Parental Involvement and Private High School Attendance

Sueuk Park

Department of Education, Chinju National University of Education 369-3, Jinnyangho-ro, Jinju, Gyeongnam South Korea

David Bills

Department of Educational Policy and Leadership Studies, University of Iowa N446 Lindquist Center, Iowa City, IA 52242 USA

Abstract

Parental involvement as shared resources between children and parents is an important factor for students to establish educational plans for the future, because parents always intervene in determining the type of high school in which their child will enroll. The differences in parental influences between students, who attend private and public, at least in part, may explain the excellence of the private sector in achievement or attainment. Using the NELS:88 which contains a sample of eighth-grade students who begin the transition from middle to high school and thus provides trend data about the critical transition to high school, this paper found that students who are enrolled in private high school already have well-organized parental involvement. Such a difference between them may cause the accumulated disadvantages for public high school students in achievement and attainment. Moreover, the effect of parental involvement is moderated by different ethnic groups and especially Asians and Blacks with parents who often discuss schooling or future plans is more likely to select a private high school than Whites.

Keywords: Parental involvement, Public school, Private school, Difference by race, Conditional effect

1. Introduction

Enrollments in private high schools in the United States have steadily increased over the past decades (Broughman and Pugh 2004). This growth is, at least in part, due to the trust that parents have that a private high school will offer a high quality learning opportunity and environment to their children and enhance their academic achievement, thereby providing them access to more selective postsecondary institutions. Evidence that supports the popular belief has appeared in several studies that have compared achievement based on types of school (Coleman and Hoffer 1987; Hoffer, Greeley, and Coleman 1985; Raudenbush and Bryk 1988). Those studies documented that attending a private high school rather than a public school offers more benefits that develop student achievement. In addition to the effect of private school son achievement, private school attendance positively affects high school completion and educational expectations (Coleman, Hoffer, and Kilgore 1982; Evans and Schwab 1995). It appears that private school enrollment, especially in Catholic schools, is at least in part a response to parental dissatisfaction with public schools (Bryk, Lee, and Holland 1993). Parental dissatisfaction can also be an important element to affect attitude of parents for involving in education for their children.

Over the past several decades, researchers have considered parental involvement as an important key to explaining the gap of achievement or attainment among youths (Fehrmann, Keith, and Reimers 1987; Feuerstein 2000; Hara and Burke 1998; Hoover-Dempsey and Sandler 1995; Stevenson and Baker 1987; Sui-Chu and Willms 1996). For example, parental involvement improves students' achievement (Griffith 1996; Singh et al. 1995), is important in high school completion (Anguiano 2004), reduces the probability of high school dropout(McNeal 1999), and increases the rate of college enrollment (Perna and Titus 2005).

Parental involvement mediates educational gaps among students and may, in part, result in children's school success. Due to these reasons, parental involvement has been considered as part of a remedy for many problems in schooling.

Although each topic (i.e., the advantages of private high school and parental involvement) has gathered considerable attention, there is little research on the association of parental involvement with attending private high school. Bauch and Goldring (1995)examined how school choice influences parent involvement, but they did not consider the reverse relationship between them. They compared the levels of parental involvement and school responsiveness to facilitate the home-school connection among three different types of schools (Catholic, and single- and multi-focus public magnet schools). However, although it is useful for us to understand how parental involvement differs according to each type of school and how schools play a role in responding to parents' needs, it does not allow us to explain how parental involvement acts to determine the types of high school attended. While Baker and Stevenson (1986) examined how parental strategies affect students' educational choice, they do not focus on choosing high schools, but rather choosing high school curriculum track.

Parental involvement as shared resources between children and parents may play an important role for students to establish educational plans for the future. Therefore, in the process of school choice it is meaningful to examine the effect of parents. This is because parents intervene in determining the type of school in which their child wills enroll. With this in mind, we focus on how parental involvement is associated with the likelihood of choosing a private high school. We are also interested in whether this relationship varies across different ethnic groups.

We first describe the extensive debate over educational excellence between private and public high schools. We then discuss different operational definitions of parental involvement in previous research and define parental involvement with the concept of social capital. Through examining the relationship between parental involvement of middle school students and private high school attendance, this study will provide insight into the differences in parental influences between students who attend private and public high schools.

2. Literature Review

2.1 Private vs. public schools

Students who attend public as opposed to private schools have different family characteristics and resources. Their parents also have different understandings of and involvement in the learning and schooling of their children. These differences are closely associated with educational outcomes of students, such as academic achievement and decisions about what type of a school to attend. Therefore, the classic debate on excellence between public and private sectors in secondary education should be reconsidered based on the recognition of the difference in the exogenous components between them.

Early studies that compared the effect of secondary schools in the public and private sectors, produced results in favor of private schools, and in particular, Catholic schools (Chubb and Moe 1990; Coleman et al. 1982; Coleman and Hoffer 1987). This research concluded that attending Catholic school has a significant effect on students' achievement, once the background characteristics of students are taken into account. Coleman and his colleagues (1982)state that the higher test scores of private schools facilitate higher academic demands of students and impose stricter discipline for students than do the public schools. In addition to producing higher achievement of students, Catholic school students have a higher probability of both graduating from high school and attending college (Evans and Schwab 1995). Estimating the effect of attending magnet, private, and public schools on standardized test scores in inner city high schools, Gamoran (1996) found that private high schools had a positive impact on math skills, compared with comprehensive public high schools. This is consistent with previous work, which found that Catholic schools have particularly large effects for urban students on outcomes of secondary schooling, such as high school graduation rate and college completion rate (Evans and Schwab 1995; Neal 1997).

Some studies have questioned whether private schools are really better (Alexander and Pallas 1983; Cookson 1993; Lee and Bryk 1988). Others have pointed out a lack of appropriate control variables, maintaining that after controlling for individual background or ability, the outcomes in favor of private high school may disappear. Using high school curriculum as a key independent variable to reduce the risk of selection bias, some studies found that public-Catholic sector differences within high school tracks are very small (Alexander and Pallas 1983; Goldberger and Cain 1982), and that the different estimates between public and private schools cannot be attributed to sample selection bias (Cain and Goldberger 1983; Evans and Schwab 1995).

That is, the nonrandom selection of student and parent variables may lead to upward-biased estimates of the treatment effect of private schools (Figlio and Stone 1997). If students with high ability and positive family resources are more likely to attend Catholic schools, then the effects of a Catholic school would be overestimated.

Despite these divergent interpretations, it is clear that the perspectives and practices regarding schooling of parents between private and public high schools may never be identical. In other words, educational involvement or attention of parents who send their children to private school is different from those who send them to public school. If the difference is not considered there will be a serious selection bias related to school choice. This selection of students into different types of schools may be also closely associated with the better educational outcomes of students in private sector. Thus, we hypothesize that before choosing a high school, parents in the private sector have already developed different degrees or types of parental involvement from those in the public sector.

2.2 Parental involvement

It is clear that family-based resources affect children's learning activities. Of those, parental involvement has served as a catalyst for children's educational success (Epstein 1986). However, research on the relationship of parental involvement and students' achievement has had inconsistent results. For example, some research has indicated that students with high parental involvement showed higher academic performance than their counterparts (Astone and McLanahan 1991). Others have found no relationship between parental involvement and children's academic achievement (Balli, Wedman, and Demo 1997; Sui-Chu and Willms 1996). These inconsistent findings may result from various operational definitions of parental involvement (Fan and Chen 2001). Some research perceived parental involvement as uni-dimensional (Griffith 1996; Stevenson and Baker 1987). Other research focused on parental involvement emphasizes its multidimensional nature (Epstein 1996; McNeal 2001; Muller 1998; Singh et al. 1995). Studies that have adopted different dimensions of parental involvement assume that certain types of parenting practices and behaviors have a different impact on educational outcomes, compared with other types.

Generally, parental involvement is divided into the two categories of school and home. The former includes parents' participation in teacher-parent conferences and school events, and communication between teachers and parents. The latter includes discussion with children and supervising (or supporting) children's learning activity at home. Earlier empirical studies on parental involvement focus on the family-school relation (Herman and Yeh 1983; Stevenson and Baker 1987). They regarded parents' participation in school activities or communication with teachers as parental involvement. However, more recent studies have added parents' discussion with children or parental rules as an important factor of parental involvement (Keith et al. 1993; Sui-Chu and Willms 1996). Epstein (1986)divided parent involvement activities into more specific categories, such as supporting student's learning at home, maintaining communication with the school, assisting in school activities, becoming involved in school governance, and advocacy. Hoge, Smit, and Crist (1997) organized family process factors into four distinct types. These are parental expectations about education, parental interest in school, parental involvement in school, and family and emotional support. In contrast, most previous studies that used the NELS labeled parental involvement as four factors. These are discussion, support, regulation, and participation. Sui-Chu and Willms

(1996) operationalized parental involvement as home discussion, school communication, home supervision, and school participation. Mau (1997) divided parental involvement into helping, controlling, supporting, and participating. Focusing on parental involvement as social capital, McNeal (1999)categorized it as parent-child discussion, PTO(parent-teacher organization) participation, monitoring, and education support strategies,

Although conceptualization on different types of parental involvement varies according to researchers' viewpoints or the specific data used, the main concept of parental involvement in the current study is the relationships between parents and children, and between parents and teachers. We categorize parental involvement based on types and characteristics of the relationships. Coleman (1988) asserted that family background is analytically separable into three different components. These are financial, human, and social capital. In his analysis, financial capital is approximately measured by the family's wealth or income, and human capital is approximately measured by parents' education, which provides the cognitive environment for the child. Finally, Coleman argued that social capital is created by relations among actors and is embedded in social relations.

Given that social capital is the relationship and the attention given by parents to children, parents can provide their children with social capital to ensure them a better future through direct or indirect involvement at home.

respectively.

In particular, Coleman (1988)thought that the human capital within the family which is not complemented by social capital such as parental involvement is irrelevant to the educational growth of children. Using the concept of social capital, McNeal (1999) extended the meaning of parental involvement to the relationship between parents and teachers as well as between parents and children. He conceptualized parental involvement as social capital built on shared resources and relationships between parents and teachers, children, even other parents. The strength of social relations among them indicates a measure of social capital available to children from parents or teachers. Therefore, both parental involvement at home and relationship between parents and teachers can be regarded as Coleman's concept of social capital.

Bourdieu (1986) explained social capital in the relationship between advantaged and disadvantaged groups. He believed that the amount of social capital an individual can acquire through social networks varies according to his or her social position, such an upper or lower class. Therefore, his concept of social capital is focused on social barriers that cause inequality across gender, ethnicity, or class. This view is supported by research in which the relationship between parental involvement and educational outcomes, such as high school completion, educational aspirations, dropping out, and college enrollment differ according to racial/ethnic groups (Anguiano 2004; McNeal 1999; Perna and Titus 2005; Oian and Blair 1999). In the same context, the degree to which parents are involved in children's education also varies by race/ethnicity (Desimone 1999; Fehrmann et al. 1987; Stevenson and Baker 1987). Some studies have found that the positive impact of parental involvement on educational outcomes is smaller for Black and Hispanic students (McNeal 1999; Perna and Titus, 2005). Using a Meta analysis, Jeynes (2003) reported that while for all racial groups parental involvement affects students' academic achievement, the impact of a certain type of parental involvement is higher for a certain racial group than other groups. For example, Black students are more positively affected by parental participation in school, although the impact of Hispanic and Asian students is not statistically significant. Another study shows that racial minorities, in particular African Americans and Hispanics are more involved with their children's school than Whites, even after controlling for SES (Kerbow and Bernhardt 1993). These empirical results indicate that there are differences between racial groups in degree to which parents involve in children's learning and schooling.

While some research has examined the relationship of parental involvement with college enrollment (Perna 2000; Perna and Titus 2005), there is little research which investigates the relationship in the process of selecting a high school. Given the fact that the effect of parental involvement is higher for younger children than older ones (Stevenson and Baker 1987), it is more meaningful to understand the impact of parental influence on high school enrollment, rather than on college enrollment.

The proportion of minority students in American public high schools has steadily increased since the 1970s (National Center for Education Statistics 2002). The rising enrollment rate of racial minorities in public high schools may be associated with their family backgrounds and parents' involvement in the learning and schooling. In other words, a certain characteristic within racial groups (e.g., parenting behaviors) may be more important to explain the difference. Given Coleman's (1988) and Bourdieu's (1986) concept of social capital, familial environment, such as parental involvement is unlikely to be equally distributed among racial groups. Although past research examines the impact that parental involvement has on academic outcomes for race or ethnicity, little is known about racial group differences in the ways in which parental involvement as social capital affect behavioral outcomes, such as high school choice. This study hypothesizes that parenting practices vary by racial group and that the difference, at least in part, encourages educational stratification by race/ethnicity through attending a private high school. Based on the arguments presented above, we have two sets of research questions. First, we compare individual and family characteristics between students who attend a public and a private high school and then examine how different types of parental involvement vary across levels of individual and family characteristics. Second, we first analyze the relative effects of different dimensions of parental involvement on attending a private high school and then examine how these relationships vary for racial groups.

3. Methods

Data used in this study retaken from the National Educational Longitudinal Survey of 1988 (NELS: 88), which was sponsored by the U.S. Department of Education's National Center for Education Statistics. The NELS contains a sample of eighth-grade students who begin the transition from middle school to high school and thus provides trend data about the critical transition to high school. Compared with other nationally representative data, NELS is particularly strong in its coverage of items pertaining to parental involvement because parents were separately surveyed allowing a comprehensive measurement of parental involvement.

We are interested in the causal link between parental involvement and private high school attendance. Since our main focus is on the effect of parental influences at the transition from middle to high school, the longitudinal aspect of the NELS is useful. For all analyses, we use the base-year (1988) data for all of independent variables and the first follow-up (1990) for the dependent variable.

The sample excludes subjects who dropped out (n=1,851), and were thus missing data for type of school attended (n=663). Due to small sample size, we also exclude American Indians/Alaskan Natives (n=173). The analytic sample numbers 15,706 high school sophomores in 1990. Because nearly all variables used in this study have missing data, using a list wise deletion method for regression models results in dropping about 40% of our analytic sample. Therefore, we replaced the missing data using a multiple imputation (MI), which allows us to retain our sample size (n=15,706). Many studies show that this technique is the most effective strategy for dealing with large amounts of missing data (Allison 2002; Schafer and Graham 2002).

The dependent variable, type of high school attended, is binary and coded 1 if private and 0 if public school. In our sample, the total numbers of students who attend a public and a private high school is 13,509 and 2,197 respectively. Only 14% of total students are in the private sector. In addition, of private high school students about 60% (1,294) attend a Catholic school. Our demographic variables include gender and race. For gender, female is the reference group. Racial groups are divided into Asians, Hispanics, Blacks, and Whites. Each racial group was recorded as a dummy variable with Whites as the reference group. Parent education level is coded as 1 if at least one parent completed college and above and 0 if not. Family income is measured in dollars with fifteen categories. Students' achievement is a continuous variable and indicates the mean on the sum of reading and math tests in the 8th grade. Parental expectation is coded as 1 if parents want their children to get at least bachelor's degree or above and 0 if not. In addition, religious affiliation is operationalized as three dummy variables: Catholic, other-religion, and non-sectarian. Non-sectarian is the reference group.

In spite of the potential effect of parental involvement on students' learning outcomes, the findings of empirical studies have been inconsistent. In their meta-analysis of parental involvement, Fan and Chen (2001)pointed out that some research presents positive effects, but others do not find this. As mentioned earlier, these conflicting results may be caused by unclear concepts of parental involvement. The effect of parental positive attention and activity varies based on educational outcomes depending on the perspective of the researcher and the particular definition of parental involvement. Another important reason for inconsistent findings from parental involvement research is that researchers use different sources to measure parental involvement, such as student reports and parent reports. While some researchers prefer only students' reports (Muller 1998), others use parent, child, and even teacher reports (Grolnick, Benjet, Kurowski, and Apostoleris 1997). In this study, we use items reported by parents, rather than students for two reasons. First, because decision-making in high school, compared with college choice, is more influenced by parents, using parent reports is more appropriate. Second, the NELS offers more items related to parental practices and involvement at school as well as in home, compared with items reported by students.

We need to know more about which aspects of parental involvement are most important. We thus divide parental involvement into four scales. These are discussion, regulation, PTO participation, and school communication. Discussion and regulation are considered to be "home involvement," and PTO participation and school communication are viewed as "school involvement." Given Coleman's (1988) and Bourdieu's (1986) conceptualization of parental involvement as social capital, the former indicates social capital at home and the latter means social capital at school.

As mentioned above, this study has two sets of research questions and each question has different dependent variables. For the first question using OLS regression, the dependent variables are four types of parental involvement. For the second question, the dependent variable is the type of school attended. More specifically, it is coded as 1 if respondents are in a private high school and 0 if not. This school variable was collected in the second wave of NELS and anything else was surveyed in the first wave of that, it is appropriate to examine longitudinally what kind of high school respondents chose. In other words, the longitudinal design of NELS allows us to put all variables included in temporal order, such as individual and parent characteristics at time 1 (1988) and school choice at time 2 (1990). Therefore, using the longitudinal data with different waves will strengthen our argument that we would not get if we had cross-sectional data, where we would have to ask if school choice somehow impacts parent characteristics. Further, because outcome variable is binary for the second question to estimate the determinants of school choice, we used logistic regression analysis.

4. Results

Individual or family resources of students who attend a private and a public high school are not same. Using a t-test, Table 1 shows that there are differences between students attending public and private high schools on four types of parental involvement as well as individual and family characteristics. While there is no gender gap for attending a private high school, Asians favor sending their children to a private high school, and Blacks are more likely to be in a public high school than Whites.

For parent education, the proportion of parents with a bachelor's degree in a private sector is almost two times, compared with parents in a public sector. Gaps in family income and students' reading and math test scores between the public and private sector are also significant. 83% of parents who sent children to a private school expect that their children will acquire a bachelor's degree or above, but in a public sector just half of parents expect children to get a college degree. In sum, the higher parental education, family income, academic achievement, and parental expectations for children's education are, the more children are likely to be in a private high school. It shows that academic achievement and family socioeconomic backgrounds of private high school students are not statistically equal to those of public high school students. For religious tendency, children from Catholic family are in a private school more than children from family with a non-Catholic religion or no religion. However, the result should be more carefully interpreted because more enrollments in a private school of Catholics results in most of private schools included in this study is Catholic private schools.

The most important finding is that students who were sent to private high school at the second wave had higher parental involvement of all types at the first wave than those who were sent to public high school. In other words, before entering into a high school, parent with a child who attend a private high school already much more discuss school experience with children, more frequently participate in a PTO, contact with teachers, and more rigorously supervise the day-life of children than those with a child who attend a public high school. These preschool differences for parental involvement between students in a public and private school suggest that the process of transition to a high school, at least in part, may play a significant role to stratify students in secondary or postsecondary education.

Table 1: Comparison of means and standard deviations between public and private

	Pu	Public		vate	T-test	
	Mean	SD	Mean	SD		
Male	0.500	0.500	0.524	0.499	0.84	
Asian	0.035	0.182	0.072	0.259	3.67 **	
Hispanic	0.101	0.301	0.078	0.269	-1.18	
Black	0.124	0.330	0.066	0.248	-2.36 *	
White	0.740	0.439	0.783	0.412	1.54	
Parental education	0.261	0.440	0.534	0.499	10.35 **	
Family income	9.635	2.456	11.234	2.179	11.25 **	
Achievement	50.847	9.907	55.496	9.337	8.98 **	
Parental expectation	0.585	0.493	0.830	0.376	9.85 **	
Other religious	0.690	0.463	0.449	0.497	-6.88 **	
Catholic	0.286	0.452	0.542	0.498	7.51 **	
Non religious	0.024	0.154	0.008	0.092	-3.40 **	
Parental involvement						
Discussion	-0.022	1.008	0.220	0.830	5.14 **	
Participation	-0.093	0.959	0.705	1.030	13.14 **	
Communication	-0.027	0.986	0.495	1.206	9.66 **	
Regulation	0.009	0.989	0.148	0.957	3.02 **	

^{*} p < .05 ** p < .01

The results of the effect of individual and family background characteristics of students on specific aspects of parental involvement are presented in Table 2. The relationships of the four types of parent involvement with individual or family characteristics vary. The gender difference in parental involvement is obvious except for the dimension of participation, controlling for all other variables.

In other words, parents of boys are more likely to talk about school experiences or educational plans, to contact children's teacher, and to control children's home life or school performance than parents of girls.

For parental involvement gaps among racial groups, this study replicated the findings from existing research (Fehrmann et al. 1987; Griffith 1996; Zellman and Waterman 1998). That is, parents from different ethnic backgrounds involve themselves in children's schooling with different strategies. For example, Asian parents are less likely to discuss schooling matters with their children and contact school less often about children's learning activities than Whites. Some research points out that the reason for these negative effects of Asian parents on parental involvement at school is derived from more reserved cultural demeanors (Wu and Qi 2004). Hispanic parents more often participate into school activity such as PTO and but also tend to supervise children's life out of school more, compared with Whites. After taking all other variables account, Black parents havea higher level of all aspects of parental involvement than Whites. In other words, under the same family environments Black parents more frequently involve themselves in their children's schooling than Whites and it supports existing research results (Kerbow and Bernhardt 1993).

The higher the educational level of parents, the more often parents participate in PTO and contact school. Higher educated parents also rigorously supervise children' life out of school, compared with less educated parents. For all types of parental involvement analyzed, parents with high income are more involved in their children's education than ones with low income. This result is similar to previous studies (Desimone 1999; McNeal 2001) which examined how parental involvement differs by family income or SES level. Although discussion and participation dimensions of parental involvement are not influenced by students' tested cognitive ability, parents of students who have high achievement are less likely to contact school and regulate children's home life, compared with their counterparts. Parents who expect that their children get at least bachelor's degree tend to have higher school involvement and discuss school more often with children.

	Discussion	Participation	Communication	Regulation
Male	0.054 **	0.007	0.163 **	0.043 *
	(0.021)	(0.022)	(0.023)	(0.021)
Asian	-0.335 **	-0.005	-0.203 **	-0.057
	(0.084)	(0.062)	(0.067)	(0.075)
Hispanic	-0.035	0.076 +	0.056	0.132 **
_	(0.042)	(0.045)	(0.050)	(0.038)
Black	0.169 **	0.298 **	0.100 +	0.220 **
	(0.039)	(0.041)	(0.057)	(0.041)
Parental education	0.034	0.265 **	0.204 **	0.053 +
	(0.027)	(0.032)	(0.032)	(0.029)
Family income	0.045 **	0.064 **	0.041 **	0.028 **
	(0.006)	(0.005)	(0.005)	(0.005)
Achievement	-0.001	0.000	-0.008 **	-0.012 **
	(0.001)	(0.001)	(0.001)	(0.001)
Parental expectation	0.379 **	0.251 **	0.083 **	0.037
-	(0.028)	(0.026)	(0.027)	(0.028)
Constant	-0.650 **	-0.920 **	-0.151 +	0.270 **
	(0.082)	(0.071)	(0.081)	(0.076)

⁺ p < .10 * p < .05 ** p < .01

The results of the binary logistic regression analysis of determinants of enrollment in a private high school are reported in Table 3.We ran three separate blocks to estimate the extent to which type of high school attended is explained by the variables of interest: Demographic variables, individual and family backgrounds, and parental involvement. For choosing a private high school, while gender differences are not significant in all three blocks, ethnicity is an important factor on private high school enrollment. Specifically, Asian parents are more likely to send their children to private school, compared to Whites. Even when ability/socioeconomic characteristics and all types of parental involvement are controlled, their preference of private high school is not reduced.

For example, the odds ratio for Asian in block 1 is 1.974. This means that for Asians the odds of choosing a private high school increase about 97.4% relative to being White. Even after holding all other variables constant, the effect is maintained as roughly 91.9%. It means that Asian parents tend to send children to a private high school regardless of their family or social background, and parenting practices on children. On the other hand, the odds that Black parents send children to a private school decrease by about 50%, compared with Whites. However, after taking all other variables account, the negative effect is no longer significant. It indicates that Black parents with same individual backgrounds and parental influence on children's schooling do not prefer for their children to attend a public high school any more.

Table 3. The effects of parental involvement on attending a private high school

	Block 1		Bloo	Block 2		Block 3	
	В	Odds ratio	В	Odds ratio	В	Odds ratio	
Male	0.090	1.094	0.070	1.073	0.020	1.020	
	(0.115)		(0.119)		(0.121)		
Asian	0.680 **	1.974	0.547 *	1.728	0.652 **	1.919	
	(0.214)		(0.243)		(0.242)		
Hispanic	-0.309	0.734	-0.147	0.863	-0.134	0.875	
	(0.237)		(0.232)		(0.225)		
Black	-0.692 *	0.501	0.178	1.195	-0.028	0.972	
	(0.299)		(0.302)		(0.307)		
Parental education	•		0.451 **	1.570	0.308 **	1.361	
			(0.103)		(0.102)		
Family income			0.231 **	1.260	0.188 **	1.207	
Ž			(0.028)		(0.028)		
Achievement			0.015 **	1.015	0.018 **	1.018	
			(0.005)		(0.006)		
Parental expectation			0.581 **	1.788	0.450 **	1.568	
1			(0.124)		(0.125)		
Other religious			0.568	1.765	0.293	1.340	
•			(0.351)		(0.354)		
Catholic			1.705 **	5.501	1.424 **	4.154	
			(0.332)		(0.342)		
Parental involvement							
Discussion					-0.017	0.983	
					(0.060)		
Participation					0.499 **	1.647	
					(0.062)		
Communication					0.228 **	1.256	
					(0.044)		
Regulation					0.056	1.058	
					(0.050)		
Constant	-2.249 **	0.106	-7.161 **	0.000	-6.649 **	0.001	
	(0.110)		(0.519)		(0.534)		

^{*} p< .05 ** p < .01

For the effect of other backgrounds including the social origin block (block 1) on private high school enrollment, block 2 supports, in part, the results of t-test from Table 2. In other words, parents who have a bachelor's degree or above are more likely than their counterparts to send children to a private school. The effect is still significant after taking four types of parental involvement into account, while the odds are a little reduced. Increase of one unit for family income increase the odds of choosing a private sector by 26% and its odds are still significant, holding all parental involvement variables constant. When the mean of test scores increases one point, odds of a private high school enrollment increase by about 1.5%. Parents who expect their children to finish at least a 4-year degree increase the odds to send their children to a private high school by 78.8%. In particular, for Catholics, the odds of choosing a private sector is higher roughly 5times greater, compared with non-sectarians. This is consistent with the finding of past research, in which the most important factor to choose a private high school is an individual's religious background (Witte 1996).

The block 3 shows more distinctly which aspects of parental involvement significantly influence the attendance of a private high school. Parental involvement at home (i.e., discussion and regulation) does not affect the decision to attend a private high school. On the other hand, parental school involvement (i.e., PTO participation and parents' school contact) has a very significant effect on such a decision. More specifically, the odds for choosing a private high school of parents who have many more frequency of participation in the PTO are increased by about 64.7%, holding all other variables constant. Frequent school contacts of parents also positively affect the likelihood to attend a private high school and the odds are increased by a factor of 1.26, controlling for other variables.

According to existing studies, the effect of parental involvement at school is strongly related to educational outcomes of students (Lee and Bowen 2006). However, the effect of parental involvement at home has on students' academic achievement or attainment is unclear. For example, some research shown that home involvement is not associated with students' academic achievement (Barnard 2004). Although the dependent variables are different, these results are consistent with our findings, in which social capital formed between family and school is associated with attending a private high school. When parents interact with teachers, they learn important skills and information to enhance children's achievement (Hill and Taylor 2004).

For example, school-related activities offer parents how to help with homework, how to handle problems occurred in children's schooling, and what school policies and practices are. These skills and information would increase students' academic achievement. In this vein, the finding that there is a positive association between parental school involvement and attending a private school is very meaningful to understand the gap of achievement between public and private high school students. In other words, students with parents who involve in school activities is more likely to attend a private high school than those with parents who are not involved and the difference for parental involvement is, at least in part, associated with students' achievement during high school years.

Table 4 shows that effects of parental involvement differ across race. In other words, the effects of four types of parental involvement on attending a private school appear to be inconsistent across ethnic groups. More specifically, from Table 3, we can see that there are no effects of parental involvement at home on enrollment of private high school. However, according to the results from the Table 4, Asian and Black parents who often discuss schooling or future plans with children have increased odds of selecting a private high school compared to Whites.

Although the significance level is not high, for Hispanic parents the conditional effect does exist. Hispanic parents who frequently communicate with teachers are likely to enroll in a private high school, compared to Whites. However, Hispanic students from families with strong rules are less likely to be in a private high school than Whites.

	•			•	8 1		
	Asian		His	Hispanic		Black	
	В	Odds ratio	В	Odds ratio	В	Odds ratio	
Discussion	0.694 **	2.002	0.210	1.234	0.905 **	2.472	
	(0.221)		(0.128)		(0.235)		
Participation	0.009	1.009	0.091	1.095	-0.310	0.733	
	(0.159)		(0.191)		(0.208)		
Communication	0.103	1.108	0.173 +	1.189	0.012	1.012	
	(0.127)		(0.104)		(0.171)		
Regulation	-0.062	0.940	-0.281 +	0.755	-0.083	0.920	
	(0.158)		(0.151)		(0.254)		

Table 4: Interaction effects of parental involvement and ethnicity on attending a private school

All models include gender, parental education, family income, achievement, parental expectation, and religious tendency.

5. Discussion

It is clear that parental involvement is effective to help children' learning activities and thus is thought of as a key determinant to explain the educational gap among high school students. In addition to the effect of parental involvement during high school years, parental involvement would significantly affect the decision of parents to send their children to a private high school because school choice may be an attempt to enhance their children's education. Such a decision would be able to associate with children's future for job and income.

⁺ p < .10 * p < .05 ** p < .01

Further, parents from different ethnic backgrounds interpret the meaning of parental involvement in different ways, and the value and belief systems that different ethnic families have in regard to education become significant issues when examining the relationship between families and schools (Anguiano 2004).

Although this study did not compare differences in parental involvement between students after they enter a public or private high school, we can guess that such positive parenting practices at a private high school would not easily change through high school years. Also, given a high relationship between parental involvement and student achievement from previous studies, based on results from this study we can derive additional interpretation about why a private high school makes a difference in achievement. In other words, we found that children from families in which parents frequently participate in the PTO and communicate with teachers or school have a higher probability of entering into a private high school than do otherwise comparable students with less close parent-school relationships ties, holding all other background variables constant. Therefore, if earlier studies related to the excellence of the private sector (Chubb and Moe 1990; Coleman et al. 1982; Gamoran 1996) consider the fact that students who are enrolled in private high school already have well-organized parental involvement, it would explain, in part, achievement gap between private and public school. For more positive parental involvement of a private high school, past research shows that Catholic private schools facilitate greater parental involvement and further parents are more likely to contact teachers (Bauch and Goldring 1995).

In conclusion, the high educational achievement of students in private school may be, at least in part, a result of the positive aspects of parental involvement obtained before attending a private school. For that reason, many researchers who suspect the excellence of private school(Alexander and Pallas 1983; Cain and Goldberger 1983; Figlio and Stone 1997)have pointed out the problem of sample selection and then asserted the difference is influenced by selection bias rather than any systematic school sector effects (Goldhaber 1996). In particular, because we have longitudinal data, it is possible to say that parents who are more involved are more likely to send their kids to private school. In this vein, previous studies which measure it at the same time would point risk getting the causal order wrong. On the other hand, students from public high schools may have a different starting-point in regard to parental involvement compared with ones of private high schools. Such a difference between two types of schools for students' achievement or attainment may cause the accumulated disadvantages for public high school students.

A relationship between parental involvement and school choice is not one-way, but two-way. In other words, the more actively parents intervene in decision of whether to attend a private high school, the more involved they are in children's education (Goldring and Shapira 1993), and such positive involvement of parents would simultaneously affect the next choice in process of educational transition. Moreover, it would contribute to enhancing the efficacy of teacher and school (Hoover-Dempsey, Bassler, and Brissie 1987).

For future research, it is necessary to consider whether differences of parental involvement between public and private high schools are continued after entering each school. If these differences are maintained or expanded, federal or state government consider policies which can encourage for each school to involve parents in their school activities, in particular participation in PTO and regular communication between home and school.

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