by studying two dimensions that concern this debate in Chile: education level and school type. We examine the following two questions: Does the level of education affect what parents value in schools? Does school type make a difference? Finally, we present a multivariate analysis to sort out the independent effects of each demographic variable.

Parents, Across All Groups, Say They Value Academic Quality

In table 3 we present data on the importance of different attributes of schools held by parents of different education levels. Note that almost every category that parents

³ For a more detailed description of the sample design and survey instruments see Elacqua (forthcoming).

mention are important to the quality of education and, contrary to what critics of choice argue, with the exception of location, parents almost never mention non-educational dimensions such as day care and extracurricular activities.

For example, consistent with other surveys, parents say they value academic and curricular aspects, with almost 50 percent of parents of all educational levels giving this response. Note that the differences among parents by education level are relatively minor in most categories. The only significant difference between these groups is that parents without a high school education are more likely to emphasize location and cost than high school and college educated parents and less likely to mention values.

At this point it is important to note that almost no parents emphasize the social composition of the student body. It is also interesting to note that despite the importance that researchers, policymakers and unions have given to class and school size as an important goal for education reform (e.g. Michel and Rothstein, 2002; Viadero, 2001), very few parents considered this indicator important in their choice of a school.

Table 3 Here

Table 4 displays the differences between public and private school parents. Public school parents are less likely to emphasize academic aspects and are more sensitive to the location and cost of schools than private school parents. Also note the extent to which private voucher and non-voucher parents stress morals and values. Given that one-third of private schools are religious, this is clearly reasonable (Elacqua, 2004).

Table 4 Here

In short, our results are consistent with other survey data that show that parents, with different levels of education and with children enrolled in public and private schools, consistently emphasize the importance of academic aspects of schools.

Multivariate Analysis of Parental Preferences

The weakness of these data is that they only account for bivariate relationships. To determine which variables affect the likelihood that a respondent will cite a particular factor in his or her choice of a school independent of the affects of other variables, results from multinomial logit estimates are presented in table 5. We model parental preferences as a function of a set of parental characteristics that have been found to affect choice behavior (Schneider et al. 2000). Specifically, we specify the following model:

Prob (Parental Preferences) = f (SES, school type, employment status, gender, proximity, church attendance, length of residence)

Where:

- SES is the total number of years of education completed.
- School type is represented by (1) a dummy variable indicating whether the parent has chosen a private voucher school or public school (private voucher =1) and (2) a dummy variable indicating whether the parent has chosen a private non-voucher school or public school (private non-voucher = 1).
- Employment status is a dummy variable indicating whether the parent works outside the home (employed = 1).
- Gender is a dummy variable indicating if the parent is female (female =1).

- Proximity is measured by whether or not a student walks to school (walks=1).
- Church attendance is a categorical variable measuring the frequency of a parent's church attendance (1 = never; 2 = rarely; 3 = only on the major holidays; 4 = about twice a year. 5 = every other month; 6 = about once a month; 7 = about every two weeks; 8 = about once a week).⁴
- Length of residence is a continuous variable measuring the number of years a parent has lived in a municipality.

We convert the logit coefficients into standardized odds ratios which allows us to compare effect sizes across variables regardless of their measurement units.

Standardized odds ratios display the change in the odds of mentioning a specific school attribute per one standard deviation change in the independent variable. Odds ratios are equal to one if there is no effect, smaller than one if there is a negative effect, and greater than one if the effect is positive.

Table 5 Here

The results presented in Table 5 confirm most of the bivariate patterns. First, our data confirm that, controlling for socioeconomic and other characteristics, private school parents (voucher and non-voucher) are less likely to rank location and cost as important. Second, the likelihood that private school parents will emphasize values is 25% greater than public school parents. Also parents that live within walking distance of their child's school are less likely to emphasize academics and values than other parents. Finally, returning to the main point: contrary to the common belief that parents with lower social

⁴ Church attendance is included as a general measure of involvement with the social life of a community and school-based activities (Schneider, 1997) and for teaching moral values (Weiher and Tedin, 2002).

status do not value academic quality, our data show that there are no significant differences among parents who value academic aspects.

While voucher advocates would take this as proof that school choice is mainly driven by academic aspects and that voucher programs will not lead to greater stratification – these results may not be reliable since they are simply responses to survey items rather than actual behavior. It is a long-standing proposition in social science research that stated preferences do not always predict actual behavior (LaPiere, 1938). Parents may feel pressured to say what is socially acceptable in an interview. Even open-ended questions do little to overcome the social stigma attached to the expression of socially based preferences. In addition, parents are expected to be concerned with academic aspects of their children’s schools. These social pressures may cause parents to avoid citing social class as a choice preference, and to emphasize educational dimensions. Given these concerns, parental behavior is a better measure of preferences than survey responses.

STATED PREFERENCES VS. ACTUAL BEHAVIOR

The literature on parental behavior is by no means extensive. Henig (1996), for instance, finds in a study of enrollment patterns in Maryland, that parents were concerned with the racial and social composition of their children’s schools. Henig found that white families were more likely to choose schools with higher percentages of white students, while minority groups tended to choose schools with higher proportions of low-income minority students. Glazerman (1998), similarly found in his study of transfer patterns in Minneapolis, Minnesota that parents chose schools in which the majority of students

were of the same racial ethnic background as their child. In a study of a choice program in a large urban public school system, Saporito and Lareau (1999) demonstrated that white parents excluded schools with high minority populations. Lankford and Wyckoff (1997) also found in their analysis of national district enrollment data, that the racial makeup of schools was strongly correlated with parents' residential and school choice decisions.

Similar to these findings, Wieher and Tedin (2002) found evidence that, despite their stated preferences for test scores, parents transferred their children into lower-performing schools. And though no parents cited race as being a factor in choosing a school, parents were likely to transfer their children into schools with children of the same race. In his study of student transfers into magnet schools in Philadelphia, Pennsylvania, Sorporito (2002) found that white families avoided schools with higher percentages of non-white students and, similarly, wealthier families avoided schools with high poverty rates. These findings hold after accounting for objective school characteristics such as average test scores. Fossey (1994) and Armor and Peiser (1998) also found that parents who exercised choice were more likely to transfer into wealthier districts. However, they were also enrolling their children in higher performing districts, which directly contradict Weiher and Tedin's (2002) and Saporito's (2003) findings.

In their study of search behavior in Washington, D.C., Buckley and Schneider (2002) found evidence that the survey responses were not consistent with results based on other forms of data collection. By observing the search behavior of parents on a web based school information system, they found that parents were much more concerned with school demographics than they admitted in surveys.

In short, almost all survey data finds that parents, across the board, say they choose schools for academic reasons and few admit to being concerned about the racial or class composition of the student body. However, these survey data are not consistent with parental behavior, where researchers have found that parents care about race and class.

SEARCH BEHAVIOR IN CHILE

In our research, we monitor the behavior of parents by examining how they construct their choice sets. By observing the search behavior of parents, we are able to go beyond the survey data where parents are likely to mention socially acceptable school preferences.

To investigate how parents construct their choice sets, in our survey we asked parents to list the schools they considered before choosing their current school. Our data show that over half of the parents surveyed considered only one school (their current school), 37% two schools and less than 10% considered 3 or more schools. The data presented in Table 6 shows that education level does not affect the number of schools considered. Table 7 displays the difference between public and private school parents. Private non-voucher school parents are less likely to shop for schools than private voucher and public school parents.

In the next stage of analysis we analyze the choice sets of parents that considered more than one school. With this information we have the means of comparing not only the types of schools parents consider, but also whether the chosen school is objectively the best school in their choice set.

In addition to the parental survey data, we collected objective indicators for each of the schools in the choice set. These data fall into three domains. The first domain is associated with the educational performance of the schools in the choice set: mathematics and reading standardized test scores.⁵ The second domain reflects the schools' values: religious or secular. A third set of attributes focuses on the demographic make-up of the student populations in terms of parental education. With these data, we are able to examine how much variance is represented in the characteristics of the schools in the choice set. Thus we are able to better understand the place of demographics versus academics in parental preferences.

How do parents construct their choice sets?

Tables 6 and 7 present descriptive data on the characteristics of schools in parents' choice sets. First, we examined the variance in the academic achievement of schools in the choice set. As discussed above, most survey data show that parents are academically motivated in choosing their schools. Thus we would not expect them to consider schools in their choice sets that vary significantly in their academic quality. In the analysis that follows, we determined whether or not schools vary in quality by examining whether test scores differed systematically across the schools they considered. Specifically, if the average test score of the lowest performing school considered was more than a one standard deviation distance from the highest performing school in the choice set, we considered the quality of schools in the choice to set to vary. Our data show that parents are considering schools that differ significantly in their academic

⁵ Chile's national standardized test *Sistema de Medición de la Calidad de la Educación* (the System of Measurement of the Quality of Education – SIMCE) assesses students in grades 4, 8 and 10 in language, mathematics, history and geography, and natural sciences.

quality. For instance, more than 60 percent of parents consider schools in their choice sets with large variations in their test scores.

Nonetheless, this may not be so important if parents are choosing the highest performing school in their choice set. To investigate this we examined whether or not the school actually chosen had a higher test score than the other schools in the choice set. Our data show that only one out of four parents chose the highest performing school in their choice sets. In sum, our findings suggest that stated preferences for academic performance are not consistent with actual behavior.

Table 6 Here

Table 7 Here

Second, we explored the values of the schools in the choice set. To examine school values we compared the religious orientation (Catholic, Protestant or secular) of the schools in parents' choice sets. Our data show that almost 70% percent of parents only look at schools with the same religious affiliation. This evidence is consistent with the survey data where parents, especially private school parents, cite values as an important school attribute.

Finally, as noted earlier, almost no parents in the survey mentioned student demographics as a choice factor. However, these stated preferences are often not congruent with observed parent behavior, where researchers have found significant effects of class. To investigate whether there is a mismatch between parental stated preferences and their behavior in the R.M., we examine whether or not the parents' choice sets included schools with diverse student demographics. We analyzed the

variance in the average mothers' years of schooling in the choice set.⁶ Specifically, if the average number of years of schooling of the lowest SES school considered was more than a one standard deviation distance from the highest SES school in the choice set, we considered the choice set to be diverse. Rather than reflecting the survey data that shows that individuals are not concerned with social class, we found that that the majority of parents (87%) only consider schools with similar student demographics in their choice set.⁷ Thus, while in surveys parents hardly ever say that social class matters, these factors do appear to matter when we use a different research technique.

In table 6, we also present data on the choice sets of parents with different levels of education. There are few differences between these groups. Note that parents with a college education are less likely to choose the highest performing school and more likely to consider schools with diverse religious affiliations in their choice set than are less educated parents. Analysis of table 7 suggests that there are some significant differences between public and private school parents. Public school parents are more likely to consider schools in their choice sets that vary significantly in quality and less likely to choose the best school. Private school parents are more likely to consider schools with diverse religious affiliations than public school parents parents

Next, we need to sort out the individual and contextual aspects of constructing a choice set. Table 8 presents multinomial logit estimates. See above for a description of the independent variables.

⁶ We obtained this data from the Ministry of Education's parent survey. We used mothers' years of schooling because 83 percent of the respondents to the Ministry of Education's parent survey were mothers.

⁷ In a previous version of this paper, we included an analysis of the student demographic categories the Ministry of Education assigns to each school (see Table 1). We characterize mothers' years of schooling because it is clearer and easier to interpret. However, the results are quite similar were we to replace years of education with the Ministry's demographic categories. These results are available upon request.

Multivariate Analysis of Choice Sets

Table 8 reports the change in probability of constructing a choice sets with shared characteristics. The multivariate analysis confirms the independent effects of some of the conditions presented in the earlier tables. Private non-voucher school parents are less likely to shop for schools than public school parents. Table 8 also demonstrates that the likelihood of choosing the best school in the choice set increases by 10% for private voucher school parents. Private (voucher and non-voucher) school parents are also less likely to consider schools with diverse religious orientations. Incidentally, the odds for choosing the best school and only considering schools with the same religious orientations also increases by 4% the more frequently a parent attends church. Table 8 also verifies that student demographics are important to parents across the board. However, table 4 also shows that, after controlling for independent effects, there are no significant differences among parents who construct choice sets with schools that vary in quality (test scores).

Table 8 Here

In sum, the schools in parent's choice sets share some common characteristics. For example, most parents consider schools with similar student demographics. Conversely, test scores differ considerably across the schools, and most parents do not choose the highest performing school in their choice set. These findings suggest that stated preferences in surveys are not congruent with actual behavior.

Before choice skeptics take this as evidence that school choice is driven by demographics rather than academics—neighborhood sorting patterns must be investigated. Neighborhood stratification is a central consideration, since the number of schooling options available to parents will depend upon their ability to obtain access to alternative schools.

To examine the educational alternatives available to families, we used a web-based Geographic Information Services (GIS) to georeference schools within a one kilometer distance from the chosen school.⁸ Each school address in the R.M. is translated into a latitude and longitude. The distance between a parents' current school⁹ and other schools is calculated and the schools within one kilometer are identified. We examined to what extent the schooling alternatives share the current school's student demographics. Specifically, we analyzed the variance in student demographics (average mothers' years of schooling) of the schools within one kilometer of the current school.¹⁰

Table 9 displays data on the characteristics of the schools within one kilometer of the chosen school. Most parents (78%) chose schools located in neighborhoods with diverse schooling alternatives. The data presented in table 9 also demonstrates that parents had options within their own sector (public, private voucher and private non-voucher). In sum, these data suggest that, despite having access to diverse neighborhood schooling alternatives, parents continue to sort themselves into schools along class lines.

⁸ In the past, researchers have constructed potential choice sets by examining schooling alternatives in the boroughs of the R.M. (e.g. Guari, 1998). However, it is probably not accurate to assume that parents have access to all schools in their borough. In most boroughs, many schools are not within walking distance and there is no orderly system of public transportation for young children in the R.M.

⁹ We recognize that the parent's address would have been better point of reference. Unfortunately we did not have access to this information.

¹⁰ We used the same method as above. If the average mother's years of schooling of the lowest SES school was one standard deviation from the highest SES school within one kilometer we considered the neighborhood choice set to be diverse.

CONCLUSION

Critics of school choice are concerned that parents, especially low-income parents, will not choose schools based on sound academic reasoning. Therefore, they argue that choice will increase stratification as high-income parents choose high performing schools and low-income parents are left behind in the lower performing schools. These arguments are at odds with most survey evidence that shows that parents across the board value academic aspects when choosing a school.

These patterns are replicated in the responses of first grade parents in the Metropolitan Region of Santiago, Chile. For example, consistent with other surveys, parents with different education levels cite academic aspects as being important in their choice of a school. Consequently, the research reported here provides little grounds for thinking that there are systematic differences in the preferences of parents by class.

The subsequent analysis indicates that relying on survey data to better understand parental preferences can lead to an overly optimistic conclusion. Although most parents say that educational dimensions matter in their choice of schools for their children and almost never admit to caring about student demographics, when using a different research technique we find different results.

Stated preferences were checked by comparing the schools in a parents' choice set. The findings are revealing. First, though academic aspects are the most important attribute cited for choosing a school, our data show that test scores differ systematically across the schools that parents considered. Furthermore, most parents do not choose the highest performing school in their choice sets. Second, though almost no parents cite

social class as a choice factor and most have access to diverse neighborhood schooling alternatives, most families only consider schools with similar student demographics in their choice sets.

Although these results are compelling, several questions remain unresolved. Among these questions is whether institutional factors or individual choices are responsible for existing stratification and class based parental preferences in Chile. Institutional factors may shape the ability of individuals to leave or enter a social setting of their choice. The primary institutional forces at work in education are the design of a school choice program and the ability of schools to select from the pool of student applicants. Chile's school choice program is unrestrictive (e.g. any student can participate) and schools are permitted to use parental interviews to select and expel students as they see fit. These organizational forces may hinder a parents' ability to choose a more diverse set of schooling options.

Much of the sociological literature on individual choices suggests that dominant groups are more likely to avoid those they perceive as a lower social class (e.g. Bonilla-Silva, 1996). For example, in an analysis of school choices of high-income parents in two large urban school districts, Jennison (2002) found that school stratification is largely the result of avoidance of schools populated by children of lower social standing.¹¹

Although it is difficult to disentangle the institutional factors that shape preferences from the choices of individuals, our findings challenge some of the most

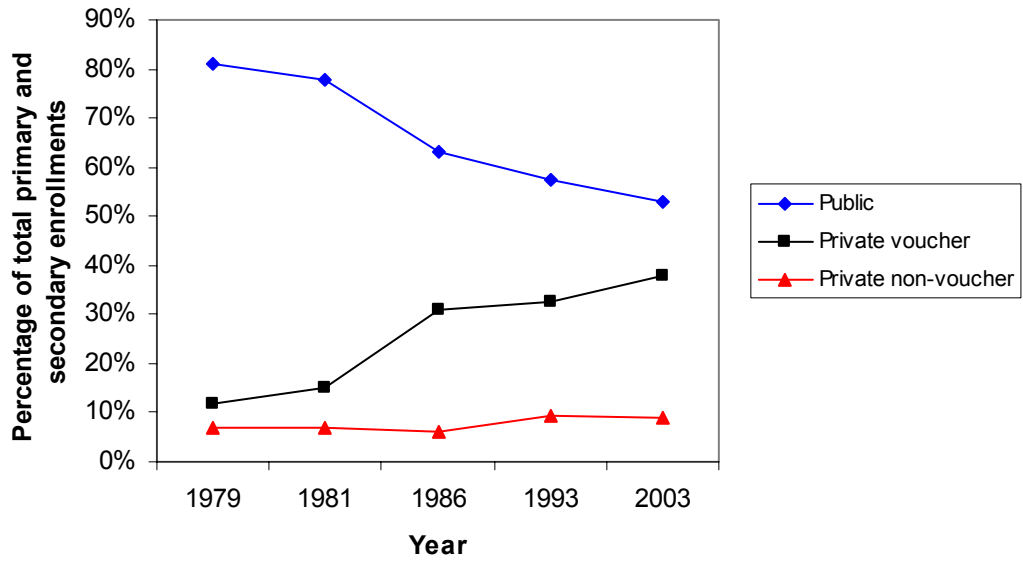
¹¹ Recent research on neighborhood disorder perceptions may provide insights into parental preferences and school choice behavior. In a study of neighborhood perceptions in Boston and Chicago, Sampson and Raudenbush (2004) found that as concentrations of poverty and minority groups increased, residents perceived heightened disorder even after accounting for objective neighborhood conditions. The authors suggest that biased perceptions of disorder may be one of the underappreciated causes of continued racial segregation in the United States.

basic assumptions about parental behavior in educational markets. Specifically, these data counter choice proponents' claims that, given choices, parents will choose schools based on sound academic reasoning.

Voucher advocates argue that school choice will unleash competitive pressure on schools to make them improve. Moreover, parents should be able to choose the school that delivers the kind of education they want for their children. Proponents argue that choice will lead to higher parental satisfaction with schools they choose because it increases the ability of parents to match their preferences for specific values, needs or pedagogical approaches with the school. Clearly this is a desirable goal. But if, as our data in Chile indicate, parents' decisions are influenced by student demographics rather than academic performance, unrestricted school choice will likely lead to undesirable outcomes.

To the extent that choice is driven by demographics rather than school achievement, unregulated choice programs, such as Chile's, may actually reduce the pressure on schools to improve their performance and increase pressure to "improve" the student demographics. In Chile, schools can choose among its applicants and shape the nature of its student body. It can take the smartest students and those from high-income families and refuse applicants from disadvantaged backgrounds. Thus, if educational markets are driven by consumer preferences, and parents care about student demographics, unfettered school choice will likely increase stratification.

Figure 1: Enrollment share in public and private schools, 1979-2003



Source: Ministry of Education

Table 1: Characteristics of socioeconomic groups and distribution of enrollment by school type, elementary school, 2003

Socio-Economic group	Mothers' years of education	Monthly Income (\$US)	Family monthly expenditure on education (\$US)	Enrollment and % in public schools	Enrollment and % in private voucher schools	Enrollment and % in private non-voucher schools	Number and % of group over total enrollment
A Low	7	\$174	\$17	22,324 79.4%	5,775 20.6%	0 0%	28,099 (10%) 100%
B Low middle	9	\$224	\$20	71,607 81.9%	15,788 18.1%	0 0%	87,395 (32%) 100%
C Middle	11	\$338	\$33	48,116 47.6%	52,855 52.3%	0 0%	100,993 (37%) 100%
D High middle	13	\$676	\$73	5,132 13.0%	32,140 81.6%	2,131 5.4%	39,403 (14%) 100%
E High	16	\$2,163	\$237	0 0%	1,159 6.1%	17,815 93.9%	18,974 (7%) 100%

Source: Ministry of Education, 2003

Table 2: Sample demographics

	Public	Private voucher	Private non-voucher
No. of first grade parents	208	232	96
Parent education <8 th grade	18.1%	8.6%	0.1%
8th grade	38.9%	29.8%	4.5%
High school	33.0%	37.9%	5.6%
College or more	9.9%	23.7%	89.8%
Average monthly household income before taxes (\$US)	\$304	\$486	\$3072
Car	28.0%	35.6%	90.9%
Employed	33.0%	34.9%	75.9%
Single parent	25.3%	20.0%	17.3%
Female	91.5%	91.0%	80.5%
Student walks to school	72.2%	63.4%	14.6%
Length of residence in municipality (years)	17.76	20.64	14.93

Table 3 What parents say is important by education level (percentage)

<i>Preference</i>	<i>< High school</i>	<i>High School</i>	<i>College</i>	<i>Total</i>
Academic environment / curriculum	48.6	55.0	53.1	52.0
Morals / Values	2.3	13.9	17.1	10.7
Discipline / safety	10.0	4.8	1.2	5.6
Class or school size	2.0	5.4	2.9	3.4
Student demographics	0.0	0.6	0.8	0.4
Facilities	0.0	0.2	1.6	0.6
Location / cost	34.1	19.3	23.3	26.0
Other	2.9	0.8	0.0	1.3
<i>N</i>	195	177	158	530

Table 4 What parents say is important by school type (percentage)

<i>Preferences</i>	<i>Public</i>	<i>Private voucher</i>	<i>Private non-voucher</i>	<i>Total</i>
Academic environment / curriculum	40.7	53.6	56.2	51.7
Morals / Values	0.1	10.1	24.8	10.5
Discipline / safety	2.7	7.6	0.0	5.5
Class or school size	2.3	4.4	0.0	3.3
Student demographics	0.0	0.5	0.6	0.4
Facilities	0.4	0.0	3.3	0.6
Location / cost	52.4	22.2	15.1	26.6
Other	1.4	1.6	0.0	1.3
<i>N</i>	208	230	96	534

Table 5: The change in the probability of an aspect being named important

<i>Variables</i>	<i>Academic Environment / Curriculum</i>	<i>Morals / Values</i>	<i>Location / Cost</i>
High School	1,015 [0.691]	1.077*** [5.585]	0,990 [0.377]
College	1,025 [1.241]	1.097** [5.416]	1,045 [1.387]
Private voucher	0,969 [0.355]	1.242*** [45.254]	0.900*** [0.104]
Private non-voucher	0,997 [0.719]	1.256*** [200.953]	0.939** [0.151]
Employed	0,995 [0.452]	1,007 [0.776]	0.975* [0.205]
Female	0,985 [0.354]	0,985 [0.410]	0,984 [0.373]
Proximity	0.939* [0.189]	0.939* [0.200]	0,982 [0.389]
Church Attendance	0,979 [0.002]	0,998 [0.002]	0,992 [0.003]
Length of Residence	1,006 [0.023]	1,028 [0.029]	1,011 [0.028]
N	518	518	518
Pseudo R2	0,1119		

Standardized Odds Ratios reported, Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 6 Parental search behavior (percentage)

	<i>< High school</i>	<i>High School</i>	<i>College</i>	<i>Total</i>
Considered more than 1 school	46.6	47.3	47.9	47.3
Limited variance in test scores	36.0	37.9	41.0	38.2
Chose highest performing school	29.6	28.0	19.3	25.8
Same religious orientation	78.2	72.4	52.8	68.2
Limited variance in student demographics	84.5	90.6	84.6	86.5

Table 7 Parental search behavior (percentage)

	Public	Private voucher	Private non- voucher	Total
Considered more than 1 school	43.4	50.8	36	47.3
Limited variance in test scores	23.3	40.1	47.0	38.1
Chose highest performing school	10.3	30.0	19.7	25.5
Same religious orientation	90.1	68.2	39.9	68.6
Limited variance in student demographics	82.2	86.8	91.9	86.6

Table 8: The probability of shopping for schools, constructing a consistent choice set and choosing the best school

<i>Variable</i>	<i>Considered more than 1 school</i>	<i>Limited variance in test scores</i>	<i>Chose Highest Performing School</i>	<i>Same religious orientation</i>	<i>Limited variance in student demographics</i>
High School	1,000 [0.307]	1,005 [0.609]	1,003 [0.567]	0,982 [0.245]	1,025 [1.331]
College	1,022 [0.497]	1,006 [0.662]	0,968 [0.547]	0,957 [0.243]	1,002 [0.643]
Private voucher	1,012 [0.276]	1,055 [1.530]	1.095* [3.895]	0.917** [0.142]	1,018 [0.755]
Private non-voucher	0.965** [0.377]	1,060 [3.091]	1,035 [2.433]	0.917** [0.142]	1,061 [3.886]
Employed	1,000 [0.405]	0,992 [0.343]	1,004 [0.687]	0,995 [0.520]	0,982 [0.404]
Female	1,013 [0.441]	1,013 [1.260]	1,026 [3.533]	0,993 [0.544]	1,014 [1.840]
Proximity	0,996 [0.301]	0,992 [0.509]	0,944 [0.272]	1,042 [1.248]	0,978 [0.312]
Church Attendance	0,994 [0.002]	0,988 [0.003]	1.035*** [0.002]	1.041*** [0.003]	1.128* [0.012]
Length of Residence	0,987 [0.544]	0.977* [0.013]	0,993 [0.015]	0,998 [0.016]	1,025 [0.033]
N	520	233	233	233	233
Pseudo R2	0,023	0,0405	0,1199	0,1305	0,0723

Standardized Odds Ratios reported, Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 9 Neighborhood choice sets (schools within 1km distance)

<i>School type</i>	<i>% with limited Variance</i>
Public	23.1
Private voucher	13.8
Private non-voucher	36.4
Total	21.2

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