THE PARTICIPATION OF LANGUAGE MINORITY FAMILIES IN FORMAL SCHOOL ACTIVITIES

A Dissertation

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by

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This dissertation analyzes data from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 to examine schools’ provision of opportunities for, facilitation of, and actual level of family participation in formal school activities. In doing so, it places a specific focus on the involvement of language minority (LM) families and synthesizes research on both the individual-level and school-level factors that influence involvement. The analyses, informed by social exchange theory and the concepts of cultural and linguistic capital, test an overall hypothesis that the home-school relationship will be stronger when the costs of being in the relationship for both parents and school personnel are lower. In particular, LM families are expected to be less involved than other families because they lack linguistic capital, or the ability to speak the dominant language and to use it appropriately, given the context in which social interaction takes place (Bourdieu 1991).
The analyses show that the opportunities schools offer families to be involved vary by school characteristics such as size, resources, and sector. However, while opportunities positively predict families’ participation in school activities, variation in opportunities does not explain differences in involvement by various child, family, and household characteristics. The families who are most involved are those with the greatest resources, including linguistic capital.

Overall, the findings from this research generally support the contention, generated from exchange theory, that parents and school personnel, who stand to benefit from parents’ involvement, will form relationships with one another when it is easier for them to do. Schools can make participation easier for language minority parents, thereby increasing their levels of involvement. The study concludes with a discussion of several practices schools should consider adopting in order to increase language minority parent participation in formal school activities.
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CHAPTER 1

INTRODUCTION

1.1 Background

Parental involvement in children’s educational lives has been an important issue for educational researchers, policymakers, and practitioners for decades. These groups believe that such involvement has positive consequences for children’s academic well-being, and much of the research that exists on this topic generally supports this view. Children generally do better in school, and are less likely to dropout, when their parents are knowledgeable about and involved with their education in various ways (Epstein 1990; Fan and Chen 2001; Ho and Willms 1996; Mueller 1993; Rumberger et al 1990; Stevenson and Baker 1987). Parents of all backgrounds express concern about and a desire to be involved in their children’s education lives (Epstein 1995; Lareau 1987; Moles 1993).

In 1994, a federally commissioned report by the National Goals Panel identified increasing parents’ involvement in their children’s education as one of eight major goals to be achieved by the year 2000 (National Education Goals Panel 1995). At that time, survey data showed that teachers felt lack of parental involvement was a serious problem for schools, a substantial number of parents were not as involved as they would have liked, and an overwhelming number of business executives felt lack of parental
involvement was the greatest obstacle to school reform (National Education Goals Panel 1995).

Federal commitment to, and support for, parental involvement in children’s education was reaffirmed with the enactment of No Child Left Behind legislation in 2002. The act gave public school parents unprecedented access to knowledge about their children’s schools’ performance, available as a result of the mandatory and annual publication of public schools’ average standardized test scores. It also expects unprecedented levels of involvement on the part of parents, who are supposed to use this knowledge to make the best choices in schooling for their children. A recent column in Education Week discussing parents’ new role under No Child Left Behind referred to a “rise of the parentariat” in which parents are “the newest and perhaps most major pivotal players of education in the future (Buchen 2004).”

Implicit in the research, policies, and programs related to parental involvement is the argument that parents are not as involved as they could (or should) be. There may be a limit to the amount of involvement parents should have in certain aspects of their children’s education, for example in activities at the school, as well as to the degree to which school staff actually want parents to be involved (Griffith 1996). However, there are some groups of parents who are less involved than others. Arguably, even if there is a desirable limit to involvement, all parents could be involved at the same level as those parents who are most involved.

Research on parental involvement is primarily concerned with examining differences in involvement among parents with different characteristics, as well as the determinants of involvement. A substantial body of research focuses on factors at the
individual level, thereby identifying characteristics of children, parents, and family life that are related to level of involvement. There are specific factors, such as work hours and parental education, that impact parents’ involvement in their children’s educational lives. Hypotheses and conclusions in this line of research rest on the assumption that it is some aspect of the parents’ lives that leads them to be involved at lower levels than is desirable.

This dissertation focuses on one group of parents who research indicates tend to be less involved than other parents: language minorities (see, for example, Moles 1993; Vaden-Kiernan and McManus forthcoming). Language minority (LM) parents are those whose native language is not English and who may or may not have difficulty understanding and communicating in English. They also tend to come from cultural backgrounds that differ from the majority culture. For these parents, language and cultural differences are individual characteristics conceptualized here as barriers that prevent them from being involved at the same level as other parents. LM parent involvement is discussed in more detail later in this chapter.

This dissertation gives much attention to the relationship between language background and involvement, but it does not limit its investigation of LM parent involvement to analyses at the individual level. This is because, although important, research focusing on individual-level factors lacks consideration of the context in which involvement occurs. Another body of research on parental involvement does account for context by examining how characteristics of the school and its personnel, apart from those of parents, affect the likelihood that schools will offer different opportunities for parents to be involved at the school, as well as whether parents will participate in school
activities. Central to this research is the belief that families and schools have shared responsibility for creating relationships with one another (Epstein 1990). As a result, responsibility for lower levels of involvement cannot be placed solely with parents. As worded, the eighth goal of the National Education Goals Panel places responsibility for “promot(ing) partnerships that will increase parental involvement and participation” squarely in the hands of schools. Thus, there is recognition that school-level characteristics, such as resources and policies, can affect levels of involvement as well.

A primary purpose of this dissertation is to add to this body of research by increasing understanding of the school-level factors that affect parents’ involvement in their children’s educational lives. Oriented toward language minorities, it examines the ways, if any, in which schools facilitate the involvement of LM parents and investigates whether such facilitation leads to higher levels of participation for these parents.

1.2 Types of Parental Involvement at the School

Many researchers have outlined and categorized the myriad of ways in which parents can be involved in their children’s educational lives (e.g., Epstein 1990 and 1995; Feuerstein 2000; Henderson, Marburger, and Ooms 1986; Scribner, Young, and Pedroza 1999). Involvement occurs within three different contexts: the family, the school, and the community (Muller and Kerbow 1993). In the family/home environment, parents contribute to the educational success of their children by fulfilling their basic obligations to care for and nurture children, which enables children to arrive at school physically and emotionally ready to learn (Epstein 1990). Parents also provide educationally enriching experiences, for example by taking children to museums or libraries and reading to or with them. They can promote educational success as well, by talking about their
children’s educational experiences with them, sharing their own educational expectations, and helping with homework.

Research suggests that involvement in the home has the strongest effect on academic achievement, but involvement in school can also have positive consequences for student’s academic well-being (Ho and Willms 1996; Muller 1993a). The focus of this dissertation is on involvement within the school, because this is the type of involvement most readily affected by the characteristics of the school and its personnel. As such, it is the most amenable to being increased and better facilitated by changes in school policy and practice. There is some research evidence that involvement at home is not related to school characteristics, but involvement at the school is (Feuerstein 2000; Ho and Willms 1996).

In the school context, involvement includes participation in formal activities, and both formal and informal contact between parents and school personnel. This type of involvement makes parents visible to school personnel; such visibility translates into a perception that these parents are concerned about the educational experiences of their children (Scribner, Young, and Pedroza 1999). It also allows for collaborative relationships to develop between parents and school personnel. Trust is created between them, which helps in the creation of a community and a positive learning environment for children (Scribner, Young, and Pedroza 1999).

Epstein (1990, 1995) has outlined a typology of six major types of parental involvement, three of which primarily occur within the school (although school practices can influence all six types). These forms of school involvement include communications from school-to-home, parent involvement in activities at the school, and parent
involvement in governance and advocacy. The first type includes “the form and frequency of communications such as memos, notices, report cards and conferences (Epstein 1990, 113).” The second type includes the activities of volunteering and attendance at student sporting events, class performances, etc. The last type of involvement relates to parental participation in education-related governance or advocacy groups.

In some types of involvement, parents increase their knowledge about their children’s educational experiences, for example, by attending a parent-teacher conference. At other times, parents directly affect these experiences, as is the case if parents insist that their children be placed in a particular teacher’s class. In still other instances, parents support the non-academic activities of their children within school, for example by attending a class play. Key to these activities is that they provide opportunities for contact between the home and the school, allowing parents to become more familiar with the institutions their children attend and the education their children receive.

1.3 Opportunities for and Facilitation of Involvement at the School

An important consideration in research evaluating the levels and determinants of involvement is the opportunities for involvement that actually are provided to parents by the school. Parents cannot participate in activities that are not made available to them. Without controlling for opportunities for involvement, school-level variations in opportunities may be interpreted erroneously as group differences in involvement levels. For example, research commonly identifies overall differences in the involvement in school activities of parents of different races/ethnicities (see, for example, Ho and Willms
Students of different racial/ethnic and socio-economic backgrounds attend schools with different levels of resources. If the opportunities for involvement schools offer are related to the resources they have, observed differences in parental involvement by race/ethnicity may be at least partially a result of differences in opportunities, which result from differences in school resources. If this is the case, current research may overstate the relationship of race/ethnicity to involvement.

Although some researchers acknowledge that parent involvement with the school is affected by the opportunities for and schools’ encouragement of involvement (Schneider 1993; Muller and Kerbow 1993), few have expressly set forth to describe the opportunities for involvement provided by schools in the United States, to determine whether these opportunities differ by school characteristics, or to determine whether apparent differences in opportunities affect involvement at the school. By failing to control for opportunities in their analyses, researchers implicitly assume that parents’ opportunities are uniform across schools, or that all schools offer the same activities at the same frequency. In actuality, little is known about the similarity of activities allowing for parent participation that are offered by schools in the United States. Data collected by the National Center for Education Statistics (NCES) show that, in 1996, the majority of public schools educating children in grades K-8 did offer a variety of events allowing parents to be involved in the school; however, there was variation, ranging from 97 percent of schools holding open houses or back to school nights to 84 percent of schools having science fairs or other academic events (Carey and Farris 1996).
Other research also suggests, directly or indirectly, that opportunities for parental involvement are not uniform across schools (e.g., Nord, Brimhall, and West 1996; Ho and Willms 1996). It is likely that structural and ideological factors affect school personnel’s ability or willingness, or both, to offer a variety of activities in which parents can be involved. Factors such as school size, resources, and the general relationship between parents and teachers may be related to the opportunities schools offer for involvement. Also, the NCES data discussed above pertain only to public schools. Given the differences in the nature of the relationships between parents and school personnel in public and private schools, it is likely that the opportunities for involvement differ by school sector as well.

This dissertation uses national data obtained from schools that educate kindergartners (from The Early Childhood Longitudinal Study, Kindergarten Class 1998-99) to describe the types and frequency of school activities in which parents of kindergartners can participate. It also examines the extent to which schools’ organizational characteristics and the characteristics of their personnel affect the number of offered opportunities. Lastly, it includes analyses to determine whether involvement is affected by opportunities when other factors at both the school and child levels are controlled.

It may be the case that the opportunities for involvement are generally similar across schools but schools are not uniformly encouraging parents to become involved in the activities they do offer. There is evidence that parents are not fully aware of the school activities in which they can participate (Chen 2001). Therefore, it is also important to study the strategies schools use to involve parents in the offered activities.
This study investigates schools’ facilitation of involvement, conceptualized as efforts by school personnel to increase parental awareness of available activities, to make the activities easier for parents to attend, and to make parents feel that their participation is welcome. Whether parents take advantage of the opportunities provided to them depends to a certain extent on the degree to which school personnel welcome, encourage, and respect parental involvement (Epstein 1995; Epstein and Sanders 2000; Moles 1993; Scribner, Young, and Pedroza 1999).

1.4 Involvement of Language Minority Parents

As discussed above, certain characteristics of the school environment that may affect involvement systematically differ for parents with different characteristics. If the involvement behaviors of all parents are to be well-understood, it is important to consider how context affects the participation of parents from diverse social backgrounds. This study focuses on the involvement of language minority (LM) parents, by examining the opportunities offered in the schools their children attend and the ways in which schools facilitate their involvement specifically. Analyses then examine how these school characteristics are related to LM parents’ actual levels of involvement.

The need to understand all aspects of the educational experience for language minorities, including parental involvement in education, has increased in recent decades along with the size of the language minority population educated in our nation’s schools. In 1998, approximately 9 percent of the nation’s kindergartners lived in homes where the dominant language was not English (West, Denton, and Germino Hausken 2000). Also, between the academic years 1993-1994 and 1999-2000, the number of English language learners, or ELL (students from non-English backgrounds with limited English
proficiency), educated by U.S. public schools increased by almost one million; in 1999-2000, ELL comprised approximately 7 percent of all public school students (Meyer, Madden, and McGrath 2004).

Research has shown that language minority students are likely to be disadvantaged at home and in the educational system, although differences do exist by factors such as socioeconomic status and country of origin; students who are limited in English proficiency appear to be the most disadvantaged (Denton forthcoming; Rosenthal, Baker, and Ginsburg 1983; Rumberger and Larson 1998; Schmid 2001; Valdes 1997). Students who lack English language skills likely have parents who lack these skills as well. These parents face the same challenges navigating the educational system, in particular in communicating with school personnel, as their children do. Lack of English proficiency can present significant barriers to participation in school activities. A substantial number of non-English-speaking parents may find it difficult and intimidating to attend school functions conducted in English and to communicate with their children’s teachers.

In general, studies on the level of parental involvement in their children’s educational lives do not specifically identify and examine language minority students or LM parents in their analyses. A small body of academic literature has explored the relationship between language background and involvement; that is, it has discussed whether and why parents whose native language is not English are involved in their children’s educational lives at different levels than parents whose native language is English. Much of this literature is written as though it is a well-demonstrated fact that language minority parents are less involved than other parents. However, there is little
research that provides empirical data showing statistically different levels of involvement based on language background. One recent study using nationally representative data does show that language minority parents are less involved than parents who only use English in the home (Vaden Kiernan and McManus forthcoming). Other studies that are more qualitative and/or evaluative also suggest that language minorities are less involved than non-language minority parents (e.g., Bermúdez 1993; Davies 1993; Scribner, Young, and Pedroza 1999). Often, however, this research relies on school staff’s perceptions of language minority parent involvement, rather than quantifiable measures of actual level of involvement, to make such conclusions.

More common than involvement research focusing specifically on language minorities is research focusing on parents of different race/ethnicities who are likely to come from non-English language backgrounds, Latinos and Asians in particular.1 Researchers commonly suggest that language barriers explain the lower levels of involvement for Latino, Asian, and immigrant parents (Peña 2000; Ritter, Mont-Reynaud, and Dornbusch 1993; Yao 1993), but none have explicitly and statistically tested this hypothesis. In this dissertation, parents are categorized according to whether they come from language minority backgrounds and, if so, whether they use English as a primary language in their home. Statistical tests are used to examine differences in the involvement levels of these different groups of parents.

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1 According to 2000 Census data, the most commonly spoken languages in the United States, other than English, are Spanish and Chinese (Shin and Bruno 2003). According to data reported in America’s Children (Federal Interagency Forum on Child and Family Statistics 2004), in 1999, 71 percent of Latino children ages 5-17 spoke another language at home. In the same year, 23 percent of Latino children who spoke another language at home were reported as having difficulty speaking English. Among children ages 5-17 who were of “other race” (not white or black) and who were not Latino (a group that consisted primarily of Asians/Pacific Islanders), 51 percent spoke a non-English language at home, and 12 percent of them were reported as having difficulty speaking English. For comparison, 4 percent of white, non-Latino and 5 percent of black, non-Latino children ages 5-17 spoke a non-English language at home in 1999.
Also, the relationship of language background and use to involvement in activities at the school is assessed while taking into account the simultaneous effects of other factors. As most studies of language minority parent involvement are qualitative, they generally do not use statistical controls to determine whether language background itself affects involvement or whether LM parents’ involvement is primarily determined by other factors also related to involvement. The effects of socioeconomic characteristics associated with language background and race/ethnicity, specifically education level and income, may at least partially explain the lower levels of involvement of language minority parents. Language minority kindergartners, on average, have parents with lower levels of education and lower socioeconomic status than non-language minority kindergartners (Denton forthcoming). Some racial/ethnic minorities also have less education, on average, and lower median incomes than whites (DeNavas-Walt, Cleveland, and Webster 2003; McKinnon 2003; Ramirez and de la Cruz 2003). Less educated and lower-income parents are less likely to be involved in their children’s educations than are the better-educated and parents from high income backgrounds (Fantuzzo, Tighe, and Childs 2000; Kerbow and Bernhardt 1993). It is likely that these socioeconomic factors would partially explain the differences in involvement levels between LM and non-LM parents, if they do exist.

Language minority parents, regardless of English language skills, also may find being involved at their children’s schools challenging as a result of differences between their home cultures and that of the school and school personnel. Many immigrants and language minorities come from cultures in which the school and what occurs in it are strictly the domain and responsibility of teachers and administrators (Rivera 1993;
As a result, these parents may not feel their involvement at the school is needed or desired. Also, a body of research purports that the educational system places less value on lower-class and minority cultures; teachers and other school staff, regardless of their own race or cultural background, value, expect, and reward middle-class, “White” values and behaviors from their students (Ferguson 1998; Rist 1979). These values and standards of behavior, including “acceptable” methods of communication, are also expected from their parents as well (Lareau 1987; Lareau and Horvat 1999).

Parents who do not come from such backgrounds are disadvantaged in their relationships with schools. In contrast to their treatment of middle-class and white parents, there is some evidence that school staff devalues the contribution of lower-class and minority parents, and make “blanket judgments about ethnicity and…. ‘deficit’ cultures that are allegedly too impoverished to value education (Valenzuela 1999, 74).” Also, unaware of the level and types of involvement expected of them, and unable to communicate with school personnel as such personnel desire, such parents might develop adversarial, rather than cooperative, relationships with schools-- if they develop relationships at all.

This line of research, while focusing on individual-level characteristics, supports the contention that school practices affect parental involvement at the school. These practices may have a unique and important impact on the involvement of language minority parents. LM parents, whose cultural and social differences situate them at the periphery of the school community, may be less comfortable participating in activities at the school. To become more involved, LM parents may need more encouragement than
other parents from school staff. Therefore, schools’ active encouragement and facilitation of involvement are especially important for them. Yet teachers and administrators may find it challenging to involve LM parents, whose language difficulties can prevent them from knowing about opportunities for involvement or act as barriers to interaction with school personnel when there is awareness of opportunities. The costs associated with trying to develop relationships with LM parents may be too great for school personnel to accept. This study examines how schools respond to the challenge of involving language minority parents. Specifically, it looks at the resources schools have and the methods they use to respond to facilitate language minority parent involvement.

1.5 Focus on Kindergartners

This research utilizes data from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99, which are representative of the nation’s kindergartners and schools that educate kindergartners. Examination of parental involvement in kindergarten is less common in the literature on involvement, which tends to focus on children in higher grades. Yet parental involvement can be important during children’s transition from a home or preschool environment to a more formal school environment, and so is worthy of attention. Parental involvement in kindergarten can make this transition a less difficult one for both children and parents; it provides more continuity between home and school life.

Parents’ involvement from the beginning of their children’s formal education also provides the foundation for parents’ involvement throughout their children’s school years. Just as engaging children at the very start of formal education is important to keep them engaged in school, engagement for parents is important as well. As mentioned
above, parents who feel that their presence in the school is welcomed and valued are likely to become and remain involved. In contrast, when parents are made to feel from the get go that their presence is not desired, they will become disengaged and may be reluctant to become involved in the future. Therefore, school policies and practices to involve kindergartners’ parents can affect involvement not only in kindergarten, but for years to come. This research examines the ways in which schools that educate kindergartners attempt to involve these students’ parents.

With respect to examining the involvement of language minority parents, the kindergarten year is an ideal one on which to focus. LM children and parents are most likely to face language barriers in children’s first year of formal schooling. In subsequent years, these children acquire English skills that allow them to be translators for parents. As such, the translation of information by school personnel may not be as critical for parental involvement and awareness of school activities. Also, parents may acquire more English themselves as the years pass, making translated materials and translators less necessary.

However, if more involvement in kindergarten leads to more involvement in the upper grades, waiting until LM children and parents feel more comfortable and competent in the school environment for parents to become involved may have negative consequences. It may be crucial for LM parents to be engaged by schools from the time their children enter school. Schools’ methods to facilitate LM parent involvement may have the most effect in the kindergarten year when parents are adjusting to their children’s formal school environment, want information about their children’s activities
during the day, and may be unclear as to what their role in the school environment should be.

1.6 Objectives and Organization of This Study

The analyses using data from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 are designed to meet four main objectives. These are: 1) to describe the opportunities for parental participation in school activities and the strategies used to facilitate involvement on a national level; 2) to determine school-level factors that affect the number of opportunities offered by the school, as well as whether the schools children with language minority parents are likely to attend differ from other schools with respect to these factors; 3) to compare the level of involvement of language minority and non-LM parents; and 4) to determine whether the opportunities for involvement offered by schools and schools’ methods of facilitation affect involvement for all parents, and for language minority parents in particular.

The next chapter includes a summary of the extant research pertaining to parental involvement in order to assess the information related to these objectives that is already known. This summary focuses on research that examines the school characteristics related to opportunities, as well as the child, family, household, and school predictors of levels of involvement both for all parents, and for language minority parents in particular. All of the analyses performed to meet the four objectives listed above are guided by a theoretical grounding in social exchange theory, which is supplemented by the concepts of cultural and linguistic capital. This theoretical rationale is provided in chapter 3, along with a conceptual framework and the hypotheses generated from the theory and informed by the literature. Chapter 4 describes the dataset, methods of analysis, and measures used
in all analyses. Chapters 5, 6, and 7 present the results of three distinct, but interrelated, sets of analyses. The school-level analyses are presented first in chapters 5 and 6, because the examined school characteristics are then used as predictors in the analyses of individual involvement in chapter 7. In chapter 5, the questions of whether there is variation in opportunities for involvement at the school level, and, if so, which schools offer more opportunities than others, are explored. Chapter 6 includes an analysis of the methods schools use to facilitate the involvement of language minority families and which types of schools use more methods of facilitation than others. The child-level analyses discussed in chapter 7 pertain to actual levels of parental involvement and focus on differences between language minority and non-language minority parents. They also investigate whether opportunities and schools’ use of different methods to facilitate involvement has a positive effect on involvement. Each of these analysis chapters includes a discussion of the results presented within them. This dissertation concludes in chapter 8 with a summary of its findings; a discussion of what the findings bring to bear on the topics of parental involvement and the theories of social exchange, and cultural and linguistic capital; and directions for future research.
CHAPTER 2

REVIEW OF LITERATURE

2.1 Introduction

As indicated in the first chapter, literature on parental involvement generally takes one of two approaches. In the first approach, analyses focus on the effects of individual-level characteristics on individual parents’ involvement. In the second approach, researchers hypothesize about and examine the effects of school organizational characteristics, policies, and practices on levels of familial involvement. This chapter summarizes research results and conclusions from studies of both types. It also summarizes what is known about the involvement of language minority parents from existing literature. This review, along with the theory presented in chapter 3, provide a foundation for predicting the effects of the factors examined in this study, as well as for identifying the areas in which the literature on involvement falls short of providing a complete picture of the factors affecting parental participation in the school, especially for language minority parents.

2.2 The Prevalence of Opportunities for Involvement in U.S. Schools

As discussed in the first chapter, Epstein (1990, 1995) has outlined six primary types of parental involvement in children’s education, three of which primarily occur in the school. The U.S. Department of Education is the only source of information about
opportunities for involvement at the national level. In a study using data collected from public schools in 1996, 97 percent of schools reported that they held an open house or back to school night; 96 percent reported holding at least one arts event such as a play, dance, or musical performance; 92 percent reported holding a regularly-scheduled school-wide parent-teacher conference, 85 percent held at least one sporting event or other athletic demonstration; and 84 percent reported holding a science fair or other academic demonstration or event (Carey and Farris 1996).

While these data are somewhat dated, they were collected just a couple of years previous to the collection of the data from the first two waves of the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K). They do demonstrate some variation in the percentages of schools that offer various activities in which parents can participate. However, these estimates are for schools that ever offer such activities. There is likely to be greater variation when the frequency with which such activities are offered, rather than just their prevalence, is considered. Also, these data are representative of the nation’s population of public schools that serve students in grades K-8. The percentages of schools offering such opportunities are likely to be different when the population includes private schools and is limited only to those schools that educate kindergartners, as does the population of schools included in the ECLS-K.

Nevertheless, these national data show that there is variation in the types of opportunities for involvement parents have. While some types of opportunities appear to be quite common and available to most parents, for example parent-teacher conferences, others are less so, for example, being able to attend an academic event in which their
children are involved. Variation related to these less-common activities may result in parents being less involved in those schools that offer fewer opportunities.

There is mixed, but limited, evidence related to the characteristics of schools that are more or less likely to offer parents different types of activities at the school in which they can participate. Some research indicates that whether schools have activities such as back-to-school nights or sports events does not vary by characteristics such as school size, location, and percent minority enrollment (Carey and Farris 1996). Other findings from a report using national data to compare schools’ and parents’ reports of whether schools offer parents various opportunities to be involved do show variation by particular school characteristics (Chen 2001). Results presented by Chen (2001) show that, according to school reports, public schools with smaller enrollments and those located in rural areas are less likely to have an open house or back to school night than larger schools and schools located in other areas. In contrast, public schools with smaller enrollments and elementary schools were more likely than larger schools and middle schools to report having regularly-scheduled parent-teacher conferences.

Other data collected from eight inner-city schools also show a grade level effect, whereby teachers are more likely to encourage volunteering in elementary schools than in middle schools, and in lower elementary grades compared to higher elementary grades (Epstein and Dauber 1991). National data, however, show that public schools’ reports of whether they offer opportunities for parents to volunteer at the school do not vary by school size, the grade levels taught, location, or minority enrollment; parents, however, are more likely to report that volunteer opportunities are available in elementary schools and low-minority enrollment schools compared to middle schools and high-minority
enrollment schools (Chen 2001). Similarly, while school reports of back-to school nights and parent-teacher conferences showed no differences by minority enrollment, according to parent reports, schools with large percentages of minority students were less likely to have an open house or back to school night, compared to schools with low minority enrollments.

These discrepancies between school and parent reports suggest that while opportunities may be available, some parents are not aware that the opportunities exist. Certain types of schools may not be doing an adequate job making parents aware of such opportunities. Epstein and Dauber (1991) assert that schools do “vary in how much and how well they inform and involve families.” Alternatively, in spite of schools’ efforts, some parents may not be paying enough attention to what schools are doing to encourage parental involvement (Chen 2001). Nevertheless, there is suggestion that school characteristics are related to both the opportunities for involvement schools offer, as well as to actual level of involvement in the school. Research on this latter topic is summarized in the next section.

2.3 School-level Influences on Parental Involvement: Opportunities

Some researchers suggest that when schools provide opportunities for and encourage parents to be involved, including those who may not otherwise be so, they do become involved (Epstein and Dauber 1991; Epstein and Sanders 2000). Key here is that schools need to provide the opportunity for and encourage the contact. Although researchers sometimes indicate that parent contact with the school is affected by the opportunities for contact provided by the school (Schneider 1993; Chavkin and Williams 1993), an extensive survey of the literature on parental involvement found no study that
presented analyses that statistically controlled for opportunities when predicting parent or family involvement at the individual level. However, there is some evidence, based on empirical analyses, that opportunities are related to level of involvement.

In their study of parental involvement among a nationally-representative sample of children in grades kindergarten through 12, Nord, Brimhall, and West (1997) indicated in a footnote that models not presented in their report showed that parents were more likely to be highly involved if the schools offered them opportunities for involvement. While it is unclear exactly what models were run, it does appear that the independent variable of opportunities was a dichotomous one indicating whether a school held any general school meetings or parent-teacher conferences since the beginning of the year. Also, the study’s authors noted that controlling for opportunities did not change the relationship between involvement and the other variables in the model.

There is also suggestion that opportunities affect involvement in literature that finds a relationship between child’s age/grade level and parents’ participation at the school. Parents of older children in upper grades are less involved than parents of younger children in lower grades (Catsambis and Garland 1997; Epstein 1990). This decrease might be related, at least partially, to schools offering fewer opportunities for parents to be involved in the upper grades (Stevenson and Baker 1987). This hypothesis that opportunities are related to actual levels of involvement is supported by a finding in Nord, Brimhall, and West (1997) that declines in involvement related to grade were less pronounced when the study’s sample was restricted only to children in schools that offered particular opportunities for involvement.
Contrary to these findings, there is limited evidence that suggests that opportunities are not related to involvement. In a study of urban schools, researchers found that attempts to build community in schools, which included offering parents many opportunities to be involved at the school, did not necessarily lead to greater levels of family involvement (Nakagawa, Stafford, Fisher, and Matthews 2002). However, this study focused on the activities of urban schools with a high degree of student mobility. Opportunities for involvement may be related to levels of involvement for parents of children who attend the same school for any given school year and/or across many school years. A goal of this dissertation is to determine what relationship, if any, opportunities have to level of involvement for a nationally-representative sample of kindergartners and their families.

2.4 School-level Influences on Parental Involvement: Other Characteristics

Opportunities for involvement are just one school characteristic that may be related to actual parental involvement at the individual level. Although the question of whether opportunities are related to involvement has not been empirically investigated, there is empirical support in the literature that other school and teacher characteristics and practices are related to parental involvement. While few in number, some researchers have approached the issue of involvement with a specific focus on, and empirical test of, whether and how numerous school characteristics affect involvement.

Almost three decades ago, Corwin and Wagenaar (1976) grounded an examination of teacher-parent relationships in organizational theory to examine how school characteristics were related to face-to-face interaction between parents and teachers. However, the purpose of their research was not to present a comprehensive
analysis of parental involvement. Instead, their analyses were primarily a test of concepts (boundary maintenance, in particular) and hypotheses in the field of sociology of organizations, with the school being the chosen organization for study. For this reason, the analyses incorporated only a limited number of school characteristics (“boundary characteristics”), had narrowly focused dependent variables, and were conducted at the school-level. Nevertheless, the results showed that organizational characteristics of the school affected, and accounted for a substantial amount of the variance in, the number of private discussions parents had with teachers. In particular, average face-to-face interaction (as opposed to general involvement) was higher in larger schools, schools with a less centralized and less formalized bureaucracy, and schools with a more experienced teaching staff.

More recently, Feuerstein (2000) used NELS:88 data to show that school characteristics explained as much as 30 percent of the variance in certain involvement activities at the school among parents of children who were eighth graders in 1988. More specifically, involvement in activities such as volunteering and parent-teacher organizations increased when teachers contacted parents more often. These analyses also demonstrated significant school sector effects, with some forms of involvement (volunteering and participating in the PTO) being higher among parents of students in private schools, compared to parents of students in public schools. Interestingly, the time parents spent volunteering at school decreased as school enrollment increased.

There are two limitations of Feuerstein’s (2000) study that are cause for concern with respect to the validity of these findings. The first is that Feuerstein notes that the relationships of most of the variables used in the study to involvement were significant
due to the large sample size of students in the dataset and the process of weighting the data to reflect national totals, but many significant measures had a substantively meaningless effect on involvement. This information suggests that he did not properly adjust the standard errors of the estimates to produce more accurate statistical tests, as is recommended by the National Center for Education Statistics, which collected the data. Secondly, the analyses are contextual analyses that employ ordinary least squares (OLS) regression. Bryk and Raudenbush (1992) assert that, when using nested data, such as data pertaining to students and their parents grouped in schools, for various reasons OLS regression provides an inadequate statistical test of the effects of factors measured at one level on an outcome measured at a different level.

While there appears to be reason to question the validity of Feuerstein’s (2000) results, another study using NELS:88 data that used hierarchical linear modeling (HLM) to examine how school characteristics are related to parental involvement also found evidence that school factors affect parental involvement. HLM is a statistical technique without the shortcomings of OLS when using nested data.\(^2\) In their examination of racial/ethnic differences in levels of parental involvement, Kerbow and Bernhardt (1993) found that a substantial portion of the variance in involvement at the school was due to school characteristics; significant between-school variation existed in involvement with the PTO and in parent-school contact regarding academic performance. In particular, the minority compositions of the school staff and student body were related to level of involvement. Parent-school contact was higher in schools with larger percentages of African American teachers, and parent participation in the PTO was higher in schools

\(^2\) See chapter 4 for a more detailed discussion of hierarchical linear modeling and its advantages compared to ordinary least squares regression.
with larger proportions of minority students and African American teachers, controlling for other factors.

Kerbow and Bernhardt (1993) suggest that these effects of racial/ethnic composition are found because schools with high concentrations of minorities are located in cohesive, minority communities, in which social capital is generated. Teachers in schools with high concentrations of minority students are more likely to be minorities as well, and contact parents at higher rates than teachers in schools with smaller concentrations of minorities. At the same time, parents feel more comfortable interacting with teachers who are the same race/ethnicity, and there is less likely to be conflict between them. In schools in which a high percentage of teachers and parents are of the same racial/ethnic background, students’ and parents’ culture is more likely to be understood and valued. This makes interaction with school personnel easier for parents, who then become more involved.

Other studies have focused on the relationship of one school-level characteristic on involvement or incorporated some school characteristics into what is primarily an analysis of the direct effects of individual-level characteristics on involvement (e.g. Ho and Willms 1996; Grolnick et al. 1997). They too show that school characteristics affect level of parental involvement. Research consistently shows that parents of children who attend private schools are more involved in all aspects of their children’s education than parents of children who attend public schools (Muller 1993b; Nord, Brimhall, and West 1997; Rathbun and Germino Hausken 2001; Vaden-Kiernan and McManus forthcoming). Involvement also appears to be higher in smaller schools (Chen 2001; Nord, Brimhall, and West 1997). This may explain, at least in part, why involvement is higher in private
schools, as such schools tend to be smaller than public schools (Alt and Peter 2002). Researchers also hypothesize that the higher levels of involvement in private schools result from greater feelings of community that are created in these schools (Bryk, Lee and Holland 1993; Coleman and Hoffer 1987). With greater feelings of community and stronger social networks found in such schools, it is easier for parents to be involved, because they are more likely to feel comfortable in an environment in which they are known and in which they know other teachers and parents.

Additional studies have found a relationship between involvement and the composition of the student body. For example, parental participation in some school activities tends to be higher in schools in which the average socioeconomic status of students is higher (Ho and Willms 1996; Kerbow and Bernhardt 1993; Rathbun and Germino Hausken 2001). In particular, as the percentage of poor students in a school increases, general parental attendance at school functions decreases dramatically (Carey and Farris 1996).

Research on the effects of percent minority enrollment on involvement is mixed. While the study described above indicated that involvement in the PTO is higher in schools with high concentrations of African American and Latino students (Kerbow and Bernhardt 1993), other research shows that parent attendance (as reported by school administrators) at functions such as open houses, back-to-school nights, and parent-teacher conferences, as well as volunteering, is lower in schools with high minority enrollments compared to schools with low minority enrollments (Carey and Farris 1996; Chen 2001; Rathbun and Germino Hausken 2001). Discrepancies in such findings are
likely due to the fact that the different studies cited include samples of children in different grade ranges and investigate involvement in different activities.

A survey of the literature found only one study that examined whether and how the percentage of English language learners in a school was related to involvement (Rathbun and Germino Hausken 2001). Using ECLS-K data, researchers found that this characteristic was not related to the proportion of parents in the school who attended parent-teacher conferences, open houses, or classroom parties, as reported by teachers. However, lower percentages of parents were reported by teachers to have attended an art/music event or to have volunteered as the percentage of English language learners in the school increased. These analyses are strictly correlational, so these findings may not hold when other characteristics, such as school resources, are controlled in multivariate analyses.

School location (i.e., metropolitan status and region) has been shown to be related to school involvement in some studies (e.g., Carey and Farris 1996; Chen 2001), but not others (e.g., Sheldon 2002). In those studies that find differences, parental involvement in city schools is generally lower than involvement in suburban schools (Carey and Farris 1996). That urban parents are involved at lower levels also is suggested by other studies that investigate school practices related to the involvement levels of these parents (see, for example, Epstein and Dauber 1991). However, one study did find that attendance at parent-teacher conferences was lower in rural schools, compared to schools in cities, suburbs, or towns (Chen 2001). With respect to regional differences, parent participation in some school-sponsored activities such as open houses and parent-teacher conferences
has been found to be lower in schools in the Southeast than in schools in other areas of the country (Carey and Farris 1996).

A common theme in literature that examines how school policies and practices affect involvement is that the more welcome, important, and efficacious parents are made to feel by school staff, the more involved they will be at the school (e.g., Chen 2001; Epstein and Dauber 1991; Hoover-Dempsey, Bassler, and Brissie 1992; Hoover-Dempsey and Sandler 1997; Inger 1992; Nord, Brimhall and West 1997; Peña 2000). An empirical study of almost 43,000 elementary students found that parents who were more empowered by schools, defined as being encouraged to be a part of the school’s activities and governance, were more involved in school activities, although the association between empowerment and involvement was not particularly large (Griffith 1996). However, this same study showed that school climate, determined by school staff’s cooperativeness and how welcome parents felt in the school in general, as well as when contacting teachers, was only indirectly related to involvement through its effect on feelings of empowerment. Other research shows that schools have stronger programs to involve parents and make more contact with hard-to-reach parents when school staff places a high value on parental involvement (Epstein and Dauber 1991).

Some studies have focused on teacher characteristics, providing further evidence that the characteristics and practices of the school personnel affect involvement within the school. For example, as Corwin and Wagenaar (1976) found, when teachers have greater commitment to the school, parental involvement in the school is higher. This likely results because teachers who are more committed to a school do more to engage the people who make up the school community. According to Epstein and Sanders
(2000), teachers’ efforts to involve parents are important in determining the degree to which parents are involved in their children’s educational lives. Studies do show that the more teachers encourage involvement, the more importance they place on it, and the more they initiate contact with parents, the more involved parents are (Gavin and Greenfield 1998; Grolnick et al. 1997; Kerbow and Bernhardt 1993). In particular, evidence shows that a concerted effort to increase involvement by teachers or others involved in school or community programs leads to positive and sustained contact between school personnel and low-income families, and English and non-English speaking Latinos (Davies 1993; Scribner, Young, and Pedroza 1999). Importantly, teachers are more likely to encourage parents to be involved when they have less stereotypical ideas about the involvement and abilities of disadvantaged parents (Epstein and Dauber 1991).

2.5 Child, Parent, Family and Household Characteristics Related to Parental Involvement

There also is a body of literature that examines the child, parent, and family characteristics that lead to greater parental involvement in schools (see, for example, Dornbusch and Wood 1989; Epstein and Sanders 2000; Hoge et al. 1997; Ho and Willms 1996; Muller 1993a). These factors include, but are not limited to, parents’ socioeconomic background, family structure, and race/ethnicity.

Existing studies consistently report positive effects of parents’ socioeconomic status (SES), which is determined by education, income, and occupation, on parental involvement. In general, parents of higher socioeconomic status are more involved in school activities than are parents of lower socioeconomic status (Stevenson and Baker
Lareau (1987) found that, while families of lower SES often were supportive of the school, they were less actively involved at the school than parents of higher SES backgrounds. Looking specifically at education level, parents with more than a high school education appear to be more involved at the school and are more likely to participate in conferences with their children’s teachers when their children are in preschool, kindergarten or first grade than are parents who have not finished high school (Fantuzzo, Tighe, and Childs 2000).

Also, studies generally show a positive relationship between income level and involvement. For example, a study of government-sponsored elementary schools in three countries, including the United States, showed that there was very little contact between low-income parents and school personnel (Davies 1993). The contact that did exist was generally negative, i.e., contact was made when the students were having behavioral or academic problems. Moles (1993) reports similar findings in his summary of research on involvement conducted in the 1970s and 1980s. However, some research shows that the relationship between income and involvement disappears when other characteristics are controlled (Nord, Brimhall and West 1997) suggesting that levels of involvement are determined by other factors related to income, such as education and family structure (discussed further below).

Research examining the involvement of parents of lower socioeconomic status also reports that these parents have attitudes and beliefs that would lead them to be less involved. Studies shows such parents feel intimidated by the educational language used by teachers and threatened by teachers’ authority and their own lack of formal knowledge
(Peña 2000; Moles 1993). Lareau (1987) found that middle-class parents, who generally have higher levels of education, are more likely to feel that they can contribute to their children’s education success and see their relationship with the school as a partnership. In contrast, working-class families are more likely to feel they do not have adequate educational preparation to help their children and “turned over the responsibility for education to the teacher (Lareau 1987, 81).” Other studies also have found that parents with less education feel that their involvement is not really helpful for their children (Peña 2000).

Additionally, parents are aware of the differences in socioeconomic status between themselves and teachers (Moles 1993), which can make it difficult for them to make requests of and form relationships with teachers. Clark (1983) argued that parents from lower socioeconomic backgrounds do “not know they have the right to ask for anything special from their children’s schools” (cited in Bermúdez 1993, 179). Working-class mothers have reported feeling powerless in the home-school relationship as their concerns are readily dismissed by school personnel (Reay 1999). In contrast, parents from higher socioeconomic backgrounds feel they are entitled, and have the responsibility, to make requests of teachers, and even challenge teachers when necessary, to assure that their children receive the best education possible (Lareau 1987; Reay 1999).

Factors associated with education, income, and occupation also appear to be associated with parents’ willingness and/or ability to participate in activities at the school. For example, parents’ education level is cited as being related to the educational expectations they have for their children (Muller and Kerbow 1993; Sewell, Haller, and
Portes 1969), a factor which itself has been linked to parents’ level of involvement. Parents with higher expectations are more involved in the school than parents who expect their children to acquire lower levels of education (Griffith 1996; Kerbow and Bernhardt 1993; Nord, Brimhall and West 1997).

Also, parents in low-income homes often rely on public transportation or have only one car that must be shared among all members. If a child’s home is not within walking distance of the school, his or her parents’ ability to be involved in at the school is constrained (Scribner, Young, and Pedroza 1999), regardless of their desire to participate. Other factors related to having low income levels, such as lack of child care and problems with safety in the areas around one’s home and school, may lead to lower levels of parental involvement as well (Moles 1993).

Other parental characteristics shown to be related to involvement are employment status and work hours. For example, mothers who work outside the home are less likely than mothers who are not in the paid labor market to volunteer (Muller 1993a). Looking at involvement more generally, mothers who work part-time have been found to be more involved than mothers who work full-time (Zill and Nord 1994). Research also shows that fathers appear to be more involved when mothers work full time, compared to when mothers work part time (Nord, Brimhall, and West 1997). Interestingly, fathers in two parent families who are least involved at the school are those who are looking for work or are not in the labor force (Nord, Brimhall, and West 1997). It is likely that there are other issues associated with fathers’ unemployment (e.g., illness and/or disability) that present constraints and limit the amount of time such fathers can be involved.
Looking at family structure, single parents generally are less likely to be involved in school activities than parents in two-parent households (Grotnick et al. 1997; Ho and Willms 1996; Nord and West 2001). One study found that, among parents of preschoolers, kindergartners, and first graders, two-parent families were more likely to participate in conferences with their children’s teachers than one-parent families, but there were no differences between these two types of families in other types of school-based involvement (Fantuzzo, Tighe, and Childs 2000). The number of children in the household also affects parents’ ability to be involved with each child individually. Research shows that general participation in school activities increases as the number of children in the home increases, while communication with teachers about a particular child decreases (Ho and Willms 1996).

Research examining factors related to parental involvement also has considered characteristics of children themselves. Findings are mixed with respect to whether child’s sex is related to involvement. Some studies show that the types of activities in which parents are more involved appear to be at least partially dependent on the sex of their children. For example, Muller (1998) found that boys’ parents attended school meetings more often than girls’ parents, but girls’ parents attended school events more often than boys’ parents. In Ho and Willms’ (1996) research, boys’ parents had more contact with the school, while parents of girls were more likely to be involved in educational activities in the home context. No differences were found by child’s sex in the levels of parental participation in the PTO or volunteering. Other research finds no relationship between child’s sex and general school involvement for either mothers or fathers when the children are in elementary school, but fathers with sons do appear to be
more involved than fathers with daughters who are in grades 6 through 12 (Nord, Brimhall and West 1997).

Another characteristic routinely included in parental involvement research is child’s race/ethnicity. School staff often perceive that minority parents are less interested and less involved in their children’s education than other parents (Ritter, Mont-Reynaud, and Dornbusch 1993). Looking empirically at rates of participation, some research does show that African American, Latino and Asian parents are less involved at the school than white parents (Muller 1993a; Ritter, Mont-Reynaud, and Dornbusch 1993; Zellman and Waterman 1998). In general, Asian parents consistently are found to have lower levels of school participation, compared to other parents (e.g., Ho and Willms 1996; Ritter, Mont-Reynaud, and Dornbusch 1993; Muller and Kerbow 1993). Other research has found no substantial differences in participation in school activities among white, African American, and Latino parents (e.g., Harris, Kagay, and Ross 1987; Ho and Willms 1996). Within any given school, it appears that parents of all racial/ethnic backgrounds are equally involved in the PTO, with the exception of Asian American parents; they are less involved than African American, Latino and white parents (Kerbow and Bernhardt 1993; Ho and Willms 1996). Still other studies have found that minority parents (again, with the exception of Asian parents) are more involved in their children’s educational lives than white parents (Kerbow and Bernhardt 1993; Fehrman, Keith, and Reimers 1987; Ritter, Mont-Reynaud, and Dornbusch 1993).

This inconsistency in research findings likely results from differences in the use of statistical controls and the types of involvement activities being considered. Differences in parental involvement by child’s race/ethnicity appear to be at least
partially dependent on the type of involvement activity examined in analyses. For example, minority parents have been found to be more involved in “traditional” activities, such as an open house, than in less traditional activities such as school governance (Chavkin and Williams 1993). In analyses of NELS:88 data presented in Muller and Kerbow (1993) and Kerbow and Bernhardt (1993), white parents were found to have high levels of participation in activities involving a large amount of social interaction, while Asian Americans had especially low levels in such activities. Controlling for other factors, including socioeconomic status, Asian American parents reported the lowest levels of parent-initiated contact regarding children’s academic matters, as well as participation in the PTO, while African American parents reported the highest levels. While Muller and Kerbow (1993) found no differences in the likelihood of volunteering by race/ethnicity, other research has shown that African American parents are slightly less likely to volunteer than white parents (Ho and Willms 1996; Zellman and Waterman 1998).

There is some contradiction in the literature regarding the level of involvement for Latinos, which may be a result of the studies’ use of different types of involvement as dependent measures. One study showed that Latina mothers feel that any help they give their children is less likely to enhance achievement than white or African American mothers (Stevenson et al. 1990). The finding that involvement is higher among mothers, in general, when they believe they can help their children learn (Hoover-Dempsey, Bassler and Brissie, 1992) suggests that Latina mothers would be less involved. Some research shows that they are less involved directly with the school than African American and white parents (Ritter, Mont-Reynaud, and Dornbusch 1993; Zellman and Waterman
However, other studies show that they participate in the PTO at about the same rate as whites but contact the school about their children’s academic performance at higher rates than whites, when background characteristics are controlled (Kerbow and Bernhardt 1993; Muller and Kerbow 1993). Whatever their involvement relative to other parents, there is evidence that Latino parents, along with African Americans, actually participate in some school activities at higher rates than would be expected, given the negative effect their lack of resources (e.g., lower average income and education levels) has on involvement (Kerbow and Bernhardt 1993).

Children’s academic success and problem behaviors are related to whether or not, and how much, parents are involved in their children’s education. Contact with school personnel is higher when children’s academic performance is lower (Kerbow and Bernhardt 1993) and when they have learning or behavioral problems (Ho and Willms 1996). Among Asian American parents, home-school contact is high only when their children’s achievement is very low (Muller and Kerbow 1993). Parents also appear more likely to attend parent-teacher conferences when their children have lower grades (Vaden-Kiernan and McManus forthcoming.)

However, parents are more involved in other types of activities at the school, such as a general school meeting or class event, when their children have higher grades (Vaden-Kiernan and McManus forthcoming). Participation in formal school organizations, such as the PTO, also is higher when children receive better grades (Kerbow and Bernhardt 1993). The relationship between involvement and children’s academic performance may be dependent on child’s grade level. Nord, Brimhall, and West (1997) found that, while there was a relationship between mothers’ involvement
and academic grades for children in grades 6 through 12, no such relationship existed for children in elementary school.

Parents’ social networks also appear to affect how involved they are at the school. Involvement at school is higher among parents of elementary school students who report speaking with more parents of children who attend the same school as their own children (Sheldon 2002). Middle-class families are more likely than lower-class families to develop social networks with other parents in their children’s schools, which facilitates the development of a stronger home-school relationship and increases involvement (Lareau 1987). However, social support may have different effects for parents situated in different communities. Among inner-city African American parents, support from other parents has been found to be related to involvement at home but not at school (McKay, Atkins, Hawkins, Brown, and Lynn 2003).

Lastly, research has shown that involvement in the home is related to involvement at school. For example, the more parents participate in both in-home and out-of home activities with their children (e.g., reading, doing arts and crafts, or going to a library or museum), the more involved they are at the school (Nord, Brimhall, and West 1997). Thus, the parents who are most likely to be involved in one context are the parents who are likely to be most involved in all contexts. For example, the propensity to engage in home activities with children, and to do so more often, is positively related to parents’ socioeconomic status (Vaden-Kiernan and McManus forthcoming); parents with high SES are more involved at the school than parents with low SES as well. Highly involved parents appear to be those who have the knowledge that participation in activities at home
and at school are beneficial for children’s cognitive and academic development, and who have access to the resources needed to participate in such activities.

2.6 Language Minority Involvement in Schools

A primary focus of this dissertation is the level of involvement of parents whose native language is not English. Language minority students and their families are an understudied population. The research pertaining to this population generally focuses on how students’ language proficiency and exposure to different methods of English- and native-language instruction affect students’ levels of achievement (e.g. Cummins 1986). Therefore, there is little empirical information available regarding the level and predictors of involvement for this particular group of parents.

There is one very recent report (Vaden Kiernan and McManus forthcoming) using nationally representative data pertaining to children in grades kindergarten through 12, collected in 2003, that shows that involvement in many types of school activities is lowest for parents of children living in households in which no parent speaks English and highest for parents of children living in households in which both parents or the only parent speak(s) English (involvement for parents of children in households in which one parent speaks English and the other does not generally falls in the middle of these other two groups). Specifically, these differences were found for attendance at a general school meeting, attendance at a school or class event, volunteering, participating in fund raising, and serving on a school committee. The only activity for which differences were not apparent was attendance at a regularly-scheduled parent-teacher conference.

These data indicate clear differences in involvement related to parents’ language use. However, there are two limitations with these data and the analyses. The first is that
they only indicate whether parents have ever attended such a school event, and therefore present a more limited picture of differences in involvement than would analyses incorporating a measure of frequency of attendance. Secondly, these differences are based on bivariate analyses; therefore, it is impossible to say that differences are due to language use and not to other factors that are simultaneously related to involvement and language background, such as race/ethnicity and education.

Aside from the nationally-representative data just mentioned, there is little empirical research that specifically examines the involvement of language minorities as a group or the relationship between language background and parental involvement at the school. Information about language minority parent involvement can be gleaned from studies that focus on parent populations defined by other characteristics (primarily race/ethnicity) but that undoubtedly include language minorities; specifically, these are Latino and Asian parents, immigrant parents, and parents of English language learners (ELL). In fact, it can be difficult to disentangle the literature on language minority involvement from that of Latino involvement and immigrant involvement. Often studies identified as pertaining to one of these groups (i.e., language minority, Latino, immigrant) include discussion of the others, because these are characteristics that are associated with one another. The majority of immigrants to the United States today come from countries in Latin America and Asia where non-English languages are spoken (Larsen 2004). Students who speak Spanish and Asian languages comprise the majority of English language learner students educated in the nation’s schools (Connell 2004). Corresponding to this statistic, educational researchers have noted that the majority of English language learners in their studies are of Latino or Asian background, or both.
(Denton forthcoming; Griffith 1996). For these reasons, findings related to the involvement of these groups of parents can reasonably be generalized to language minority parents as a whole. Therefore, the discussion that follows includes descriptions of studies pertaining to parents from all of these groups.

There are qualitative studies that suggest that language minority parents are not involved at desired levels. For example, school personnel report a lack of involvement of English language learners’ parents, who are likely to be limited in English proficiency themselves (Bermúdez 1993). Immigrant parents and school personnel have reported a lack of interaction with one another (Stewart 1993).

As noted above, studies show that Latino and Asian parents are less involved than non-Latino white and African American parents, at least in some types of school activities. Researchers often suggest that these lower levels of involvement are due to the language barriers experienced by a substantial number of Latino and Asian parents. While no statistical test of this hypothesis has been conducted in studies focusing on racial/ethnic differences in involvement, some qualitative studies suggest that this is true.

For example, Peña (2000) cites lack of Spanish translation at school PTO meetings as a specific reason why many Spanish-speaking parents in her study of one elementary school in Texas did not attend such meetings. Interviews with language minority parents also indicated that the parents themselves felt language differences hindered their involvement. Parents in the study reported feeling uncomfortable in the school when English was being spoken, that there was no point attending school functions when they could not understand what was being said, and that their participation must not have been important or necessary because translators were not
provided for them. Limited ability to speak English also makes it difficult for some migrant parents to communicate with teachers (Martinez and Velazquez 2000). Some language minority parents feel embarrassed by their lack of English proficiency, or frustrated that they cannot effectively advocate for their children, which leads them to be less involved (Chavkin and Gonzalez 1995; Stewart 1993). These results suggest that language differences, in particular the inability to understand and communicate well in English, act as barrier to meaningful participation in the school.

Other factors besides language differences, such as cultural orientations toward education and sociodemographic characteristics such as education and income, may explain why levels of involvement tend to be lower for Latino and Asian parents. To the extent that language minorities tend to be Latino and Asian, these factors may also contribute to their lower levels of involvement as well.

Researchers argue that some parents come from cultures in which the relationship between schools and families is different from that in the United States. In the United States there is a well-established norm that parents invest themselves in their children’s education (McNeal 1999); this may not be true in other cultures. In some cultures, it is not the parents’ place to question what happens at school, where teachers and administrators are the experts (Tansley 1986). Among Latino and Asian families, in particular, there is the belief that teachers are professionals who should be respected, deferred to, and trusted to act in the best educational interests of their children, so much so that family members are reluctant to act in ways they perceive to be interfering (Carrasquillo and London, 1993; Ritter, Mont-Reynaud, and Dornbusch 1993; Stewart 1993; Yao 1993). These beliefs lead some parents to have less communication and
interaction with school personnel (Chavkin and Gonzalez 1995). Also, Stewart (1993) noted that parents for whom involvement at the school is not customary might become confused about what to do when requests are made for their opinions or for them to become involved in the school. Without past experiences of involvement, they feel uncomfortable or at a loss as to how to help.

Aside from any differences in perspectives related to parents’ proper role at the school, general cultural differences between school personnel and immigrant, Latino, and language minority parents can also lead to lower levels of involvement for these parents (Peña 2000). For these reasons, parents with cultural differences, such as language minorities, are less likely to contact the school or attend school functions. This lower level of interaction often results in a perception among school staff that these parents are uninterested in their children’s education (see Moles 1993 for review of research on teacher perceptions; also, Inger 1992).

Contrary to these perceptions, research shows that, like all families, Latino, Asian, immigrant, and language minority families are interested in their children’s education; they place high value on education, have high expectations, recognize the importance of a good education for future success, and feel they should be knowledgeable about their children’s educational experiences (Chavkin and Williams 1993; Drummond and Stipek 2004; Garcia 2001; Hao and Bonstead-Bruns 1998; Ritter, Mont-Reynaud, and Dornbusch 1993; Vernez, Abrahamse, and Quigley 1996; Yao 1993), although there is some indication that expectations are lower for Latino and native-born parents than for parents of other races/ethnicities and immigrant parents, respectively (Vernez, Abrahamse, and Quigley 1996; Hao and Bonstead-Bruns 1998). Nevertheless, grass-
roots organizations in Latino communities have long worked for improvement in the educational conditions and achievement of Latino children (Colon-Morera, et al. 1993). Fieldwork by Scribner, Young, and Pedroza (1999) shows that Latino parents in high-achieving schools feel they can make important contributions to the education of their children and see the development of strong relationships with school personnel as an important component of their ability to do so. Recognizing the benefits of involvement, these parents want to be visible at the school and communicative with school personnel to demonstrate exactly how valuable they consider education to be. In general, Latino and language minority parents want the access to information provided to them by their involvement at the school (Scribner, Young, and Pedroza 1999), believe it is important for teachers to maintain contact with parents (Darder and Upshur 1993), and are interested in attending and helping with functions at the school (Chavkin 1989).

Despite the fact that most parents are greatly interested in their children’s education and indicate an interest in helping their children in school, some parents’ strong interest in and high value of education do not result in high levels of involvement. Garcia (2001) argues that Latino parents’ value for education does not translate into action because many Latinos do not have much formal education, on average. Immigrants also have lower average levels of education, compared to non-immigrants (Larsen 2004). Low levels of education, combined with lack of English proficiency, seem to make it especially difficult for some Latino parents to interact effectively in the school environment (Peña 2000). Bermúdez (1993) argues that without skills and knowledge that can be gained through education, such as the ability to converse fluently in English and knowledge of the US educational system or subject matter taught in schools, and the
power that comes with them, parents of ELL do not have the ability to assert themselves, influence their children’s school experiences, and bring about change (178).

Education level is only one characteristic that may explain why Latinos, immigrants, and language minorities are less involved than other parents. Latinos are disproportionately represented among the poor population, and their average income is lower than it is for non-Latino Whites (Ramirez and de la Cruz 2003). Immigrants have lower average income levels and are more likely to be poor than non-immigrants as well (Larsen 2004). School-home communication has been found to be particularly low for poor Latinos (Nicolau and Ramos 1990). Latinos also are more likely to find themselves in need of transportation, and this affects their ability to participate at the school (Darder and Upshur 1993). A study of high-performing Latino schools showed that the majority of parent volunteers at each school was composed of mothers who had transportation or lived close enough to the school to walk (Scribner, Young, and Pedroza 1999).

Latino and immigrant parents, given their lower average levels of education, are also likely to work in unskilled jobs that demand long or untraditional hours, as well as tiring, physical work (Cattan 1993; Larsen 2004; Peña 2000; Ramírez and de la Cruz 2003). This is especially true of migrant workers (Martinez and Velazquez 2000). It may also be the case that because no one family member can secure a job with a high enough income to support everyone in the household, both parents, as well as older siblings, must work outside the home for pay. This is true of some Asian immigrant families as well (Yao 1993). Researchers have cited the need for older children to work to support their families as a possible reason for the high dropout rates among Latinos (e.g., Garcia 2000). These factors make it difficult for any adult within the household to
attend school functions (Chavkin 1991; Darder and Upshur 1993; Martinez and Velazquez 2000; Peña 2000).

Latinos also have larger families, on average, than non-Latino Whites (Ramirez and de la Cruz 2003), and therefore may have less time to spend meeting with teachers or watching the activities of each particular child. However, if they have more than one child in school at a given time, this may increase the likelihood that they participate in certain activities like the PTO or volunteer. Their efforts benefit the educational lives of several children at once. Nevertheless, lack of child care has been cited as a barrier to involvement for these families in particular (Chavkin and Williams 1993; Peña 2000).

In contrast to Latinos, Asians demonstrate characteristics that suggest they would have relatively high levels of involvement. As a group, Asians have the highest median income in the United States, compared to people of other racial and ethnic backgrounds (DeNavas-Walt, Proctor, and Mills 2004). They also have higher levels of education than people of other racial/ethnic backgrounds (Bauman and Graf 2003), and Asian households are more likely to be married couple households than either Latino or African-American households (Fields 2004). The fact that these characteristics are related to higher levels of involvement suggests that cultural and linguistic differences are largely responsible for their lower levels of involvement observed in other studies.

It is, however, the case that differences exist among Asians from different countries. For example, Asians who identify themselves as Chinese, Japanese, or Filipino have higher incomes and education levels than Asians who are Laotian or Hmong (Paisano 1993). Perhaps these latter groups of Asians, with characteristics related to lower levels of involvement, are those who are most likely to have difficulty
with English and therefore compose a larger share of the non-English-speaking Asian population. Although somewhat dated, information from the 1990 census shows that, while 65 percent of all Asian/Pacific Islanders report speaking a non-English language at home, Laotians, Cambodians, and Hmong are the most likely of all Asian groups to report that they do not speak English “very well” and are the most likely to be linguistically isolated (Paisano 1993). It might be expected that involvement levels would be particularly low for this group of LM parents, and that they drive the lower levels of involvement for Asians as a group.

Although language minority students are more likely to be Latino or Asian, the insights gained from studies examining differences among racial and ethnic groups are limited by the fact that not all language minority parents are racial minorities and not all Latinos and Asians come from non-English-speaking backgrounds. It is apparent that any study assessing the involvement of language minority parents should control for race/ethnicity, as well as other demographic factors associated with race/ethnicity. To the extent that race/ethnicity can be an indicator of cultural background, differences evidenced by language use may be reflections of different cultural backgrounds from which minority-language speakers come. Without controlling for other factors, low levels of involvement may be attributed to language barriers when factors such as cultural differences and socioeconomic status may largely explain involvement.

### 2.7 Facilitation of Involvement

As discussed above, the practices that school personnel use to involve parents can have a significant effect on the likelihood that parents become involved in their children’s educational lives. When these practices increase involvement, they can be said to
facilitate involvement. Facilitation involves increasing parents’ awareness of their
children’s school experiences, as well as of opportunities for involvement, through
dissemination of newsletters, posting of signs, and direct communication with parents. It
also involves making involvement convenient for parents, for example by offering
activities at times and in manners that accommodate parents’ work schedules. Lastly,
facilitation involves making parents feel comfortable, welcome, and familiar in the
school setting. In this section, facilitation of involvement for all parents is discussed first,
followed by facilitation specifically for language minority parents.

One way in which school personnel facilitate involvement is simply by making
parents aware of the activities at the school in which they can participate. A necessary
component of awareness is communication between school and home. National data
show that the percentages of parents who report being contacted by the school through
different methods of communication vary by the type of school children attend, child’s
race/ethnicity, child’s poverty status, and parents’ language background (Vaden-Kiernan
and McManus forthcoming). In particular, children living in households in which no
parent speaks English are less likely than children living in households in which at least
one parent speaks English to have a parent report that the school has communicated with
them through notes, e-mail, newsletters, memos, or notices. Communication through
notes or e-mail also is reported less often by parents of Latino and Asian children,
compared to parents of White and African American children, and by parents of poor
children, compared to parents of children living in households with incomes above the
poverty level. Interestingly, reports of communication by telephone are higher among
parents of those children commonly identified as disadvantaged: minority (excluding Asian/Pacific Islander) and poor children.

There is, of course, a difference between communicating with parents and doing so in an effective manner. The schools that parents report do the best at communicating with them (for example by making them aware of opportunities to volunteer at school and providing information on different topics such as their children’s performance and community services) are private and small (compared to public and large schools) (Vaden-Kiernan 1996). There is evidence that some parents are not aware of the opportunities schools claim to offer (Chen 2001). This suggests that some schools are not communicating effectively with parents, which can have negative consequences for involvement. When parents and school personnel, especially teachers, have contact with one another, involvement in school activities appears to be higher (Epstein and Dauber 1991; Feuerstein 2000; Kerbow and Bernhardt 1993; Rivera 1993). This is because parents perceive that there are both opportunities and demands for their involvement when there is more home-school communication (Hoover-Dempsey and Sandler 1995).

Another way in which schools can facilitate parental involvement for parents new to a school is by offering transition activities that bring them to the school building. Research shows that when schools send parents of children about to enter kindergarten information about the kindergarten program, when they arrange pre-enrollment visits, and when they hold parent orientations, parents are more likely to attend school functions or volunteer regularly in the classroom or school (Rathbun and Germino-Hausken 2001).

There are other ways in which schools can facilitate the involvement of parents. They can hold school events, conferences, and open houses at times that are convenient
for parents, in particular those who work outside the home. They can also offer child
care for the times parents do attend school functions. While researchers discuss these
efforts as those which they believe would make it easier for parents to be involved (e.g.,
Brown 1989; Inger 1992; Martinez and Velazquez 2000; Moles 1993), they have not
empirically tested the effects such efforts have on level of involvement.

These methods of facilitation are expected to increase the involvement levels of
all parents. Cultural and linguistic differences are likely to necessitate specific methods
of facilitation for language minority parents that address their specific needs. There is
evidence that school personnel and practices impact whether and how much language
minority families are involved. Qualitative studies suggest ways in which these parents
are effectively encouraged to participate in their children’s education. Here again, the
research evidence comes primarily from studies that pertain to increasing the
involvement levels of Latino students’ parents.

The most detailed information available about programs that increase the
involvement of Latino parents comes from case studies of schools and school districts
with high concentrations of Latino students. In some studies, it is noted that school
personnel focused their involvement programs on increasing language minority and
Latino parental involvement in the home environment, rather than at the school (Rivera
1993; Scribner, Young, and Pedroza 1999). In these instances, teachers gave parents
assignments to work on with children at home, as well as information about the best ways
to go about helping children. With such a focus on increasing home-based involvement,
it may be that schools place less emphasis on encouraging and increasing school-based
involvement. This may explain why studies have shown lower levels of involvement at

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the school for Latino and language minority parents, compared to non-Latino whites and non-language minorities.

Despite this apparent focus on increasing home-based involvement, some schools have created specific programs and practices aimed at increasing Latino and language minority parents’ presence in the school. Central to these programs are efforts to reduce the constraints on involvement for parents, thereby making involvement easier. For example, according to Inger (1992), a basic rule of programs that facilitate the involvement among poor, Latino families is that they make it easy for parents to participate, by doing things such as having babysitters available during school functions and holding them at convenient times. A Boston public school created classroom-based parent activity centers, in which parents could both observe teachers working with their children and help their children with activities themselves (Rivera 1993). In the same school system, a public high school developed an outreach program in which a parent liaison coordinated special orientations, home visits, open houses, and workshops for Latino parents, with the goal of creating positive home-school connections and making the school a welcoming place for these parents. Other research also suggests that use of a parent liaison or parent “specialist” is an effective way to communicate with parents who are perceived by school staff as being distant from the school culture (Scribner, Young, and Pedroza 1999). Parental outreach programs also are present in schools that educate immigrant students effectively (Stewart 1993).

When focus is placed on developing connections among Latino and Spanish-speaking parents in the school, these parents appear to be more involved (Rivera 1993; Scribner, Young, and Pedroza 1999). Facilitation of parental contact with other parents
may be especially important for language minorities. LM parents can meet bilingual parents who may relay and clarify information, as well as translate for them when attending school activities. According to Scribner, Young, and Pedroza (1999), interaction with other parents leads to improved English proficiency, which in turn improves language minority parents’ ability to communicate with different actors in the school environment. As a result, LM parents learn more about their children’s educational lives. This increased awareness, along with the confidence that comes with improved communication and interpersonal skills in the school setting, leads LM parents to become more involved in all aspects of their children’s education.

Communicating with parents in their native languages appears to be a key aspect of any program aimed at increasing contact between parents and the school. When schools and teachers are “linguistically accessible,” parents are more likely to be involved (Glenn and de Jong 1996). Studies show that personnel in schools that successfully educate Latino students have made special efforts to learn Spanish and to hire additional bilingual staff members (Scribner, Young, and Pedroza 1999). In Edinburg, Texas, immigrant parents rarely attended PTA meetings conducted only in English, but they did attend open houses when Spanish was used (Peña 2000). Latino informants in Boston suggest that, in order to increase Latino parental involvement, written materials sent to parents should be written in Spanish, workshops and training sessions should be conducted in Spanish, translators should be provided at all school-wide meetings, and, when feasible, special meetings conducted in Spanish should be held for these parents (Rivera 1993). Spanish-speaking parents report that they feel teachers
who can speak to them in their native Spanish are more approachable than teachers who only speak English or use interpreters (Scribner, Young, and Pedroza 1999).

Tansley (1986) found that parents exhibit a certain shyness in expressing themselves to teachers of dissimilar linguistic and cultural backgrounds. Also, when parents are unable to read the information that is sent home, they are unaware of the programs that are taking place in school. They are not able to participate in activities of which they are not aware. Similarly, as noted above, parents feel their involvement is actually unimportant when no effort is made by school personnel to understand them (Peña 2000). These results show that when the barrier of language differences is not reduced by school personnel, involvement is low, but when the barriers are reduced through language assistance, involvement is higher.

The incorporation of parents’ language into home-school interactions not only improves communication, but serves to validate non-English-speaking students’ and parents’ cultures as well. Schools that transform parents’ general cultural characteristics into capital by giving them value within the school setting also are successful in increasing involvement (Davies 1993). A key aspect of the Boston program mentioned above was increasing the resources of Latino parents and making their cultural resources valued within the school (Rivera 1993). This increase in cultural value allowed parents to feel more comfortable and effective in the school setting, which made involvement easier for them.

Reports from an experimental bilingual program in Britain (Tansley 1986) show that parents became involved in the school’s multicultural program by bringing objects from their native cultures to share with their children’s classes. This participation and
recognition that their cultures were being valued by the school community resulted in a new sense of belonging for minority parents. Administrators reported that attendance of minority parents at school meetings increased along with interaction between parents of both minority and White backgrounds. It should be noted, however, that despite these increases in involvement, validation of parents’ culture through incorporation of their language and culture into the school does not eliminate entirely the difficulties language barriers pose for involvement (Peña 2000).

A central part of successful parental involvement programs is teacher education that not only teaches the basics about establishing good home-school relationships, but also that focus on teaching educators about different cultures and how to create positive relationships with students and parents who are different from themselves. Research points to the necessity of encouraging school personnel to learn about Latino culture, which will improve their ability to meet the needs of their Latino student and parent populations (DeBlassie and DeBlassie 1996; Rivera 1993). These programs may even teach parents’ native languages, as discussed above. However, researchers frequently indicate that such training is lacking in teacher preparation programs and schools throughout the United States (Bermúdez 1993; Moles 1993).

Aside from making efforts to incorporate parents’ languages and cultures into the classroom, it appears to be necessary for school personnel to be the initiators of frequent contact for Latino and language minority parents to develop strong positive ties to the school. One study found that the majority of Latino parent respondents felt that teachers should be the ones in charge of getting parents involved in the school and that schools should make rules for involving parents (Chavkin and Williams 1993). Parents in
predominantly Latino schools are more encouraging of their children’s educational activities when teachers contact them consistently (Darder and Upshur 1993). Latino informants suggest that to increase Latino parental involvement, school personnel have to make contact with these parents a priority, and that teachers should meet with parents regularly throughout the year to provide both positive and negative (i.e., not only negative) feedback regarding their children’s academic progress (Rivera 1993).

In general, regular opportunities for personal contact enable school personnel to pass on necessary information and to gain the trust and support of English and non-English-speaking Latinos more effectively (Scribner, Young, and Pedroza 1999). Importantly, there needs to be direct contact between parents and teachers. Often when parents cannot speak English well, contact between parents and school staff occurs primarily through the students themselves, who act as translators (Garcia 2001). However, communication through the children themselves is often unreliable (Scribner, Young, and Pedroza 1999).

As with all parents, an important aspect of programs aimed at increasing the involvement of language minority parents is simply the provision of information about the school and what is expected of the students and parents. Many Latino and Asian parents, in particular those who are recently arrived in the United States and do not speak English well, are unfamiliar with the U.S. educational system (Scribner, Young, and Pedroza 1999; Yao 1993). When schools make a concerted effort to provide these parents with the information they need in a language they can understand, parents become more knowledgeable about the school experiences of their children. In turn, they feel more comfortable contacting teachers regarding what is going on in school, as well
as attending school functions. Research has shown that workshops in which parents are specifically told their participation is important and are given specific ways in which they can help their children succeed academically are effective in increasing involvement (Rivera 1993).

Given the fact that Latinos tend to have many children, the need to find care for these children places a particular constraint on them. Research suggests that the provision of child care during school-based functions (Rivera 1993) or having teachers and outreach workers do home visits so that child care need not be found (Scribner, Young, and Pedroza 1999) are effective methods for increasing home-school contact.

The studies cited above suggest there are many ways in which schools can encourage and facilitate the involvement of language minority, Latino, and immigrant parents in their children’s education. However, it is questionable how common it is for schools to provide these services to language minority families. These studies focus on schools that are serving their LM, Latino, and immigrant populations well: they are schools that can be models for other schools faced with the same challenge. Just as common are studies describing the ways in which schools fail to meet the needs of their Latino and language minority students and their families.

Researchers commonly stress that the services needed to meet the needs of English language learners and language minority students and their families are lacking in school districts throughout the country (Bermúdez 1993; Olsen 1997). In an in-depth study of a high school in Texas, Valenzuela (1999) found that the concerns of parents, PTA members, and community advocates were routinely dismissed by school staff. A general lack of communication existed between the home and the school. In another case
study of an elementary school in Texas, Peña (2000) found that teachers generally did not recognize the influence that certain characteristics, such as language barriers and cultural differences, had on the involvement of Mexican-American parents. According to her, only parents “who were bold enough to take the initiative were able to find assistance at the school to help them stay informed” (Peña 2000). In interviews with parents in a Dallas school district, some parents reported that if a parent called and asked to speak to the principal in Spanish, they were hung up on or put on hold for a long time (Stewart 1993).

According to Bermúdez (1993), there is a strong “need to engage homes and communities (of English language learners) in the educational process (176).” For ELL, she argues that schools need to work with parents/homes to assess needs and develop a plan to meet these needs. However, in her research, she finds that schools do not know how to increase these parents’ participation. “Neither schools nor parents know how to secure the support of one another (Bermúdez 1993; 178).” School personnel’s negative perceptions about language minority families may contribute to the lack of communication between them and language minority parents, as well as to a lack of facilitation methods aimed at increasing their involvement. Research documenting such negative perceptions is discussed in the next section.

2.8 Perceptions of Involvement of Disadvantaged Parents

In qualitative studies about and policy pieces geared toward the involvement of disadvantaged or marginalized parents, which include language minorities (Bemak and Cornely 2002), researchers commonly note that school personnel tend to perceive that such parents are difficult to communicate with, that they are uninterested in being
involved, and that their involvement is not actually beneficial for their children (e.g., Darder and Upshur 1993; Davies 1993). For example, Olsen (1997) found that school personnel were very critical of immigrant parents who they perceived as being inattentive to their children’s educational needs. Teachers noted that conferences and back to school nights were virtually ignored, especially by Latino parents, whom teachers felt placed very little value on education.

In his study of the involvement of low-income families, Davies (1993) found that school personnel thought that low-income and socially marginal (e.g., language minority and immigrant) parents were “hard-to-reach.” Reasons for this perception included the characteristics of the parents themselves (e.g., they were not knowledgeable enough to be involved), the social or economic conditions of the communities in which they lived, and the notion that parents were too busy or not interested enough to be involved. An important aspect of teachers’ perceptions noted in the research is that the majority of educators placed the blame for low involvement on the parents themselves, rather than on the way the school approached and treated parents. Educators had low expectations for their students’ parents when it came to involvement and parents’ ability to help.

Parents, on the other hand, did not think they were hard to reach. They admitted that they did not initiate contact with the school, but that they would go “to the school when asked for a good reason (Davies 1993; 208).” Many parents cited bad experiences of their own with schools, as well as a sense of being intimidated, as reasons why they did not like to go to their children’s schools. By their own accounts, parents indicated that their involvement was low because there were psychological costs associated with participation at the school.
Moles (1993) summary of research on the topic of teachers' perceptions echoes these findings in reference to poorly educated parents; teachers feel poorly educated parents do not have the ability or interest to help their children in school. When teachers hold such a view, they have no reason to facilitate parental involvement. They believe there is no payoff to their efforts. Interestingly, Moles’ (1993) survey of the literature stressed that many parents adhered to this view as well. Many cited their own past difficulties succeeding in school as a reason why their involvement would not be beneficial to their children. In essence, the teachers serve to reinforce rather than counteract parents’ negative perceptions about their capabilities.

Bermúdez (1993) summarizes findings from other research that indicate the reasons teachers generally give for why they do not effectively communicate with some parents include lack of interest on the part of the parents, fear and distrust of people and lifestyles different from their own, that they do not know parents’ native languages, and that they have received no formal training on how to interact effectively with parents. Some research shows that in schools in which parents and teachers are more culturally and educationally different from one another, teachers believe they are more supportive of parental involvement than parents are and that parents are disinterested or uninvolved (Epstein and Dauber 1991). “These barriers, whether real or imagined,” limit the communication between home and school (Bermúdez 1993, 180).

Disadvantaged parents, particularly those who do not speak English, can be challenging for school staff to develop collaborative relationships with. Research suggests that teachers and administrators see this as a challenge with which they are unwilling to deal, particularly because it requires extra work on their part (Peña 2000).
Some educators feel that immigrant and language minority children are more difficult to teach as a result of their cultural and linguistic differences (Davies 1993; Stewart 1993). For this reason, school personnel approach the education of these children with negative biases. Interviews with school personnel indicate that these negative perceptions extend to parents as well (Davies 1993). Non-English-speaking parents reportedly give teachers a “hard time” (Valenzuela 1999, 258). Speaking Spanish is seen as a deficit that impedes the development of a collaborative relationship rather than a difference that can be accommodated in order to develop such a relationship.

Stewart (1993) found that some teachers feel it is not their job to do anything special for immigrant children. Evidence suggests that this attitude extends to the parents of immigrant, language minority, and Latino children. Some school personnel interviewed in high-performing Latino schools felt it was the parents’ responsibility, not the school’s, to find a way to communicate and to be involved (Scribner, Young, and Pedroza 1993). These beliefs can limit the amount of effort teachers put into making and maintaining ties with language minority parents. Teachers may be able to avoid interaction with parents they consider to be difficult, because interaction with these parents is not an immediate reality of their jobs (it is the children they have to deal with on a daily basis, not parents). Indeed, Peña (2000) found that teachers in an overwhelmingly Latino school generally participated as little as possible in functions at which parents were present, and the interactions that school staff did have with parents often were negative.

Schools engage only a relatively small group of parents within any school (Davies 1993). These are the parents who have the resources and knowledge to be involved.
Schools must reach out to parents who are not comfortable interacting in a school environment. A common theme among the studies discussed in the previous section was that, for any program to be successful at increasing parental involvement, school personnel must see the importance of parental involvement and be truly committed to increasing the involvement (Rivera 1993), as well as find ways to make parents comfortable in the school environment. Given these findings related to the perceptions of school staff, it is expected that school efforts to facilitate the involvement of language minority families will be limited.

2.9 Usefulness and Limitations of Existing Research

The existing research on parental involvement described above has provided a solid foundation of information on many individual-level factors associated with parental involvement at the school. There is less information available about the school factors related to involvement or how parents’ language background is related to it. While one can make reasonable and logical observations about what these relationships may be, more empirical analyses are needed to support these observations.

The research described above comes from a wide variety of disciplines and, as a result, is variable in method and generalizability. Much of the research is qualitative (e.g., Lareau and Horvat 1999) and includes small samples (e.g., Hoover-Dempsey, Bassler, and Brissie 1992). In contrast, this dissertation is quantitative and employs nationally-representative, large-scale survey data.

Many of the studies discussed above describe successful parent involvement programs or particular schools that have implemented such programs (e.g., Bermúdez 1993; Davies 1993; Epstein and Dauber 1991). The fact that such programs can be
successful at encouraging and increasing parental involvement shows that school
practices do affect parents’ participation at the school. However, the specificity of these
studies makes it difficult to determine whether the actions the featured schools have
undertaken to promote involvement would increase involvement in all schools, and for all
parents, or whether the particular characteristics of the featured schools have allowed
their efforts to be successful.

In particular, most of the evidence about the effect of language background on
involvement, as well as the effects of methods to facilitate the involvement of language
minority parents, comes from qualitative studies in which a single school district with a
limited number of informants is studied. Therefore, this evidence is based on the
perceptions of a small group of people who observe that schools’ efforts do indeed
increase language minority, Latino, and Asian parents’ involvement. The implicit
assumption in these observations is that the involvement of such parents would be low if
not for these programs. Although intuitively one would think that these programs and
methods of facilitation would increase involvement, with no systematic test
demonstrating whether facilitation efforts do positively affect involvement for any
particular group of parents, these efforts are promising rather than proven methods for
increasing involvement.

Another limitation of research that focuses on the involvement of parents and the
development of social networks among them is that it may be excluding a group that
plays an important role in the educational lives of language minority children: extended
family. McNeal (1999) argues that we need to address how the forms of social capital
vary across sociodemographic domains, including race/ethnicity, socioeconomic status,
Among immigrants and language minorities, there may be strong social networks created among extended family members, who may supplement or supplant the traditionally-viewed role that parents play in their children’s education (Garcia 2001). Researchers need to examine family involvement, rather than parental involvement, because for many children, including immigrants and language minorities, the person who provides the most child care may not be a parent (Davies 1993). In some cases, immigrant children’s parents do not live with them in the United States (Garcia 2001; Yao 1993).

Most of the studies discussed above refer only to the involvement of parents in their children’s education. By excluding the involvement of other family members, the involvement of the home in children’s education may be underestimated for language minority children. However, in 1992, Inger noted that the Latino extended family was a “source of strength” underutilized by schools. If, in fact, extended family members have not been traditionally welcomed and acknowledged in the school setting, then research focusing on involvement of parents may not be measuring accurately the presence of the home in the school setting. To get the most accurate picture of family involvement at the school, this research considers the school participation of family members in general, not just parents.

As discussed above, much of the research pertains to Latino and Asian students and their parents in general, rather than language minority students in particular. This makes it difficult to determine exactly what is the effect of language background on involvement. It is uncertain whether factors affecting the involvement, as well as the levels of involvement, of these parents who are proficient in English are different from
those for parents who are not English-proficient. It should not be assumed that the factors affecting, and levels of, involvement are the same for both groups. While both confront issues involved with being culturally distinct, language barriers present an additional constraint on involvement for non-English-speaking language minorities. In this dissertation, language minority parents are examined in two groups: those for whom English is a primary language in the household and those for whom a non-English language is dominant.

Turning attention to the measures of involvement, the majority of the studies discussed above use an indicator of involvement that is dichotomous (participates vs. does not participate) (e.g., Chen 2001) or a relative frequency (e.g., Griffith 1996). A limitation of such measures is that they are not able to ascertain variation in involvement at a more refined level. Also, many studies examine only a limited number of types of parental involvement within the school (e.g. Kerbow and Bernhardt 1993). An advantage of this dissertation, as will be discussed in chapter 4, is that participation is quantified to represent actual number of activities or events attended. It also examines a larger array of opportunities for and types of involvement within the school than other studies.

Some studies use data collected from a single source, in particular parents (Griffith 1996) or teachers (Rathbun and Germino Hausken 2001). This can be problematic when trying to associate school practices with involvement, because individual respondents may be negatively or positively biased one way or the other when providing information on both topics. For example, parents who are more involved at the school may report a high number of opportunities for involvement, because they are aware of the opportunities that exist. In contrast, parents who are less involved may
report lower numbers of opportunities, because they are not aware of the opportunities that exist. The bias in their answers creates a correlation between the characteristics that may or may not represent the relationship accurately. The analyses in this dissertation avoid this type of bias by using data on opportunities and level of involvement that have been reported by different respondents.

The findings from national studies that relate school characteristics to opportunities and to actual parental involvement provide important information about the overall relationships between these factors. They indicate in which schools parents are most involved. However, the relationships described are generally the bivariate relationships between the various measures. These relationships may not hold when many variables that tend to be related to one another (e.g., race/ethnicity and school resources) are controlled simultaneously in multivariate analyses.

The most nationally-representative studies available that have used multivariate analytic techniques utilize data from the National Educational Longitudinal Study of 1988 (Muller and Kerbow 1993; Muller 1993; Ho and Willms 1996), which is a study of students who were 8th graders in 1988. There appears to be no such nationally-representative analysis on the involvement of parents in lower grades. Results from these studies on 8th graders may be substantially different from the results of research on kindergartners, because the types, levels, and effects of involvement likely change over time (Mueller 1995).

This section has outlined some of the ways in which the analyses in this dissertation improve upon previous studies. In chapter 4, more detail is provided about the measures and methods of analyses that have been mentioned here. This detail
includes an explanation of the specific relationships expected between the independent measures and the outcomes, given the research findings and theory that is discussed in the next chapter.
CHAPTER 3

THEORETICAL BACKGROUND, CONCEPTUAL MODEL, AND HYPOTHESES

3.1 Introduction

To some extent, research on parental involvement lacks strong theoretical underpinnings. In studies focusing on individual-level characteristics, investigators rationalize the effects of particular resources and motivations on involvement but fail to ground their work in larger theoretical frameworks. This dissertation situates the discussion of parental involvement within a social exchange framework, supplemented by the concepts of cultural and linguistic capital, to investigate the individual- and school-level factors that affect parents’ involvement in their children’s schools. With this theoretical grounding, this study is able to synthesize the work of other research on the antecedents of involvement.

3.2 School-Parent Interactions as Exchange Relationships

Parents and school personnel form relationships with one another when they have contact, and when parents participate in activities offered by the school. Social exchange theory is concerned with explaining relationship formation, maintenance, and change (Sabatelli and Sheehan 1993); therefore, it is adept at explaining why contact between parents and schools is desirable, as well as for determining the factors that affect the opportunities for and actual levels of parental participation in school activities.
The basic proposition underlying social exchange theory is that most social relationships are exchange relationships between social actors. These actors can be individuals or collectivities (Emerson 1962). In the home-school relationship, the social actors are individual parents, individual school personnel (i.e., teachers and administrators), parents as a collective group, and school personnel as a collectivity. This research is concerned with the involvement of individual parents, and therefore focuses primarily on the relationships between individual parents and school personnel as both individuals and as a collectivity. In some types of parental involvement at the school, there may be no direct contact between school personnel and parents (e.g., at a school sporting event), yet they can still be conceptualized as exchange relationships. In these instances, school personnel provide the opportunities for parents to attend school functions, and parents take advantage of the opportunities.

3.2.1 Rewards Exchanged in the Home-School Relationship

Interpersonal relationships involve the exchange of valued goods, or rewards, between two or more social actors. These rewards can be intrinsic (e.g., prestige, social approval, or compliance/power) or extrinsic (e.g., information), materialistic (e.g., money) or altruistic (e.g., helping others) (Ritzer 1996). The need or desire for these rewards motivates individuals to seek and maintain relationships with others who can provide such rewards. In general, exchange theorists argue that all actors must reap some benefits from the exchange relationship for it to exist (Blau 1964; Cook 1977). If actors fail to gain rewards once in a relationship, they will cease their involvement in it.

Social actors form relationships when some purpose or interest attracts them to one another (Blau 1964). School personnel and parents share a common interest in the
education of children. Each of these groups is responsible for the care and socialization of these children for different periods during the day. Therefore, they have a stake in knowing what happens to the children while in each other’s care. This desire is generally much stronger for parents than it is for teachers and administrators, because parents have stronger bonds with the children they have given birth to and raised, as well as primary responsibility for the children’s welfare.

According to the exchange framework, school personnel and parents will interact with one another when they perceive that they can gain desired rewards from this interaction. The interaction will continue when these rewards are provided consistently. There are many goods exchanged in the home-school relationship, including information, support, and respect for the role parents, teachers and administrators play in the lives of the students.

Many researchers have considered the rewards both parents and school personnel reap when parents are active in their children’s educational lives. They have referred to these rewards as benefits (Scribner, Young, and Pedroza 1999), motivations for involvement (Mueller and Kerbow 1992), and the effects of the home-school relationship (Eccles and Harold 1993; Epstein 1990). Thus, in their studies of parental involvement, researchers assume that parents and school personnel pursue relationships with one another because there is something to be gained from these relationships; they adhere to a basic tenet of social exchange theory without identifying it as such. The work of these researchers largely informs the following discussion about the rewards obtained by parents and school personnel from the home-school relationship.
One such benefit of involvement that researchers focus on is social capital, which is a resource used by individuals to achieve their interests (Coleman 1988). The concept of social capital fits well within the social exchange framework, because this resource is a reward that actors gain from their relationships with one another. Furthermore, it is generated and exists only in relationships between social actors (Coleman 1988). It cannot exist without the formation and maintenance of interpersonal relationships.

The relationships parents have with members of the school community and with one another can be sources of social capital. Opportunities for involvement provided by the school facilitate the generation of social capital, because they enable contact between parents and school personnel. They also allow parents to establish relationships with one another. While parent-parent relationships can be formed outside of the school environment, attendance at school functions facilitates relationships between parents who may not otherwise come into contact with one another.

Social capital exists in many forms, including obligations, trust, expectations, and information channels (Coleman 1988). All of these are benefits provided to parents and school personnel when they form relationships with one another. School personnel, by nature of their jobs, have the obligation, and are therefore expected by parents, to educate children. In this task, they also have the obligation to provide parents with information regarding their children’s school experiences. In return, parents are expected by school personnel to support their efforts to educate. Part of this support involves being in contact with school personnel who need to convey the rules, norms, and expectations of the school, as well to receive information pertinent to the family and children that affect their ability to educate.
For school personnel, the primary rewards from relationships with parents are information and support that can make their task of educating children easier. Parents can become allies, or partners, in education. In meetings with one another, school personnel and parents can discuss their educational goals and values. When they align themselves on these issues, students will perceive that the people who are significant in their lives are united in their beliefs about the value of education. Also, parental involvement with the school reinforces the values of the school, particularly the idea that education and the activities of the school are important. As a result, children perceive that it is worth investing their time in educational pursuits, which leads them to be more motivated and attentive in school. Similarly, parents can reinforce the schools’ norms for acceptable behavior, leading children to be more disciplined. This allows teachers to spend more time teaching and administrators to focus on the academic, rather than the disciplinary, aspects of the school.

By talking with parents, teachers can also acquire information about characteristics of students’ home environments that may affect the learning process. They can then adjust their teaching strategies or seek the assistance children need to allow them to focus on learning while in school. For example, a teacher may discover that the parents of a student performing poorly are divorcing and decide that the best way to help that student academically is to help him or her deal with the parents’ divorce. This could involve referring the student for counseling.

School personnel can also provide information to parents that helps in the educational process. When parents are knowledgeable about the curricula, they can assure that schoolwork is completed and, when necessary, help children understand what
they are supposed to learn. Parents can intervene in school when they become aware of academic problems their children are having. They can also deal with behavior problems occurring at school when teachers and administrators let them know that the problems exist. In all of these instances, school personnel receive assistance from parents that is directly related to their task of educating children.

Parental involvement in school activities can generate support for the personnel, regardless of whether direct contact between parents and personnel occurs. The primary purpose of parents’ attendance at many functions is to show support for their children in the school’s activities, for example by attending plays, sporting events, music recitals, etc. However, by attending these functions, parents also support the personnel responsible for providing the opportunities. This support is expressed as general support for the school community (i.e., the school personnel as a collectivity). When attending these functions, parents may meet the school personnel in charge of organizing them and express their support and approval through comments made in casual conversation. Without these opportunities, parents would be limited to interaction only with their children’s specific teachers in predetermined, more formal engagements.

Aside from the reward of social capital, school personnel reap psychological benefits from the home-school relationship as well. When parents seek information and advice from them, the expertise of teachers and administrators is acknowledged. Through this acknowledgement, their status as educational experts is reinforced. Also, their importance as educators is reinforced. This brings them job satisfaction as well a personal sense of importance, i.e., that what they do matters. These rewards are largely intrinsic.
Exchange with school personnel also provides parents with many rewards. It allows them to acquire information about their children’s educational experiences, which satisfies parents’ desires to know what happens while their children are away from them and facilitates their involvement in school activities. Some parents may feel uneasy putting responsibility for their children’s academic growth solely in the hands of other people. Special school programs or meetings with teachers provide parents with the knowledge of how to help their children at home. They can also let parents know if the activities they are doing at home are beneficial or harmful for children (Epstein 1990).

Parental involvement with the school may be especially important for parents of young children, especially kindergartners. This is a time when parents are giving up some responsibility for the care of their children. Awareness of what goes on in school, and how their children are treated, can alleviate some parents’ anxiety about letting others care for the children. It also lets them monitor their children’s adjustment to school. For parents of children at any age, involvement with the school can help parents feel more connected to their children, because they are involved in a significant aspect of their children’s lives.

School communications tell parents what opportunities for involvement are available in the school. Participation at the school, in turn, produces intrinsic, psychological rewards for parents. They gain satisfaction from seeing their children’s accomplishments first hand. They also gain satisfaction through volunteering, for example in classrooms or going on field trips; parents see themselves as contributing to their individual children’s education, as well as to the classroom or school as a whole.
Without parental assistance, certain school activities and events, such as school-wide fundraisers, may not be possible.

Attendance at school functions also provides the opportunity for parents to form relationships with other parents, which are a source of social capital. Parents serve as a source of information for one another, allowing one another to keep current about what is going on with their children, both in and outside of school. These contacts with other parents are helpful especially for parents who are unable to be involved at the school as much they would like. Also, when parents have relationships with the parents of their children’s classmates, the values and norms of the school can be reinforced in an even larger social network.

The relationships between parents also make the task of raising children easier for them. Parents more effectively monitor and guide their children’s behavior when they know other parents, because their commonly-held values and norms are reinforced by others in their social network (Carbonaro 1998). Sanctions and rewards aimed at encouraging expected behaviors can be bestowed upon children by anyone within the parents’ social network. When these norms place high value on education, children are more likely to focus their attention on the positive aspects and activities of the school, rather than turning to less constructive and potentially detrimental activities outside the school.

Some activities at the school provide parents with power, an intrinsic reward. This is the case when they are involved in school governance or are members of parent-teacher organizations. Parents also are delegated a certain amount of power when they become members of committees or groups that organize and carry out activities for the
school. No matter the scope of the power, parents can gain a feeling of satisfaction and importance by being involved in these activities. They perceive that their opinions and actions are valued by the school community and have a real impact on their children’s school experiences.

School personnel and parents also benefit from the rewards schooling provides directly to students, specifically the acquisition of knowledge. Students’ learning benefits parents because their children become educated and have a greater chance for success later in life. When children learn, school personnel receive personal satisfaction and the recognition that they have performed their jobs well. They also gain the rewards of social approval and respect from parents and peers for the work that they do. These rewards can be increased by fostering a positive home-school relationship. Research shows that learning is enhanced when parents are involved in their children’s education (Zellman and Waterman 1998; Ho and Willms 1996). In this case, parental and school rewards are not reaped directly from the home-school relationship, but rather indirectly as a result of the effect the home-school relationship has on student learning. This is yet another reason parents and school personnel have a stake in developing positive relationships with one another.

In sum, social relationships are valuable to individuals when they provide the resources, or capital, individuals need to achieve their goals. Parents, teachers, and administrators create networks in which social capital is generated. This includes information regarding students’ school experiences, obligations to assist students in the educational endeavor, and reinforcement of norms that value education. Other rewards
not specifically identified as social capital gained from the home-school relationship are support, power, and personal satisfaction.

3.2.2 Costs of the Home-School Relationship

While actors enter exchange relationships to gain rewards, they usually incur costs from being in the relationship as well. This is because such relationships are governed by a norm of reciprocity: in order to have others satisfy an individual’s needs, he or she must provide something in return (Thibaut and Kelley 1959). Homans (1958) refers to costs as the rewards that could have been gained from relationships or actions other than those chosen, but are lost as a result of not choosing them.

There are costs associated with the home-school relationship. Parents and school personnel spend time and energy on their relationship that they could devote to other pursuits. School personnel often have to devote time outside of the regular workday to fulfill the commitments of their jobs, for example, when schools hold back-to-school nights or when teachers must call parents at home in the evening. The costs to them, which result from having to put in evening hours at the school, are loss of the rewards of time with their families of for themselves, or to prepare the next day’s lesson. Parents, on the other hand, may have to take time off from their jobs in order to meet with teachers. Here costs may include the loss of income or time to complete work tasks, which are forgone by choosing involvement at school over attendance at work. Parents also lose time to complete household chores, be with their families, or relax when they attend school functions, talk to teachers on the phone, or respond to notes sent home.

There can be intangible, psychological costs associated with the home-school relationship as well. School personnel open themselves up to possible criticism and
conflict when they share their policies and practices with parents. Parents, particularly those with less education, risk being condescended to when they interact with educated teachers. Parents and school personnel who do not feel parental involvement is essential for students to have good educational experiences may feel forced into relationships of which they do not want to be a part.

In existing studies of parental involvement, researchers implicitly assert that the costs of involvement may limit parental involvement at the school. They refer to the factors that affect levels of involvement as resources, obstacles, constraints, or barriers (e.g., Eccles and Harold 1993; Mueller and Kerbow 1993; Rivera 1993). According to exchange theorists, the scarcity of resources constrains the ability of the individual to act in accordance with his or her wishes (Ritzer 1996). Therefore, lack of resources is a constraint that must be overcome in order to form and maintain relationships at the school. Any time that parents have to overcome constraints, they incur costs. These costs are maximized for parents who lack resources. They are minimized for parents who have valued resources that make involvement more feasible and easier. In their discussion of factors affecting involvement, again researchers utilize the logic of exchange theory without specifically identifying it as the theory underlying their reasoning.

3.2.3 Evaluation of the Cost/Benefit Ratio as a Predictor of Involvement

Exchange theory is a theory of rational action. As such, it asserts that individuals make rational choices regarding their behavior. Both before relationships are entered into and while they exist, exchange theorists assert that individuals consider the benefits and costs to the relationship, as well as the availability of alternative resources for the desired
reward (Blau 1964). Individuals will leave one relationship for another when the costs of the relationship far outweigh its benefits and/or alternative relationships or behaviors are available.

Perceptions of costs and benefits are more important than their objective existence when individuals consider the cost-benefit ratio. Individuals actually have to perceive there are benefits to a relationship in order to seriously consider forming and remaining in it. They must also perceive the costs as real costs in order for such costs to act as deterrents to action.

Relationships are most likely to be maintained when there is maximization of perceived rewards and minimization of perceived costs. This condition is met for the benefits and costs of the home-school relationship outlined above only when the actors interact positively and cooperatively. Teachers and principals gain more support for their goals and their actions when they foster positive relationships with parents. Parents who understand and agree with school personnel are likely to convey the message to their children that personnel are to be respected and obeyed. They are also unlikely to generate conflict with school personnel.

When the home-school relationship is not positive, conflict occurs. This is detrimental for the interests of school personnel, because productive work is difficult in a hostile environment. Conflict can make it more difficult for teachers to teach: they will have no parental allies reinforcing their rules, and students may become disrespectful, knowing that their parents do not support their teachers. Parental interests also can be harmed when conflict occurs. Parents who anger school personnel are less likely to find the personnel receptive to their requests for contact, information, and action than are
parents who do not generate conflict. Therefore, teachers, principals, and parents have it in their best interest to encourage positive interaction with each other.

A proposition of Homans’ (1974) theory of social behavior states that when actors do not receive the rewards they desire from a relationship or a behavior, they will become angry and exhibit aggressive behavior. The results of such aggressive behavior will become more important than the reward that was originally desired. Such a reaction would not bode well for the creation of positive, constructive home-school relationships. Therefore, it is important that both school personnel and parents provide the rewards that they are seeking from one another. Schools must be responsive to parents’ desires for information and opportunities for involvement. Parents, on the other hand, must be responsive to schools’ request for information and assistance and comply with the schools’ rules and limitations for involvement. If one of these conditions is not met, the importance of the home-school relationship may be diminished for the actors.

Cooperative interaction is more likely to occur when parents and school personnel share similar values and ideologies regarding the educational process. When this is not the case, the relationship may be a competitive one, in which each actor tries to get the other to provide the rewards he or she wants but the other is unwilling to give. For example, teachers discuss with parents the types of behavior they expect from students while in school. If parents agree with the teachers’ preferences, there is no conflict, and the preferences may be reinforced in the home. If parents disagree with them, as would be the case when the behaviors and values at home conflict with, or at the least are not supportive of, those at school, then conflict between parents and teachers results. They
may find themselves arguing over whose role it is to instill values and discipline children, rather than working together to create an environment conducive to learning.

When parents and teachers perceive conflict in their relationships, they likely will reduce the amount of contact they have, or avoid it altogether. This is because they perceive the costs (in the form of conflict) to be too great. Thus, there is no incentive to interact with one another—only experiences drawing them away.

When faced with alternative actions and relationships, individuals will choose the one for which the value of the result, multiplied by the probability of obtaining that result, is the greatest (Homans 1974). In other words, the value of a reward decreases as the probability of obtaining it decreases. Applying this proposition to the home-school relationship, it is asserted that even when parents and teachers value, or desire, contact with one another, if they perceive it as difficult to obtain, they may avoid trying to produce it. Parents will come to see their involvement at the school as less important, which will lead to lower levels of involvement. Research results discussed in chapter 2 (e.g., Peña 2000) demonstrate that this does occur.

Likewise, school personnel may stop trying to contact individual parents who have not responded after repeated attempts. On a more general level, school personnel may decide to limit school-wide opportunities for involvement if they feel the parents in the school seem generally uninterested in their children’s education. This possibility is not likely to be a decision made abruptly in any given year, but may be the gradual result of experiences over several years. That is, as school personnel become frustrated from dealing with a seemingly disinterested parent community, they may increasingly offer fewer and fewer opportunities for involvement. Qualitative studies do show that some
teachers blame parents’ lack of involvement on parents’ disinterest, thereby absolving themselves of the responsibility for encouraging involvement (e.g., Bermudez 1993) and, in some cases, actively avoiding interaction with parents (Peña 2000).

In sum, the most desirable relationships between parents and school personnel are positive and cooperative, meaning they provide rewards without the incurrence of insupportable costs. In such a situation, schools are more likely to offer opportunities for contact with and involvement of parents. Parents, in turn, are more likely to participate in the activities schools provide for them to be involved.

3.3 Factors Affecting Variations in Perceptions of Costs and Rewards

Every exchange relationship occurs in specific social contexts between actors with specific social characteristics. These contexts and characteristics affect individuals’ perceptions of the benefits and costs of any relationship, and therefore their willingness to engage in such relationships. They also affect individuals’ abilities to form and maintain relationships regardless of their desire to do so. In particular, the capital individuals possess and the structural realities of the contexts in which they are imbedded can either facilitate or constrain the home-school relationship.

3.3.1 Structural Constraints Affecting Involvement

Exchanges between parents and school personnel cannot occur always and indefinitely. Interaction is affected by the particular context in which it occurs. Structural constraints limit actors’ abilities to invest themselves in particular exchange relationships. The structural characteristics of a school, i.e., those related to the school’s composition and the organization of the school, place limitations on the school’s ability
to offer activities in which parents can be involved. For example, personnel in smaller schools may find it easier than their counterparts in larger schools to offer a greater number of parent-teacher conferences throughout the year, because there is a smaller number of parents with whom they need to meet.

There are also structural characteristics of parents’ lives that place limitations on their involvement. Studies investigating parental involvement with children at home employ time availability theory to partially explain parents’ time spent with their kids (Aldous, Mulligan, and Bjarnason 1999). This theory is equally useful applied to involvement at the school. Time availability theory logically states that the more time parents have available to spend with their children, the more time they will spend with them. Alternatively, parental involvement will decrease as other demands on parents’ time increase. These demands limit the time parents have to devote to the home-school relationship. The finding that mother’s work hours are generally negatively related to involvement (Muller 1993a; Zill and Nord 1994) support the contention of time availability theory that parental involvement will decrease as the demands on parents’ time increase. Fathers who become more involved when mothers work full time, compared to when mothers work part time (Nord, Brimhall, and West 1997), appear to be compensating for mothers’ reduced ability to be involved, given the increased demands on her time.

Rational choice theories recognize that an individual’s actions also are constrained by the norms and rules of social institutions (Ritzer 1996). Although norms are generated from social capital (Schneider 2000), they are not conceived of here as a reward in the home-school relationship, because they are not exchanged between the
actors. Instead, norms govern the exchange relationship between individuals and a collectivity by dictating which behaviors are socially acceptable within an institution. Individuals receive approval for conformity to the group in return for contributing to the stability of the institution through adherence to its norms (Blau 1964).

Norms of the school dictate that parents should be involved in their children’s schools, but only at the levels and in the manners approved of by school personnel. For example, parents may not call the school administrators or teachers when they feel there are problems if the school has not made them feel welcome to do so; that is, if the norms of the school indicate that parents are not free to discuss their concerns with personnel whenever they arise. School personnel may feel pressured to create relationships with all their students’ parents if norms of the school indicate that parental involvement is highly valued. Rules dictate which of an individual’s desired choices are allowed to be pursued within the context of the institution. A parent may want to be a daily presence within the school, but school rules regarding where parents can be and when during the school day limit the amount of time parents can actually spend there.

3.3.2 Capital as a Determinant of Parental Involvement

Above it was argued that social capital generated from the home-school relationship provides rewards to parents and school personnel. This type of capital results from parental involvement. It acts as a motivator for action, meaning its acquisition is the goal of interaction. Once acquired, it can also be a resource that leads to additional and on-going involvement. As parents meet and form relationships with other parents, it becomes easier and more desirable to attend school functions at which
they can interact with people who are familiar to them. In this case, social capital affects the formation and maintenance of the home-school relationship.

When parents lack social capital, and therefore the sense of comfort and familiarity that comes from being around others that they know, they may be less inclined to participate in school activities. In general, lack of capital acts as a constraint that leads individuals to believe that either it is impossible to gain desired rewards from the home-school relationship or that the acquisition of those rewards would come at too high a cost.

There exist other types of capital that also affect the home-school relationship. These include human, financial, cultural, and linguistic capital. Human capital includes parents’ education levels, skills and abilities, and financial capital includes income and assets (Nord, Brimhall, and West 1997). The research summarized in chapter 2 on the effects of individual-level characteristics such as socioeconomic status generally support the hypothesis that parents with less of these types of capital are less involved. The other two types of capital, cultural and linguistic, are discussed extensively below, because they provide the foundation for the discussion about the involvement of language minority parents.

Pierre Bourdieu presented and discussed the concepts of cultural and linguistic capital in his works, *A Theory of Practical Action* (1977) and *Language and Symbolic Power* (1991), respectively. While research often incorporates the thinking associated with cultural and linguistic capital, only a few educational researchers (e.g., Lareau 1987; Reay 1999) have explicitly drawn upon Bourdieu’s conceptualizations of these types of capital to analyze parental involvement in their children’s education. These concepts are
particularly useful for this study in its investigation of the involvement of language minorities in formal school activities.

3.3.2.1 Bourdieu’s (1977) Theory of Practical Action

Before discussion of Bourdieu’s concepts of cultural and linguistic capital proceeds, it is necessary to provide background on his theory of social behavior and explain the role of capital within it. As previously stated, a central component of exchange theory is the assertion that individuals consciously weigh the costs and benefits of an action or a relationship before they make any decisions about whether to pursue it. This assertion has been criticized by theorists who argue that humans do not conduct such rational calculations in their daily lives. Bourdieu’s (1977) “theory of practical action” demonstrates similarities to exchange theory while avoiding a rigid insistence on purely rational action. Although his is not a theory about interpersonal relationships, it can be used to predict individual behavior as well as assist in theorizing about the costs of interaction in the school context.

At a very basic level, Bourdieu asserts that an individual’s actions are affected by his or her interests. All social actors have an interest in obtaining capital and maximizing profits (monetary or otherwise) (Thompson 1991). In this respect, his theory and exchange theory share a common vision about the motivation for, and goals of, individual action: attainment of some desired reward.

Bourdieu puts forth what he terms a theory of practical action, as distinguished from theories of rational action. Bourdieu rejects the idea that individuals conduct a conscious and thorough cost/benefit analysis in their efforts to achieve desired rewards. Instead, individuals exhibit behaviors that are influenced by both the social context in
which they were socialized and the context in which they are acting. Bourdieu asserts that all individuals possess a *habitus*, or a set of dispositions that influence his or her actions, perceptions, and attitudes. These dispositions, or “natural tendencies,” affect the decisions individuals make in exchange relationships; they can influence what individuals perceive as costs and rewards, as well as what actions they are willing to take to get these rewards. They can also lead individuals to react “naturally” without regard to conscious consideration of the cost/benefit ratio. The *habitus* is affected largely by the amount of capital individuals have been able to acquire up to the point of action within a given environment. Individuals with greater amounts of socially-valued capital develop different orientations toward the social world than do individuals with lesser amounts of such capital. This is explained in greater depth in the discussions of cultural and linguistic capital below.

Although an individual’s *habitus* exerts great influence on attitudes and actions, it is not overly deterministic. Bourdieu asserts that the *habitus* only provides an orientation toward action in any given setting (Thompson 1991). Action also is affected by the particular social context, which Bourdieu refers to as a *field*, in which it occurs. What individuals perceive to be costs and benefits in one context may not be perceived as such in a different context. Similarly, what one individual perceives to be costs and rewards in one context may not be considered as such by others in the same context. Therefore, it is problematic to assume that all school personnel and all parents perceive the same costs and benefits to involvement in their children’s educational lives. Both the *habitus* and the *fields* in which their relationships are formed and sustained (or avoided and dissolved) affect the perceptions of costs and benefits.
How individuals go about obtaining capital, and whether they are successful in their efforts, also depend upon the particular fields in which they are embedded. Of particular importance in the acquisition process is their location in the social structure, as well as the amount of capital they already possess. Individuals located in higher social positions, as well as those who already possess capital (which tend to be the same individuals), are at an advantage in this process.

According to Bourdieu, the habitus is generated within, and therefore reflective of, the particular social environment in which the individual was raised. As a result, the behaviors and perceptions of different actors in exchange relationships will vary by their social characteristics and experiences. A basic proposition of the theory of practical action is that when an individual’s habitus is congruent with the particular context in which he or she is embedded, actions come naturally and proceed with relative ease and confidence. Individuals in this situation are likely to feel comfortable in their environment, which leads them to be more involved in it. When the habitus and field are in conflict, the individual may be quite confused about the proper actions and feel ill-at-ease or doubtful about how to behave (Thompson 1991). In this situation, individuals will find it difficult to behave appropriately and are likely to limit their actions within that particular environment. This conflict between habitus and field occurs when parents from cultures in which parents are not customarily involved at the school are asked or expected to be so by school staff (Stewart 1993).

Despite his rejection of the purely rational theories of individual action, Bourdieu’s theory can be incorporated into this study that focuses on how the desire for rewards and the costs of involvement affect the home-school relationship. Bourdieu does
not assert that no consideration is given to these issues: in fact, the benefits motivate people to action. However, it is not necessary to assert that the cost/benefit ratio of involvement is rationally analyzed before any actions are taken. In fact, perceived constraints, and therefore the costs associated with them, may transcend contexts, such that the experience of constraints or failure in one context may lead to the expectation for constraints in the other. In such a case, individuals who expect to experience constraints or outright failure to obtain any reward may be predisposed to avoid the new situation, regardless of the potential benefits involvement might provide. Within the exchange perspective, this phenomenon is referred to as generalization, or the tendency to extend behavior to circumstances similar to ones previously experienced (Ritzer 1996). In this situation, there may be only a partial weighing of the costs and benefits, if it occurs at all. Constraints of this sort most generally derive from a person’s social class and cultural and linguistic background, or more specifically, to the types of cultural and linguistic capital they possess. The next two sections discuss how these two types of capital affect the exchange relationship between parents and school personnel.

3.3.2.2 Cultural Capital

Cultural capital consists of cultural resources, or “instruments of symbolic wealth and ways of talking and acting (Mehan 1983, 179)” that provide advantages, in certain contexts, to those who possess them. These resources only translate into advantages when the context in which an individual is embedded places value on the resources. The cultural resources that traditionally have been theorized as capital pertain to the elite classes (Bourdieu 1977; DiMaggio 1982). These resources are “instruments for the appropriation of symbolic wealth socially designated as worthy of being sought and
possessed” (Bourdieu 1977, 190), and include such things as knowledge and activities that pertain to elite groups in society. For example, knowledge of classical music provides more cultural capital (i.e., is considered more prestigious) than knowledge of the latest hip-hop artists. Although members of all social classes possess cultural resources, capital possessed by the upper class generally has been afforded greater value by societal institutions, including schools (Lareau 1987).

The concept of cultural capital initially was utilized in educational research to explain why students from higher social classes outperformed students from lower social class backgrounds (e.g., DiMaggio 1982). Researchers posited that school personnel view the knowledge and behaviors of upper-class children more positively, which results in greater positive attention paid to them and better evaluations of student performance. Also, because upper-class students’ home culture is more closely aligned with that of the school, in terms of valued knowledge, authority patterns, and expectations for behavior, these students make the transition from home to school more easily, and face fewer conflicts, than do students from lower social classes.

These arguments have been extended to research on parental involvement to explain differing levels of participation for parents from different social classes (e.g., Lareau 1987; Reay 1999). Just as their children do, parents who possess cultural resources valued by the school (i.e., those who belong to the upper-class) are more likely to feel comfortable and confident interacting with school personnel for several reasons. They are likely to have had their own positive experiences with school, which allows them to bring a more positive orientation to involvement with their children. Also, because these parents tend to have completed higher levels of education, they have the
requisite knowledge, with respect to both academic material and the structure and processes of the educational system, to manage their children’s academic lives effectively. These resources also lead school personnel to interact positively with these parents, because the personnel consider them to be caring, knowledgeable partners in the educational process. Also, the *habitus* of the better educated involves an orientation toward involvement in their children’s educational lives; that is, their experiences since childhood have led them to believe they have both the right and the responsibility to manage their children’s education. All of these factors lead higher-class parents to be more involved in their children’s educational lives than lower-class parents, whose experiences with the school system are markedly different.

Parents with less cultural capital (i.e., those in lower social classes) do not have a *habitus* that predisposes them to visible involvement in their children’s education. These parents’ own experiences as students are likely to have been negative, leading them to have difficulty interacting in, or to avoid, an environment they view as dismissive, demeaning, or even hostile (Eccles and Harold 1993; Moles 1993; Reay 1999). Also, having completed less education, they may feel they lack the knowledge about school material and processes that would enable them to participate competently in a school environment that values and expects such knowledge. This perception of parents’ inability to add to the academic achievement of students also may be held by the teachers and administrators who view parents’ lack of valued cultural resources as a detriment to both their students’ educational opportunities as well as to their meaningful interactions with parents. As a result, school personnel may avoid contact with these parents or act in
a condescending or dismissing manner when contact does occur. Such treatment by their children’s teachers further alienates lower-class parents from the school environment.

Ideological constraints that limit an actor’s desire to interact in certain ways with certain others may also derive from the interaction of *habitus* and *field*. With respect to involvement, these constraints are related to the importance individuals place on the home-school relationship. When school personnel or parents place less importance on the home-school relationship, the contact they have with one another will be limited. If school personnel do not believe parental involvement is beneficial for student’s academic well-being, they will not feel compelled to assure that home-school contact occurs. As indicated in the discussion above, school personnel are less likely to feel parental involvement is beneficial when parents have less cultural capital to bring to the home-school relationship. For parents, involvement depends upon the degree to which they feel their involvement is necessary, as well as whether they have the skills to make their involvement beneficial. Again, as indicated above, parents with more cultural capital are more likely to feel they should be involved in the school setting and more likely to have this involvement welcomed than are parents with less cultural capital. Therefore, the latter group is likely to experience greater ideological constraints to involvement.

Bourdieu (1977) limits his discussion of cultural capital to a consideration of social class. However, the concept of cultural capital lends itself to an investigation of the involvement of language minority (LM) parents, the topic with which this dissertation is particularly concerned. As mentioned in chapter 1, LM parents tend to come from cultural backgrounds that differ from the majority culture. People of different ethnic and racial backgrounds possess different levels of cultural capital. In the United States, elite
culture traditionally has been defined as that pertaining to people of European ancestry. Minority cultural practices, beliefs, and traditions do not translate into cultural capital for those individuals who follow and adhere to them. Therefore, minority parents experience conflicts between *habitus* and *field* similar to those experienced by parents from lower social classes. This lack of cultural capital stemming from cultural background is compounded by the fact that racial and ethnic minorities are concentrated among the lower social classes in the United States. Poor, language minority parents who are also racial/ethnic minorities are at a particular disadvantage with respect to possession (or lack) of cultural capital.

Incorporated into a discussion of the home-school relationship as one of social exchange, cultural capital is related to involvement in different ways. On one hand, cultural capital is a reward that can be gained from the home-school relationship. Parents acquire some types of cultural capital needed to be effective participants in the school environment, such as knowledge of the way the school system works as well as the material their children are covering in classes. Some parents may participate in school as a form of cultural enrichment (i.e., to increase cultural capital) (Muller and Kerbow 1993).

Parents with all levels of cultural capital do stand to gain rewards from the home-school relationship. However, these rewards of cultural capital are lower for parents already possessing such capital; they do not have as much to gain from the home-school relationship as parents with less cultural capital. If only considering rewards, parents who lack cultural capital would be more inclined to be involved in the school. However, as described above, the costs of involvement are much greater for parents who lack
cultural capital. Also, if their interactions with the school are generally negative, these parents may not perceive that there are any rewards to be gained from relationships with the school. For these reasons, lack of cultural capital acts as a constraint to involvement.

The possible costs to overcoming this constraint are intangible, but real. They may include feelings of discomfort at being in such a social situation, fear, inadequacy, and powerlessness. Over time, as parents become more knowledgeable and friendly with their children’s teachers, these negative feelings may diminish. However, it is likely that parents who experience such feelings do not involve themselves long enough for such diminishing to occur. The psychological costs of involvement are too great.

3.3.2.3 Language Constraints as a Cost of Involvement

Another form of capital that is especially pertinent to a discussion of language minority parent involvement, and which can be conceived of as a specific form of cultural capital, is linguistic capital. Bourdieu (1991) theorizes that individuals can acquire a practical competence in social situations that involves that ability to act appropriately in the given context. With respect to language, this competence involves both the basic ability to speak a given language, as well as the ability to use that language appropriately, given the context in which social interaction takes place. Linguistic products are afforded a particular value in a particular context. When the language produced by an individual is given value within the context in which the individual is embedded, the language is considered to be appropriate. Language also gives the speaker the ability to be heard and believed, as well as to influence others. This competence to use context-appropriate language is referred to as linguistic capital.
According to Bourdieu (1991), all individuals assess the value of their speech within a given context. The awareness that they possess the capability to produce valued speech allows individuals to speak and interact with confidence and distinction in formal or official situations. This greater confidence also endows them with a certain authority with respect to what they are saying. Others are to believe in and agree with what they say, because they are confident about what they have said. In contrast, those without such competence experience anxiety about speaking in a contextually appropriate manner that does not come naturally to them. This lack of competence acts as a constraint to speaking in social situations. People lacking linguistic capital censor what they say according to the anticipated reactions to their speech (Thompson 1991). As a result, these individuals may limit their speech in formal social situations or avoid these situations altogether.

Language also reflects individuals’ power within the social structure. Linguistic capital is distributed across social groups and classes in the same way that other types of capital are distributed (Thompson 1991). Those individuals who possess greater amounts of economic and cultural capital also possess greater amounts of linguistic capital. As such, members of the upper classes demonstrate greater practical competence with respect to language than do members of lower social classes, primarily because they have greater access to “linguistic training,” i.e., education.

According to Bourdieu (1991), the unique ways in which people from different social backgrounds speak often allows individual’s social class to be ascertained during linguistic exchanges. The greater linguistic capital possessed by members of the upper classes allows them to speak with distinction, thereby distinguishing themselves from
individuals with less linguistic capital. Members of lower social classes are more likely to avoid linguistic exchanges in formal social situations, knowing that their manner of speaking can disadvantage them. Their methods of avoidance include remaining silent, limiting speech, or avoiding interaction altogether.

Linguistic exchanges, either spoken or written, are a vital component of the home-school relationship. Without such exchanges, parents and school personnel cannot become aware of student’s experiences that affect academic outcomes. For example, parents cannot be made aware of children’s grades, assignments, or discipline problems. Teachers, on the other hand, cannot be assured that parents understand what is being expected of their children, or even that parents are interested in their children’s educational experiences. Parents who lack the competency in the dominant language to participate effectively in the school environment are at a disadvantage in the home-school relationship. These are the parents who may be labeled as being uninterested, as a result of their avoidance of, or limited involvement in, social situations at the school.

Parents must not only possess basic knowledge of the dominant language, but also language appropriate to the school setting. This involves the ability to talk about school processes and academic material. Parents who can talk about these things are the parents with knowledge of them—those who possess cultural capital. Linguistic capital in the school setting also involves knowledge of the appropriate manner in which to speak. Research has found that school personnel expect parents to communicate with them in a particular manner that corresponds to the institutional standards of the school (Lareau and Horvath 1999). These standards, which stress deference to and support for teachers, as well as the need to be well-informed about children’s school experiences, privilege white
parents, who tend to interact with schools in a more positive (i.e., less confrontational) manner. Minority parents who do not use appropriate language and speech mannerisms again are at a disadvantage in the home-school relationship when direct communication with school personnel is involved.

In the school context, parents from upper classes, who have more education and most likely are proficient English-speakers, possess the linguistic capital necessary to interact comfortably, effectively, and with authority. Speaking with distinction, they know their manner of speaking is valued within the formal setting of the school. Also, their competent and knowledgeable discussions with teachers and administrators about the educational process may lead school personnel to take these parents’ opinions and desires more seriously when making decisions about student’s educational experiences. These parents are likely to be seen as partners in the educational process.

In contrast, participation in linguistic exchanges involves costs for parents with less linguistic capital. These parents must make strident efforts to use a language that is appropriate for the situation. They may fear showing their lack of education through the particular speech they use. Also, these parents are aware that they are dealing with professionals who know much more about the educational system and processes than they do. They may anticipate feelings of discomfort and inadequacy resulting from their inability to talk about the school process in an informed manner. It may even be the case that they are made to feel irrelevant to their children’s educational lives by teachers and administrators who are aware of the parents’ lack of culturally-valued knowledge and speech. In order to reduce the psychological costs associated with linguistic exchanges,
parents may act solely as receptors of information, rather than active participants in the exchange. Some of these parents may choose to avoid contact altogether.

Individuals with the least amount of linguistic capital are those who are not proficient in the dominant language of a particular context. In the school setting, these are parents whose native languages are not English—they are language minorities. For them, interaction with the school is undertaken in the face of great constraints. Their language difficulties present a unique constraint that other parents do not encounter. The inability to understand written and verbal communication from school personnel makes it difficult for these parents to involve themselves in their children’s school lives. Unable to read newsletters, flyers, etc., they may be unaware of the ways in which they can become involved. Even when there is awareness of opportunities, the inability to interact with others in the school setting in a meaningful way can preclude their involvement.

Although English is not the official language of the United States, it dominates in all official places, of which the school is one. Bourdieu (1991) argues that it is within the educational system that English is imposed as the legitimate language, or the language of most value in our society, because this is the primary language in which children are instructed and which they must use. Most programs in the United States aimed at educating language minority students are transitional programs that teach children English rather than bilingual programs that reinforce the value of and fluency in native languages (Stewart 1998). Therefore, the interactions schools have with children are English-focused. It is likely that school-parent interactions are English-focused as well. This makes it difficult for parents to participate in school activities. These difficulties can result in a loss of self-esteem if parents feel incapable of social interaction in English,
as well as a loss of social acceptance for not speaking the dominant language. To be involved in a meaningful rather than superficial way, language minority parents must spend time and expend effort to find translators to accompany them to school functions or to learn English themselves. For these reasons, involvement comes at a greater cost for LM parents than it does for other parents. As such, their involvement is expected to be lower than the involvement of parents who have a command of the English language.

3.4 Power and Dependence in the Home-School Relationship

In thinking about the exchange relationship, it is important to consider the power and dependence of each actor in the relationship. The balance of power affects the types and quantity of rewards that are exchanged. Also, an individual’s degree of dependency on the relationship for rewards affects the types and quantity of costs he or she is willing to accept to be in the relationship. In exchange relationships, both members of the relationship can have power over the other. Person A’s power over B “is a function of the degree of B’s dependence on A. Dependence relates positively to the value of the resources that B can obtain from A..., and relates inversely to the availability of those resources from alternative sources (Hegtvedt, Thompson, and Cook 1993, 103).” In other words, an individual has more power in a relationship when he or she is less dependent upon the exchange partner for valued resources than the partner is dependent on him or her. As can be seen from the discussion of rewards above, parents have more to gain from the home-school relationship than do school personnel.

Parents have power over school personnel, because without the children parents send to school, the personnel would not have jobs. Teachers and administrators are dependent upon parents to provide the children. However, with few exceptions (e.g.,
homeschoolers, the Amish), parents are required by law to send their children to school. In this sense, the exchange relationship is not a voluntary one for parents, so their power is somewhat illusory. School personnel, on the other hand, have power over parents, because parents generally depend on the personnel to provide their children with an education.

_Individual_ parents are more dependent on schools to provide this reward than school personnel are on _individual_ parents to provide the children. School personnel have many alternatives to the relationship with an individual parent. In contrast, parents and students have few alternatives, if any, to those with the student’s assigned teacher and other administrators. There are four alternatives to attendance at a student’s current school: attendance at another public school, attendance at a private school, homeschool, or receive no education. With respect to the first option, there is a growing prevalence of school choice programs in the United States, but the majority of parents can not choose the public schools their children attend. Attendance at private school is an option only for those with the resources to pay for it. Homeschooling is an option only for those families with an adult who is able to be home during the day and has the knowledge to teach. The last option, not receiving an education, is very costly, both for future success and because it is against the law; as such, it is unlikely to be chosen by parents.

Parents’ alternatives to the relationships with particular schools and the personnel within them are limited. Even if a family chooses from among the listed alternatives, the removal of an individual student from the school has little, if any impact on the personnel. Schools and the positions within them continue to exist whether or not a particular family is part of the school community. The school personnel are not affected
by the loss of that particular exchange relationship, because they have many others to
draw upon for rewards. Parents, on the other hand, generally have no choice but to
depend on their children’s assigned school for their children’s education. This imbalance
in dependencies results in a power imbalance, whereby school personnel wield more
power than parents. As the power of a social actor increases, its dependence on the
weaker actor for rewards decreases, primarily because the ability of the weaker actor to
provide rewards diminishes (Emerson 1962). As such, school personnel have a lesser
need to seek and maintain relationships with parents than vice versa.

The discussion of power until now applies to the possession of desired goods on
an individual level. Exchange theorists also recognize that individuals are afforded
power as a result of the positions that they occupy within a social group or organization.
School personnel have legitimated authority that is bestowed upon them by the positions
they occupy within the institution of the school. It is through their jobs that they are
given the power, or control, to decide whether school resources will be used to provide
opportunities for contact between themselves and parents. Also, it was noted above that
school personnel are afforded status within the educational arena. People who are
afforded status within a social group are also given power to control its members
(Emerson 1962). As a result of this greater power and status, the provision of
opportunities for contact ultimately lies with school personnel. They determine the nature
and frequency of these opportunities.

Due to their lesser need for relationships with parents, school personnel may be
inclined to minimize the opportunities for contact they provide to parents, especially
those that represent greater costs to the school. However, this minimization of contact
may not occur for several reasons. The legitimated authority school personnel have is limited in scope; authorities may use their power only to enforce a group's norms and behaviors that will lead to the achievement of the group’s goals (Emerson 1962). In the school setting, the ultimate goal of the school personnel and parents alike should be to produce student learning. A commonly held belief is that parental involvement can enhance student learning. Even if this belief is not held by everyone in the school, parents generally have the expectation, as well as the right, to know what is happening to their children in school. For this reason, it is unlikely that principals or teachers will eliminate all contact with parents, no matter what the costs or benefits of doing so might be. At the very minimum, school personnel should offer some type of written communication to parents about what and how well their children are doing in school.

School personnel also have their statuses as educational experts reinforced in their interaction with parents. Status recognition and reinforcement compels more powerful actors to maintain relationships with weaker actors; this recognition is an intangible reward they receive from the relationship. So, despite their greater power, school personnel will offer opportunities that allow for contact with parents in order to continue reaping such rewards.

School personnel may also see involvement of parents in the school setting as a way to maintain group cohesion. Leaders maintain group cohesion by showing deference to their subordinates (Blau 1964). School personnel can show deference to parents by affording them the opportunity to be involved in their children’s school lives, and at least giving the appearance that parents’ desires and opinions are heard when communication takes place. Teachers and administrators recognize that while they ultimately control the
child’s experiences during the school day, parents have a strong influence on the way the children perceive and react to these experiences. Group cohesion is created and maintained when teachers and administrators develop partnerships with parents, and when they give parents access to one of the rewards they seek from their relationship with the school, namely information.

Parents are able to influence these opportunities for contact when their power relative to the power of school personnel increases. Parents can gain such power in several ways. The first is by joining together to form a coalition. Through the process of coalition formation, weaker individuals can increase their power relative to a third, more powerful, social actor (Emerson 1962). Parent-teacher organizations are the most common type of parent coalitions found in schools today. They provide an established mechanism by which parents can make their desires for involvement opportunities known and pressure school personnel to provide them. Parents can acquire greater power if they sit on school management committees that are responsible for determining the nature and frequency of home-school contact. Parental power also is increased in situations where the very existence of positions in the school, or the ability of an individual to retain a position, is dependent upon the degree to which parents are satisfied with their experiences within the school. Such a situation exists when parents pay for their children to attend a particular school, or when the relationships teachers and administrators develop with parents are a factor used to evaluate their job performance.

Power is also a central feature of Bourdieu’s theory on social behavior. Simply stated, capital provides power. Individuals who possess more valued capital have more power. Parental involvement is mediated by power relations such that parents possessing
less cultural capital often feel frustration with and a sense of powerlessness in the parent-teacher relationship (Reay 1999). Parents with greater amounts of cultural and linguistic capital are at an advantage in interactions with school personnel and in influencing the opportunities for contact with which they are provided. These parents likely possess as much, if not more, capital as school personnel. They may be more insistent on contact with teachers and principals, given their perceptions that involvement is both their right and responsibility. Their linguistic competence provides them with the ability to persuade school personnel to seriously consider and meet their requests. Teachers and administrators also recognize that they are dealing with parents who have power outside the school. This can act as pressure to meet parental requests as well. However, the most powerful parents may become overbearing, leading school personnel to see them as too involved. In this case, the norms regarding proper parental involvement are violated. Parents who violate these norms may see their contact with school personnel limited.

3.4.1 Language Minority Parents’ Relative Lack of Power

Being avoided as a result of having too much power and being overly demanding is quite different from having limited contact with school personnel due to lack of power. Language minority parents lack the types of capital that would provide them with power. Not being from the dominant culture, these parents lack cultural capital. Immigrant families may be less willing to contact the school, because they may not know the procedures for doing so, or they may not know what school personnel’s reaction to such contact would be (Schneider 1993).

Language is a vehicle for stratification, whereby individuals without command of the dominant language are relegated to lower levels of social status (Mehan 1984). Lack
of (or less) linguistic capital places language minority parents in a position of lower status. As a result, they lack power, which acts as a constraint to certain types of involvement. Language minority parents do not have the linguistic ability to make their preferences clearly known nor to push for the school experiences they want their children to have. Therefore, they have no power to influence school personnel. Without this power, language minority parents may see little benefit to their participation in certain activities such as the PTO or parent-teacher conferences.

3.5 Facilitation of Involvement by School Personnel

Some parents may not be interested in being involved at their children’s schools or may not value education highly, or both; therefore, they will not work to create positive home-school relationships. Other parents may be deeply interested in their children’s education and want to be involved at the school, but these beliefs and desires do not translate into action. Some researchers believe schools can implement policies and practices to increase involvement for individual parents who are currently not involved, or for groups of parents that, historically, have been less involved than others (see Epstein and Sanders 2000). In devising such practices and policies, school personnel have to anticipate and address the constraints to involvement that these parents face. Efforts to increase parental participation levels must be aimed at reducing the costs of involvement for parents. This study conceives of the school practices and policies that reduce the costs of involvement as facilitation.

It is advantageous for teachers to make conscious efforts to demonstrate to all parents, most especially those who may be considered hard-to-reach, that their involvement is both desired and valued. As mentioned above, parents who do not receive
the benefits they desire from the school-parent relationship may become less involved in
the school. Therefore, it is important that school personnel are responsive to parents’
requests for contact and information, and that they facilitate involvement. Such
facilitation involves efforts as basic as making parents feel welcome in the school and
aware of the opportunities for involvement provided by the school. It also includes
efforts to make involvement easier and more convenient, for example by offering
meetings at convenient times and having child care available during school functions. It
is best to begin facilitating involvement at the very beginning of the school year (Moles
1993), before parents become frustrated about not receiving the rewards they seek.

Facilitation of involvement by school personnel is especially important for
language minority parents, particularly those who are not proficient in English. They are
disadvantaged by their difficulties in speaking the primary language used in school, as
well as by the lack of power afforded to them as a result of these difficulties and cultural
background. Methods of facilitation for language minorities include increasing the
amounts of cultural and linguistic capital they possess, as well as making the capital they
do possess more highly valued within the school community. Specific ways of doing this
include using translators at school functions, holding school meetings in non-English
languages, sending home translated information, and providing these parents with the
information they need to understand what role they are expected to play in their
children’s education.

When such facilitation occurs, the constraints posed by lack of capital are
reduced, thereby reducing parents’ costs of involvement. Facilitation makes these
parents feel welcome and respected in the school and can make it easier for them to
interact with other members of the school community. The discussion of research in chapter 2 made clear than when the costs of being involved associated with language differences were reduced, language minority parents were more involved. Also, when schools transformed parents’ general cultural characteristics into capital by giving them value within the school setting, parents became more involved (Davies 1993).

3.6 Summary of Theoretical Background

This chapter connected the issue of parental involvement in schools to social exchange theory to explain why parents and schools develop relationships with one another. In doing so, it drew heavily on the work of other researchers, such as Epstein (1992) and Coleman (1988), who previously had outlined the benefits that involvement can have for parents, school personnel, and children. According to the exchange framework, school personnel and parents are inclined to form relationships with one another, because there are benefits, or rewards, to be gained from the relationship. These rewards include, but are not limited to, information, support, respect, and personal satisfaction from seeing children’s achievement.

However, there are limits to the amount of home-school interaction possible. Parents and school personnel are constrained in their actions by the context in which their relationships exist. At the school level, constraints derive from the organizational characteristics of the school, the demographic characteristics of school personnel and the student body, and the beliefs and attitudes of the school personnel. For parents, constraints derive from the characteristics of their home and work environments, including the amount of capital they possess, as well as their beliefs about the proper role of parents in the school.
The effort to overcome these constraints and develop and maintain relationships with one another involves costs for parents, teachers, and administrators. When the benefits of parental involvement are perceived as outweighing the costs of overcoming constraints, schools will provide opportunities for parents to be involved, and parents will take advantage of these opportunities. When the costs are perceived as outweighing the benefits, the opportunities and actual involvement will be limited.

One group of parents for whom the constraints to, and therefore the costs of, involvement are considered to be high are language minority parents. As with parents of lower socioeconomic status, LM parents lack the cultural capital that helps them to participate effectively and with confidence in the school. Parents who lack cultural capital can be made to feel unnecessary and unwelcome in the school by school personnel, who do not see perceive their involvement to be as beneficial as that of parents who possess cultural capital.

Language minority parents also face a unique constraint to involvement, which is lack of linguistic capital, or the basic ability to speak English and to use it appropriately, given the context in which social interaction takes place (Bourdieu 1991). This lack of capital makes it difficult for language minority parents to develop relationships with school personnel and to understand the information they are given about their children’s school experiences. Lack of this particular type of capital, which is possessed by the majority of parents, results in LM parents being less involved in school activities than non-LM parents.

Schools can work to reduce the costs of involvement for parents by using methods that facilitate involvement. For all parents, these methods include increasing parental
awareness of opportunities for involvement, making it easier for parents to become involved, encouraging involvement, and making parents feel as though their involvement is welcome and important. Facilitation may be especially important for language minority parents, for whom the costs of involvement are high. Methods for facilitation for these parents include translating school information into the parents’ native languages and providing translators at school functions.

3.7 Conceptual Model

The theoretical discussion presented in this chapter and the findings from extant literature pertaining to parental involvement provide the foundation for the conceptual model underlying the analyses in this dissertation, as well as for the specific hypotheses tested. Figure 1 depicts the conceptual model from which the hypotheses are generated.

It is similar to a model presented by Eccles and Harold (1993), because it predicts that factors in different contexts, measured at different levels, affect individual parents’ involvement. As depicted on the left side of the model, school-level factors affect the home-school relationship. These school-level factors affect both the number of opportunities for involvement provided by the school and efforts to facilitate involvement in the activities that do exist. These characteristics measured at the school level, in turn, affect actual levels of parental involvement in the school. Parents also find their relationships with their children’s schools affected by characteristics of their own lives. These are structural, contextual, and ideological constraints measured at the child, parent, and household levels.
Figure 1.1: Conceptual Model
3.8 Hypotheses

The theory pertaining to the concepts of rewards, costs, power, dependence and cultural and linguistic capital provide the rationale for expecting those relationships depicted in the model. School personnel and parents are inclined to form relationships with one another, because there are rewards to be gained from the relationship. School personnel have the primary ability (and responsibility) to provide opportunities for involvement, because they control school resources and have the power to determine the daily activities in the school. Parents, in turn, take advantage of these opportunities to be involved actively in their children’s school lives. The first hypothesis derives from this contention:

H1: *The greater the opportunities for involvement provided by the school, the greater actual parental involvement.*

However, there are limits to the amount of home-school interaction possible. Interaction is affected by the context in which it occurs. Characteristics of the school and home environments inevitably affect both school personnel’s and parents’ ability and willingness to form and maintain relationships with one another. These characteristics that either constrain of facilitate the home-school relationship exist at both the school and individual levels.

The effort to overcome these constraints involves costs for parents, teachers, and administrators. Schools can offer opportunities for involvement only when the costs to the school are not so great as to outweigh the benefits of having parents involved. Similarly, parents’ involvement in the school setting is dependent upon whether the benefits can be acquired without the incurrence of overwhelming costs. Social exchange
theorists posit that in any interpersonal relationship, the social actors attempt to minimize
their costs. From this rationale, the following hypotheses are generated:

H2: \textit{As the costs of overcoming constraints increase, the opportunities for parental involvement offered by school personnel, as well as efforts to facilitate involvement, decrease.}

AND

H3: \textit{As the costs of overcoming constraints for parents increase, the actual level of parental involvement decreases.}

As stated above, costs are incurred as actors attempt to overcome the constraints to their relationship. At the school-level, constraints derive from the structural characteristics of the schools, the characteristics of school personnel, the institution’s support for parental involvement, and the degree to which schools afford parents real influence in the educational process. This study examines the effects of many characteristics of the school that are hypothesized to impose constraints on opportunities for, facilitation of, and actual levels of involvement. These characteristics include school resources; school size; school sector; school location; the demographic composition of the student body, including size of the school’s minority and English language learner student populations; and the size of school’s minority teacher population. Some of these factors influence the involvement of all parents, while some are expected to affect uniquely the involvement of language minority families. The literature cited in chapter 2 provides evidence of the direction of the relationship between the outcomes of interest in this dissertation and many of these school characteristics. The next chapter discusses each of the school-level factors used in the analyses in detail. This discussion includes information about the expected direction of the relationship between each factor and the
outcomes, as exchange theory and the cultural and linguistic capital frameworks would predict.

While constraints at the school level affect the opportunity for parental involvement, constraints at the individual and familial levels affect the degree to which parents take advantage of these opportunities. These constraints are related to characteristics such as parents’ available time, the effort needed to engage in school activities, and the resources they can draw upon in order to be involved. The effects of many of these characteristics have been well examined in other studies, but their effects have not been fitted within a social exchange framework. In general, as shown in chapter 2, researchers have found that the greater the demands of both the home and workplace are, the less involved parents are with their children’s education. Factors like work hours, nontraditional work schedules, the number of children in a family, and family structure all affect the home-school relationship. Stated in terms of exchange theory, the costs of involvement increase as the demands for time and energy outside of the school increase. As with school-level factors, the individual-level factors are discussed in more detail in the next chapter. However, because the effects of these individual-level characteristics have been documented by other researchers, and this dissertation proposes no new expected relationships between them and involvement, a specific hypothesis with respect to their effects is not tested here.

This dissertation is concerned with the unique constraints of language minority parents, which have not been studied by many other researchers. There are costs of involvement associated with their linguistic and cultural differences. These costs increase as parents’ English proficiency decreases. It is expected that the increased cost
of involvement for language minority parents, compared to parents whose native language is English, will lead them to be less involved. This provides rationale for the fourth hypothesis:

H4: *As the amount of possessed linguistic capital decreases, the costs of involvement increase, and actual involvement decreases.*

School personnel can increase the involvement levels of all parents by facilitating it, i.e., by providing benefits (information) and reducing the costs associated with involvement. Therefore, it is expected that:

H5: *The more schools facilitate involvement, the greater the actual parental involvement.*

Facilitation for language minority parents, as distinct from facilitation for all parents in general, is conceptualized as schools decreasing the difficulties LM parents have as result of their linguistic and cultural differences. Hypothesis 5 is tested specifically for LM parents by examining whether the methods schools use to facilitate the involvement of language minority families have a positive effect on involvement.

These five hypotheses are tested in the analyses presented in chapters 5, 6, and 7. In the next chapter, the data and measures used for these analyses are described in detail.
CHAPTER 4

MEASURES AND METHODS

This chapter provides detailed descriptions of the data set and the measures used in analyses. In describing the measures, the concepts of opportunity for involvement, facilitation of involvement, actual parental involvement, constraints, and power are operationalized. This chapter also details the different statistical analyses conducted to meet the study’s goals and to test the hypotheses presented in the previous chapter.

4.1 The Early Childhood Longitudinal Study, Kindergarten Class of 1998-99

The data for this research come from the Early Childhood Longitudinal Survey, Kindergarten Class of 1998-99 (ECLS-K). This survey, conducted by the National Center for Educational Statistics, is a national longitudinal study of children who were kindergartners in the 1998-99 school year. The study is well-suited for examining the issues of interest in this dissertation. Designers of the study paid “particular attention to the role that parents and families play in ....supporting their (children’s) education through the primary grades (U.S. Department of Education 2001: 1-3)” and wanted to gather “information on how schools prepare for and respond to the diverse backgrounds and experiences of the children and families they serve (U.S. Department of Education 2001: 1-3).” Therefore, the data set includes a wealth of information on parent-school contact, school personnel’s attitudes regarding such contact, parents’ feelings regarding
their experiences with school personnel, the diversity of students’ backgrounds, including native language, and schools’ efforts to facilitate the involvement of language minority parents.

The ECLS-K is a longitudinal study of a nationally representative sample of the nation’s kindergartners (n=21,260) being educated in a nationally representative sample of 1,277 schools. The children were followed from the time they were in kindergarten until fifth grade. When the ECLS-K data are weighted appropriately, their findings represent the characteristics and experiences of the population of children who were kindergartners in the 1998-99 school year. They also describe the population of schools that educated kindergartners in the same school year. Therefore, results from this research present a national picture of the opportunities schools provide for their students’ families to participate in school activities. They also demonstrate what methods, if any, schools use to facilitate the involvement of the families of language minority children, as well as kindergartners’ parents’ level of participation in school activities.

This research study uses data from two of the five waves of data currently available for the ECLS-K: the fall and spring of kindergarten. The ECLS-K gathered information from multiple sources. Parents participated in phone interviews in both the fall and spring. They provided information about their children, their home environments, their involvement with the school, and language use within the home. Interviews were conducted in Spanish when parents indicated they were not proficient enough in English to participate in an English-only interview.

School-level data were collected from teachers and school administrators. Both of these groups of respondents completed self-administered questionnaires. This study uses
only a small amount of information from teachers that was collected in the fall. Teachers also participated in the study in the spring, but no data from them at that time point are used here. School administrators completed surveys in the spring. Most information pertaining to the school, including opportunities for involvement, facilitation of involvement, and structural and organizational characteristics comes from the administrator questionnaire. The majority of the measures used in this study, regardless of the respondent who reported them, come from the spring wave, because this wave has the most detailed information on actual parental involvement and the only information on opportunities for involvement.

4.2 Measures of Opportunities for, Facilitation, and Level of Parental Involvement

As indicated in the first chapter, this study is concerned primarily with parental involvement in the school. Therefore, the main measures of concern relate to parents’ interaction with the school and school personnel.

Opportunity for Parental Involvement at the School Level. In the spring wave of the kindergarten year, school administrators were asked whether a variety of school activities that involve parents were offered by the school. These activities included PTA, PTO, or Parent-Student-Teacher Organization meetings; parent-teacher conferences; school performances to which parents were invited; classroom programs like class plays, book nights or family math nights; and fairs or social events planned to raise funds for the school. For each of these five groups/types of activities, principals were asked to indicate whether they were offered 1) never; 2) once a year; 3) 2 to 3 times a year; 4) 4 to 6 times a year; or 5) 7 or more times a year. In order to obtain a measure approximating the
actual number of opportunities for involvement offered by the school, the categories are recoded. Categories in which a single frequency is indicated are assigned the value of that frequency. Categories that include a range of frequencies are assigned a value equal to the midpoint of that range. The uppermost category is topcoded at 7. Thus, the recoded measures have the following values: Never = 0, Once a year = 1, 2 to 3 times a year = 2.5, 4 to 6 times a year = 5 and 7 or more times a year = 7. The answers are then summed across all five types of activities to produce an overall indicator of the number of opportunities for involvement provided to parents. Possible scores range from 0 to 35. Schools with higher scores on this measure provided more opportunities for involvement than did schools with lower scores on this measure.

Facilitation of Parental Involvement by School Personnel for All Parents. Encouraging parents to visit the school can make them familiar with and comfortable in the school environment. Such familiarity and comfort can lessen any reservations or anxiety parents have about being at the school, thereby increasing involvement for some parents who may otherwise shy away. In other words, the costs of involvement are reduced as familiarity and comfort increase, which leads to increased involvement. The reduction of this type of cost can be accomplished with orientations for parents and children before the school year begins.

The data set includes measures of transition-to-kindergarten activities provided by schools; although primarily meant to make the transition easier for children, these efforts can also make parents more familiar and more comfortable with the school and school personnel. In the fall, teachers were asked whether 1) someone at the school had phoned or sent home information about the kindergarten program to parents; 2) parents and
children had visited kindergarten prior to the start of the school year; 3) any teacher had visited the homes of the children at the beginning of the school year; or 4) parents had come to the school for orientation prior to the start of the school year. A scale measure indicating facilitation through transition-to-kindergarten activities is created using teachers’ responses to these questions in the following manner: if a child’s teacher indicated an activity was provided, a score of one is assigned. These scores are then summed across all four possibilities, so that the overall score ranges from 0 to 4. A higher score indicates greater facilitation of involvement through transition-to-kindergarten activities.

Parental involvement in the school also is encouraged and made easier when parents have one person in particular they can rely upon for information, and when there is one person whose sole responsibility is maintaining contact with parents. This is a parent liaison. Having a parent liaison on staff also demonstrates that school personnel feel it is important to keep parents informed and involved in the school and, therefore, serves as an indicator of institutional support for parental involvement as well.

Administrators were asked to provide their best estimate of the number of full-time equivalent parent liaisons or home school coordinators employed at the school. These analyses use the actual number of full-time parent liaisons, as reported by administrators. The greater the number of liaisons, the greater the facilitation, and the greater the expected involvement of parents.

Of issue for all parents who attend school functions is who will care for their children when they attend such functions. Finding childcare, whether during evening hours for all children or during the day for younger children not yet enrolled in school,
can be costly for parents. They have to find the child care, make necessary arrangements to drop off and pick up their children, and may have to pay the caregiver. Schools can reduce these costs by providing the child care parents need to attend school events and meetings. Administrators were asked whether the school provided child care so parents could attend parent meetings or events. This measure is employed as a dummy variable where “1” indicates that the school provided child care and “0” indicates that the school did not provide child care.

Lastly, as discussed in chapter 3, in order for parents to be able to participate in opportunities at the school, they have to know that the opportunities exist. In order to facilitate the involvement of any parent, schools must make parents aware of their children’s school experiences and the activities that are going on at the school. School personnel can do this through written information sent home with students or through the mail. Administrators were asked to indicate how often the school sent letters, calendars, newsletters, etc. to parents in order to provide them with information about the school. Possible responses were 1) never, 2) once a year, 3) 2 to 3 times a year, 4) 4 to 6 times a year, and 5) 7 or more times a year. These categories were recoded in a manner similar to those composing the measure of opportunities for involvement (Never = 0, Once a year = 1, 2 to 3 times a year = 2.5, 4 to 6 times a year = 5 and 7 or more times a year = 7) to create an indicator of facilitation through awareness. Schools with higher scores on this measure did more to make parents aware of what was going on at their child’s school.

Facilitation of Parental Involvement by School Personnel for Language Minority Parents. Of particular importance to this research is the effort school personnel make, if any, to involve parents whose language difficulties and unfamiliarity with the school may
impose constraints to their interaction with others in the school setting. With greater facilitation, the costs of involvement are reduced, especially when the facilitation efforts focus on eliminating barriers related to language differences. It is hypothesized that as facilitation for language minority parents increases, so too will their participation in activities as the school.

Facilitation efforts were measured by a series of questions asking about the assistance schools provided to language minority parents. Specifically, administrators were asked whether 1) translators were made available to parents for parent/teacher and parent/school staff meetings and/or meetings were conducted in the parents’ non-English language; 2) translations of written communications were provided to LM-LEP\(^4\) families; 3) home visits were made to families of LM-LEP children; 4) an outreach worker assisted in enrolling children first entering school; 5) the school conducted special parent meetings for non-English background families; or 6) other special services were provided. For this study, a scale measure is created indicating overall facilitation of involvement for language minority parents in the following manner: a score of one is assigned for each service that schools indicated they provided. These scores are then summed across all the items. The scores on this LM-facilitation measure range from 0 to 6, where higher scores reflect schools’ use of a larger number of methods that reduce the costs of involvement for language minority parents.

Another way schools can facilitate the involvement of language minority parents, whether or not they have the formal services described above, is by employing personnel

\(^4\) This acronym is used in the ECLS-K questionnaire and refers to language minority/limited English proficient students. It is used here and throughout discussion of the analyses for ease of presentation. Please note the limited English proficient, or LEP, was the terminology used to identify English language learners at the time the ECLS-K was first fielded and so is used here and throughout the remaining chapters.
who can communicate with these parents in their native languages or identify with them culturally, thereby making it easier for them to be involved at the school. These analyses employ several measures pertaining to school staff who can do this. The first indicates the number of full-time equivalent ESL/bilingual education teachers and aides in the school. The second is the administrator’s report of the percentage of part-time and full-time teachers who were of Latino or Asian origin, including regular classroom, ESL/bilingual, remedial, special education, art, and physical education. The third measure is a dichotomous indicator coded “1” if the principal was Latino or a non-Black minority, “0” otherwise. All of these measures are expected to have a positive effect on the involvement of language-minority parents, because they indicate the presence of school staff who can communicate with them and with whom they may feel more comfortable interacting as a result of having a common culture.

While conceptualized as facilitating the involvement of LM families, the number of ESL/Bilingual teachers and aides, percentage of Latino and Asian teachers, and whether the principal is Latino and/or non-Black minority also affect a school’s ability and willingness to provide the assistance just discussed. These personnel have the skills necessary to interact with non-native English speakers, thereby making it easier (i.e.,

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5 Data indicating whether a principal is Asian were not available in the public-use data set. Information indicating whether the principal was a race other than white or black was available and is used here to indicate that a principal is Asian or another racial minority. Latino ethnicity is asked separately; administrators coded as Latinos may be of any race.

6 While language-minority families come from all language and ethnic backgrounds, as discussed in chapter 2, the majority of language-minority students in the United States have Latino, Spanish-speaking or Asian origins. As a result, it is not inappropriate to use indicators only of Latino and Asian staff and principals in analyses that focus on LM families of all backgrounds.

Also, while the measure of percent minority teachers described below was examined in analyses of facilitation and involvement, this is not considered to have a direct effect on facilitation nor to facilitate the involvement of language-minority families, because it encompasses the size of the Black teacher population. This particular teacher population is not expected to have the skills or cultural awareness that positively affect facilitation methods or the extent to which LM families are involved. In may even be the case that, as a result of cultural conflict between African Americans and other minority groups, higher percentages of Black teachers would have a negative effect on LM parental involvement.
reducing the costs) for schools to provide assistance to LM parents. It is hypothesized that larger numbers of ESL/bilingual education teachers and aides, larger percentages of Latino and Asian teachers, and having a principal who is Latino and/or non-Black minority will lead to schools’ use of a greater number of methods of facilitation. Therefore, these measures are expected to have both a direct and an indirect effect on actual LM parent involvement.

Two other measures that may be related to facilitation for these same reasons are investigated. These are dichotomous measures indicating whether the principal had taken any ESL or bilingual education courses (coded 1=yes, 0=no) and whether the principal had taught any ESL or bilingual education courses (coded 1=yes, 0=no).

*Actual Parental Participation in Formal School Activities.* In the spring, parents were asked a series of questions about familial involvement in school activities. The questions addressed three aspects of involvement: 1) whether someone in the household had participated in any of seven types of activities at the school since the beginning of the school year; 2) who had participated; and 3) how many times that person/those persons had participated. All of these aspects of involvement were investigated in this study. Note that the questions in the ECLS-K ask about the involvement of household members, rather than just parents. For ease of discussion, this study often makes reference to parental involvement, but the reader should keep in mind that what is measured is the involvement of any member of a child’s household.

Many of these activities about which parents were asked were the same as those included in the administrator questionnaire. They included: an open house/back to school night; a PTA, PTO, Parent-Student-Teacher Organization meeting; a parent advisory
group or policy council; a regularly scheduled parent teacher conference with the child’s teacher; a school or class event, such as a play, sports event, or science fair; whether the parent acted as a volunteer or served on a committee; or whether the parent participated in fund raising. A composite measure, indicating the number of activities in which household members participated is computed by summing the number of activities for which the parent/guardian indicated someone had participated. Possible values for this measure range from 0 to 7.

Questions asking how many times during the school year parents or other household members participated in the seven activities were asked as well. Responses to these questions were used to compute a measure similar to the measure of opportunities within the school. The frequencies of attendance for each type of activity were summed to produce an overall level of involvement score. Higher scores indicate greater involvement. The top 2 percent of responses on this measure were topcoded at attendance at 55 school functions to avoid biasing the results with the presence of outliers.7

Literature suggests that children of minority backgrounds, including language minorities, may be likely to have family members other than parents who participate in school events (Garcia 2001; Inger 1992). As indicate above, the questions pertaining to frequency of attendance, which are used to compute the overall involvement score, make no distinction between parents and other household members. As a result, any differences in involvement observed between the families of language-minority and non-language minority-children will not be attributable to a failure to account for the

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7 This top 2 percent of cases reported attending functions at the school between 56 and 174 times during the school year.
involvement of people other than parents. The measures in this study ascertain whether language-minority children had anyone participate in school activities.

To investigate whether language minority children indeed were more likely to have family members other than their parents involved at the school, analyses were conducted utilizing questions that asked who in the household participated in the various activities at the school. Specifically, when a parent or guardian indicated that someone participated in a particular activity, they were asked whether it was the mother, father, both parents, or neither parent who had participated. These answers are used to produce an indicator of who participated the majority of the time. First, the total number of activities in which the mother/father/both/neither had participated is divided by the number of activities in which anyone in the household had participated. The result is multiplied by 100 to obtain a percentage. Four dummy variables are created indicating that the mother, father, both parents, or neither parent participated most often; the measure pertaining to the option that had the highest percentage is coded “1.”

4.3 School-level Predictors of Parental Involvement

School Size. School size is expected to be related to the number of opportunities schools provide for involvement, because the number of students and parents whose interests and desires must be accommodated affect school offerings. However, it is unclear what the specific direction of that effect will be. On the one hand, size may exhibit a negative relationship with opportunities as a result of the expenditures involved in providing these opportunities. As the number of students and parents increase, the

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8 For example, if the percentages indicate that the mother participated 30 percent of the time, the father participated 30 percent of the time, and both participated 40 percent of the time, the child is coded “1” on option 3- “both,” and coded “0” on the other three options.
time, energy, and monetary costs associated with providing opportunities for all of them increase.

On the other hand, smaller schools may not be able or have the need to offer as wide an array of services as larger schools (Alt and Peter 2002), in which case the relationship between school size and opportunities will be positive. With a larger student body, schools have to provide more extra-curricular opportunities that encompass a wider range of interests. The costs of not doing so may be discontent among students who do not have the opportunities they want, as well as detachment of students who are not involved with the school. These extracurricular activities also provide opportunities for parents to attend school functions in order to watch their children. Similarly, with a larger parent population, schools may find it easier to attract enough parents to support a parent-teacher organization or school fair.

School size is measured by the number of students enrolled at the time administrators filled out their questionnaires. The data set contains a categorical measure of size, where 1= 1-149 students, 2= 150-299 students, 3= 300-499 students, 4=500-749 students, and 5= 750 students or more.

School Resources. The provision of opportunities brings many kinds of costs. Schools with greater financial and human resources can more easily bear these costs. As a result, they are less constrained by cost factors. Therefore, as schools’ resources increase, they will be able to provide a greater number of opportunities and use a greater number of facilitation methods to increase LM parental involvement.

Finding an adequate measure of school resources for this study proved difficult. Educational researchers commonly employ a measure of the number of students within
each school eligible for free or reduced-price lunch as an indicator of the average socioeconomic status of the student body, which in turn reflects school resources. Although the ECLS-K includes measures of students eligible for both types of lunch programs, as indicated by school administrators, this information is missing for 26 percent of the sampled schools. Using this measure in analyses would have resulted in a substantial loss of cases.

Therefore, this research utilizes some “best alternative” measures related to school resources. The first is a composite measure indicating that the student body is comprised of at least 50 percent low-income students, which is commonly used in National Center for Education Statistics (NCES) publications of estimates from ECLS-K data (see, for example, Denton (forthcoming) and Prakash, West, and Denton (2003)). This measure is coded “1” if schools have at least 50 percent of their students from low-income backgrounds and “0” if schools have less than 50 percent of their students from low-income backgrounds. Schools with at least 50 percent of students from low-income backgrounds have fewer resources to draw upon than schools with lower percentages of low-income students and, therefore, are expected to offer fewer opportunities for involvement to all parents and to use fewer methods of facilitation for language minority parents.

9 Two other measures of school resources also were examined but determined to be less statistically sound than those included in final analyses. The first was a scale measure approximating the resources of the communities in which the school is located. It was created from responses of school administrators about whether each of the following was a big problem, somewhat of a problem, or no problem in the surrounding neighborhood: litter/garbage, gangs, drugs, heavy traffic, violent crime, crime in general and vacant buildings. All of these are problems that are more likely to be found in poorer communities, and thus reflect the general resources of the school. When all responses were summed, approximately 22 percent of the cases had missing data. Therefore, use of this measure would also have resulted in a substantial loss of missing data.

Another measure in which the incomes of sampled children within each sampled school was also investigated as a possible indicator of school resources. Some schools in the data set had only one sampled child, meaning that one child’s family income would have been used to indicate average SES of the entire student body. For this reason, use of this measure also was determined to be statistically unsound.
This measure is computed from information about the percentage of students who received free or reduced-price lunch and operation of a school-wide Title 1 program. First, the percentage of students in a school who receive free or reduced-price lunch is computed. Schools for which this percentage is at least 50 percent are identified as having a high concentration of low-income students and assigned a value of “1.”

For schools that are missing data on this measure, information about whether the school operated a School-wide Title 1 program is used to determine concentration of low-income students. At the time the ECLS-K base year data were collected in the 1998-99 school year, schools in which more than 50 percent of the student population was low-income qualified for a school-wide Title 1 program. Therefore, schools that had missing data on the percent of free and reduced-price lunch and operated a school-wide title 1 program are coded “1” on this measure. Schools that had missing data on the percent of free and reduced-price lunch and did not operate a school-wide title 1 program are assigned a value of “0.”

A second measure of school resources indicates any additional sources of funding a school received, as indicated by administrators. Schools that receive funding in addition to basic funding from the state or tuition conceivably have extra money available to dedicate to providing opportunities for involvement and to increase efforts to facilitate that involvement, if they so choose.

Administrators indicated whether their schools received funding from state compensatory funds, community fund raising, PTO fund raising, local and/or national businesses, special education programs or agencies, auxiliary services or affiliated

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10 The school-wide Title 1 program is a compensatory funding program in which the Federal Government allocates money to school districts based on the number of low income families in each district. Schools that qualify for school-wide programs receive money for each child enrolled in the school.
enterprises, Medicaid, impact aid, bilingual aid, migrant aid, or other grants. For this study, a composite measure of additional sources of funding is computed. First, a score of one is assigned for each type of assistance the school received. These scores are then summed across all 11 types of additional funding, resulting in a score that ranges from 0 to 11.

A factor that may reduce the number of opportunities schools offer for involvement and methods of facilitation they use is whether they have experienced a loss of human and/or economic resources in the recent past. With fewer staff and/or less money, schools may be unwilling or unable to assume the costs associated with providing opportunities and facilitating involvement. The measure of loss of resources comes from administrators’ indications of whether, in the previous three years, their funding levels had decreased or there was a reduction in their teaching staff. If neither of these changes occurred, schools are assigned a score of 0. If at least one of these changes occurred, schools receive a score of 1.11 The expected relationship between loss of resources and both opportunities and facilitation is negative.

Aid for bilingual or migrant education provides a resource to schools directly aimed at improving the education of students who do not speak English. This may include providing language assistance to the parents. As such, schools that receive such aid may do more to facilitate LM parental involvement in the ways indicated above than schools that do not receive such aid. In this study, a dummy variable is created where

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11 This measure was also calculated as a continuous variable indicating whether 0, 1, or 2 negative changes had occurred in the previous year. Using this calculation showed no statistical advantage over the dichotomous measure, probably because schools that experienced both types of changes represented only 6 percent of the sample.
“1” indicates that a school received aid for bilingual and/or migrant education, and “0” indicates that a school did not receive either type of aid.

School Sector and Type. Differences in the parent-school relationship between public and private schools, as well as among schools within the same sector, may lead to differences in all three dependent measures this study investigates, i.e., opportunities provided, facilitation methods used, and actual level of parental involvement. There are two prevalent perspectives in the study of the relationship between parents and private schools; researchers identify the relationship as adhering to market principals or existing within an environment focused on the development of communities. Using either perspective, it can be expected that private schools will offer more opportunities for parents to be involved, and facilitate that involvement to a greater degree, than public schools.

In the market model of the parent-private school relationship, parents are considered to be consumers of the school’s goods because they are paying for their children’s education. Private schools are dependent upon their students’ families for the income necessary to run the school. As a result, school personnel are pressured to meet the needs and desires of the parents on whom they are dependent for resources and, ultimately, employment. This is not true of public schools, which receive financial resources from public funds. As such, private schools have a greater need to satisfy any desires their parents have for involvement. They also must assure the parents that their children are receiving quality educational experiences. Facilitating this might include inviting parents to school to see these experiences firsthand and making parents aware of what’s going on at the school.
While there is somewhat of a consumer relationship that exists between parents and personnel in Catholic schools, research suggests that their relationship is not strictly so. Catholic schools place special emphasis on developing a sense of community among school personnel, students, and parents (Bryk, Lee, and Holland 1993). An integral part of this communal orientation is the shared commitment of parents and school personnel to creating community and an academically enriching environment for all students. Researchers assert that this vision of the school as community enables Catholic schools to produce higher levels of achievement and lower dropout rates than those found in public schools (Coleman 1988; Coleman et al. 1982). Thus, a method by which Catholic school personnel succeed as educators is by creating and maintaining relationships with parents. For this reason, they may be highly motivated to offer parents opportunities to be involved at the school and to facilitate the involvement of those parents who may find it harder to become involved.

For all private schools, whether operating strictly according to market principles or with a communal orientation toward education, there are costs to not providing opportunities for involvement. These can include the loss of funding and students that may occur if parents become dissatisfied with their school experiences and decide to educate their children elsewhere. Without parental involvement, school personnel may also fail to develop a community atmosphere, which represents a failure to adhere to the basic mission of some schools. In all cases, school staff must weigh the monetary, time, and energy costs associated with providing opportunities for involvement against the costs associated with not providing these opportunities.
In recent decades, there has been a movement within the public school system to create schools with private-like characteristics in an effort to improving public education. Such schools include magnet and charter schools. Often these schools purport a school-as-community orientation commonly found in Catholic schools. Many also require increased parental involvement for their students to attend (Cookson 1994). As a result of this orientation toward students and their families, these types of public schools also are expected to provide greater opportunities for parental involvement, and to use more methods of facilitation, than are regular public schools. Actual levels of involvement also are expected to be higher for families of students in magnet and charter schools, compared to families of students in regular public schools.

This study utilizes two sets of measures indicating school sector. The first, a global measure of sector, in which a dichotomous distinction is made between public and private schools, is coded 1 if the school is a private school and 0 if the school was public. The second measure is actually a series of variables that distinguish within sector by school type. Specifically, schools in this study were identified as belonging to one of five categories: a regular public school, a magnet school or public school of choice, a Catholic school, a private school with a non-Catholic religious affiliation, or a secular private school. A dummy variable was created for each of these five school types where a “1” indicates that the school was of that particular type and “0” indicates that the school was not of that particular type. Public schools are the reference category in regressions.

Schools in this sample also were identified as being public or private early childhood centers by a dummy variable coded “1” if the school was an early childhood
center and “0” if is was not. These schools educate children in only a limited number of grades, which probably results in their offering fewer opportunities for involvement.

School Location. Schools in various locations serve different populations of students and tend to be found in different communities. These differences are hypothesized to affect the number of opportunities schools offer, the ways in which they facilitate the involvement of language minority families, and the extent to which parents are involved. Urban and suburban schools tend to educate students who live relatively close by, compared to rural schools, which are more likely to draw students from a wider geographic range. Knowing that both students and parents need to travel farther distances to participate in activities at the school, rural schools are probably limited in the amount of activities they do offer, compared to urban and suburban schools. For the same reason, parents who live in rural areas are expected to be less involved than parents in other areas.

The diversity of the areas in which schools are located affects whether they offer assistance to language minority families. In more diverse, urban areas there is likely to be greater understanding of the needs of language minority families, as well as more resources in the community outside the school upon which to draw for support in meeting those needs. For this reason, schools in central cities will provide more methods of facilitation than schools in suburban areas which, in turn, will provide more methods of facilitation than schools in rural areas.

The ECLS-K provides a composite measure of urbanicity, which indicates whether a school was located in one of three areas: a central city; urban fringe or large town; or small town or rural area. Dummy variables are created for each of these
locations and labeled city, suburb, and rural respectively ("1" indicates the school was
located in such an area, and "0" indicates the school was not located in that area).

Size of the School’s Limited English Proficient (LEP) Student Population. The
size of a school’s LEP student population is hypothesized to affect the number of
methods schools use to facilitate the involvement of language minority parents. As the
percentage of the student population that has limited English proficiency increases, the
percentage of parents with limited English proficiency can be assumed to increase as
well. As the proportion of the community the school serves that is limited English
proficient increases, it becomes more costly for school personnel to not address their
language-related needs. When only a few parents in a school have such difficulties, the
overall effect of these parents’ lack of involvement on the school as a whole is probably
minimal. However, when these percentages become more substantial, the effect of
parents’ lack of involvement can become more substantial as well. Schools will lack
needed assistance from parents, both in the school in activities such as volunteering and
fund raising, as well as at home on things such as helping children with homework and
reinforcing the school’s policies about discipline. Lack of involvement of so many
parents would make it more difficult to educate a larger percentage of their student
populations. It therefore benefits school personnel to facilitate the involvement of
language minority parents in the opportunities they do offer parents to be involved.

However, the number of involvement opportunities schools actually offer may be
negatively related to the percentage of LEP students in a school. Because schools find it
more difficult to involve parents with language-related difficulties, and because schools
have to provide language assistance at the activities they do offer, they may be inclined to
provide fewer activities over the course of a year than schools that do not have to accommodate the language-related needs of as many parents.

The percentage of LEP students in a school is expected to have a positive impact on the participation levels of language minority families. When the percentage of LEP students in a school is larger, language minority parents will be more likely to find a community of other parents among whom they feel comfortable and with whom they share similar cultural values and school-related issues. These parents also can provide support and assistance to one another in addition to, or in the absence of, the more formal types of language assistance provided by the school. Therefore, as the percentage of LEP students in a school increases, the costs of involvement for language minority families decrease, resulting in increases in their participation in school activities.

These analyses employ two measures related to the size of a school’s LEP population. The first is a simple dichotomous measure indicating whether schools educated any students with limited English proficiency, as indicated by administrators (coded 1= school educated LEP students, 0= school has no LEP students). These are identified as LEP and non-LEP schools throughout the report.

The second measure indicates administrators’ estimation of the percentage of the school’s student population that was limited English proficient. These percentages, provided as a continuous measure in the ECLS-K, are recoded into a categorical measure in order to minimize any bias in the relationship between percent LEP and the dependent measures that may result from the presence of outliers.\(^{12}\) The categories for the new

\(^{12}\) Although the average percent of LEP students in all schools was 4 percent and 12 percent in schools that educated LEP students, about 1 percent of all school administrators reported that their schools were 90 percent or more LEP; 5 unweighted cases reported that their student populations were 95 percent or more LEP.
categorical measure are as follows: 0 = school does not educate LEP students; 1 = 1 to 5 percent LEP; 2 = 6 to 25 percent LEP; 3 = 26 to 50 percent LEP; 4 = more than 50 percent LEP.

A measure indicating the percentage of parents in the school whose native languages were not English would have been preferable as a predictor of whether schools provided special assistance to language minority families. It is possible for children to speak English well while their parents lack the ability to communicate well in English. However, this research study is limited by the information included in the data set; the ideal measure is not available. Furthermore, the question about the percentage of LEP students in the school served as a filter for administrators to answer questions about the special services that may facilitate the involvement of language minority parents as described above: if the school had no LEP children, administrators were not asked the questions about such services. For more discussion of this issue, see chapter 7.

Despite this limitation, the possibility that some administrators did not answer the questions but their schools did provide special services to language minority parents is reduced because the children in this study were young. Children who speak a language other than English at home often have their first formal contact with English when they arrive at school (Garcia 2000). Therefore, they are likely to be identified as LEP by school personnel in their first years in elementary school. As such, administrators in these schools that educated young children as they began formal schooling probably would have identified their schools as educating LEP students, and therefore answered the questions about special services.
Size of the School’s Minority Student Population. The racial composition of the student body is hypothesized to affect the home-school relationship, because of the relationships teachers and minority parents are able (or unable) to create and maintain with one another. School personnel may also be less inclined to offer opportunities for involvement when they expect or have experienced conflict with parents. This conflict is more likely to be perceived and/or experienced when parental attitudes, beliefs and mannerisms conflict with the school. In other words, when parents lack the cultural capital necessary to interact with school personnel in expected ways. Researchers have shown that school personnel expect students and parents to exhibit middle-class values and behaviors. As a result, the ways in which lower-class, and minority, parents interact with school personnel has been perceived as inappropriate and adversarial by teachers and administrators (Laureau and Horvat 1999). As discussed in chapter 3, there is also a perception that minority parents are less interested in education and less involved than are White parents. The result is that school personnel can disregard such parents in any involvement opportunities, because efforts to involve them may seem futile. It is expected that as the size of the minority population within a school increases, the opportunities school personnel provide for involvement will decrease.

The data set provides a categorical measure of the percent of minority students within each school. It is coded in the following manner: 1= less than 10% minority, 2= 10 to less than 25% minority, 3= 25 to less than 50% minority, 4= 50 to less than 75% minority, 5=75% or more minority.\textsuperscript{13}

\textsuperscript{13} Consideration was given to using a measure of the percent of Latino students in a school. However, this measure was highly correlated with both percent minority students and percent LEP students, but had more missing data that either of these other measures. Therefore, it was dropped from the study.
Characteristics of School Staff. The analyses include a measure of the total number of full-time equivalent school personnel, as indicated by school administrators. This measure indicates the human resources available to provide opportunities for and facilitate involvement. The greater the number of school staff, the greater the opportunities for and facilitation of involvement.\(^\text{14}\)

Conflict between the home and school environments, which is predicted by cultural capital theory, may be reduced when parents, teachers, and students are of the same racial/ethnic background, and therefore have similar cultural backgrounds. It is expected that a relationship between the percentage of minority teachers and opportunities for involvement will exist only in conjunction with the percentage of minority students in a school. That is, there will be a positive effect on opportunities when both the percentages of minority teachers and students are high or, conversely, when they are both low. A similar interaction between child’s race/ethnicity and the percentage of minority teachers is expected. Specifically, parental involvement for minority parents will be higher when their children’s schools have larger percentages of minority teachers.

A measure of the percent of minority teachers within each school is computed from a continuous measure in the data set that indicates the percent of White, non-Latino teachers in a school. This percentage is subtracted from 100 to obtain a measure of percent minority teachers.

\(^{14}\) Total school staff was chosen over the total number of classroom teachers, because the opportunities for involvement included in this study are not just those in which regular classroom teachers participate. Also, administrative staff likely are very active in the facilitation efforts of schools, for example when newsletters are sent home to parents.
**General Parental Power.** General parental power within the school is indicated by two measures representing the influence parents had in different aspects of the school. The first measure indicates whether parents were represented on a school-based management committee. It is coded “1” if yes, and “0” if no. Note that parents’ participation in governance and advocacy is one form of parental involvement identified by Epstein (1992). It is used here as a measure of power, because it is perceived that when parents have the opportunity to influence school policy and practice through participation on such a committee, they have the power to affect the activities of the school, including the provision of other types of opportunities for involvement.

The second measure of parental power indicates *parental influence on the administrator’s job evaluation.* Specifically, administrators were asked how much parent and community support, as well as parent involvement in school activities, influenced his or her job evaluation. It is hypothesized that the more these factors influence the administrator’s evaluation, the more costly it would be to not offer opportunities for parental involvement or take efforts to create positive relationships with parents. Failure to do so could result in the loss of a job. Therefore, it is expected that the greater the influence parents have, the greater the number of opportunities for involvement and the greater the efforts at facilitation. Again, administrators indicated whether parents had 0) no influence, 1) some influence, or 2) major influence. A scale measure was created by summing the responses to these two areas affecting job evaluation, resulting in a measure of influence ranging from 0 to 4. Higher scores reflect greater parental influence on the administrator’s job evaluation.
Institutional Support for Teacher-Parent Contact. The value the institution placed on the parent school relationship is indicated by administrators’ responses to the question of how much emphasis he or she placed on kindergarten teachers communicating well with parents. Available responses included: 1) No or minor emphasis, 2) Moderate emphasis, 3) Major emphasis. For these analyses, categories 1 and 2 were collapsed into one, because only one administrator reported that the school placed no or minor emphasis on communicating well with parents. The resulting measure is dichotomous with “1” indicating that a school placed major emphasis on such communication, and “0” indicating that a school placed less emphasis on communication with parents. Greater emphasis on good communication with parents reflects greater institutional support for the home-school relationship and is expected to be positively related to opportunities for and facilitation of involvement.

Another manner in which administrators can provide institutional support for the home school relationship is by allowing training for teachers that would enable them to create effective home-school relationships. Researchers suggest that such training is essential but lacking in teacher education programs (Moles 1993; Bermúdez 1993; Davies 1993). Teachers do not have the necessary skills to encourage parental involvement, especially with those who are considered hard to contact. Therefore, creating these relationships represents real costs to teachers because they have to undertake the process with little training in how to do so, and they may become frustrated at their inability to connect with some parents. The costs of creating positive home-school relationships are reduced for teachers when they are taught the necessary skills-for doing so, and when they feel there is support from the administration and other teachers.
The measure of teacher training for encouraging involvement used in this study comes from a question that asked administrators to indicate how often their school provided *workshops for teachers* that focus on parental involvement. This measure is coded such that 1 = Never; 2 = Once a year; 3 = 2 to 3 times a year; 4 = 4 to 6 times a year; and 5 = 7 or more times a year. Higher scores reflect greater institutional support for parental involvement and greater training for generating parental involvement.

A third indicator of institutional support for parental involvement is whether *parents are welcome to visit the school*. Administrators were asked how strongly they agreed or disagreed with the following statement “about the school’s climate in the early grades:” parents of the children in the school are welcome to observe classes anytime they are in session. Original response categories were 1- Strongly disagree, 2- Disagree, 3- Neither agree nor disagree, 4- Agree, and 5-Strongly Agree. Only 15 percent of administrators gave responses of 1, 2, or 3. Therefore, a recoded measure is created in which the three lower categories are collapsed into one (coded 0), and categories 4 and 5 are left as single categories (coded 1 and 2, respectively). The recoded variable ranges from 0 to 2, where higher scores indicate parents are more welcome to visit any time classes are in session. This greater sense of being welcome is expected to be positively related to parental involvement at all school functions at the school. Involvement is easier (i.e., less emotionally and psychologically costly) for parents when they know their participation is welcomed rather than unwanted.

**4.4 Child, Family, and Household Predictors of Parental Involvement**

*Linguistic Capital: English Language Use.* Cultural capital theory predicts that language-minority parents will be less involved than parents whose native language is
English, because they lack the cultural capital, and more specifically the linguistic capital, that is both valued in the school environment and that makes it easier to participate in a meaningful way. Without linguistic capital the costs of involvement are greater, because of the language barriers that must be overcome. For these same reasons, among language minority parents, those who know and commonly use English will be more involved than LM parents who either do not speak English at all or use it on a limited basis.

This indicator of the linguistic capital children’s parents possessed was computed using information pertaining to primary home language use. First, parents were identified as being language minorities if they indicated that a non-English language was used in the home. With this information, parents were categorized as being language minority (a non-English language was used in the home) or non-language minority (only English was used in the home). The language minority group was further divided into two categories based on use of English in the household, similar to the categorization scheme used by Rosenthal, Baker, and Ginsberg (1983). Parents who spoke a non-English language in the home but who indicated that English was a primary language used in the home are identified as English-speaking language minorities. Parents who spoke a non-English language in the home and who did not indicate that English was a primary language used in the home are identified as non-English-speaking language minorities.

15 An alternate categorization scheme based on English-language proficiency was considered. Parents who indicated that they read, wrote, spoke, or understood English “not very well” or “not well at all” were categorized as being language minority, non-English proficient. Parents who indicated that they did these things “pretty well” or “very well” were categorized as language minority, English proficient. Ultimately, this scheme was not used for two reasons. The English proficiency of only the interview respondent was assessed, rather than that of both parents. This left an incomplete picture of English use in the household. Secondly, this latter scheme resulted in a group with a smaller sample size, which would have made it more difficult to detect significant relationships, even when they existed.
minorities. Note that the reference to the latter group does not indicate that these parents do not know or speak English at all, but rather that English is not reportedly used as a primary language in the home. Dummy variables represent group membership where “1” indicates that a student has a parent(s) with the specified language background and “0” otherwise. Students with non-language minority parents are the reference group in analyses.

Child’s Citizenship Status. It is important to consider whether language minority parents are immigrants or U.S. natives when investigating their levels of involvement. Immigrant parents may be less likely to be involved at the school than parents who are immigrants because they lack the cultural capital, i.e., the knowledge about the U.S. school system and a cultural pattern in which parents are expected to be involved at the school, that would facilitate their involvement. Unfortunately, the ECLS-K did not ascertain parents’ immigrant status in the kindergarten year. It did ascertain whether the student is a U.S. citizen, which is used here as a proxy for parents’ immigrant status.

However, this is not a perfect indicator. Non-citizen students of such a young age are almost certain to have parents who are non-citizens as well, so students coded “0” on this measure as non-citizens are highly likely to have parents who are immigrants. This is a less reliable indicator of parents’ immigrant status for students who are coded “1” as citizens. It is highly likely that some children were born in the United States and therefore are citizens, but their parents are immigrants. This measure does not accurately capture the immigrant status of parents in such cases. Nevertheless, the relationship between students’ citizenship status and level of parental involvement is investigated keeping this limitation in mind.
**Family Socioeconomic Status.** Research suggests that parents of higher socioeconomic status have the cultural capital that makes it easier for them to be involved at the school (Lareau 1987; Reay 1999). As with linguistic capital, the costs of involvement are reduced when cultural capital is greater, because there is less potential for conflict between the home and school environments. Therefore, cultural capital theory would predict that as socioeconomic status increases, parental involvement at school increases.

The ECLS-K provides a composite, categorical measure of familial socioeconomic status. The components of this measure include mother’s and father’s education level, the average prestige scores of mother’s and father’s occupations, and household income. For children living in single-parent households, socioeconomic status was computed using the measures pertaining to the one parent with whom the children live. This composite is the average of each of the components, which were standardized to have a mean of 0 and a standard deviation of 1. For the categorical measure, scores on a continuous family SES measure were divided into quintiles. As scores increase, family SES increases. The ECLS-K also includes a dichotomous

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16 As discussed in chapter 3, previous studies have found significant relationships between parental involvement and both household income and parental education. Significant positive relationships between involvement and these measures were also found in these data. Specifically, as household income increased, involvement increased (r = .20, p < .001). Similarly, as parents’ highest level of education increased, involvement increased (r = .24, p < .001). To reduce the number of measures included in the HLM analyses, the composite measure of socioeconomic status was used.

17 This score reflects the average of the 1989 General Social Survey prestige score for the occupation (U.S. Department of Education 2001: 7-9).

18 Due to a large percentage of missing data on household income (28.2 percent), the ECLS-K provides a measure of income in which missing values are imputed using hot-deck imputation. In this procedure, a value was donated from one respondent who had income data to another respondent with similar characteristics who did not have income data.
indicator of poverty, which is used here as well. Students are coded “1” if they are poor and “0” if they are not poor.

*Child’s Race/Ethnicity.* As discussed in chapter 3, some studies have shown that minority parents are differentially involved at the school than White, non-Latino parents. Some researchers who have found lower level of involvement suggest this is due to their lack of cultural capital (Lareau 1987). Minority parents may not have the skills or knowledge to interact in a meaningful way with school personnel in an environment that places importance on Anglo, middle-class values, patterns of behavior, and methods of communication (Laureau and Horvat 1999). Here again, the costs of involvement are reduced for White, non-Latino parents, because there is less potential for conflict between their home and school environments.

Research also suggests that the cultural practices of immigrant and some minority parents, Asians and Latinos in particular, lead them to be less involved at the school (Chavkin and Gonzalez 1995; Stewart 1993; Yao 1993). Specifically, these parents have respect for teachers and other school personnel as the individuals who know how to educate children best. Out of deference to school personnel, these parents leave them to do their jobs without interference, which results in their being less present in the school environment. To increase involvement, they would have to overcome psychological costs associated with acting contrary to their cultural beliefs.

For these reasons, minority families are expected to be less involved in school activities than White, non-Latino families. This study uses a measure of child’s race/ethnicity, rather than parents’ race/ethnicity, because the questions about involvement do not pertain to any one parent, but to all household members. In
households in which parents are different races/ethnicities, the child’s reported race/ethnicity probably reflects the combination of races and ethnicities found in the household. The ECLS-K provides a composite measure of race/ethnicity, which was used to create a set of five dummy variables indicating that a child was White, non-Latino; Black, non-Latino; Latino (of any race); Asian/Pacific Islander; or another race.19

*Child’s Status in Kindergarten and Academic/Behavioral Problems.* These analyses investigate the relationship between involvement and two measures related to the child’s status in kindergarten. The first measure indicates whether the *child attends full-day or half-day kindergarten.* It is coded “1” if the child is in a full-day program and coded “0” if the child is in a half-day program. When their children are in school for a greater number of hours, parents have more available time to participate at the school doing things like volunteering in their child’s classroom. Such greater flexibility in when parents can participate will be more important for parents who find their available time constrained by work hours, because there is a better chance of them being able to find a time when they are not working or when it is more convenient to take time off when they can attend.

The second measure is a dummy variable coded “1” if the *child is a first-time kindergartner,* “0” if the child is repeating kindergarten. The relationship between this measure and parental involvement is unclear, as exchange theory can be used to hypothesize both positive and negative effects. On the one hand, being a first-time kindergartner may be positively related to involvement, because parents will benefit from

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19 The “other race” category includes American Indians, Alaska Natives, and bi/multiracial children. While this is a very diverse group in and of itself, small sample sizes precluded the estimation of reliable estimates for these children as separate groups. Because of the diversity that exists within this group, meaningful interpretation of their characteristics cannot really be made. They are included in regression analyses to avoid losing cases, but the findings related to them are not discussed.
being involved at their child’s new school and learning about their child’s educational experiences. This knowledge would be beneficial in helping their children adjust to being in school. Parents of children who are repeaters are already familiar with the school. On the other hand, this familiarity may lead to parents of repeaters being more involved at the school; involvement is easier because they know their way around the school, know teachers, and know other parents. Parents of repeaters also may be more involved because the difficulties that lead to their children being retained must be addressed by the school. In doing so, more frequent interaction between parents and teachers occurs.

Indeed, research has shown a significant relationship between students’ having problems at school and parental involvement (Ho and Willms 1996). Therefore, the analyses of involvement presented here employ two measures indicating student problems. The first is a dichotomous measure coded “1” if the student was reported to be in a special program for students with emotional or behavioral problems (coded “0” otherwise), as reported by the teacher. The second also is a dichotomous measure, again teacher reported, indicating whether the teacher had communicated with a student’s parents, outside of a regular teacher conference, to discuss problems the student was having. This measure is coded “1” if the teacher reported contacting a parent to discuss problems only or to discuss both problems and how well the child was doing. The measure is coded “0” if a student’s teacher contacted a student’s parent only to discuss how well the child was doing or if the teacher did not contact the parent(s) at all.
Child’s Disability. When a child has a disability, there likely is a high level of communication between parents and the school regarding the best way to educate the child and about how the child is doing. A composite measure indicating whether the child has a parent-reported disability is available in the ECLS-K (recoded so that 1=child has a parent-reported disability, 0=child does not have a parent-reported disability). This measure is used in analyses with the expectation that students with disabilities will have parents who are more involved than students who do not have disabilities.

Parental Employment. These analyses utilize two sets of measures, one indicating mother’s employment status and the other indicating father’s employment status. They are both coded in the same manner. Each set of measures is a series of dummy variables for which a child was coded “1” if his or her parent had that particular employment status, “0” otherwise. Specifically, these dummy variables are mother/father works full-time (35 hours or more per week), mother/father works part-time (less than 35 hours per week), mother/father is looking for work, and mother/father is not in the labor force. Additionally, two dummy variables are included to account for those cases in which a mother or father was not present. The first variable is coded “1” if there was no mother in the household, and “0” if the child did live with his or her mother. The second variable is coded “1” if there was no father in the household, and “0” if the child did live with his or her father. Mother works full time and father works full time are the reference categories in multivariate analyses. It is expected that as work hours increase, so too do the costs of involvement, in terms of forgone income, leave, and the limited free time a working parent has. This increase in costs leads to a decrease in the actual level of parental involvement.
Family Composition. Family structure is indicated by a series of dummy variables indicating with whom a child lived. The first variable, single-parent family, is coded “1” if a child lived in a single-parent household in the fall of kindergarten, where the single-parent was a biological, adoptive, step, or foster parent. The second dummy variable, guardian-only household, is coded “1” if a child lived with at least one non-parent guardian in the fall of kindergarten. A third dummy variable, two-parent family, was coded “1” if a child lived in a household with two biological, adoptive, step, or foster parents in the fall of kindergarten. Two-parent families constitute the reference category in regression analyses.

In this study, married and cohabiting parents are not distinguished from one another, because neither experience the costs associated with time, income, or energy to as large a degree as single parents, as discussed in chapter 4. When two adults are present, regardless of their marital status, they hypothetically have someone else they can rely upon to provide the child care needed when a parent attends functions at the school. Also, any income that may have been forgone when one parent attended a school activity is not as large a cost when someone else in the family provides income as well, compared to single-parent families. In the case of the latter group, forgone income results in no income to support the family.

As noted above, family structure is identified as the household structure in the first wave of the survey, the fall of kindergarten. Any disruption that occurs during the year, either through the addition or loss of a parent, may constrain a parent’s ability or willingness to attend school functions, because dealing with important family issues take precedence. A dichotomous measure indicating familial disruption occurred during the
year, either through the addition or loss of parent is included in analyses (coded 1=disruption occurred, 0=no disruption occurred).\textsuperscript{20}

The number of siblings a student has is included as the actual number of children indicated by the parent participating in the ECLS-K interview.\textsuperscript{21} The relationship between number of children and parental involvement is unclear. It may be negative, in that parents who have many children may find that they can only participate in a limited number of functions related to any one child. On the other hand, the more children a family has, the more likely parents may be to feel comfortable attending functions at the school, because they may have done so for many children. This latter possibility will likely be the case only when families have children who are older than the kindergartner around whom the ECLS-K is centered. For this reason, these analyses also include another dummy variable indicating whether the child of concern in the study has an older sibling (1= older sibling, 0 = no older sibling). It is expected that parents of kindergartners who have older siblings will be more likely to attend school functions, because they already have experience interacting with the school system. Such experience lessens the costs associated with learning about how the school system works or feeling uncomfortable visiting and navigating in an unfamiliar school.

\textsuperscript{20} Initially, the analyses considered the relationships of involvement to separate measures for addition of a parent and loss of a parent. Both relationships were negative. Families of students in homes where a parent was added to the household between the fall and spring were less involved than families of students in homes where a parent was not added to the household between the fall and spring ($t=-3.17$, $p < .001$). Similarly, families of students in homes where a parent left the household between the fall and spring were less involved than families of students in homes where a parent did not leave between the fall and spring ($t=-6.23$, $p < .001$). Therefore, one composite measure indicating either type of family disruption was created and used.

\textsuperscript{21} This measure is topcoded at 5 siblings. Approximately 1 percent of the sample of students had more than 5 siblings.
Lastly, the analyses investigate the relationship between involvement and a
dichotomous measure of whether kindergartners have any *siblings in the same school*. It
may be more beneficial for parents to attend any given general school function when they
have more than one child in the same school, because such attendance increases their
knowledge of the educational environment and experiences of all their children. This
measure also acts somewhat as a control, because parents may report greater involvement
at school functions, such as parent-teacher conferences, that are not strictly related to the
kindergartner who is the focus of the study.

Lastly, the analyses investigate the relationship between involvement and three
measures indicating the presence of other adults who could either provide child care
while parents attend school functions or could attend the school functions themselves.
The first measure is a dummy variable indicating the *presence of family members age 18
or older* (other than parents) who lived in the child’s house for the entire kindergarten
year. These family members could be older siblings of the focal child, grandparents,
aunts, uncles, or cousins. The second measure is a dummy variable coded “1” if the
child’s parent indicated that the *child’s grandparent lived close by*, “0” otherwise.

Family members who live in the child’s house or close by could provide child
care, thereby enabling parents to attend functions at the school, or could attend the school
functions themselves, in place of the parents. Therefore, the level of involvement as
measured here is expected to be higher when an adult age 18 or older lives in the
household or when the sampled child has a grandparent who lives nearby. There is an
exception to this general hypothesis, however. On older grandparent living in the
household may be less likely to provide care or attend school functions than other
members of the household age 18 or over. The third measure included in analyses is a dummy variable coded “1” if a grandparent over the age of 65 lived in the household throughout the kindergarten year.

Importance of Education. Parents’ values and beliefs about education may also affect their levels of involvement. Parents who place more importance on the value of education may be more involved in the school as a way to monitor their children’s school experiences to assure that they are of the highest quality possible. When parents place a high value on education, factors such as time constraints may have less impact on their level of involvement, because they make be likely to put forth the effort to overcome those constraints in order to be involved. In contrast, when parents do not place as much value on education, it may be costly for them to be involved at the school; doing so would require them to go against their own feelings with respect to education. Also, they may be less inclined to try and overcome other constraints to be involved at the school.

These analyses include a measure of parental expectations for their children’s education, which others have used as an indicator of the value that parents place on education (Kerbow and Bernhardt 1993). With low expectations about how far their children will go in school, there may be less incentive for parents to monitor their children’s educational experiences, which may lead to lower levels of involvement. Also, parents who have low expectations for their children may have had negative experiences of their own in school. Research suggests that parents who have had negative experiences themselves are less likely to be involved (Eccles and Harold 1993; Reay 1999).
When asked about their educational expectations for their children, parents were able to indicate that they 1- did not expect their children to get a high school diploma, 2- expected their children to graduate from high school, 3- expected their children to attend two or more years of college, 4- expected their children to finish a 4- or 5-year college degree, 5- expected their children to earn a master’s degree or equivalent, or 6- expected their children to earn a Ph.D., M.D, or other higher degree.

Another indicator of the value parents’ place on education is the degree to which parents are involved in educational activities with their children at home. Parents who are more involved at home may place greater value on the educational process in general and also may see such involvement as a way to improve their children’s academic achievement. Also, it is important to include a measure of involvement at home as a control in analyses investigating school effects, because parents who are more involved at home may be more likely to be involved at school, regardless of schools’ efforts or characteristics related to involvement. This study operationalizes parental involvement at home as the frequency with which a family member reads to the child. Responses are coded 0- Not at all, 1- Once or twice a week, 2- 3 to 6 times a week, and 3- Everyday. Higher scores on this measure indicate that parents read to their children more often.

Social Capital. Research has shown that parents with more social capital tend to be more involved in and knowledgeable about their children’s education (Coleman, others). Just as greater cultural capital facilitates involvement, so too does greater social capital. Social capital is operationalized here as the number of parents of students in their children’s class that parents talked with regularly, either in person or on the phone.
Perceived Barriers to Involvement. In the spring, parents were asked whether various factors had made it hard for them to participate in activities at the school. Responses of particular interest in this study include the following: “the school does not make me feel welcome,” “problems because you or members of your family speak a language other than English and meetings are conducted only in English,” and “You don’t hear about things going on at school that you might want to be involved in.” Affirmative answers to these questions are indicative of problems in school/home communication.

These measures provide interesting insight into parents’ perceptions of barriers to involvement, after the opportunities for involvement have come and gone. As such, they are not used to predict levels of involvement. However, responses from parents of different groups are compared to one another, to see if there are any systematic differences between parents based on some of the characteristics investigated in this study. These comparisons focus on any differences between parents based on language background and English proficiency. It is expected that language minority-parents are more likely to report experiencing these barriers to involvement than parents whose native language is English.

4.5 Other Measures

This study includes two measures that research suggests are related to parental involvement but that are not conceptualized as either a constraint or facilitator. The first is child’s sex. Some research has shown that parental involvement in different educational activities and in different contexts varies by child’s sex (Ho and Willms
Child sex is included as a dummy variable where “1” indicates the child is a girl, and “0” indicates the child is a boy.

The second measure pertains to the school and is the geographic location in which the school is located. Research has documented different levels of parental involvement for schools located in different geographic locations (Carey and Farris 1996). Geographic location is entered as a series of mutually exclusive dummy variables representing the regions Northeast, South, Midwest, and West. All variables are coded “1” if a school is located in that region, “0” otherwise. Schools in the Northeast are the reference category in analyses of actual level of parental involvement.

4.6 Sample Selection and Methods of Analysis

A variety of samples and methodologies are appropriate for the analyses needed to fulfill this study’s intended objectives. The sample used to describe the opportunities for parental participation in school activities on a national level and to determine the factors related to both the opportunities schools offer and the facilitation of language minority parents’ involvement consists of the 866 schools for whom school administrator data were available. The sample used to determine the predictors of parental involvement is restricted to kindergartners who attended the same school for the entire academic year and for whom parent data, and parents’ language background specifically, were available. It includes 16,988 children and their parents.

Univariate and bivariate statistics are used to describe the opportunities schools offered parents to become involved at the school, the types of opportunities available to parents of language minority students and the ways in which schools facilitated their involvement, and actual level of parental involvement in school activities. A focus is
placed on comparisons between LEP and non-LEP schools at the school level, and
between children with language minority parents and children whose parents are not
language minorities at the child level. Comparisons are made using the Student’s t
statistic. Only differences that are significant at the .05 level of significance are
discussed.

As can be seen in the hypothetical model, this study includes three distinct, but
interrelated, sets of analyses. Each set of analyses employs a subset of the measures
described above. The first two sets are at the school-level; as a result, they do not include
any individual child, family, or household characteristics. The third set of analyses uses
data at both the schools and child levels.

It should be pointed out that, in the third set, the child is the unit of analysis. All
estimates should be referenced to the child. The text often discusses the involvement of
language-minority parents for ease of presentation, but the data are truly describing the
parental involvement of children whose parents are language minorities. It is a subtle but
important distinction, because the data are nationally representative of children’s
experiences. They are NOT nationally representative of parents who had children in
kindergarten in the 1998-99 academic year.

In the first set of analyses, opportunities for involvement offered by the school are
examined. Particular attention is paid to differences between LEP and non-LEP schools
both within and across sector. Characteristics of the school and its personnel are
hypothesized to affect opportunity for involvement. The dependent variable in the
multivariate analysis is the composite measure of the number of involvement
opportunities described above. Because this variable is continuous, Ordinary Least
Squares (OLS) regression is used to determine which school-level factors are related to the number of opportunities schools provide.

In the second set of analyses, facilitation of the involvement of language minority children’s parents is examined. These analyses are conducted using only the population of LEP schools. Characteristics of the school and personnel are hypothesized to affect facilitation. As with opportunities for involvement, OLS regression is used to determine which school-level factors are related to facilitation, because the dependent variable in these multivariate analyses is the composite measure indicating the number of ways in which schools facilitate the involvement of their students’ language minority parents.

The last set of analyses conducted for this study examines the level of family participation in school activities and functions, with a specific focus on the involvement of parents who are language minorities. For these analyses, the familial involvement levels of the two groups of students with language minority parents (those with parents who use English as a primary language in their home those with parents who do not) are examined and compared, both to one another and to students whose parents do not come from language minority backgrounds.

These analyses use both student-level and school-level characteristics to predict family involvement at school. A primary hypothesis of this study is that when schools’ policies and practices work to reduce the costs of involvement for parents, parents will be more involved. More specifically, when schools facilitate the involvement of language minority parents, LM parents will be more involved. In other words, school characteristics affect the relationships between student-level characteristics and family involvement.
This third set of analyses parallels those presented in Kerbow and Bernhardt (1993). In that study, researchers also examined how characteristics at multiple levels affected parental involvement. Specifically, they focused on whether, and how, the percentage of minority students in a school affected the involvement levels of minority parents. They first analyzed the effects of child, family, and household characteristics on parental involvement using ordinary least squares (OLS) regression. They then proceeded with hierarchical linear modeling (HLM) to assess the effects of school-level variables on parental involvement. They also used HLM to determine whether the effects of individual-level characteristics held within schools or were instead an artifact of the schools that students of particular backgrounds were likely to attend.

The multivariate analyses in chapter 7 begin with an extensive set of OLS regressions that assess the effects of student-level variables on familial involvement. The level-1 models developed here are complex and include many variables. A simplified model with the most relevant and influential student-level variables is developed from these analyses to be used in HLM. HLM models are then employed to assess the effects of school-level measures, adjusted for student-level characteristics, on involvement. Here again, focus is given to whether and how the hypothesized school-level variables affect the involvement of families of students with language minority parents.

HLM is an analytical method used when data are hierarchically-ordered; that is, when data are nested within groups. This method is particularly applicable to educational research, because the subjects of such research are naturally clustered: students are nested within classrooms, which are nested within schools. When data are

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22 The full description of hierarchical linear modeling presented in Bryk and Raudenbush (1992) informs the discussion of HLM presented here.
clustered, elements within a cluster share characteristics that may differ systematically from elements in another cluster. This between cluster variance is not accounted for in regular OLS regression, because it analyzes all individuals as one group. Also, OLS regression assumes that error terms are randomly distributed; this assumption is violated with hierarchically ordered, or nested, data.

In contrast, HLM analyses accounts for between-group variance using maximum likelihood estimation techniques to estimate a series of equations that partition within-group and between-group effects. In doing so, HLM provides better estimates of individual-, group-, and cross-level effects. Also, by partitioning the error variance into between-school and within-school components, HLM produces more accurate standard errors than OLS regression, thereby making hypothesis tests more accurate as well (Kerbow and Bernhardt 1993).²³

In this study, many school level measures are controlled for. Including them in an OLS regression would allow for a contextual analysis of the data, allowing for an examination of how individual-level effects are affected by these specific school measures. However, it is unlikely that the model would include all school-level characteristics that are related to both the student characteristics and familial involvement. Without accounting for these measures, OLS estimates of individual level effects might be biased, because they would not partition out the effects of these unmeasured school level characteristics (Kerbow and Bernhardt 1993). HLM partials out

²³ Note that in this study, the standard errors in OLS regressions are adjusted to account for the clustering of the data, but these adjustments are made based on clustering associated with sample selection, specifically clustering in the chosen strata and primary sampling units, rather than clustering within organizational units (i.e., schools). HLM does not adjust for clustering related to this study’s sample design.
the variance associated with any unmeasured school characteristics to produce unbiased estimates of individual-level effects.

This study focuses on characteristics at two levels: the student and the school. Therefore, it employs 2-level intercept- and-slopes-as-outcomes HLM models. In two-level models, HLM estimates both an individual level and a school-level model simultaneously. The individual-level (level-1) model predicts familial involvement within each school. These level-1 effects (beta coefficients) become outcomes in the school-level model.

The school-level model (level-2) predicts a schools’ mean involvement, adjusted for the level-1 characteristics. Specific level-2 characteristics are used to predict average involvement in each school. They can also be used to predict the effects of level-1 characteristics on the outcome (called cross-level effects). Cross-level effects are modeled when there is a hypothesis that the effect of a given level-1 characteristic on the outcome differs from group to group, or in this case from school to school. Some of the hypotheses set forth in this study say just this; specifically, that the effect of parents’ language status on involvement will vary from school to school depending on the methods schools use to facilitate their involvement, as well as the composition of the schools’ student and staff populations. Therefore, the HLM analyses presented in chapter 7 incorporate modeling of cross-level effects. Additionally, all level-1 variables are centered about the group-mean, as Bryk and Raudenbush (1992) indicate they should be when estimating person-level effects (p.121). The level 2 measures are entered as uncentered.
The level 1 and level 2 equations estimated in HLM take the following general forms:

**Individual level:**

\[ Y_{ij} = B_{0j} + B_{1j} (X_{1ij}) + B_{2j} (X_{2ij}) + \ldots \cdot r_{ij} \]

**School level:**

\[ B_{0j} = y_{00} + y_{01j} (W_{1j}) + y_{02j} (W_{2j}) + \ldots \cdot u_{0j} \]

\[ B_{nj} = y_{10} + y_{11j} (W_{1j}) + y_{12j} (W_{2j}) + \ldots \cdot u_{ij} \]

In the individual-level equation, \( Y_{ij} \) is the outcome (here, familial involvement) for a given student \( i \) in school \( j \). \( B_{0j} \) is the intercept (mean) of familial involvement for students in a single school \( j \), \( B_{nj} \) is the beta coefficient (slope) and \( X_{nj} \) is the independent variable for student \( i \) in school \( j \), and \( r_{ij} \) is an error term assumed to be normally distributed with homogenous variance across schools.

The first equation in the school-level model predicts the intercept of the level-1 model \( (B_{0j}) \). In this equation, \( y_{00} \) is the school-level mean of family involvement; \( W_{nj} \) is the independent variable (level-2 predictor) for school \( j \), \( y_{01j} \) is the mean involvement difference between schools with differing values of \( W_{nj} \) (i.e., the beta coefficient for level-2 predictor \( W_{nj} \)), and \( u_{0j} \) is the unique effect of school \( j \) on the outcome (i.e., a random effect), holding \( W_{nj} \) constant. In estimating this equation, HLM assesses the direct effects of school characteristics on the mean level of involvement within each school.

The level-2 model also estimates equations that predict the beta coefficients of all level-1 predictors. This general form of this equation is the second one listed above. \( y_{10} \) is the average slope for level-1 predictor \( X_n \) in all schools, \( y_{11j} \) is the mean difference in the slope for level-1 predictor \( X_n \) with differing values of \( W_{nj} \), and \( u_{ij} \) is the unique effect of school \( j \) on the slope for level-1 predictor \( X \) holding \( W_{nj} \) constant. It is through estimation of these equations that HLM is able to disentangle the group effect from the
individual effect and produce more accurate level-1 estimates. Chapter 7 identifies the specific measures used in the models estimated in this study.

The OLS regression analyses of level-1 characteristics are limited only to students for whom parent data are available in both the fall and spring of kindergarten. Use of the child-level weight discussed in section 4.9 allows for the generalization to the general population of kindergartners when students without parent data are excluded. In order to assess the effects of school characteristics on involvement as adequately as possible, including the involvement opportunities offered and the methods used to facilitate the involvement of all parents, analyses in chapter 7 also are limited only to students who were in the same school for the entire academic year. School effects on involvement would be diluted and possibly misleading for students who had only attended their schools for a short amount of time, as would be the case for students who changed schools during the course of the academic year.

The HLM analyses are further limited only to students for whom administrator data are available. There is no weight available in the ECLS-K that accounts for administrator non-response. Exactly 2081 students who were in the same school all year and had parent data (about 13 percent of this group of students) did not have information from administrators in their schools, i.e., no administrator completed a questionnaire. Imputation of missing data for these students was not desirable, because the entire set of school characteristics examined in this study would have been imputed for them. A bias analysis was conducted to determine whether 1) students with administrator data differed substantially from students without administrator data, and 2) whether the loss of students without administrator data significantly affected the relationships between the student-
level variables and level of family involvement. The results of these analyses are presented in Appendix A. They generally show that students with administrator data are more advantaged than students without administrator data with respect to characteristics such as socioeconomic status and family structure. However, the pattern of relationships between the individual-level characteristics and involvement are generally the same when the analyses omit students with non-responding administrators. The effects of some measures do appear to weaken (see appendix A for more details).

A final restriction was placed on the sample, because HLM requires that a sufficient number of cases be available within each school to accurately and reliably estimate the level-2 parameters. Specifically, the sample was limited only to students attending schools that had at least five students represented in the data set.24 The schools remaining in the analyses varied in sample size from 5 to 26 students.

4.7 Causality

Statements about causality are best made when data are longitudinal and a clear order among the variables can be established. As indicated above, most of the data are collected at the same time point, in the spring of kindergarten. Although this results in what is essentially a cross-sectional analysis, statements about causality are not necessarily inappropriate.

Some measures are logical antecedents to the dependent measures, and are therefore discussed as being predictors of the outcome measures. In particular, these antecedents include school’s composition and organizational characteristics. For example, if a significant relationship is found between school size and the number of

24 This resulted in the elimination of 60 students in 22 schools.
opportunities, school size will be discussed as having an effect on opportunities. To assert that the reverse relationship could exist, i.e., that the number of opportunities determines school size, is not logical.

For analyses of actual involvement, data are reported by different sources, so there is less likelihood that any observed relationships result from the propensity of individuals to answer all questions in certain way. For example, because school characteristics are reported by administrators, we can have more confidence that associations between school characteristics and parent-reported involvement are causal; that is, that the characteristics of the school, opportunities in particular, affect involvement. If opportunities and actual involvement were both parent-reported, it might be the case that parents perceived there were more opportunities precisely because they were more involved, and not because schools really offered a greater number of opportunities.

For other measures, whether their relationships to the outcome measures are causal is less clear. While theory leads to hypotheses that they are predictors, less definitive statements can be made about causality, because information about them is collected at the same time as the data on opportunities. For example, parental presence on a school-based management committee, conceptualized as a measure of parental power, is believed to be positively related to opportunities; this study hypothesizes that as parental power increases, parents will have more influence on the relationships schools have with them. However, it may be the case that a positive relationship exists between these measures because activities for parents and school-based management committees with parental representation are both likely to exist in schools with a general pattern of
involving parents. Care is taken to note these instances in which relationships may reflect only association and not prediction.

4.8 Treatment of Missing Data

Values are not imputed for cases missing data on any of the items in analyses conducted only at the school level. Most items in the ECLS-K have low levels of nonresponse, so any bias associated with loss of cases due to item nonresponse is probably minimal. Measures that were initially of interest but that had large amounts of missing data were replaced by other variables that were conceptually similar and had less missing data. Researchers at the National Center for Education Statistics, which produces the data, handle missing data in the ECLS-K in this way. They have conducted nonresponse bias analyses, which generally indicate that there is no substantial bias due to school nonresponse (Rathbun, West, and Germino Hausken 2004; U.S. Department of Education 2001).

That said, data were imputed for one measure that was of particular interest in the analyses, specifically the percentage of limited English proficient (LEP) children in the school. About 9 percent of LEP schools (unweighted n=37) had data missing for this measure. Values for the percentage of minority students in the school, which was highly correlated with percent LEP (r= .51, p < .001) for LEP schools, were used to impute values for the categorical measure of percent LEP. First, a crosstabulation between these two measures was run using LEP schools that had data for both of them. It was noted for which category of percent minority the largest percentage of cases in each category of percent LEP fell. Then, the values of percent minority for schools that were missing percent LEP were noted. A value was imputed for percent LEP that corresponded to the
LEP category that contained the largest number of cases associated with a school’s value for percent minority. For example, in the sample of LEP schools, most schools with less than 10 percent minority students had a value of “1- less than 5 percent” on the percent LEP measure. This value (1-less than 5 percent) was imputed for schools that were missing percent LEP but that administrators identified as being less than 10 percent minority.

Data with missing values at the school level is more problematic in analyses at the child level, because HLM can not estimate models with missing data in the level-2 variables. When no imputation at the second level occurs, all individual cases contained within a level-2 group that has missing data are excluded from analyses. In this study, all children in schools with any item-level nonresponse would have been dropped. To prevent such a loss of cases from occurring, values based on subgroup means are imputed for missing cases in the level-2 measures included in the third model predicting level of family involvement. In general, the amount of missing data for any one measure is small. Some measures, such as school size, have no missing data at all.

The characteristics used to generate subgroup means are school size, school sector, and school location. In most cases, the imputed means are those obtained when one of these school characteristics is crossed by the other. For example, a public school in a central city missing data for percent minority students is assigned the weighted mean of this measure for all public schools in central cities that have data on this measure. For more detailed information on which measures have missing data imputed, how much missing data each measure has, and what values are imputed, see Appendix B.

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25 As a reminder, data were not imputed for students with administrator unit-nonresponse, that is cases in which the administrator did not participate in the study by completing a questionnaire. As described above, these students are dropped from the HLM analyses.
4.9 Weighting and Adjusting Standard Errors to Account for a Complex Sampling Design

The Early Childhood Longitudinal Study has a complex dual-frame, multistage sampling design in which students were sampled from public and private schools, which were sampled from primary sampling units (counties and county groups) (West, Denton, and Germino Hausken 2000). In addition, private schools, children who attended private schools, and Asian/Pacific Islander children were all oversampled. This multistage design combined with oversampling results in each school, teacher, and child having a different probability of being included in the survey sample. These differences in probabilities must be taken into account in statistical analyses in order to produce the most accurate and nationally representative results possible.

The ECLS-K data set includes an extensive set of weights to be used in all analyses in order to adjust for the differences in probability of selection, as well as for unit nonresponse. Weighting the data also allows for the generation of national estimates. In the ECLS-K, the particular weight that should be chosen for analyses depends on the time points from which the analyst is using data, as well as on the type of questionnaire or assessment from which data are taken. When using weights, cases for which a particular instrument or set of instruments are missing, due to the failure of one or more selected respondents to participate in the study at a given time, have a weight of 0 and drop out of analyses. The remaining cases are weighted to the populations of

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26 Unit nonresponse results when a sampled respondent does not participate in an interview or complete a questionnaire. In the ECLS-K, unit non-response can be associated with a parent, teacher, or administrator. Some students lack all parent, teacher, and/or administrator data from a given wave. This is different from item non-response, which occurs when a parent, teacher, or administrator completes an interview or questionnaire but fails to answer a question for any reason during the survey administration.
interest, meaning that estimates generated from these cases accurately reflect the characteristics of the entire populations of interest.

In this study, data are taken from the parent interview in both the fall and spring of kindergarten, as well as from the spring school administrator questionnaire. When doing analyses at the school-level, only one weight is available for use. This weight, S2SAQW0, is applied during the first and second sets of analyses described above. The third set of analyses at the child level uses the weight BYCPTW0. Students who did not participate in both kindergarten waves of the survey or whose parents were not interviewed are assigned a weight of 0 using this particular weighting variable, and are therefore excluded from the analyses. When applying this weight, the data for the remaining children reflect population totals and therefore population characteristics.

In addition to applying a weight to adjust for differential probabilities of selection and unit nonresponse, the standard errors produced for estimates and used in statistical tests need to be adjusted. This is because the calculation of standard errors is affected by the sampling design, and the ECLS-K uses a complex sampling design. As a result, “the standard errors are larger than would be expected if the sample was a simple random sample and the observations were independent and identically distributed random variables (West, Denton, and Germino Hausken 2000: 71).” Many statistical software packages calculate standard errors assuming that the sample is a simple random sample; that is, they do not take into account the differences in probability of selection and clustering of the data. This can result in inaccurate estimates of standard errors and identification of statistically significant differences when there are none. In order to account for design effects by adjusting standard errors, this dissertation utilizes the Stata
software package. Specifically, the use of survey commands results in Stata employing Taylor series estimation to adjust standard errors and produce more accurate tests of significance. It does this by accounting for the sampling stratum and the primary sampling unit from which each case was drawn. Variables for stratum and psu are provided in the ECLS-K data set and are explicitly specified for use by Stata.

4.10 Additional Methodological and Analytical Considerations Related to Using Data with a Complex Sample Design

There are some other methodological and analytic issues that arise from the need to adjust standard errors and should be noted. First, the significance levels from normal correlation analyses produced in Stata are not accurate. Bivariate Pearson correlations are obtained by running a correlate command with the proper weight specified, then using bivariate regression to obtain significance levels. Upon the recommendation of statisticians employed by Stata, p-values for the correlation coefficients are obtained in the following manner: for each correlation, the dependent variable is first regressed on the independent variable, and the p-value for the regression coefficient is noted. Then, the independent variable is regressed on the dependent variable, again noting the p-value. The larger p-value is used as a conservative estimate of the p-value of the correlation coefficient.27

Secondly, missing data sometimes leads to a situation in which a stratum that contains only one PSU exists in the analytic sample. Specifically, as more variables are added to a model, the amount of missing data increases, thereby increasing the likelihood

27 See [www.stata.com/support/faqs/stat/survey.html](http://www.stata.com/support/faqs/stat/survey.html) for more detailed information.
of this situation occurring. Because Stata uses the variation in the strata and psus to adjust standard errors, it is unable to estimate the model when this occurs.

To fix this problem, it is necessary to combine the errant stratum with an adjacent stratum. This results in the restratification of a limited number of schools, which are combined with schools in an adjacent stratum. For the first two sets of analyses, it was necessary to compute a new strata variable that reflected these reassignments. The reassignment of strata has no effect on the beta coefficients but does have minimal effects on the standard errors. Therefore, although this problem only occurs in the models that contain larger numbers of variables, all models within a set are run with the new strata measure specified. This assures that any changes in the significance of the measures’ effects are due to changes in the model specifications, rather than to differences associated with restratification.

In the ECLS-K sampling design, public and private schools constitute distinct sampling strata (U.S. Department of Education 2001). Therefore, it is assured that the stratum into which schools are reassigned also contain schools in the same sector.
CHAPTER 5

OPPORTUNITIES FOR INVOLVEMENT AT SCHOOL

This chapter presents results from the school-level analyses of the opportunities schools provided parents to be involved at the school. Before this discussion, a description of the schools to which these school-level analyses pertain is given. The total population of schools is described first, followed by a look at two main groups of schools: those that educated students with limited English proficiency (LEP), and those that did not, as indicated by an administrator. For ease of presentation, these schools are referred to as LEP schools and non-LEP schools, respectively. These descriptions provide background information about the types of schools that serve language minority families. Comparisons are made to determine whether schools tasked with the challenge of meeting the needs of LEP students differed from non-LEP schools on the characteristics related to the opportunities schools offered for involvement, as well as to facilitation, which is discussed in the next chapter.

5.1 Descriptive Statistics of Schools

5.1.1 Basic Descriptives of the Full Sample

Table 5.1 provides basic descriptive statistics for the population of schools educating kindergartners in the 1998-99 school year. Public schools composed 65 percent of the weighted sample (about 47,000 schools). Approximately 16 percent of
TABLE 5.1

DESCRIPTIVE STATISTICS

FOR SCHOOLS EDUCATING KINDERGARTNERS, TOTAL POPULATION AND BY PRESENCE OF LEP STUDENTS

IN THE UNITED STATES:

1998-1999

<table>
<thead>
<tr>
<th></th>
<th>All Schools</th>
<th>LEP Schools</th>
<th>Non-LEP Schools</th>
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<tr>
<td></td>
<td>Range</td>
<td>Mean</td>
<td>s.e.</td>
</tr>
<tr>
<td>School size</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td></td>
<td>2.60</td>
<td>.048</td>
</tr>
<tr>
<td>School type</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td>.65</td>
<td>.018</td>
</tr>
<tr>
<td>Public, school of choice or magnet school (^1)</td>
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<td>.16</td>
<td>.020</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td>.35</td>
<td>.018</td>
</tr>
<tr>
<td>Catholic (^2)</td>
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<td>.029</td>
</tr>
<tr>
<td>Religious (^2)</td>
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<td>.043</td>
</tr>
<tr>
<td>Secular (^2)</td>
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<td>.038</td>
</tr>
<tr>
<td>Early childhood center</td>
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<td>.016</td>
</tr>
<tr>
<td>School location</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
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</tr>
<tr>
<td>Suburban</td>
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<td>.37</td>
<td>.027</td>
</tr>
<tr>
<td>Rural</td>
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<td>.26</td>
<td>.025</td>
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</table>
TABLE 5.1 (contd.).

<table>
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<th>Student and staff population</th>
<th>All Schools</th>
<th>LEP Schools</th>
<th>Non-LEP Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent minority students</td>
<td>1-5</td>
<td>2.41</td>
<td>.072</td>
</tr>
<tr>
<td>School educates LEP students</td>
<td>0-1</td>
<td>.39</td>
<td>.020</td>
</tr>
<tr>
<td>Percent LEP students (continuous)</td>
<td>0-99</td>
<td>4.39</td>
<td>.645</td>
</tr>
<tr>
<td>Percent LEP students (categorical)</td>
<td>0-4</td>
<td>.62</td>
<td>.041</td>
</tr>
<tr>
<td>Number of full-time-equivalent school personnel</td>
<td>5-100</td>
<td>35.53</td>
<td>1.018</td>
</tr>
<tr>
<td>Percent minority teachers</td>
<td>0-100</td>
<td>13.30</td>
<td>1.118</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>School resources</th>
<th>All Schools</th>
<th>LEP Schools</th>
<th>Non-LEP Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 50 percent low income students</td>
<td>0-1</td>
<td>.32</td>
<td>.019</td>
</tr>
<tr>
<td>Number of sources of additional funding</td>
<td>0-11</td>
<td>3.37</td>
<td>.093</td>
</tr>
<tr>
<td>School experienced loss of resources</td>
<td>0-1</td>
<td>.21</td>
<td>.018</td>
</tr>
<tr>
<td>School received bilingual and/or migrant aid</td>
<td>0-1</td>
<td>.19</td>
<td>.021</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parental power</th>
<th>All Schools</th>
<th>LEP Schools</th>
<th>Non-LEP Schools</th>
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</thead>
<tbody>
<tr>
<td>Parent influence on job evaluation</td>
<td>0-4</td>
<td>2.48</td>
<td>.046</td>
</tr>
<tr>
<td>Parent presence on school-based management committee</td>
<td>0-1</td>
<td>.48</td>
<td>.021</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional support for parental involvement</th>
<th>All Schools</th>
<th>LEP Schools</th>
<th>Non-LEP Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major emphasis on good communication with parents</td>
<td>0-1</td>
<td>.88</td>
<td>.013</td>
</tr>
<tr>
<td>Frequency school offers teacher workshops</td>
<td>1-5</td>
<td>2.13</td>
<td>.042</td>
</tr>
</tbody>
</table>

NOTE: Detail may not sum to total due to rounding.
1 Estimate indicates proportion of public schools that are of this type.
2 Estimate indicates proportion of private schools that are of this type.
these public schools were schools of choice or magnet schools. Of the roughly 25,000 private schools, about 41 percent were non-Catholic religious schools, 27 percent were Catholic, and 32 percent were secular schools.\textsuperscript{28} About 13 percent of the population was comprised of early childhood centers. Schools in central cities and suburban areas each accounted for 37 percent of the population, while 26 percent of the schools were located in rural areas.

The largest percentage of schools (26 percent) educated between 150 and 299 students.\textsuperscript{29} The mean for the measure of school size indicates that the average school had about the same number of students ($\chi = 2.60$). While the mean for the indicator of the percent of minority students in a school falls between the categories of 10 to less than 25 percent and 26 to less than 50 percent ($\chi = 2.41$), the largest percentage of schools (40 percent) had student populations that were less than 10 percent minority.\textsuperscript{30} Approximately 39 percent of the weighted sample of schools educated limited English proficient students, as reported by administrators. On average, LEP students composed about 4 percent of students in all schools.\textsuperscript{31} The schools employed an average of 36 staff members. Also, approximately 13 percent of an average school’s teacher population was minority.

\begin{itemize}
\item \textsuperscript{28} Where percentages are given, they may not sum to 100 percent due to rounding.
\item \textsuperscript{29} Percentage distributions for the other categories of school size are as follows: 0 to 149 students: 24 percent; 300 to 499 students: 24 percent; 500 to 749 students: 19 percent; 750 students or more: 8 percent.
\item \textsuperscript{30} Percentage distributions for the other categories of percent minority students are as follows: 10 to less than 25 percent: 19 percent; 25 to less than 50 percent: 16 percent; 50 percent to less than 75 percent: 9 percent; 75 percent or more: 15 percent.
\item \textsuperscript{31} This estimate is based on the continuous measure of percent LEP in a school, before the measure was recoded into categories and values were imputed for missing data.
\end{itemize}
Thirty-two percent of schools had student populations that were at least 50 percent low-income. Schools in the total population additional funding from an average of about 3 sources; 8 percent of schools did not receive additional funding from any source. Nineteen percent of schools reported receiving bilingual or migrant aid. Lastly, approximately 21 percent of schools experienced a loss of human or economic resources in the previous three years.

With respect to the indicators of parental power, the data show that in 48 percent of schools, parents sat on a school-based management committee. The mean score on the composite measure of how much influence parents had on the school administrator’s job evaluation was 2.5, out of a possible 4. In the vast majority of schools (88 percent), principals indicated that they placed major emphasis on good communication with kindergartners’ parents, which served as one indicator of institutional support for parent involvement. Lastly, for the second indicator of support for parental involvement, frequency of workshops on parental involvement for teachers, the data show that schools offered them an average of about once a year.

5.1.2 Schools Educating Limited English Proficient (LEP) Students

As noted above, approximately 39 percent of the schools educated limited English proficient students. The task of educating these students fell primarily in the hands of public schools: of the approximately 28,000 schools that educated LEP students, 88 percent were public. Of these public schools, 20 percent were schools of choice or magnet schools. Of the private schools that educated LEP students, 36 percent were Catholic, 31 percent were other religious schools, and 32 percent were secular private
This distribution of private school types is somewhat different from the distribution within the total population of schools; Catholic schools comprise a larger percentage of the private LEP schools than they do of all private schools (27 percent). Additionally, approximately 10 percent of LEP schools were identified as early childhood centers.

With respect to school location, almost half (43 percent) of the schools that educated LEP students were located in central cities, 39 percent were located in suburban areas, and 18 percent were located in rural areas.

These schools were larger than the average school in the total sample: average school enrollment was about 300-499 students ($\chi^2=3.27$), although the largest percentage of schools (31 percent) educated between 500 and 749 students. They also educated a larger percentage of minority students than the full sample: the mean of the categorical measure was just about 3, which is 51 to less than 75 percent. While most schools in the total sample had low percentages of minority students, LEP schools were somewhat equally distributed across the percentage categories. LEP schools were about as likely to have less than 5 percent minority students as they were to have 75 percent or more minority students.

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32 Of the total sample of schools (both public and private) that educated LEP students, only 4 percent were Catholic schools, 4 percent were other religious schools, and 4 percent were secular private schools.

33 Percentage distributions for the other categories of school size are as follows: 0 to 149 students: 9 percent; 150 to 299 students: 15 percent; 300 to 499 students: 30 percent; 750 students or more: 14 percent.

34 Percentage distributions for the categories of percent minority students are as follows: Less than 10 percent: 21 percent; 10 to less than 25 percent: 21 percent; 25 to less than 50 percent: 22 percent; 50 percent to less than 75 percent: 13 percent; 75 percent or more: 22 percent
Within these schools that educated LEP students, LEP students comprised about 12 percent, on average, of the total school population.\textsuperscript{35} The schools employed an average of 48 full-time staff, which is larger than the average staff size in the population of all schools. The teacher population was composed of a larger parentage of minorities as well. Approximately 17 percent of the total teacher population, on average, was minority.

Looking at school resources, LEP schools appeared to educate a student body that was less advantaged than schools in the general population. About 42 percent of them had student populations in which at least 50 percent of the students came from a low-income background. However, on average, they received additional funding from four sources, which is about one more than the average for the general population of schools. As would be expected for schools educating LEP students, a larger percentage of these schools (41 percent) received bilingual or migrant aid, compared to the general population of schools. Approximately 23 percent of them experienced a loss of human or economic resources in the previous three years, a slightly larger percentage than in the total population of schools.

With respect to the indicators of parental power, the data show that in 72 percent of LEP schools, parents sat on a school-based management committee, a much larger percentage than in the total population of schools. The mean score on the composite measure for parents’ influence on the administrator’s job evaluation was 2.6, similar to what was seen in the total population. Also, like the full population of schools, in 88 percent of LEP schools, principals indicated that they placed major emphasis on good

\textsuperscript{35} This estimate is based on the continuous measure of percent LEP in a school, before the measure was recoded into categories and values were imputed for missing data.
communication with kindergartners’ parents. Lastly, LEP schools offered workshops on parental involvement slightly more often than schools in the general population, although the estimate still rounds to about once a year.

Rather than focusing on how schools that educated LEP students differ from the general sample of schools, of which they are a part, perhaps more meaningful and interesting comparisons are those between schools that educated LEP students and schools that did not educate such students. Descriptive characteristics of the schools that did not have any LEP students in their student populations are presented in table 5.1 as well.

These two groups of schools significantly differed on almost every school characteristic included in this study. The differences related to school sector are large and confirm that public schools primarily were responsible for educating LEP students. Fully half of all non-LEP were private schools, compared to only 12 percent of LEP schools. This is a highly significant difference ($t= 9.62, p <.001$). While the estimates show that, among private schools, a greater percentage of LEP schools than non-LEP schools were Catholic, and a lower percentage of LEP schools than non-LEP schools were other religious schools, these differences were not significant. This failure to test is probably a result of the fact that there were so few schools of these types that educated LEP students (Catholic, unweighted n=18; other religious, unweighted n=10), and statistically significant findings are more difficult to obtain in smaller samples. Among public schools, a greater percentage of LEP schools were schools of choice or magnet schools (20 percent), compared to non-LEP schools (11 percent) ($t= 2.89, p <.01$). Only
10 percent of LEP schools were early childhood centers, while 15 percent of non-LEP schools were such centers ($t=2.05, p <.05$).

While no differences were found between schools that educated LEP students and those that did not with respect to the likelihood that they were located in suburban areas, LEP schools were somewhat more likely to be located in central cities ($t=2.35, p <.05$) and much less likely to be found in rural areas ($t=-3.56, p <.001$).

Large differences are especially evident in the demographic compositions of both the student and teacher populations. LEP schools educated a significantly larger number of students, on average, than did non-LEP schools ($t=10.58, p <.001$). LEP schools also had larger percentages of minority students, on average, than non-LEP schools ($t=8.30, p <.001$). Looking at the characteristics of school staff, these data show that LEP schools had significantly larger staff sizes ($t=10.50, p <.001$) and employed significantly larger percentages of minority teachers (17 percent, compared to 11 percent for non-LEP; $t=2.42, p <.05$).

These comparisons also revealed some differences in resources. LEP schools were significantly more likely than non-LEP schools to have student populations that were at least 50 percent low-income (42 percent vs. 26 percent; $t=3.96, p <.001$). LEP schools received funds from a significantly larger number of outside sources (4, compared to 3 for non-LEP schools; $t=8.92, p <.001$). The fact that LEP schools had more sources of outside funding probably reflects their greater need for fiscal resources supplementary to those gained from traditional sources of school funding. Also, reflective of their need for such aid, a much larger proportion of LEP schools received bilingual or migrant aid (41 percent) than did schools that did not educate LEP students.
A higher percentage of LEP schools than non-LEP schools experienced a loss of human or financial resources, although the difference was not significant.

No significant differences were found between LEP and non-LEP schools in the influence parents had on the school administrator’s job evaluation or the administrator’s emphasis on good communication with parents. LEP schools did offer workshops on parental involvement more often ($t = 2.64$, $p < .01$), and parents sat on a school advisory committee in a much larger percentage of them ($t = 10.40$, $p < .001$), compared to non-LEP schools.

5.1.3 Differences Between LEP and non-LEP Schools Within and Between Sectors

Many of the differences noted between LEP and non-LEP schools likely exist because non-LEP schools were much more likely to be private schools; the smaller student and staff populations, fewer resources, and the lower percentages of minority students among non-LEP schools were all characteristic of private schools, as compared to public schools. To describe the characteristics of schools that educated LEP students while controlling for school sector (and therefore to determine whether the differences noted above were primarily reflective of the differences in the likelihood of educating LEP students by sector), comparisons were also made between non-LEP and LEP schools within and between sectors. Descriptive statistics for public LEP and non-

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36 As a group, private schools had significantly smaller enrollments ($t = -13.00$, $p < .001$), fewer minorities ($t = -2.84$, $p < .01$), and fewer sources of additional funding than public schools ($t = -15.13$, $p < .001$). Also, compared to public schools, a significantly lower percentage of private schools had student populations that were at least 50 percent low-income ($t = -11.18$, $p < .001$) or were located in rural areas ($t = -5.44$, $p < .001$), while a greater percentage of them were located in central cities ($t = 2.96$, $p < .01$) or were classified as early childhood centers ($t = 4.49$, $p < .001$).
LEP schools, as well as for private LEP and non-LEP schools, are presented in tables 5.2 and 5.3, respectively.

In general, the same pattern of differences seen in the full population of schools was found between LEP and non-LEP schools in the public sector, with some exceptions. Fewer differences were found between these two types of schools in the private sector, but the differences that were found were generally in the same direction as those in the full sample, with some exceptions. It should be noted again that real differences between schools in the private sector may not test as significant because of the relatively small number of private schools that educated LEP students.

LEP schools, whether public or private, were more likely to be located in central cities (public: \( t = 3.37, p <.01 \); private: \( t = 1.99, p <.05 \)) and much less likely to be found in rural areas (public: \( t = -5.37, p <.001 \); private: \( t = -3.24, p <.001 \)). Among public schools, LEP schools were more likely than non-LEP schools to be suburban (\( t = 2.54, p <.05 \)). The opposite was true for private LEP schools compared to private non-LEP schools, although the difference was not significant (32 percent vs. 40 percent, \( t = -.91 \)).

Public LEP schools educated a significantly larger number of students, on average, than did public non-LEP schools (\( t = 8.49, p <.001 \)), but private LEP and non-LEP schools had roughly similar enrollments. Both public and private LEP schools had larger percentages of minority students, on average, than non-LEP schools (public: \( t = 6.74, p <.001 \); private: \( t = .52, p <.05 \)). While public LEP schools had significantly larger total staff sizes (\( t = 8.41, p <.001 \)) than public non-LEP schools, no significant differences were found between schools in the private sector (staff: \( t = .11 \)).
TABLE 5.2

DESCRIPTIVE STATISTICS

FOR PUBLIC SCHOOLS EDUCATING KINDERGARTNERS, TOTAL POPULATION AND

BY PRESENCE OF LEP STUDENTS

IN THE UNITED STATES:

1998-1999

<table>
<thead>
<tr>
<th></th>
<th>All Public Schools</th>
<th>Public LEP Schools</th>
<th>Public Non-LEP Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>Mean</td>
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</tr>
<tr>
<td>School size</td>
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</tr>
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<tr>
<td>School type</td>
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<td></td>
</tr>
<tr>
<td>Public, school of choice or magnet school</td>
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<td>.16</td>
<td>.020</td>
</tr>
<tr>
<td>Early childhood center</td>
<td>0-1</td>
<td>.08</td>
<td>.01</td>
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<tr>
<td>School location</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Urban</td>
<td>0-1</td>
<td>.32</td>
<td>.03</td>
</tr>
<tr>
<td>Suburban</td>
<td>0-1</td>
<td>.36</td>
<td>.03</td>
</tr>
<tr>
<td>Rural</td>
<td>0-1</td>
<td>.32</td>
<td>.03</td>
</tr>
<tr>
<td>Student and staff population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent minority students</td>
<td>1-5</td>
<td>2.53</td>
<td>.09</td>
</tr>
<tr>
<td>School educates LEP students</td>
<td>0-1</td>
<td>.53</td>
<td>.030</td>
</tr>
<tr>
<td>Percent LEP students (continuous)</td>
<td>0-99</td>
<td>6.28</td>
<td>.943</td>
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</table>
**TABLE 5.2 (contd.).**

<table>
<thead>
<tr>
<th>Student and staff population (contd.)</th>
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<th>Public LEP Schools</th>
<th>Public Non-LEP Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>Mean</td>
<td>s.e.</td>
</tr>
<tr>
<td>Percent LEP students (categorical)</td>
<td>0-4</td>
<td>.85</td>
<td>.059</td>
</tr>
<tr>
<td>Number of full-time-equivalent school personnel</td>
<td>5-100</td>
<td>44.54</td>
<td>1.51</td>
</tr>
<tr>
<td>Percent minority teachers</td>
<td>0-100</td>
<td>13.54</td>
<td>1.291</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>School resources</th>
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<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 50 percent low income students</td>
<td>0-1</td>
<td>.44</td>
<td>.024</td>
<td>.44</td>
<td>.026</td>
<td>.44</td>
</tr>
<tr>
<td>Number of sources of additional funding</td>
<td>0-11</td>
<td>4.19</td>
<td>.11</td>
<td>4.49</td>
<td>.148</td>
<td>3.85</td>
</tr>
<tr>
<td>School experienced loss of resources</td>
<td>0-1</td>
<td>.23</td>
<td>.021</td>
<td>.23</td>
<td>.024</td>
<td>.24</td>
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</table>

<table>
<thead>
<tr>
<th>Parental power</th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent influence on job evaluation</td>
<td>0-4</td>
<td>2.57</td>
<td>.05</td>
<td>2.59</td>
<td>.062</td>
<td>2.54</td>
</tr>
<tr>
<td>Parent presence on school-based management committee</td>
<td>0-1</td>
<td>.64</td>
<td>.02</td>
<td>.79</td>
<td>.025</td>
<td>.49</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Institutional support for parental involvement</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Major emphasis on good communication with parents</td>
<td>0-1</td>
<td>.87</td>
<td>.02</td>
<td>2.26</td>
<td>.055</td>
<td>2.09</td>
</tr>
<tr>
<td>Frequency school offers teacher workshops</td>
<td>0-1</td>
<td>2.18</td>
<td>.05</td>
<td>.88</td>
<td>.018</td>
<td>.87</td>
</tr>
</tbody>
</table>


**NOTE:** Detail may not sum to total due to rounding.

1 Estimate indicates proportion of public schools that are of this type.
2 Estimate indicates proportion of private schools that are of this type.
+ Not applicable.
### TABLE 5.3
DESCRIPTIVE STATISTICS
FOR PRIVATE SCHOOLS EDUCATING KINDERGARTNERS, TOTAL POPULATION AND
BY PRESENCE OF LEP STUDENTS
IN THE UNITED STATES:
1998-1999

<table>
<thead>
<tr>
<th></th>
<th>All Private Schools</th>
<th>Private LEP Schools</th>
<th>Private Non-LEP Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range Mean s.e.</td>
<td>Mean s.e.</td>
<td>Mean s.e.</td>
</tr>
<tr>
<td>School type</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Catholic²</td>
<td>0-1 .27 .029</td>
<td>.36 .088</td>
<td>.26 .030</td>
</tr>
<tr>
<td>Religious²</td>
<td>0-1 .41 .043</td>
<td>.31 .092</td>
<td>.42 .048</td>
</tr>
<tr>
<td>Secular²</td>
<td>0-1 .32 .038</td>
<td>.32 .097</td>
<td>.32 .042</td>
</tr>
<tr>
<td>Early childhood center</td>
<td>0-1 .23 .03</td>
<td>.24 .088</td>
<td>.23 .036</td>
</tr>
<tr>
<td>School location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>0-1 .46 .04</td>
<td>.62 .085</td>
<td>.43 .044</td>
</tr>
<tr>
<td>Suburban</td>
<td>0-1 .39 .04</td>
<td>.32 .084</td>
<td>.40 .04</td>
</tr>
<tr>
<td>Rural</td>
<td>0-1 .15 .03</td>
<td>.06 .014</td>
<td>.17 .029</td>
</tr>
<tr>
<td>Student and staff population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent minority students</td>
<td>1-5 2.17 .10</td>
<td>2.89 .311</td>
<td>2.06 .102</td>
</tr>
</tbody>
</table>
TABLE 5.3 (contd.).

<table>
<thead>
<tr>
<th>Segment Description</th>
<th>Range</th>
<th>All Private Schools</th>
<th>Private LEP Schools</th>
<th>Private Non-LEP Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>s.e.</td>
<td>Mean</td>
</tr>
<tr>
<td>Student and staff population (contd.).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School educates LEP students</td>
<td>0-1</td>
<td>.14</td>
<td>.023</td>
<td>1.00</td>
</tr>
<tr>
<td>Percent LEP students (continuous)</td>
<td>0-99</td>
<td>.97</td>
<td>.480</td>
<td>7.89</td>
</tr>
<tr>
<td>Percent LEP students (categorical)</td>
<td>0-4</td>
<td>.18</td>
<td>.042</td>
<td>1.35</td>
</tr>
<tr>
<td>Number of full-time-equivalent school personnel</td>
<td>5-100</td>
<td>18.43</td>
<td>1.26</td>
<td>18.20</td>
</tr>
<tr>
<td>Percent minority teachers</td>
<td>0-100</td>
<td>12.86</td>
<td>2.058</td>
<td>23.53</td>
</tr>
<tr>
<td>School resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least 50 percent low income students</td>
<td>0-1</td>
<td>.10</td>
<td>.021</td>
<td>.26</td>
</tr>
<tr>
<td>Number of sources of additional funding</td>
<td>0-11</td>
<td>1.87</td>
<td>.11</td>
<td>2.29</td>
</tr>
<tr>
<td>School experienced loss of resources</td>
<td>0-1</td>
<td>.17</td>
<td>.033</td>
<td>.24</td>
</tr>
<tr>
<td>Parental power</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent influence on job evaluation</td>
<td>0-4</td>
<td>2.33</td>
<td>.09</td>
<td>2.51</td>
</tr>
<tr>
<td>Parent presence on school-based management committee</td>
<td>0-1</td>
<td>.17</td>
<td>.03</td>
<td>.24</td>
</tr>
<tr>
<td>Institutional support for parental involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major emphasis on good communication with parents</td>
<td>0-1</td>
<td>.91</td>
<td>.02</td>
<td>.93</td>
</tr>
<tr>
<td>Frequency school offers teacher workshops</td>
<td>0-1</td>
<td>2.04</td>
<td>.07</td>
<td>2.24</td>
</tr>
</tbody>
</table>


NOTE: Detail may not sum to total due to rounding.

1 Estimate indicates proportion of public schools that are of this type.

2 Estimate indicates proportion of private schools that are of this type.

+ Not applicable.
Unlike in the total sample, among public and private schools, significant differences were not found between LEP and non-LEP schools with respect to the percentages of minority teachers they employed, although the difference between private schools appears somewhat large (24 percent for private LEP schools, compared to 11 percent for private non-LEP schools).

With respect to differences within sector on concentration of low-income students, the pattern for private schools only reflected the pattern in the total sample. Private LEP schools were more likely than private non-LEP schools to have student populations that were at least 50 percent low-income ($t = 3.30$, $p < .05$). A similar difference was not observed between LEP and non-LEP schools in the public sector ($t = .10$). Also, LEP schools received funds from a larger number of outside sources in both sectors, but only the difference among public schools was significant (public: $t = 3.30$, $p < .01$; private: $t = 1.51$).

As in the full population of schools, no significant differences were found between public or private LEP and non-LEP schools in the influence parents had on the school administrator’s job evaluation or the administrator’s emphasis on good communication with parents. Also, similar to the full population of schools, parents sat on a school advisory committee in a larger percentage of public LEP schools than public non-LEP schools (79 percent vs. 49 percent) ($t = 6.36$, $p < .001$). No significant differences were found between schools in the private sector on this measure ($t = .81$). Unlike in the full population, differences were not found between LEP and non-LEP schools in either sector in the frequency with which they offered workshops on parental involvement.
Analyses of differences between schools across sector, that is comparisons of public LEP schools to private LEP schools and of public non-LEP schools to private non-LEP schools, show some differences that are consistent with the overall differences between public and private schools. Public LEP and non-LEP schools educated a significantly larger number of students than private LEP and non-LEP schools, respectively (LEP: $t = 9.04, p < .001$; non-LEP: $t = 8.42, p < .001$).

Public schools, regardless of whether they educated LEP students, had larger staff sizes (LEP: $t = 12.55, p < .001$; non-LEP: $t = 8.23, p < .001$) than private schools. There were no differences across sector in the percentage of minority students or minority teachers in a school, most likely because these measures were somewhat controlled when comparing within LEP grouping.

Similar to overall public-private differences, public LEP schools were less likely than private LEP schools to be located in central cities ($t = 2.49, p < .05$) and more likely to be located in rural areas ($t = -4.25, p < .001$). The same was true for non-LEP schools in the public sector, compared to non-LEP schools in the private sector (city: $t = 3.38, p < .05$; rural: $t = -6.85, p < .001$). Private non-LEP schools were more likely to be located in a suburb than public non-LEP schools ($t = 2.07, p < .05$). A similar difference was not found between LEP schools in different sectors.

Findings for resources were consistent with overall public-private differences. Public non-LEP schools were more likely than private non-LEP schools to have a large concentration of low-income students ($t = 7.68, p < .001$). While the difference between public LEP schools and private LEP schools was somewhat large (44 percent compared to 26 percent, respectively), the difference was just shy of being significant ($t = 1.92,$
Public LEP and non-LEP schools received funding from a greater number of additional sources than private LEP and non-LEP schools, respectively (LEP: \( t = 6.18, p < .001 \); non-LEP: \( t = 10.88, p < .001 \)). No differences were found in the likelihood of having experienced a loss of resources in the previous three years.

No differences were found in the measures of parental power and institutional support for parental involvement, with one exception: public schools, regardless of whether they educated LEP students, were more likely than private schools to have a school-based management committee with parental representation (LEP: \( t = 5.88, p < .001 \); non-LEP: \( t = 6.32, p < .001 \)).

Taken together, these findings suggest that many of the differences noted between LEP and non-LEP schools are reflective of the different sectors to which they are likely to belong. However, sector does not completely explain these differences. Differences exist between LEP and non-LEP schools within sector as well, although the two types of public schools significantly differ in more ways than the two types of private schools. Below, the relationships of categorization as an LEP school and school sector, as well as many other variables, to opportunities for involvement are investigated. First, however, the chapter discusses the prevalence of opportunities, both overall and by specific activity, in the population of schools that educate kindergartners in the United States.

### 5.2 Opportunities for Involvement

As shown in table 5.4, the average number of opportunities for involvement provided to families by the population of schools educating kindergartners was 18.33 in the previous year. Some substantial differences were found among schools in different
TABLE 5.4

MEAN FREQUENCY OF OPPORTUNITIES FOR INVOLVEMENT
IN SCHOOLS EDUCATING KINDERGARTNERS, TOTAL POPULATION AND
BY PRESENCE OF LEP STUDENTS AND BY SECTOR
IN THE UNITED STATES:
1998-1999

<table>
<thead>
<tr>
<th></th>
<th>All Schools</th>
<th>LEP Schools</th>
<th>Non-LEP Schools</th>
<th>Public Schools</th>
<th>Private Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total opportunities for involvement</td>
<td>18.33 (.318)</td>
<td>20.18 (.399)</td>
<td>17.10 (.417)</td>
<td>20.17 (.316)</td>
<td>14.78 (.519)</td>
</tr>
<tr>
<td>Individual opportunities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTA, PTO, or Parent-Student-Teacher</td>
<td>5.14 (.129)</td>
<td>5.60 (.148)</td>
<td>4.84 (.173)</td>
<td>5.78 (.122)</td>
<td>3.92 (.207)</td>
</tr>
<tr>
<td>Organization meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent-teacher conferences</td>
<td>2.61 (.057)</td>
<td>2.81 (.100)</td>
<td>2.48 (.075)</td>
<td>2.75 (.074)</td>
<td>2.35 (.090)</td>
</tr>
<tr>
<td>School performances to which parents</td>
<td>4.36 (.099)</td>
<td>4.83 (.132)</td>
<td>4.05 (.127)</td>
<td>4.80 (.111)</td>
<td>3.56 (.152)</td>
</tr>
<tr>
<td>are invited</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom programs like class plays,</td>
<td>3.40 (.110)</td>
<td>4.06 (.133)</td>
<td>2.97 (.141)</td>
<td>3.99 (.123)</td>
<td>2.30 (.153)</td>
</tr>
<tr>
<td>book nights or family math nights</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fairs or social events planned to</td>
<td>2.71 (.111)</td>
<td>2.90 (.161)</td>
<td>2.60 (.120)</td>
<td>2.84 (.135)</td>
<td>2.48 (.145)</td>
</tr>
<tr>
<td>raise funds for the school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Standard errors are in parentheses.
sectors. Public schools offered an average of 20.17 opportunities per year while private schools offered an average of 14.78 opportunities per year, a difference which was highly significant \((t=9.29, p <.001)\). Among public schools, the difference between regular public schools and public schools of choice was small and insignificant \((t=1.36)\). As a result, no distinctions were made between regular and special public schools of choice in further analyses.

There were significant differences between some types of private schools (see table 5.5). Catholic schools offered significantly more opportunities for involvement \((17.28/\text{year})\) than did other religious privates \((14.52/\text{year})\) \((t=2.78, p <.01)\) or secular privates \((12.75/\text{year})\) \((t=4.19, p <.001)\). The difference between non-Catholic religious and secular private schools was not significant \((t=1.37)\).

Schools that educated LEP students had, on average, 20.18 opportunities for involvement per year. This is a significantly greater number of opportunities than was provided by schools that did not educate LEP students, which offered an average of 17.10 per year \((t=5.79, p<.001)\).

Again it was thought that these differences in opportunities may be due to the differences in sectors in which these two types of schools were found; public schools were both more likely to educate LEP students and have a larger number of opportunities for involvement than private schools. Table 5.6 shows the opportunities offered by LEP and non-LEP schools in the public and private sectors.\(^{37}\) The difference in opportunities between LEP and non-LEP schools in the public sector was smaller than the difference between these two types of schools in the total population of schools; nevertheless the

\(^{37}\) Analyses by specific type of private school were not conducted because of the small number of unweighted cases that were both LEP schools and private (n=36).
### TABLE 5.5

**MEAN FREQUENCY OF OPPORTUNITIES FOR INVOLVEMENT IN PRIVATE SCHOOLS EDUCATING KINDERGARTNERS, TOTAL POPULATION AND BY SCHOOL TYPE IN THE UNITED STATES:**

**1998-1999**

<table>
<thead>
<tr>
<th></th>
<th>All private</th>
<th>Catholic</th>
<th>Other Religious</th>
<th>Secular Private</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total opportunities for involvement</strong></td>
<td>14.78 (.519)</td>
<td>17.28 (.491)</td>
<td>14.52 (.900)</td>
<td>12.75 (.952)</td>
</tr>
<tr>
<td><strong>Individual opportunities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTA, PTO, or Parent-Student-Teacher Organization meetings</td>
<td>3.92 (.207)</td>
<td>4.71 (.204)</td>
<td>4.13 (.328)</td>
<td>2.91 (.412)</td>
</tr>
<tr>
<td>Parent-teacher conferences</td>
<td>2.35 (.090)</td>
<td>2.38 (.136)</td>
<td>2.34 (.155)</td>
<td>2.34 (.193)</td>
</tr>
<tr>
<td>School performances to which parents are invited</td>
<td>3.56 (.152)</td>
<td>3.95 (.172)</td>
<td>3.71 (.273)</td>
<td>3.01 (.245)</td>
</tr>
<tr>
<td>Classroom programs like class plays, book nights or family math nights</td>
<td>2.30 (.153)</td>
<td>2.72 (.179)</td>
<td>2.04 (.249)</td>
<td>2.27 (.293)</td>
</tr>
<tr>
<td>Fairs or social events planned to raise funds for the school</td>
<td>2.48 (.145)</td>
<td>3.46 (.216)</td>
<td>2.42 (.230)</td>
<td>1.68 (.237)</td>
</tr>
</tbody>
</table>


**NOTE:** Standard errors are in parentheses.
TABLE 5.6
MEAN FREQUENCY OF OPPORTUNITIES FOR INVOLVEMENT
IN SCHOOLS EDUCATING KINDERGARTNERS, BY SECTOR AND PRESENCE OF LEP STUDENTS
IN THE UNITED STATES:
1998-1999

<table>
<thead>
<tr>
<th></th>
<th>Public LEP Schools</th>
<th>Public Non-LEP Schools</th>
<th>Private LEP Schools</th>
<th>Private Non-LEP Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total opportunities for involvement</td>
<td>20.81 (.438)</td>
<td>19.42 (.419)</td>
<td>15.45 (.877)</td>
<td>14.67 (.583)</td>
</tr>
<tr>
<td>Individual opportunities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTA, PTO, or Parent-Student-Teacher Organization meetings</td>
<td>5.82 (.130)</td>
<td>5.73 (.168)</td>
<td>3.88 (.528)</td>
<td>3.92 (.225)</td>
</tr>
<tr>
<td>Parent-teacher conferences</td>
<td>2.81 (.109)</td>
<td>2.68 (.131)</td>
<td>2.80 (.294)</td>
<td>2.28 (.093)</td>
</tr>
<tr>
<td>School performances to which parents are invited</td>
<td>4.97 (.149)</td>
<td>4.59 (.164)</td>
<td>3.84 (.343)</td>
<td>3.51 (.166)</td>
</tr>
<tr>
<td>Classroom programs like class plays, book nights or family math nights</td>
<td>4.33 (.134)</td>
<td>3.60 (.177)</td>
<td>2.12 (.317)</td>
<td>2.33 (.173)</td>
</tr>
<tr>
<td>Fairs or social events planned to raise funds for the school</td>
<td>2.89 (.166)</td>
<td>2.80 (.165)</td>
<td>2.98 (.404)</td>
<td>2.40 (.155)</td>
</tr>
</tbody>
</table>

NOTE: Standard errors are in parentheses.
difference was significant ($t = 2.38$, $p < .05$), such that public LEP schools offered a slightly higher number of opportunities for involvement in the previous year than public non-LEP schools did. In contrast, private LEP schools and private non-LEP schools did not differ significantly in the number of opportunities they provided for parental involvement ($t = .74$).

Comparing LEP schools across sectors, analyses showed that public LEP schools offered significantly more opportunities than private LEP schools ($t = 5.05$, $p < .001$). A similar difference emerged when comparing non-LEP schools across sectors: public non-LEP schools offered significantly more opportunities than private non-LEP schools ($t = 6.79$, $p < .001$). These findings are consistent with the overall difference between public and private schools with respect to the number of opportunities they offered parents to be involved at the school in the previous year. However, differences in opportunities are seen between LEP and non-LEP schools within sector as well, suggesting that characteristics other than sector are causing the differences in the number of involvement opportunities LEP and non-LEP schools provide.

Focusing on a global measure of opportunities may lead to the incorrect assumption that parents are always offered more opportunities to be involved in all types of activities in public schools compared to private schools, and in LEP schools compared to non-LEP schools. It may be the case that private schools and non-LEP schools offered more opportunities for meaningful contact with school personnel were related to academic matters, for example parent-teacher conferences, but fewer opportunities for parents to attend other school functions like sporting events. Comparisons among
different school types were made to determine whether differences in offerings of individual activities existed.

The means for each activity that together compose the overall opportunity measure (Parent-Teacher Organization meetings; parent-teacher conferences; school performances to which parents were invited; classroom programs; and fundraising events), broken down by LEP categorization and school type, are presented above in Tables 5.5 and 5.6. Means are presented for the general population of schools, as well as for LEP versus non-LEP schools and for public versus private schools. In addition, means are presented for schools by both LEP category and school sector to examine whether schools in different sectors that educate LEP students are different from one another and from non-LEP schools.

Among all schools, the most common parental involvement activity was PTA, PTO, or Parent-Student-Teacher Organization meetings, held an average of about 5 times per year. The least common activities were parent-teacher conferences and fairs or social events planned to raise funds for the school, each reported by administrators as being offered less than three times in the previous year.

Looking at differences between LEP and non-LEP schools, t-tests generally show that LEP schools offered each type of involvement activity significantly more often than non-LEP schools (PTA meeting, \( t = 3.78, p < .001 \); conference, \( t = 2.46, p < .05 \); performances, \( t = 4.58, p < .001 \); classroom programs, \( t = 6.18, p < .001 \)), with the exception of fundraisers, for which the difference was not significant at the .05 level.

Public schools offered each type of involvement activity significantly more often than the total population of private schools (PTA meeting, \( t = 9.40, p < .001 \); conference,
Performances, $t=6.75, p<.001$; classroom programs, $t=9.11, p<.001$; and fundraisers, $t=2.04, p<.05$). The smallest difference in mean frequency was for fundraisers, which public schools had about 3 times per year and private schools had about 2.5 times per year, on average. The largest difference in mean frequency was for PTA meetings, which public schools had about 6 times per year and private schools had about 4 times per year.

When only schools within the public sector were considered, the differences between LEP and non-LEP schools diminished, and only one emerged as significant: LEP schools offered class programs significantly more often than non-LEP schools (4.33 vs. 3.60 times per year; $t=3.69, p<.001$). No differences were found between LEP and non-LEP schools in the private sector either.

When comparing LEP and non-LEP schools across school sector, some differences consistent with the overall differences between public and private schools emerged. Public LEP schools had more PTA meetings ($t=3.83, p<.001$), school performances ($t=2.84, p<.01$), and class programs ($t=6.24, p<.001$) than private LEP schools. Significant differences did not exist between public and private LEP schools in the average number of parent-teacher conferences they held in the previous year. In contrast, public non-LEP schools had more parent-teacher conferences, on average, than private non-LEP schools (5.73 vs. 3.92 times per year; $t=2.28, p<.05$). They also held PTA meetings ($t=7.42, p<.001$), school performances ($t=4.70, p<.001$), and class programs ($t=5.61, p<.001$) more often than private non-LEP schools. No differences were found between LEP and non-LEP schools across sector in the number of fairs or social events planned to raise funds for the school.
For further explication of differences by school type, analyses were run comparing public schools to the different types of private schools examined in this study. These schools were not compared further by LEP status, because of the low number of unweighted cases that were both LEP schools and private.\textsuperscript{38} In general, t-tests showed that public schools offered these activities significantly more often than each type of non-public school, with one exception: fundraising events. Catholic schools had fairs or social events planned to raise funds for the school significantly more often than public schools ($t=2.72$, $p < .01$), other religious schools ($t=3.25$, $p < .001$), or non-secular private schools ($t=5.42$, $p < .001$). Among non-public schools, Catholic institutions generally offered each type of activity more frequently than the other two types of schools. Contrary to predictions, non-secular private schools offered parents the fewest opportunities to be involved in school decision making, as indicated by the low average number of times PTO meetings they hold during the year ($\chi^2=2.91$).

5.3 Relationships Between School-level Independent Measures and Total Number of Opportunities for Involvement

5.3.1 Correlations

Bivariate Pearson correlations show that many of the school characteristics outlined in the previous chapter are significantly related to the total number of opportunities schools provided for parent involvement in the direction predicted. These include school size ($r=.39$, $p < .001$), the total number of school personnel ($r=.35$, $p < .001$), and the number of sources of additional funding ($r=.41$, $p < .001$). As each of these increased, the number of opportunities provided increased. Unexpectedly, having a

\textsuperscript{38} Of these 36 schools, 18 were Catholic, 10 were other religious schools, and 8 were secular.
high concentration (at least 50 percent) of low-income students was significantly and positively related to opportunities ($r = .10, p < .05$), although the correlation coefficient was not large. The same was true for the percentage of minority students within the school ($r = .12, p < .01$).

While school sector was related to opportunities, the direction of the relationship was opposite of that expected. The dummy for private school was significantly and negatively related to number of opportunities ($r = -.40, p < .001$), indicating that private schools offered fewer opportunities than public schools. This is consistent with the results of analyses presented above. There was also a significant negative association between being an early childhood center and opportunities ($r = -.26, p < .001$).

Consistent with the differences in opportunities provided by LEP and non-LEP schools noted above, and contrary to expectations, the presence of LEP students in a school was positively and significantly related to number of opportunities ($r = .24, p < .001$). The categorical measure of the percent of LEP students in a school also was positively and significantly related, indicating that as the percentage of LEP students in a school increased, the number of opportunities increased as well ($r = .16, p < .01$).

Opportunities for involvement were not significantly correlated with whether the school experienced a loss of human or financial resources in the previous year ($r = .03$) or the percentage of teachers from minority backgrounds ($r = .06$). None of the school location measures were significantly related to opportunities either (city: $r = .04$; suburb: $r = -.01$; rural: $r = -.04$). Furthermore, t-test comparisons of schools in different locations showed that opportunities for involvement did not significantly differ by location ($t$ statistics ranged from $.43$ to $.88$).
Aside from school compositional and organization characteristics, several measures pertaining to support for parental involvement and parental power were expected to be associated with the number of opportunities provided by the school. Results indicate that parental power did have a positive relationship to number of opportunities. As expected, a greater number of opportunities for involvement were provided by the school when parents were represented on a school-based management committee ($r = .31$, $p < .001$) and when parental involvement and support affected the administrator’s job evaluation more greatly ($r = .19$, $p < .001$). While positively related, the emphasis the administrator placed on good communication with parents was only moderately associated with opportunities ($r = .10$, $p < .05$). This low association is likely due to the lack of variation on this measure; the vast majority of administrators (88 percent) indicated that they placed major emphasis on good communication. Lastly, as expected, the frequency with which schools held workshops on involvement for teachers, an indicator of institutional support for the home-school relationship, was highly related to the number of opportunities provided ($r = .30$, $p < .001$).

5.3.2 Regression Analyses Using All Schools

In a series of ordinary least squares regressions, the independent variables were entered in stages to determine whether the overall relationships described above between the characteristics of the schools and opportunities for involvement at the school persisted when controlling for many factors simultaneously. The size of the school staff was omitted, because it was highly correlated with school size ($r = .74$, $p < .001$).\(^{39}\) Percent

---

\(^{39}\) The variable for total school staff initially was entered into regression model 2, along with school size, and found to be nonsignificant ($b = .01$, $p = .487$). However, when it was included in regression model 2 in place of school size, it was significant and positively related to opportunities ($b = .04$, $p < .01$).
minority teachers also was omitted, due to its high correlation with percent minority students ($r = .65$, $p < .001$) and higher percentage of missing data, compared to other measures.40

In the first regression, presented as model 1 in table 5.7, opportunities for involvement were regressed on the dummy variable indicating presence of LEP students in a school. The relationship of the LEP measure to opportunities was highly significant, with the beta coefficient indicating the difference between the LEP and non-LEP school means for opportunities. Schools that educated LEP students offered about three more opportunities in the previous school year than non-LEP schools. As shown by the $r$-squared, this measure alone accounted for approximately 6 percent of the variation in opportunities.

Regression model 2a includes the other school organizational and compositional characteristics. This model utilizes the global measure for school sector which indicates that a school is private.41 Controlling for other factors, school size was positively related to opportunities: larger schools offer more opportunities than smaller schools. Private schools and early childhood centers provided fewer opportunities for involvement than did public schools and schools that were not early childhood centers, respectively. The percentage of minority students in a school did not predict opportunities once other factors were controlled. Other characteristics that are commonly associated with both percent minority students and opportunities, in particular school size and school sector,

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40 Fifty-six cases, or about 6 percent of the sample, were missing data for this measure. In regression analyses, a loss of 40 cases was attributable to this measure alone. Furthermore, this measure was not significantly related to opportunities, either by itself or in conjunction with the percentage of minority students in the school, as was hypothesized in chapter 5. Including it in the models did not affect any of the relationships of the other variables to opportunities. For these reasons, it was dropped from analyses.

41 Public schools are the reference category.
<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2a</th>
<th>Model 2b</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Constant</strong></td>
<td>17.10***</td>
<td>17.53***</td>
<td>17.85***</td>
<td>16.11***</td>
</tr>
<tr>
<td></td>
<td>(.417)</td>
<td>(1.214)</td>
<td>(1.161)</td>
<td>(1.219)</td>
</tr>
<tr>
<td>School educates limited English proficient (LEP) students</td>
<td>3.08***</td>
<td>.19</td>
<td>.18</td>
<td>-.12</td>
</tr>
<tr>
<td></td>
<td>(.533)</td>
<td>(.566)</td>
<td>(.553)</td>
<td>(.526)</td>
</tr>
<tr>
<td>Private</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>-3.66***</td>
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</tr>
<tr>
<td></td>
<td>(.571)</td>
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<td></td>
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<tr>
<td>Catholic</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>-2.27**</td>
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<td>-1.85**</td>
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<tr>
<td></td>
<td>(.664)</td>
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<td>(.647)</td>
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<tr>
<td>Other religious private</td>
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<td>-3.64***</td>
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<tr>
<td></td>
<td></td>
<td>(.955)</td>
<td>(.995)</td>
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<tr>
<td>Secular private</td>
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<td>-4.74***</td>
<td>-3.67**</td>
<td></td>
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<td></td>
<td>(1.090)</td>
<td>(1.100)</td>
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</tr>
<tr>
<td>Child center</td>
<td>-3.29***</td>
<td>-2.90**</td>
<td>-2.75**</td>
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</tr>
<tr>
<td></td>
<td>(.814)</td>
<td>(.934)</td>
<td>(.901)</td>
<td></td>
</tr>
<tr>
<td>School size</td>
<td>.96***</td>
<td>.86**</td>
<td>.70**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.258)</td>
<td>(.254)</td>
<td>(.234)</td>
<td></td>
</tr>
<tr>
<td>Percent minority students</td>
<td>.13</td>
<td>.13</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.181)</td>
<td>(.176)</td>
<td>(.183)</td>
<td></td>
</tr>
<tr>
<td>Suburb</td>
<td>- .46</td>
<td>- .46</td>
<td>- .39</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.653)</td>
<td>(.639)</td>
<td>(.624)</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>-1.05</td>
<td>-1.16</td>
<td>-1.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.855)</td>
<td>(.821)</td>
<td>(.767)</td>
<td></td>
</tr>
<tr>
<td>At least 50 percent low income students</td>
<td></td>
<td></td>
<td>-1.14*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(.508)</td>
<td></td>
</tr>
<tr>
<td>Sources of additional funding</td>
<td>.64***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.153)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent presence on school-based management committee</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental influence on administrator’s job evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major emphasis on good communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency school offered teacher workshops</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-square</td>
<td><strong>.06</strong></td>
<td><strong>.23</strong></td>
<td><strong>.24</strong></td>
<td><strong>.27</strong></td>
</tr>
<tr>
<td>N</td>
<td>Unweighted</td>
<td>818</td>
<td>798</td>
<td>798</td>
</tr>
<tr>
<td></td>
<td>Weighted</td>
<td>68,103</td>
<td>66,141</td>
<td>66,141</td>
</tr>
<tr>
<td></td>
<td></td>
<td>64,668</td>
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**TABLE 5.7**

**OPPORTUNITIES FOR INVOLVEMENT REGRESSED ON SELECTED SCHOOL CHARACTERISTICS**
TABLE 5.7 (contd.).

<table>
<thead>
<tr>
<th></th>
<th>Model 4a</th>
<th>Model 4b</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>12.14*** (1.489)</td>
<td>11.43*** (1.290)</td>
<td>12.17*** (1.614)</td>
</tr>
<tr>
<td>School educates limited English proficient (LEP) students</td>
<td>.02 (.534)</td>
<td>.03 (.548)</td>
<td>.25 (.526)</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-3.00*** (.766)</td>
<td>-5.38*** (.132)</td>
<td></td>
</tr>
<tr>
<td>Catholic</td>
<td>-2.08** (.772)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other religious private</td>
<td>-3.53** (1.110)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secular private</td>
<td>-3.83** (1.186)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child center</td>
<td>-2.79** (.920)</td>
<td>-3.07*** (.832)</td>
<td>-2.80** (.832)</td>
</tr>
<tr>
<td>School size</td>
<td>.31 (.249)</td>
<td>.38 (.249)</td>
<td>1.31*** (.367)</td>
</tr>
<tr>
<td>Percent minority students</td>
<td>.04 (.160)</td>
<td>.03 (.162)</td>
<td>-0.05 (.472)</td>
</tr>
<tr>
<td>Suburb</td>
<td>-.31 (.560)</td>
<td>-.34 (.562)</td>
<td>-0.56 (.689)</td>
</tr>
<tr>
<td>Rural</td>
<td>-1.34+ (.730)</td>
<td>-1.33+ (.730)</td>
<td>-2.52* (1.106)</td>
</tr>
<tr>
<td>At least 50% low income students</td>
<td>-1.15** (.430)</td>
<td>-1.05** (.438)</td>
<td>1.23 (1.051)</td>
</tr>
<tr>
<td>Sources of additional funding</td>
<td>.54*** (.149)</td>
<td>.58*** (.144)</td>
<td>.58*** (.135)</td>
</tr>
<tr>
<td>Parent presence on school-based management committee</td>
<td>.78 (.641)</td>
<td>.72 (.647)</td>
<td>-0.11 (.760)</td>
</tr>
<tr>
<td>Parental influence on administrator’s job evaluation</td>
<td>.42+ (.219)</td>
<td>.44* (.214)</td>
<td>.46* (.213)</td>
</tr>
<tr>
<td>Major emphasis on good communication</td>
<td>1.39* (.642)</td>
<td>1.48* (.635)</td>
<td>.87 (.639)</td>
</tr>
<tr>
<td>Frequency school offered teacher workshops</td>
<td>1.45*** (.220)</td>
<td>1.43*** (.221)</td>
<td>.49 (.393)</td>
</tr>
<tr>
<td>Percent minority * school size</td>
<td></td>
<td></td>
<td>-0.27* (.111)</td>
</tr>
<tr>
<td>Low-income students * school size</td>
<td></td>
<td></td>
<td>-0.80* (.353)</td>
</tr>
<tr>
<td>Percent minority * frequency of workshops</td>
<td></td>
<td></td>
<td>0.37** (.142)</td>
</tr>
<tr>
<td>Private school * good communication</td>
<td></td>
<td></td>
<td>2.64* (1.058)</td>
</tr>
<tr>
<td>Rural * parents on management committee</td>
<td></td>
<td></td>
<td>2.47* (1.24)</td>
</tr>
<tr>
<td>Suburb * parents on management committee</td>
<td></td>
<td></td>
<td>0.30 (.974)</td>
</tr>
<tr>
<td>R-square</td>
<td>.33</td>
<td>.33</td>
<td>.36</td>
</tr>
<tr>
<td>N Unweighted</td>
<td>715</td>
<td>715</td>
<td>715</td>
</tr>
<tr>
<td>N Weighted</td>
<td>59,315</td>
<td>59,315</td>
<td>59,315</td>
</tr>
</tbody>
</table>


NOTE: Standard errors are in parentheses. + p < .01, * p < .05, ** p < .01, *** p < .001
appear to explain the overall positive relationship between these measures that was found in the correlation analyses; schools with higher percentages of minority students tend to be larger and public, factors which are both positive predictors of number of opportunities. School location was unrelated to opportunities in this model. However, the direction of the relationships for suburb and rural were negative, indicating that these schools offered fewer opportunities for involvement than schools in central cities once other factors were controlled, although not significantly fewer. The variables included in model 2a using a global measure for private school accounted for approximately 23 percent of the variation in opportunities.

Model 2 was rerun with the global measure for private school replaced by the three dummy variables identifying different types of schools within the private sector (see model 2b). Public schools are the reference category in this model as well. The negative relationship between each type of school and opportunities was highly significant and contrary to expectations. The beta coefficients indicated that secular private schools offered the fewest opportunities, almost 5 less per year than public schools, when other factors were controlled. Catholic schools, on average, offered approximately two fewer opportunities per year than public schools, while other religious private schools offered about four fewer opportunities. The relationships between all the other measures and opportunities generally remained the same as they were in model 2a. This model

---

42 The correlations between percent minority and both the dichotomous measure for private school and school size are \( r = -.12, p < .01 \) and \( r = .15, p < .01 \), respectively.

43 Schools in central cities are the reference category. Analyses were conducted in which rural schools were the reference category, and results were similar. Suburban was not used as the reference category, because the largest differences hypothesized in chapter 5 were between urban and rural schools.
explained 24 percent of the variance in opportunities. The remaining analyses use the expanded set of dummy variables indicating school type.

When the school organization characteristics were added to model 2, regardless of whether the global or expanded set of measures for sector was included, the presence of LEP students in schools demonstrated no relationship to opportunities. Above, it was suggested that the different school sectors to which LEP schools are likely to belong may explain at least part of the relationship between educating LEP students and opportunities for involvement. To investigate how school sector affected the relationship between opportunities and the presence of LEP students in a school, just these two independent measures were entered simultaneously in a regression model. When the global measure for private was entered with presence of LEP students, both measures were significant ($b(\text{LEP}) = 1.26, p < .01$ and $b(\text{private}) = -4.88, p < .001$) and in the same direction exhibited in model 2a. When the expanded set of sector measures indicating school type was included, results were similar ($b(\text{LEP}) = 1.22, p < .01$; $b(\text{Catholic}) = -2.46, p < .001$; $b(\text{Other religious}) = -5.09, p < .001$; $b(\text{Secular}) = -6.96, p < .001$). These results show that school sector does explain some of the relationship between being an LEP school and opportunities, as the magnitude of the effect for presence of LEP dropped from about three opportunities to about one opportunity. However, school sector did not explain all of the relationship, given that the effect of the LEP measure remained significant.

In order to determine which of the other measure(s) included in model 2a primarily explained the relationship between LEP and opportunities, separate regressions were run in which opportunities were regressed only on the LEP measure and one other school characteristic. When school enrollment size was entered, the effect of the LEP
measure disappeared ($b(\text{LEP}) = 1.07$ and $b(\text{size}) = 1.86, \ p < .001$). The measure of presence of LEP students remained significant in the models with early childhood center ($b(\text{LEP}) = 2.85, \ p < .001$ and $b(\text{center}) = -4.81, \ p < .001$), percent minority students ($b(\text{LEP}) = 2.79, \ p < .01$ and $b(\text{minority}) = .22$), and school location ($b(\text{LEP}) = 3.07, \ p < .001, b(\text{suburb}) = -.33, b(\text{rural}) = -.18$). These results show that school size is the other major factor, in addition to sector, explaining the relationship between presence of LEP students and opportunities: LEP schools tend to be larger, and larger schools offer more opportunities for involvement than smaller schools.

In model 3 (table 5.7), the school resource variables were added to the regression.\textsuperscript{44} Both the concentration of low-income students, which is included as a proxy for school resources, and additional sources of funding were related to opportunities in the directions expected. The beta coefficient indicates that for every three additional sources of funding, schools offered about one more event in which parents could participate. Once other factors were controlled, schools that educated a large concentration of poor students were found to offer fewer opportunities than schools with less than 50 percent of low-income students comprising their student populations. The positive bivariate relationship between concentration of low-income students and opportunities likely exists because schools with a majority of low-income students have those characteristics that are significantly and positively related to opportunities, in particular being larger and public.\textsuperscript{45} The beta coefficient indicates that such schools offer

\textsuperscript{44} Results with the measure for loss of resources in previous three years are not shown here; this measure had no significant effect on opportunities when other factors were controlled ($b = -.06$).

\textsuperscript{45} The correlations between concentration of low-income students and both the dichotomous measure for private school and school size were $r = -.35, \ p < .001$ and $r = .19, \ p < .001$, respectively.
about one less opportunity per year than schools with a lower proportion of low-income students, all other things being equal.

The variables that were significant in model 2 remained significant in this model, although the magnitude of the relationships of some of the measures, the three types of private schools and school size in particular, were reduced. This suggests that some of the differences in opportunities noted between public and private schools are due to differences in resources. Specifically, the effects of the private school measures became less negative, indicating that private schools offer fewer opportunities partially because they have fewer resources than public schools. Likewise, the effect for school size became smaller when resources were taken into account, indicating that larger schools offer more opportunities partially because they have more resources than smaller schools to do so. These school resource measures explained an additional 3 percent of the variance.

Lastly, the measures of parental power and institutional support for parental involvement were added to a fourth model. When included all at once, two of these four measures were related to the number of opportunities for involvement. As was seen in the correlation analyses, more opportunities were offered when schools had teacher workshops on parental involvement more often, and when school administrators placed major emphasis on good communication with parents. No relationship was found between opportunities and either parents’ influence on administrators’ job evaluations or parental presence on a school-based management committee. The overall relationships between these measures, which were noted in correlation analyses, must be due to their common association with a third factor that directly affects opportunities. Together, all
the variables included in this model accounted for about 33 percent of the variation in opportunities.

When the measures of power and institutional support were added to the model, some changes in the significance levels and beta coefficient sizes of other variables occurred. Some of these changes were relatively small, for example in the case of the measure for early childhood center. However, the relationships of a few other variables to opportunities changed more significantly. Specifically, the effect of school size became insignificant, while the effect for rural grew larger and approached significance at the .05 level. The effect of the Catholic and secular private school measures became more negative. Also, while they remained insignificant, the beta coefficients for the measures of percent minority and percent LEP changed substantially. The direction of relationship between percent LEP and opportunities changed from negative to positive as well. Such changes suggested that either: 1) there were interaction effects between one or more of the power and support measures and school size, percent minority, presence of LEP students, and school location; or 2) school size, percent minority, presence of LEP students, and/or location were interacting with one another in a way that was not evident before controlling for these measures of parental power and institutional support.

An extensive set of interaction effects were tested for significance. Specifically, interaction variables were created by separately multiplying school size, percent minority, presence of LEP students, school sector, resources, suburb, and rural, with each of the four power and support measures. In addition, interactions were computed between all possible two-variable combinations of school size, percent minority, presence of LEP students, school sector, resources, suburb, and rural. The results, which include only the
set of significant interactions, are presented in model 5 (table 5.7). To reduce the number of potential variables in the model, these analyses employ the global measure indicating that a school was private. This is the variable that was used to compute interaction terms. Model 4b is the same model discussed above with the specific private school types replaced by the global measure; it should be used for comparison with the analyses in model 5.

The results show that the effect of school size on opportunities can be understood fully only once its relationships with the concentration of low-income and percent minority students are taken into account. School size has an independent, positive, and direct effect on opportunities once other factors are controlled. However, the negative coefficients of the two school-size interaction terms show that the positive effect of school size weakened as the percentage of minority students in a school increased, and in schools with a high concentration of low-income students (i.e., schools with the lowest resources). As was the case in all previous models, percent minority demonstrated no independent, direct effect on the number of opportunities schools offered for their students’ parents to be involved at the school. Once the school size*resources interaction term was introduced, the independent effect of resources disappeared, indicating that school size conditions the effect of school resources of opportunities.

The negative effect of larger percentages of minority students in larger schools appears to be alleviated in schools that offered more workshops to their teachers on parental involvement. The positive and significant beta coefficient for the workshop*percent minority interaction indicates that when more workshops were provided in schools with larger percentages of minority students, parents were offered
more opportunities for involvement. When this interaction was controlled, the direct
effect of frequency of workshops on opportunities disappeared. Therefore, the effect of
teacher workshops, or institutional support for involvement, on opportunities can only be
understood by considering the size of a schools’ minority population, relative to the total
enrollment.

An interaction term between the private school dummy and whether the school
administrator placed major emphasis on good communication with parents was also
entered in this model. Although the main effect of the private school dummy shows that
private schools still offered fewer opportunities for involvement once all these factors
were controlled, the difference was reduced when administrators indicated that they
placed major emphasis on good communication. The positive effect of good
communication was unrelated to opportunities in public schools, as evidenced by the
insignificant relationship between the main effect of good communication and
opportunities once this interaction was introduced.

Lastly, an interesting result was observed when the measures for school location
were interacted with whether parents sat on a school-based management committee and
included model 5. The main effect of the rural measure became significant, indicating
that rural schools offered about 2.5 fewer opportunities for involvement, all other things
being equal. However, this difference was reduced in rural schools when parents had a
presence on a school-based management committee. The beta coefficients for the main
effect of rural and its interaction term are almost identical (but opposite in sign),
indicating that rural schools that have a school-based management committee that
includes parents offer about the same number of opportunities as schools in urban areas.
Parental presence on a school-based management committee had no effect on the number of opportunities offered in either urban or suburban areas. Also, in this model when the relationships between many related measures were taken into account, a direct effect of parents’ influence on administrator’s job evaluation on opportunities emerged in the direction expected; the more influence parents had, the larger the number of opportunities that schools offered.

5.3.3 Regression Analyses Using Measure of Percentage of LEP Students in All Schools

The correlation analyses showed that percentage of LEP students in a school was also related to opportunities. To investigate whether the regression results differed when the measure for presence of LEP students was replaced with percentage of LEP students in a school, models 1 and 4 were run using the categorical measure of percent LEP students (see table 5.8). Results for model 1, in which opportunities were regressed only on the LEP measure, show a positive and significant relationship between these two measures. This is the same result obtained when presence of LEP students was used. For every category increase in percent LEP, the number of opportunities provided by a school increased by one. In model 5, with all significant measures included, the percentage of LEP students was not significantly related.

5.4 Discussion

In the 1998-99 school year, schools educating kindergartners provided about two formal opportunities a month for parents to be involved at the school in an average 10-month academic year. Some types of activities were offered more frequently than others. The most frequent opportunities were PTA, PTO or Parent-Student-Teacher Organization
### TABLE 5.8

**OPPORTUNITIES FOR INVOLVEMENT**

**REGRESSED ON SELECTED SCHOOL CHARACTERISTICS, INCLUDING PERCENT LEP**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Constant</strong></td>
<td>17.67*** (.408)</td>
<td>12.11*** (1.618)</td>
</tr>
<tr>
<td>Percent limited English proficient (LEP) students</td>
<td>1.03 *** (.324)</td>
<td>-0.03 (.265)</td>
</tr>
<tr>
<td><strong>Private</strong></td>
<td>-5.40*** (1.120)</td>
<td></td>
</tr>
<tr>
<td><strong>Child center</strong></td>
<td>-2.78** (.832)</td>
<td></td>
</tr>
<tr>
<td><strong>School size</strong></td>
<td>1.33*** (.367)</td>
<td></td>
</tr>
<tr>
<td>Percent minority students</td>
<td>-0.02 (.483)</td>
<td></td>
</tr>
<tr>
<td><strong>Suburb</strong></td>
<td>-0.55 (.684)</td>
<td></td>
</tr>
<tr>
<td><strong>Rural</strong></td>
<td>-2.53* (1.102)</td>
<td></td>
</tr>
<tr>
<td>At least 50 percent low income students</td>
<td>1.21 (1.059)</td>
<td></td>
</tr>
<tr>
<td><strong>Sources of additional funding</strong></td>
<td>.59*** (.136)</td>
<td></td>
</tr>
<tr>
<td>Parent presence on school-based management committee</td>
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<td></td>
</tr>
<tr>
<td>Parental influence on administrator’s job evaluation</td>
<td>.45* (.214)</td>
<td></td>
</tr>
<tr>
<td><strong>Major emphasis on good communication</strong></td>
<td>.87 (.642)</td>
<td></td>
</tr>
<tr>
<td>Frequency school offered teacher workshops</td>
<td>.50 (.394)</td>
<td></td>
</tr>
<tr>
<td>Percent minority * school size</td>
<td>-2.27* (.116)</td>
<td></td>
</tr>
<tr>
<td>Low-income students * school size</td>
<td>-2.79* (.353)</td>
<td></td>
</tr>
<tr>
<td>Percent minority * frequency of workshops</td>
<td>.36* (.144)</td>
<td></td>
</tr>
<tr>
<td>Private school * good communication</td>
<td>2.63* (1.055)</td>
<td></td>
</tr>
<tr>
<td>Rural * parents on management committee</td>
<td>2.44* (1.24)</td>
<td></td>
</tr>
<tr>
<td>Suburb * parents on management committee</td>
<td>.30 (.972)</td>
<td></td>
</tr>
</tbody>
</table>
meetings, while parent-teacher conferences were least common, held between two and three times a year. However, schools did not provide equal opportunities for parental participation in activities at the school: the number of opportunities schools offered throughout the year was affected by many school characteristics.

In chapter 4, it was hypothesized that schools that educated limited English proficient (LEP) students might offer fewer opportunities for involvement than schools that did not educate LEP students, due to the greater costs associated with involving their parents. LEP schools may find it more difficult, and therefore more costly, to involve parents with language-related difficulties, if they make a conscious effort to do so. Given the greater resources that are necessary to provide language assistance at the activities schools do offer, they may be inclined to provide fewer activities over the course of a year than schools that do not have to accommodate the language-related needs of as many parents.

The analyses using data on the nation’s kindergartners presented here do not support this hypothesis. Schools that educated LEP students actually provided more opportunities for involvement than schools that did not educate LEP students. However, once other factors were accounted for, the presence of LEP students in a school had no relationship to opportunities, indicating that the task of educating LEP students, in and of

<table>
<thead>
<tr>
<th>R-square</th>
<th>.06</th>
<th>.36</th>
</tr>
</thead>
<tbody>
<tr>
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<td>819</td>
<td>715</td>
</tr>
<tr>
<td>Unweighted</td>
<td>68,104</td>
<td>59,315</td>
</tr>
<tr>
<td>Weighted</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Standard errors are in parentheses. + p < .01, * p < .05, ** p < .01, *** p < .001
itself, did not affect schools’ provision of activities in which parents can participate. This was true regardless of how large a schools’ LEP population was, relative to the entire student population.

The overall positive relationship between presence of limited English proficient students in a school and opportunities was explained completely by the characteristics of the schools that educated such students. In particular, LEP schools tended to be large, and the overwhelming majority of them were public. All other things being equal, larger schools and public schools provided more involvement opportunities than smaller schools and private schools, respectively. School location also helped to explain some of the relationship between educating LEP students and opportunities: rural schools offered fewer opportunities than urban schools, once many factors were taken into account, and LEP schools were much less likely to be rural and more likely to be in central cities than non-LEP schools.

One school characteristic that, in and of itself, did not help explain the opportunities LEP schools provided was the percentage of minority students in a school. Contrary to what was expected, the overall relationship between percent minority and opportunities showed that schools actually offered more opportunities when the size of their minority student populations was larger, relative to total school enrollment. However, it was not the case that LEP schools offered more opportunities because they had larger percentages of minority students. The relationship between the dichotomous LEP measure and number of opportunities did not disappear when LEP categorization was included in a regression with percent minority only. Also the relationship between percent minority and opportunities did not hold when other factors were controlled. As
with presence of LEP students, the percentage of minority students, in and of itself, did not affect schools’ provision of activities in which parents could participate.

However, the percentage of minority students in a school did affect opportunities in conjunction with school size. The significant interaction between school size and percent minority students suggests that, for any particular category of school enrollment, families are better off, in terms of the opportunities they are given to be involved, in schools with lower percentages of minority students. Also, the positive impact on opportunities of being a large school diminishes as the percentage of minority students increases. There is actually a slight advantage to being in a smaller school with the highest minority concentration, compared to being in a larger school with the highest minority concentration.

A reasonable explanation for such a finding is that larger schools with larger minority populations (which are also most likely to be found in central cities) tend to be those with the most limited amount of resources. Qualitative research and anecdotal evidence suggest that high minority, large, urban schools have eliminated enrichment programs in order to provide only the most essential educational services with their limited resources (for example, see Kozol (1991)). These enrichment programs generate some of the opportunities for parental involvement (e.g., class programs, school plays, sports events) that this study examined.

These analyses did account for the effects of school resources on involvement opportunities. Although the data do not ascertain how much additional money is provided by additional sources of funding, it is clearly the case that schools with more sources of additional funding provided more opportunities for parents to be involved. In
some cases, the additional funding might have been provided specifically for schools to develop parent involvement programs as part of an overall effort for school improvement.

These analyses also show that school resources (measured as the percentage of low income students) and school size conditioned one another’s effects on opportunities; the opportunities schools offered were lowest in the largest schools with the fewest resources and highest in the smallest schools with the most resources. As noted in chapter 2, research on the individual level factors affecting parental involvement consistently shows that parents of higher socioeconomic status, in particular those who are not poor, are more involved than parents of lower socioeconomic status (see for example, Ho and Willms 1996; Kerbow and Bernhardt 1993; Rathbun and Germino Hausken 2001). This higher involvement could be a result of high SES students’ attendance at schools that offer parents more opportunities to be involved. This issue is investigated in more depth in chapter 7.

With respect to the relationship between the percentage of minority students and opportunities discussed above, it is possible that resources were not adequately controlled for in these analyses, and that the interactive relationship between school size and percent minority students would not be observed if a better indicator of resources was used. However, there is theoretical and empirical justification for expecting the relationships observed. There appears to be something about the environment in large schools with large minority populations that leads them to offer fewer opportunities for parents to be involved. It was suggested in chapter 3 that if the parents of children in these schools are those who are least likely to be involved, school personnel may feel no need to involve
them. Teachers and administrators may also perceive the effort to involve parents as being too costly, given the lack of results from their efforts.

Cultural capital theory posits that this lack of involvement on the part of parents in large, high minority schools is due to parents’ lack of cultural capital, specifically the knowledge about and ability to act in accordance with school’s norms for behavior. Research does show that some parents feel uncomfortable in the school setting and/or that they feel they are unprepared to help their children learn (Laureau 1987; Moles 1993; Reay 1999; Stevenson et al. 1990). Also, parents from some cultural backgrounds feel that school personnel know best when it comes to education, which leads them to be less involved as they avoid “interfering” in what happens at the school (Chavkin and Gonzalez 1995; Stewart 1993; Yao 1993). The parents who are most likely to lack cultural capital are those who lack other types of capital (i.e., resources) as well. They are poor, minority, and less educated; and they are likely to be the parents of students in large, high-minority schools. Given the perception that their students’ parents are not very involved in what happens at the school, school personnel may not make the effort to provide opportunities that they think parents would not take advantage of anyway.

Cultural capital theory suggests another reason for the interactive effect of size and percent minority on opportunities, which is less benign than those described above. Rather than suggesting that school personnel play somewhat of a passive role in limiting opportunities (i.e., they only offer fewer opportunities because parents are less involved anyway), cultural capital theory can be used to posit that school personnel in large, high minority schools actively avoid interaction with parents who lack cultural capital. Specifically, a culture that school personnel perceive as conflicting with that of the school
may dominate when the majority of the student and parent populations lacks the cultural capital necessary to interact with school personnel in constructive and collaborative, rather than destructive and adversarial, ways. In this case, school personnel may perceive that the costs of involving parents (i.e., increased conflict) outweigh the benefits.

Research demonstrates that adversarial relationships do exist between some school personnel and more poor, minority, and less educated parents (Laureau and Horvat 1999; Reay 1999). Also, given that their lack of valued resources leaves them with less power, these parents may not be able to persuade school personnel to be responsive to their requests or to provide them with opportunities for involvement. Here too, there is research evidence that school personnel sometimes are dismissive of parents with fewer resources (Davies 1993; Reay 1999). Recognizing their lack of power in the home-school relationship, some parents may forgo participation in certain school activities altogether (Moles 1993; Peña 2000).

School sector did explain some of the relationship between presence of LEP students in a school and the opportunities schools offered: schools that educated LEP students offered more opportunities than non-LEP schools, because they were overwhelmingly public. Among all schools, school sector was one of the strongest predictors of opportunities. Even when accounting for other factors that affect involvement and are related to school sector, such as school size, private schools offered fewer opportunities overall than public schools. Catholic schools offered more to parents than other types of public schools, but still offered fewer activities than the average public school.
These findings contradict what was expected, given the nature of the relationship between school personnel and parents in private schools. Here too, the failure to adequately control for resources may account for why public-private differences opposite of those expected were observed. The proxy measure of resources, which indicated whether a school had a student population with at least 50 percent of its students coming from a low-income background, was computed using operation of a school-wide Title 1 program as its primary component. Regulations may make it more difficult for private schools to receive Title 1 funding than public schools, especially in the case of religious schools. This measure may be more reflective of this difficulty among private schools than of need, i.e., of how economically disadvantaged their student populations are. Had resources been better controlled for through inclusion of better measures, for example actual school budgets, the effect of private school may have been reduced further or eliminated altogether. However, extant research offers plausible explanations for these findings that contradict what was expected, thereby providing support that these are real differences that would not be explained away if other measures of resources were included.

Parents of private school students may not feel that they need to be involved, because they may have a greater level of trust than parents of public school students that school personnel are providing their children with a quality education. A study on Catholic high schools suggests this is true of Catholic school parents. Parents’ trust in school personnel, who feel they are morally obligated to act in the students’ best interest, leads parents to be less involved in the day-to-day aspects of the school environment (Bryk, Lee, and Holland 1993). This same study suggests that some of this trust stems
from the fact that Catholic schools educate a large number of disadvantaged children. These children’s parents, lacking education and knowledge of what their children need to succeed, leave education in the hands of the people they feel are better able to provide it. Such findings support the contention that parents with fewer resources, in this case human and cultural capital, find it difficult (i.e., costly) to be involved. Also, current rhetoric surrounding the debate over school choice reveals a common belief that private school education is superior to public school education. As a result of this belief, parents of children in non-Catholic private schools may demonstrate similar levels of trust in their schools’ staff.

Private school parents also are shown to be generally more satisfied with various aspects of their children’s schools than parents of public school children (Hausman and Goldring 2000; US Department of Education 2001), which may result in their feeling less of a need to concern themselves with the daily functioning of the school. Parents whose children are having problems, or who are dissatisfied with the schools, might be more likely to have contact with school personnel on a more regular basis (Muller and Kerbow 1993; Vaden-Kiernan 1996). In general, decreased parental presence in the daily activities and governance of private schools, accompanied by less pressure from parents for contact with school personnel, results in fewer opportunities for involvement overall, because private school personnel do not see the need for or utility in offering them.

It also is highly possible that public schools offer more opportunities for involvement because they are expected required to do so by parents, educators, the government, and the general public. In the early 1990s, *A Nation at Risk* became a guide to improving public school education, which was considered to be in a dire state. One
recommendation made in the report was to increase parents’ involvement in their
children’s education. Public schools serious about improving their students’ educational
experiences were expected to follow these recommendations. Today, it is a common
expectation that schools will involve parents in the educational process. Not offering
parents the opportunity to do so would be very costly for schools in terms of public
perceptions about the school’s quality and the criticism school personnel likely would
receive from parents and local governments and governing bodies.

Some public schools also have legal requirements for providing opportunities for
involvement set in place by the federal government, state education agencies, and local
school boards. For example, in order to receive Title 1 funding, schools are required to
implement programs that encourage parent and community involvement in education
(Epstein and Hollifield 1996). In this case, the costs of not offering opportunities are too
great, leading schools to offer opportunities to be involved in order to avoid incurring
those costs. As noted above, it may be much easier for public schools, as a group, to
qualify for and receive Title 1 funds than private schools.

Receipt of Title 1 funds may help explain why there was a positive overall
relationship between opportunities and percent minority students, percent LEP students,
and concentration of low-income students (which used operation of school-wide Title 1
as a component) as well. Schools educating higher percentages of such students
generally have fewer resources and are more likely to receive Title 1 funding, which is
targeted toward schools that educate disadvantaged students. However, the overall
positive relationships between these factors and opportunities seem best explained by the
fact that schools with the highest scores on these measures are public. When school
sector is controlled, the effect of concentration of low-income students becomes negative, which was the expected relationship.

The last set of characteristics examined were features of schools that had more to do with school climate surrounding parental involvement than with the organizational features of schools. The analyses suggest that parental power was related to the extent to which parents were offered opportunities to be involved, once other factors were controlled. In all schools, when parental involvement and support from the community had more influence on an administrator’s job evaluation, more opportunities were offered. Parental presence on a school-based management committee was related to opportunities as well, but only in rural schools. In these schools, the management committee might serve as a concrete activity that requires on-going meetings that parents on the committee attend regularly. Without a need for such regular meetings, rural schools offer fewer opportunities over the course of a year than urban schools.

The effect of institutional support for parental involvement was conditioned by other factors as well. It is not clear why administrators’ emphasis on good communication with kindergartner’s parents only matters in private schools. It may be that the expectations and requirements for public schools drive the provision of opportunities, regardless of individual administrators’ feeling about, or emphasis on, involvement of and communication with parents.

The frequency of workshops on parental involvement had a direct effect on the number of opportunities overall, but its effect depends on the percentage of minority students in a school. Specifically, the significant interaction between these two measures
shows that opportunities for involvement are greatest in schools with higher percentages of minority students that offer more workshops to teachers.

While this study conceptualizes the frequency of workshops on parental involvement as an indicator of institutional support for parental involvement, the relationship between this measure and opportunities should be interpreted with caution for two reasons. First, the item asking administrators about the frequency of workshops appeared as one component of a general question asking about the frequency of many activities in the school. The measures of opportunities appeared as items within the same question. The observed relationship may exist because of patterns in reporting, specifically because administrators indicated similar frequencies for each of the items.

Second, there are issues of causality that must be considered. It is possible that workshops are offered in schools with higher percentages of minority students because school staff has had a difficult time interacting with parents in the opportunities that are offered. When the number of opportunities is greater, the need for workshops may be more pressing, because there is more interaction. Nevertheless, these results show that at least some schools that educate culturally diverse students are taking steps to increase their teachers’ abilities to interact effectively with the parents in these schools. These workshops are more common in schools that educate LEP students than they are in schools that do not educate LEP students, which is encouraging, given researchers’ recommendations that more teacher training is needed to increase the involvement of culturally diverse parents (e.g., Bermúdez 1993; Moles 1993).

If causality in the relationship proceeds from workshops to the provision of opportunities, then it is clear that all schools, students, and parents benefit when teachers
learn more about the skills they need to engage with parents, but the benefit is greater in high-minority schools. These are the schools that, according to cultural capital theory, have greater potential for conflict between the school and home environments. Teachers in these schools may need extra training in order to feel comfortable interacting with parents who may come from different backgrounds and/or be perceived as hard-to-reach. In contrast, the frequency of offering workshops on parental involvement does not have as large an effect on opportunities in schools with smaller percentages of minority students. In schools with lower percentages of minority students, there may be less conflict between the home and school environments, resulting in a lesser need for such workshops to encourage home-school contact and facilitate involvement.

In sum, the analyses presented in this chapter demonstrated significant relationships between many of the measures conceptualized as affecting the costs of offering opportunities for parents to be involved. As predicted, more opportunities were provided in larger schools, in schools with more sources of supplemental funding, and in schools in which parents’ had greater influence on an administrator’s job evaluation. Also as predicted, schools offered more opportunities when they had more workshops for teachers on parental involvement, when parents sat on a school-based management committee, and when administrators placed strong emphasis on good communication with parents. However, the effects of these three characteristics were conditioned by other measures in unexpected ways, such that they only had an effect in schools with particular characteristics. Contrary to expectations, opportunities were lower in private schools compared to public schools, and in schools with a low concentration of low-income students compared to schools in which at least 50 percent of their student
populations were low income. The next chapter investigates schools’ efforts to facilitate the involvement of language minority parents in the opportunities for involvement just described.
CHAPTER 6

FACILITATION OF INVOLVEMENT OF LANGUAGE MINORITY FAMILIES

This chapter presents analyses related to the facilitation of involvement for families of language minority (LM) /limited English proficient (LEP) children. These analyses focus on schools that educated limited English proficient (LEP) students (n=424).46

46 The analyses are limited in this way as a result of the skip patterns in the ECLS-K school administrator questionnaire. As mentioned in chapter 5, administrators only in schools that educated LEP students were asked whether their schools provided a variety of services to the families of language minority children. These services are conceptualized here as methods to facilitate the involvement of language minority families. Analyses of facilitation that included schools that were not asked these questions (i.e., non-LEP schools) would provide misleading information about the extent to which schools in the U.S. facilitated the involvement of language minority families in the ways measured here. The results of tests of association likely would be biased such that the characteristics of non-LEP schools would appear strongly related to lack of facilitation.

Also, it should be noted that the selection criteria used in the ECLS-K for which schools were asked this series of questions may result in an underestimate of the number of ways in which schools facilitate the involvement of language minority families. This is some children from language minority backgrounds are not limited in English proficiency themselves, but they have parents whose proficiency is limited. Schools without LEP students may find that they still need to accommodate the language needs of language minority parents. However, if there is underestimation, it is probably minimal in the ECLS-K, as a result of the young age of the students in the study. Children who speak a language other than English at home often have their first formal contact with English when they arrive at school (Garcia 2000). Therefore, they are likely to be identified as LEP by school personnel for one, if not more, of their first years in elementary school. As such, administrators in these schools that educated children as they began formal schooling probably would have identified their schools as educating LEP students and, therefore, answered the questions about special services. Also, the likelihood that a school would have no LEP children (and therefore not be asked the facilitation questions), but have a large enough population of parents with language issues to warrant the development of programs to address these issues, is probably low.
6.1 Description of Methods of Facilitation of Involvement for LM Families in Schools Educating Children with Limited English Proficiency

On average, LEP schools used about 3 ($x = 2.7$) out of the 6 possible methods of facilitation described in chapter 4 (see table 6.1). The most prevalent type of assistance was the provision of translators at meetings between parents and school staff or having meetings that were conducted in the parents’ native non-English languages, with approximately 78 percent of schools reporting that they provided this service. Sixty-nine percent of schools reported that they provided translations of written communications. Almost half, or 48 percent, of schools reported that visits were made to these families’ homes. Less common were schools that had outreach workers that helped children enroll in school or that held special meetings for families from non-English speaking backgrounds (36 percent and 31 percent, respectively). Additionally, roughly 5 percent of these schools reported that they provided other types of assistance to language minority families.

These estimates indicate that the majority of LEP schools were attempting to meet the language needs of their non-English speaking families in one way or another. However, they also indicate that a non-trivial percentage of schools were not providing any special assistance at all. In approximately 14 percent of these schools in which administrators had indicated they educated LEP students, no special assistance was provided to language minority families. These schools that offered no assistance were more likely to be private than public ($t = 3.10, p < .01$). Specifically, 39 percent of private LEP schools employed none of these methods of facilitation, compared to only 10

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47 When the analyses are not limited to LEP schools, the average number of methods of facilitation in the total population of schools is just about 1.
TABLE 6.1
MEAN NUMBER OF METHODS OF FACILITATION
IN SCHOOLS EDUCATING KINDERGARTNERS WITH LIMITED ENGLISH PROFICIENCY, TOTAL POPULATION AND BY SECTOR
IN THE UNITED STATES:
1998-1999

<table>
<thead>
<tr>
<th></th>
<th>All LEP Schools</th>
<th>Public LEP Schools</th>
<th>Private LEP Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total methods of facilitation</td>
<td>2.67 (.094)</td>
<td>2.88 (.091)</td>
<td>1.22 (.242)</td>
</tr>
<tr>
<td>Specific types of facilitation methods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Translators/non-English language used at school meetings</td>
<td>.78 (.028)</td>
<td>.82 (.026)</td>
<td>.46 (.094)</td>
</tr>
<tr>
<td>Translations of written communications</td>
<td>.69 (.029)</td>
<td>.76 (.029)</td>
<td>23 (.072)</td>
</tr>
<tr>
<td>Home visits</td>
<td>.48 (.027)</td>
<td>.53 (.028)</td>
<td>.16 (.078)</td>
</tr>
<tr>
<td>Outreach workers help to enroll children</td>
<td>.36 (.034)</td>
<td>.38 (.034)</td>
<td>.21 (.078)</td>
</tr>
<tr>
<td>Special meetings for parents from non-English language backgrounds</td>
<td>.31 (.026)</td>
<td>.35 (.029)</td>
<td>.07 (.051)</td>
</tr>
<tr>
<td>Other type of assistance1</td>
<td>.05 (.012)</td>
<td>.05 (.013)</td>
<td>.08 (.039)</td>
</tr>
</tbody>
</table>

NOTE: Standard errors are in parentheses.
1 The specific types of “other” assistance mentioned by school administrators were not available in the ECLS-K public-use data set.
percent of public LEP schools that had none.\textsuperscript{48} This difference did not appear to be related to sector differences in the percentage of the student population that was LEP; schools that used no methods of facilitation did not significantly differ from schools that employed at least one method of facilitation in the percent of LEP students in the school ($t = .63$).\textsuperscript{49}

Eleven percent of schools used only one method of facilitation. Among these schools, having translators available at meetings between parents and school staff or having meetings that were conducted in the parents’ non-English native languages were the most common methods of facilitation, employed by about 56 percent of them. The second most common method was conducting home visits, employed by about 20 percent of schools that used only one method of facilitation.

### 6.2 Characteristics Related to Facilitation of Involvement of Language Minority (LM) Families

Most of the same school characteristics examined in the analyses of opportunities were hypothesized to be related to schools’ efforts to facilitate the involvement of language minority families as well. The analyses in this chapter use the percentage of LEP students in a school as the primary indicator of a school’s LEP population that is expected to be related to schools’ facilitation of the involvement.

In addition, several additional school characteristics were hypothesized to be related to facilitation of LM family involvement. These include whether the principal

\begin{footnotesize}
\begin{itemize}
\item[48] In this chapter, all private schools are analyzed as one group, rather than by type (i.e., Catholic, other religious, secular). Further differentiation was not statistically useful due to the very small number of unweighted cases of LEP schools that were private. Of these 36 schools, 18 were Catholic, 10 were other religious schools, and 8 were secular.
\item[49] The mean on the categorical measure of percent LEP students for schools with no methods of assistance was 1.49. The mean on the categorical measure of percent LEP students for schools with at least one method of assistance was slightly higher, 1.62, but not significantly so.
\end{itemize}
\end{footnotesize}
was Latino and/or a non-Black racial minority, whether the principal had taken any English as a Second Language (ESL) or bilingual education courses, whether the principal had taught ESL or bilingual education courses, the percentage of teachers in a school of Latino and/or Asian background, the number of full-time equivalent ESL and/or bilingual education teachers and full-time aides that were employed by a school, and whether schools employed a parent liaison. Descriptive statistics for these measures are presented in table 6.2 for the entire population of schools, as well as for LEP and non-LEP schools separately.

### TABLE 6.2

**DESCRIPTIVE STATISTICS**

**FOR SCHOOLS EDUCATING KINDERGARTNERS, TOTAL POPULATION**

**AND BY PRESENCE OF LEP STUDENTS**

**IN THE UNITED STATES:**

1998-1999

<table>
<thead>
<tr>
<th></th>
<th>All Schools</th>
<th></th>
<th>LEP Schools</th>
<th></th>
<th>Non-LEP Schools</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal is Latino/non-Black minority</td>
<td>0-1</td>
<td>.06</td>
<td>.010</td>
<td>.10</td>
<td>.020</td>
<td>.03</td>
</tr>
<tr>
<td>Principal has taken ESL/bilingual education course</td>
<td>0-1</td>
<td>.18</td>
<td>.016</td>
<td>.33</td>
<td>.026</td>
<td>.09</td>
</tr>
<tr>
<td>Principal has taught ESL/bilingual education</td>
<td>0-1</td>
<td>.07</td>
<td>.010</td>
<td>.10</td>
<td>.016</td>
<td>.04</td>
</tr>
<tr>
<td>Percent Latino/Asian teachers</td>
<td>0-39</td>
<td>3.24</td>
<td>.286</td>
<td>5.56</td>
<td>.543</td>
<td>1.76</td>
</tr>
<tr>
<td>Number of ESL/bilingual education teachers and aides</td>
<td>0-7</td>
<td>.54</td>
<td>.051</td>
<td>1.29</td>
<td>.101</td>
<td>.06</td>
</tr>
<tr>
<td>Full-time parent liaison</td>
<td>0-1</td>
<td>.14</td>
<td>.018</td>
<td>.21</td>
<td>.028</td>
<td>.09</td>
</tr>
</tbody>
</table>

As can be seen from the table, only 6 percent of all schools were headed by principals that were Latino and/or a non-black racial minority. Schools serving LEP students had a larger percentage of Latino/minority principals than the general population of schools, although the percentage was still small (10 percent). LEP schools also were much more likely than non-LEP schools to have Latino/non-Black minority principals; only 3 percent of non-LEP schools were headed by such principals ($t = 3.31, p <.001$).

In the general population of schools, about 18 percent of principals had taken ESL or bilingual education courses, while about 7 percent had actually taught such a course. Again, these percentages were higher in the LEP schools than in the general population of schools, and the differences between LEP and non-LEP schools were significant. Thirty-three percent of principals in LEP schools had taken ESL or bilingual education courses, compared to 9 percent of principals in non-LEP schools ($t = 7.76, p <.001$). About 10 percent of principals in LEP schools had taught ESL or bilingual education courses, compared to 4 percent of principals in non-LEP schools ($t = 3.07, p <.01$).

Schools had teacher populations that were, on average, about 3 percent Latino and/or Asian and employed less than one full-time teacher or teacher’s aide who taught bilingual education or English as a Second Language ($x = .54$). In comparison, schools that educated LEP students had a teacher population that was, on average, about 6 percent Latino/Asian, which was a significantly larger percentage than in non-LEP schools (2 percent) ($t = 6.01, p <.001$). LEP schools also employed, on average, 1.29 full-time equivalent ESL/bilingual teachers or aides. This was significantly more than non-LEP schools, the vast majority of which (96 percent) employed no such teachers or aides ($t = 12.28, p <.001$).
In contrast, about 33 percent of LEP schools reportedly employed no ESL/bilingual education teachers or aides. About 43 percent of LEP schools had at least one full-time ESL/bilingual education teacher or aide. These statistics indicate that just over half of all LEP schools did not employ at least one full-time staff member who would be the most effective at communicating with language minority parents. There may be other people in the school who can speak parents’ native languages, but arguably, the ESL/bilingual teachers who educate these parents’ children would be the best source of information for parents. Nevertheless, these results show that, logically, LEP schools were much more likely to have principals and teachers with characteristics and experiences that leave them better prepared to meet the needs of language minority families.

Lastly, 14 percent of schools in the total population employed a full-time parent liaison or home-school coordinator. A larger percentage of LEP than non-LEP schools did so ($t = 4.17, p < .001$).

The pattern of differences looks similar when considering only schools in the public sector, which were most likely to educate LEP students. Descriptives for all public schools, public LEP, and public non-LEP schools are presented in Table 6.3. Among public schools only, it is also the case that LEP schools were more likely than non-LEP schools to be headed by a Latino and/or a non-Black racial minority principal ($t = 4.54, p < .001$) or to have a principal who had taken or taught ESL or bilingual education ($t = 7.26, p < .001$ and $t = 5.10, p < .001$, respectively). Public LEP schools also employed a significantly larger percentage of Latino/Asian teachers ($t = 8.73, p < .001$) and a larger number of ESL/bilingual teachers and/or aides ($t = 12.35, p < .001$),
TABLE 6.3

DESCRIPTIVE STATISTICS
FOR PUBLIC SCHOOLS EDUCATING KINDERGARTNERS, TOTAL
POPULATION AND BY PRESENCE OF LEP STUDENTS
IN THE UNITED STATES:
1998-1999

<table>
<thead>
<tr>
<th></th>
<th>All Public Schools</th>
<th>Public LEP Schools</th>
<th>Public Non-LEP Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>Mean s.e.</td>
<td>Mean s.e.</td>
</tr>
<tr>
<td>Principal is Latino/non-</td>
<td>0-1</td>
<td>.06 .012</td>
<td>.10 .020</td>
</tr>
<tr>
<td>Black minority</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal has taken ESL/</td>
<td>0-1</td>
<td>.21 .019</td>
<td>.33 .026</td>
</tr>
<tr>
<td>bilingual education course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal has taught ESL/</td>
<td>0-1</td>
<td>.06 .010</td>
<td>.10 .015</td>
</tr>
<tr>
<td>bilingual education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Latino/Asian</td>
<td>0-39</td>
<td>3.17 .307</td>
<td>5.39 .517</td>
</tr>
<tr>
<td>teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of ESL/ bilingual</td>
<td>0-7</td>
<td>.78 .078</td>
<td>1.44 .113</td>
</tr>
<tr>
<td>education teachers and aides</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time parent liaison</td>
<td>0-1</td>
<td>.18 .024</td>
<td>.23 .030</td>
</tr>
</tbody>
</table>


compared to public non-LEP schools. Lastly, public LEP schools were more likely than public non-LEP schools to employ a full-time parent liaison (t = 3.50, p <.01).

6.2.1 Correlation Analyses

Correlation analyses showed that many of the characteristics included in this study were highly related to the number of methods schools used to facilitate the involvement of language minority families. In particular, the characteristics related to the racial/ethnic composition of a school’s teacher and students populations, as well as those
related to language instruction, were highly related. Specifically, schools used a larger number of methods to facilitate involvement as the percentage of LEP students in the school increased \((r = .26, p < .01)\). Also, the number of ways in which schools facilitated the involvement of language minority families was larger in schools with larger percentages of Latino and Asian teachers \((r = .38, p < .001)\), in which principals had taken ESL/bilingual education classes \((r = .17, p < .05)\), with a larger number of students \((r = .19, p < .05)\), and with larger percentages of minority students \((r = .29, p < .001)\).

While facilitation was only moderately related to the size of the school staff \((r = .17, p < .01)\), it was highly and positively related to the number of ESL/bilingual teachers and/or aides \((r = .37, p < .001)\). It was also positively, though not highly, related to schools’ employing a full-time parent liaison \((r = .15, p < .01)\).

In addition, the number of ways in which schools facilitated the involvement of LM families was positively related to the number of additional sources of funding schools received \((r = .31, p < .001)\). Unexpectedly, positive correlations showed that facilitation of involvement was greater in schools with student populations that were at least 50 percent low-income \((r = .19, p < .01)\) or that had experienced a loss of funding in the previous three years \((r = .17, p < .01)\), compared to schools with student populations that were less than 50 percent low-income or did not experience a loss of funding, respectively. As with concentration of low-income students, an indicator of school resources, an unexpected relationship was found between facilitation and the measure indicating that a school was private: the number of ways in which schools facilitated the involvement of LM families was lower in private schools that educated LEP students than it was in public schools that educated LEP students \((r = -.34, p < .001)\).
These positive bivariate relationships may exist when other factors are not controlled because schools that had a high concentration of low-income students, that had experienced a loss of resources, or that were public were more likely to educate a larger percentage of minority and LEP students or employed a larger number of ESL/bilingual education teachers or aides. The common association of resources and school sector with these other characteristics which are also related to facilitation may confound any direct relationship that exists between facilitation and these measures of school resources and sector. When other factors are controlled the relationships between these measures and facilitation may be negative.

Of the two measures of parental power, only parental presence on a school-based management committee was significantly related to facilitation ($r = .32, p < .001$). Likewise, only one measure of institutional support for parental involvement, frequency of workshops, was significantly, though not highly, correlated ($r = .12, p < .05$): the more often schools held workshops for teachers on parental involvement, the greater the methods of facilitation. Also, while the number of opportunities schools provided for involvement was not hypothesized to affect facilitation, it was significantly and positively related to facilitation ($r = .24, p < .001$). This suggests that when LEP schools provide many opportunities for parents to be involved at the school, they do attempt to make involvement in these activities possible for language minority families.

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50 Correlation of concentration of low-income students with percent minority students ($r = .38, p < .001$), percent LEP students ($r = .31, p < .001$), percent Latino/Asian teachers aides ($r = .21, p < .001$), and number of ESL/bilingual education teachers/aides ($r = .22, p < .001$). Correlation of loss of resources with percent minority students ($r = .14, p < .05$) and percent Latino/Asian teachers aides ($r = .11, p < .05$). Loss of resources was not significantly correlated with percent LEP students ($r = .03$) or number of ESL/bilingual education teachers/aides ($r = .02$).
The number of ways in which schools facilitated the involvement of language minority families was not significantly related (at the .05 level of significance) to whether the principal was Latino or a non-black racial minority \((r = .13)\)^51 or whether principals had taught ESL/bilingual education classes \((r = .09)\). Facilitation also appeared to be unrelated to the location of the school (city, \(r = .04\); suburb, -.05; rural, \(r = .01\)), despite the fact that the percentage of limited English proficient students in a school was related to school location.\(^52\) Lastly, the influence parents had on an administrator’s job evaluation and the emphasis administrators placed on good communication with parents were unrelated to the number of ways in which schools facilitated the involvement of LM families \((r = .04\) and \(r = -.06\), respectively). As in the analyses of opportunities for involvement, the lack of association between emphasis on good communication and facilitation of involvement likely is due to lack of variation on this measure; among LEP schools, 88 percent of administrators said they placed major emphasis on good communication.

### 6.2.2 Regression Analyses of Facilitation of Involvement

The independent variables were entered in stages to determine whether specific characteristics of the schools and their staff were related to facilitation of involvement in the school when controlling for many factors simultaneously. As with the analyses of

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51 Interestingly, a measure of whether the principal was Latino of any race was significantly and positively related to facilitation methods \((r = .22, p < .001)\).

52 Urban LEP schools educated significantly larger percentages of LEP students than suburban LEP schools \((t = 3.72, p < .001)\). The differences between urban and rural LEP schools, and between suburban and rural schools were not significant \((t = 1.14\) and \(t = .56\), respectively).
opportunities, the number of school staff was omitted, because it was highly correlated
with school size (school staff: \( r = .67, p < .001 \)) in the sample of LEP schools as well.\(^{53}\)

In the first regression, presented as model 1 in table 6.4, the composite measure of
facilitation of involvement was regressed on the measure indicating the percentage of
LEP students in a school. The beta coefficient indicates a significantly positive
relationship between the percentage of LEP students and facilitation. As the percentage
of LEP students in a school increased, the number of ways in which schools facilitated
the involvement of language minority families increased. As shown by the R-squared,
this measure alone accounted for approximately 7 percent of the variation in facilitation.
Regression model 2 includes the measure of percent LEP students, as well schools’
structural characteristics. Contrary to expectations, private schools used fewer methods
of facilitation than did public schools, even when controlling for the percentage of LEP
students in a school. School size and location were unrelated to facilitation. Percent
minority students was originally included in this model, but was omitted due to apparent
multicollinearity with the measure of percentage of LEP students.\(^{54}\)

In model 3, characteristics that reflected school staff’s language use and cultural
background were added. The model presented in table 6.4 includes only those

\(^{53}\) Size of the school staff initially was included in regression model 2 and was not significant (b=
-0.001, \( t = -.41 \)). It also was not significant when included in place of school size (b=-.003, \( t = -.85 \)).

\(^{54}\) In a model with both percent LEP students and percent minority students, the measure of
percent LEP was insignificant (b=.27, \( t = 1.49 \)) and the measure of percent minority students was
significant (b=.23, \( p <.001 \)). Percent LEP was retained in the model, because this is the measure that is
most theoretically relevant to the facilitation of LM parent involvement.

These two measures are highly correlated in LEP schools (\( r = .57, p <.001 \)). It was thought that
multicollinearity might exist, and therefore result in percent LEP being insignificant, because percent
minority students was used to impute values for cases missing data for percent LEP students. To
investigate this possibility, the analysis was run with the measure of percent LEP students without missing
data imputed. Results were similar, in that the measure of percent LEP became insignificant, while the
measure of percent minority students was significant (b(\text{percent LEP}) = .30, \( t = 1.53 \) and \( b(\text{percent
minority}) = .24, p <.01 \)). Furthermore, the correlation between percent minority students and the unimputed
measure of percent LEP was high in LEP schools as well (\( r = .55, p <.001 \)). These findings indicate that the
imputation of missing values is not responsible for the multicollinearity between these measures.
### TABLE 6.4

**FACILITATION OF INVOLVEMENT**

**REGRESSED ON SELECTED SCHOOL CHARACTERISTICS**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.91*** (.246)</td>
<td>2.25*** (.473)</td>
<td>2.68*** (.430)</td>
<td>1.92*** (.426)</td>
</tr>
<tr>
<td>Percent LEP students</td>
<td>.48** (.159)</td>
<td>.39* (.158)</td>
<td>-.004 (.191)</td>
<td>-.01 (.187)</td>
</tr>
<tr>
<td>Private</td>
<td>-1.55*** (.345)</td>
<td>-1.57*** (.313)</td>
<td>-1.27*** (.299)</td>
<td></td>
</tr>
<tr>
<td>School size</td>
<td>.02 (.122)</td>
<td>-.06 (.099)</td>
<td>-.06 (.091)</td>
<td></td>
</tr>
<tr>
<td>Suburb</td>
<td>-.16 (.204)</td>
<td>-.08 (.200)</td>
<td>.06 (.201)</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>-.15 (.345)</td>
<td>-.04 (.295)</td>
<td>-.17 (.272)</td>
<td></td>
</tr>
<tr>
<td>Number ESL/bilingual teachers and aides</td>
<td>.19*** (.053)</td>
<td>.19*** (.050)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Latino/Asian teachers</td>
<td>.03** (.010)</td>
<td>.02* (.010)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least 50% low income students</td>
<td></td>
<td></td>
<td>.20 (.195)</td>
<td></td>
</tr>
<tr>
<td>Sources of additional funding</td>
<td></td>
<td></td>
<td>.13** (.039)</td>
<td></td>
</tr>
<tr>
<td>School experienced loss of resources</td>
<td></td>
<td></td>
<td>.58** (.201)</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>.07</td>
<td>.17</td>
<td>.24</td>
<td>.29</td>
</tr>
<tr>
<td>N</td>
<td>413</td>
<td>413</td>
<td>406</td>
<td>392</td>
</tr>
</tbody>
</table>

Unweighted

Weighted

27,200

27,200

26,826

25,999
TABLE 6.4 (contd.).

<table>
<thead>
<tr>
<th></th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Constant</strong></td>
<td>1.45** (.428)</td>
<td>1.11* (.457)</td>
</tr>
<tr>
<td>Percent LEP students</td>
<td>.04 (.167)</td>
<td>.15 (.191)</td>
</tr>
<tr>
<td>Private</td>
<td>-1.09** (.320)</td>
<td>-1.28*** (.351)</td>
</tr>
<tr>
<td>School size</td>
<td>-.09 (.087)</td>
<td>-.08 (.080)</td>
</tr>
<tr>
<td>Suburb</td>
<td>.14 (.200)</td>
<td>-.002 (.415)</td>
</tr>
<tr>
<td>Rural</td>
<td>.04 (.244)</td>
<td>1.18* (.558)</td>
</tr>
<tr>
<td>Number ESL/bilingual teachers and aides</td>
<td>.21*** (.049)</td>
<td>.32*** (.063)</td>
</tr>
<tr>
<td>Percent Latino/Asian teachers</td>
<td>.02* (.009)</td>
<td>.04*** (.011)</td>
</tr>
<tr>
<td>At least 50% low income students</td>
<td>.17 (.198)</td>
<td>.67* (.336)</td>
</tr>
<tr>
<td>Sources of additional funding</td>
<td>.12** (.039)</td>
<td>.09* (.040)</td>
</tr>
<tr>
<td>School experienced loss of resources</td>
<td>.57** (.197)</td>
<td>.56** (.202)</td>
</tr>
<tr>
<td>Parent presence on school-based management committee</td>
<td>.41* (.198)</td>
<td>.50** (.184)</td>
</tr>
<tr>
<td>Frequency school offered teacher workshops</td>
<td>.18* (.082)</td>
<td>.23* (.107)</td>
</tr>
<tr>
<td>Percent Latino/Asian teachers * number ESL/bilingual teachers and aides</td>
<td></td>
<td>-01*** (.003)</td>
</tr>
<tr>
<td>Workshops * rural</td>
<td>-.54* (.234)</td>
<td></td>
</tr>
<tr>
<td>Workshops * suburb</td>
<td>.04 (.161)</td>
<td></td>
</tr>
<tr>
<td>Private * rural * size</td>
<td>.63** (.233)</td>
<td></td>
</tr>
<tr>
<td>Private * suburb * size</td>
<td>.21 (.332)</td>
<td></td>
</tr>
<tr>
<td>Percent LEP students * concentration of low-income students</td>
<td></td>
<td>-.28 (.176)</td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td>.32</td>
<td>.37</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>Unweighted</td>
<td>Weighted</td>
</tr>
<tr>
<td></td>
<td>385</td>
<td>25,496</td>
</tr>
<tr>
<td></td>
<td>25,496</td>
<td>25,496</td>
</tr>
</tbody>
</table>


NOTE: (Standard errors are in parentheses). * p < .05, ** p < .01, *** p < .001
characteristics that were significant. It accounts for about 24 percent of the variance in facilitation of involvement of language minority families. The positive and significant beta coefficient indicates that, as expected, facilitation increased as the number of ESL/bilingual teachers and aides in a school increased. Similarly, as the percentage of Latino/Asian teachers increased, so did facilitation. Measures that did not have a significant effect on facilitation include: the principal is a Latino/non-black racial minority,\textsuperscript{55} the principal has taken an ESL or bilingual education course, the principal has taught an ESL or bilingual education course, and the school employed a full-time parent liaison or home-school coordinator.\textsuperscript{56}

In a regression similar to model 3 in which the number of ESL/bilingual aides and teachers was omitted, the percentage of Latino/Asian teachers had a slightly larger effect on facilitation ($b = .04$, $p < .001$). These changes in the significance and strength of association of the measure of percent Latino/Asian teachers are likely a result of the fact that the number of ESL/bilingual aides was highly correlated with the percentage of Latino/Asian teachers ($r = .48$, $p < .001$); that is, bilingual/ESL teachers tend to be Latino and/or Asian, and likely speak Spanish or an Asian language in order to meet the

\textsuperscript{55} Although schools are more likely to have a principal who is Latino or a non-Black racial minority when the percentage of Latino and Asian teachers in a school is higher ($r = .31$, $p < .01$), the measure of principal’s race/ethnicity was not insignificant due to multicollinearity with this measure. When included in model 3 in place of the percentage of Latino/Asian teachers, it was insignificant as well ($b = .47$, $t = 1.09$). Also, although significantly correlated with facilitation, the measure indicating that a principal was Latino of any race was not significant in model 3 when other factors were controlled either ($b = .78$, $t = 1.56$).

\textsuperscript{56} Beta coefficients for these measures when entered all at once in model 3 are as follows: principal is a Latino/non-black racial minority, $b = .34$, $t = .71$; principal taken ESL/bilingual education, $b = .24$, $t = 1.15$; principal taught ESL/bilingual education, $b = -.31$, $t = -1.06$; full-time parent liaison, $b = .10$, $t = .47$. Beta coefficients for these measures when entered one at a time in model 3 are as follows: principal is a Latino/non-black racial minority, $b = .30$, $t = .66$; principal taken ESL/bilingual education, $b = .19$, $t = .91$; principal taught ESL/bilingual education, $b = -.14$, $t = -.59$; full-time parent liaison, $b = .11$, $t = .54$.  

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educational and linguistic needs of those children who comprise the largest percentage of
the LEP/language minority population in U.S. schools.

When these measures pertaining to school staff were included, the effect of the
percentage of LEP students on methods of facilitation disappeared. These findings
indicate that schools with larger percentages of LEP students used a greater number of
methods of facilitation because they employed more ESL/bilingual education
teachers/aides, as well as teachers of Latino/Asian background.

In model 4, the measures of school resources were added. Results show that the
more sources of additional funding schools had, the more methods of facilitation they
employed. Unexpectedly, when schools experienced a loss of resources in the previous
three years, the number of methods used to facilitate involvement was greater. In this
model, the concentration of low-income students in a school was unrelated to facilitation
when other factors were controlled. The relationships of two of the other significant
variables in the model to facilitation changed slightly after school resources were added.
The magnitude of the effects of being a private school and the percentage of Latino and
Asian teachers in a school decreased somewhat. Together, these measures accounted for
29 percent of the variance in methods of facilitation.

In model 5, the measures of parental power and institutional support for
parental involvement were added. Two of these measures were significantly related to
facilitation. Parental presence on a school-based management committee and the
frequency of teacher workshops about parental involvement had significant positive
effects on the number of ways in which schools facilitated the involvement of their
LEP/LM students’ families. These measures explain an additional 3 percent in the
variance. Consistent with results from the correlation analysis, whether the principal placed strong emphasis on communication with kindergartner’s parents and the influence parents had on the administrator’s job evaluation had no effect on facilitation ($b = .02$, $t = .08$, and $b = .01$, $t = .10$, respectively).

Again, some differences were noted in the relationships of the other significant variables to facilitation from those in model 4. The magnitude of the effect of being a private school again was reduced somewhat. Also, while the effects of the percentage of LEP students and being a rural school remained insignificant, they did change direction from negative to positive.

As with the analyses of opportunities, an extensive set of analyses was conducted to see whether and how any of the independent measures interacted with one another to affect facilitation of involvement for language minority parents. All of the parental power and institutional support measures were interacted with characteristics of the school composition and organization. Characteristics of school organization and composition were interacted with one another as well. Model 6 includes only those interaction effects that were significantly related to facilitation.

The analyses in model 6 demonstrate that the effects of school location, specifically whether a school was rural, the frequency of workshops on parental involvement, school sector, concentration of low-income students, school size, the percentage of Latino/Asian teachers, and the number of ESL/bilingual aides and teachers in a school were all conditioned by other factors; that is, their effect was dependent on other school characteristics. In particular, rural schools had characteristics whose effects on facilitation counteracted each other, resulting in the measure for rural being
insignificant in previous models. When these counteracting effects were accounted for, the significant main effect for the rural dummy variable indicates that, all other things being equal, rural schools used an average of one more method to facilitate the involvement of language minority/LEP families than urban schools.

Interestingly, however, the effect of workshops on methods of facilitation was not as large in rural schools as it was in urban schools. Among rural schools, the net effect of workshops on methods of facilitation was positive only when schools offered workshops four or more times a year.\textsuperscript{57} Also, all else being equal (and accounting for the three-way interaction between school size, school being rural, and sector), urban public schools that had teacher workshops about parental involvement at least two times during the school year used more methods of facilitation than did rural public schools with the same number of workshops. Urban private schools that had teacher workshops about parental involvement at least four times during the school year used more methods of facilitation than did rural private schools with the same number of workshops.

The significant effect of the rural*private*school size interaction indicates that there was an additional positive effect on opportunities when rural schools were private, and the effect increased with school size. The same interaction indicates that the difference between public and private LEP schools was not as great in rural areas as it is in urban areas.

These analyses also demonstrate an interaction between the percentage of Latino/Asian teachers in a school and the number of bilingual/ESL aides and teachers. Contrary to the individual, direct positive effects of these two characteristics, the

\textsuperscript{57} The main effect for workshops is .23 and the effect of the rural*workshop interaction is -.54. Only when the measure for workshop has a value of 3 (4-6 times per year), is the combined effect of these two measures positive.
interaction of these two measures was significant and negative, indicating that the positive effects of the presence of Latino and ESL/bilingual teachers on methods of facilitation was somewhat reduced as these two measures increase. Once this slight negative effect was accounted for, the main effects for these two measures became more strongly positive.

Lastly, an interesting relationship between resources and facilitation emerged when an interaction between percent LEP students and concentration of low-income students was accounted for: as was seen in the correlation analyses, the effect of the concentration of low-income students became significant. The positive beta coefficient indicates that schools with student populations that were at least 50 percent low-income used more methods of facilitation (a little less than one, on average) than schools with student populations that were less than 50 percent low-income. Although not significant, the effect of the percent LEP*low-income concentration interaction term was negative, while the measure for percent LEP became more positive. These findings suggest that, while schools with disadvantaged populations and larger percentages of LEP students generally used more methods to facilitate the involvement of their language minority families, the number of methods was somewhat lower in those schools with the highest percentages of LEP students.

6.3 Differences in Methods of Facilitation by School Sector

The analyses above show that school sector is highly related to the methods schools use to facilitate the involvement of language minority parents. As with opportunities for involvement, focusing on a global measure of facilitation may lead to the incorrect assumption that public schools are more likely than private schools to use
each of the methods of facilitation included in this study. Comparisons between public and private LEP schools were made to determine whether differences existed in the specific types of services these two groups of schools were likely to offer, and specifically whether there were some methods that were more likely to be used by private schools than public schools.

The means for each method of facilitation that together comprise the overall facilitation indicator, broken down by school type, are presented at the beginning of this chapter in Table 6.1. T-tests showed that public schools used every one of the specific methods asked about significantly more often than private schools. Eighty-two percent of public LEP schools provided translators at meetings between parents and school staff or had meetings that were conducted in the parents’ non-English native languages, compared to 46 percent of private LEP schools ($t=3.83$, $p < .001$). Seventy-six percent of public schools reported that they provided translations of written communications, compared to 23 percent of private schools ($t=6.54$, $p < .001$). In a little more than a half of public LEP schools (53 percent), home visits were made to language minority families, while this occurred in less than a fifth (16 percent) of private schools ($t=4.33$, $p < .001$). Thirty-eight percent of public schools had outreach workers that helped children enroll in school, compared to 21 percent of private schools ($t=2.19$, $p < .05$). It was on this measure that the smallest difference between public and private schools existed. Special meetings for families from non-English speaking backgrounds were held in 35 percent of public schools, compared to only 7 percent of private schools ($t=4.68$, $p < .001$). No differences were found in the number of school administrators who reported that their schools provided another type of assistance (5 percent for public schools, compared to 7
percent for private schools) \((r=.63)\), but this lack of difference likely results from the fact that administrators had to indicate what this additional method was. It’s likely that many administrators in schools that used methods other than those asked about did not take the time to proactively offer them.

### 6.4 Discussion

In general, most schools that educate limited English proficient (LEP) students provide some type of special assistance that are conceptualized in this study as methods that facilitate the involvement of language minority parents at the school. Most of the school characteristics examined in this chapter were related to facilitation efforts, as evidenced in the correlation analyses. However, the regression analyses, in which many characteristics were controlled simultaneously, showed that some of these relationships were indirect, some were spurious, and some were direct but conditioned by other factors.

As expected, facilitation was greater in schools with larger percentages of LEP students. However, this positive relationship disappeared once other factors, specifically percent Latino and Asian teachers and the number of ESL/bilingual teachers and aides employed by a school, were controlled. Therefore, the relationship between the percentage of LEP students in a school and facilitation of the involvement of LM/LEP families appears to be indirect, primarily through the characteristics of the teachers and aides a school employs. Specifically, when a larger percentage of a school’s student population is LEP, it hires more ESL/bilingual teachers and/or aides to address LEP students’ language and educational needs. In turn, schools with more ESL/bilingual teachers and aides offer more types of assistance to LM/LEP families that may facilitate these families’ involvement.
Also, schools with larger percentages of LEP students may employ larger percentages of Latino and Asian teachers because they draw their teaching staff from the same communities as LEP students, who are likely to be Latino and/or Asian themselves. Schools may also recruit teachers of the same background as their LEP students in order to have staff that understands the cultures, and perhaps the languages, of these students and their families. Either way, schools with larger percentages of Latino and Asian also provide more services to LM/LEP families that may facilitate their involvement.

These observed positive relationships between facilitation and the characteristics of school staff were expected. Facilitation is easier (i.e., costs are reduced) when the school staff have the necessary skills and cultural understanding to interact effectively with LM families. In this case, as schools human resources increase, so does the number of methods of facilitation they employ, because it is less costly for schools to provide such services.

Although having a greater number of ESL/bilingual aides and teachers, as well as Latino and Asian teachers, pays off for schools in terms of them employing more methods of facilitation, the negative interaction term between these two measures shows that these positive effects are lowest in schools that simultaneously have the largest percentages of Latino and Asian teachers and the highest number of ESL/bilingual teachers and aides. A possible explanation for this finding is that these are likely to be the schools with the fewest financial resources, which makes it difficult for them to use a variety of methods of facilitation. This is true especially for those methods that require a greater investment of financial resources, such as employing an outreach worker. These schools may focus their efforts specifically on one or two methods asked about in the
survey, for which they already have the resources, rather than use a variety of such methods. For example, in such schools, it may be relatively easy to provide translators at meetings and translate written materials because they already employ the staff to do so. It would be more costly to hire additional staff to do outreach.

This explanation relies on a lack of resources to explain these findings. However, these analyses use measures to control for schools’ financial resources. As discussed in chapter 5, it may be that resources are not being adequately controlled, but there are alternative explanations to this finding. In schools with high concentrations of these two types of staff, a non-English language may be commonly used in the school setting. In such situations, formal programs or policies for providing assistance to LM families may not be in place, because use of a non-English language is a natural, informal part of the school environment. Even if school staff regularly translate for parents who need language assistance and materials are printed in a non-English language, administrators may not have identified such assistance as a formal “service” (the language used in the questionnaire) when completing the survey.

Another possible reason for such a finding is that the number of students who are limited in English proficiency is likely to be highest in schools with the largest numbers of ESL/bilingual education teachers and aides and the largest percentages of Latino and Asian teachers. While these schools use methods of facilitation for parental involvement, the may need to give more time, energy, and resources to the education of the students, who need special assistance themselves. This limits the number of methods schools ultimately use to involve their parents.
Also, some of the services asked about may be too costly to provide when the population of language minority students is large. For example, it can be very costly to provide an outreach worker(s) to enroll all of the students, or to visit all of their homes. Instead, schools may focus their efforts on the methods that can reach a larger population of parents for fewer costs: translators and translated materials. The finding that there are fewer methods of facilitation in schools with a high concentration of low-income students as the percentage of LEP students in a school increases provides some support for this explanation.

These analyses also demonstrate that rural schools use more methods of facilitation than urban schools, especially when those schools are private and larger, all else being equal. In chapter 4, the opposite finding, i.e., that urban schools would do more than rural schools to facilitate involvement, was predicted. However, some of the rationale provided in chapter 4 can actually be used to explain the contrary findings seen here.

First it should be pointed out that these findings are not explained by the fact that rural schools educate larger percentages of LEP students. They actually educate somewhat smaller percentages of LEP students relative to their total enrollments. Furthermore, this relationship between the rural measure and facilitation held whether or not the percentage of LEP students was accounted for. Instead, as discussed in chapter 4, it might be that the diversity of the areas in which schools are located explains the findings here.

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58 Rural schools had a mean of 1.52 on the categorical percent LEP measure, while urban schools had a mean of 1.80. The difference was not significant ($t=1.14$).
It was predicted that in more diverse, urban areas there would likely be greater understanding of the needs of language minority families, as well as more resources in the community outside the school upon which to draw for support in meeting those needs. Rather than have the effect of leading to more methods of facilitation, greater diversity may actually lead to fewer. To explain, in less diverse areas, such as those in rural Texas or California where the numbers of Spanish speakers is high, there may be one dominant language used by most language minorities. Also, among those language minorities, they may be more likely to use that one non-English language almost exclusively and to be surrounded by people who do the same.

In contrast, in more diverse, urban areas, the number of different languages used by students and their families may make it difficult for schools to offer assistance to all families. As a result, schools may use fewer types of methods but focus on those which are easiest when accommodating a more diverse range of languages. Also, in urban areas, language minority families may be more likely to know enough English to not need special assistance, or to be surrounded by bilingual people who can be a resource to turn to when they need help communicating with the school. This takes the burden off the school to provide special assistance. For these reasons, rural schools may have a greater need to offer formal methods of language assistance to language minority families and find it easier to provide more assistance when there is only one language to be accommodated.

Although there is a positive effect of a school’s being rural on facilitation, once other factors are controlled, facilitation was not significantly related to school location in bivariate analyses, and urban and rural schools did not offer significantly different
The significant interaction between the rural dummy variable and the number of workshops that schools offered explains this apparent contradiction. When schools offered workshops to teachers about parental involvement more often, the number of methods of facilitation schools used was greater. This suggests that when schools place more importance on developing the home-school relationship and teachers are taught skills to engage with parents successfully, they provided more assistance to language minority/LEP families to improve the home-school relationship. However, as previously discussed, workshops had a different effect on facilitation in urban and rural schools. Among rural schools, the net effect of workshops on methods of facilitation was actually negative. The overall correlation between methods of assistance and frequency of workshops among rural schools was negative as well, although not significantly so ($r = -.11$).

It appears that rural schools make a choice between using a larger number of methods of facilitation and offering teacher workshops more often as the most effective way to improve the home-school relationship. The data tend to support this: 29 percent of rural schools that have at least one workshop a year use 4 methods of facilitation or more, compared to 60 percent of rural schools that do not have teacher workshops about parental involvement. In contrast, as little as one workshop a year encouraged school staff in urban and suburban schools to use more methods of facilitation. Schools use these methods in conjunction with one another to improve the home-school relationship. No overall differences existed between rural and urban schools in methods of facilitation, because the positive effect of being a rural school was counterbalanced by the negative
effect of workshops for these schools, and the majority of rural schools (about 75 percent) offered workshops.

The finding that rural schools, which tend to be less diverse than urban schools, used more methods of facilitation once other factors were controlled, combined with other findings from these analyses, suggest that language minority families benefit from being in communities with people of a similar background. In the correlation analyses, it was shown that schools that used more methods of facilitation had larger percentages of minority students, limited English proficient students, and Latino and Asian teachers, and were headed by a Latino or non-black racial minority principal. When schools and their surrounding communities include people with an understanding of the needs of language minority parents, as well as the skills to meet those needs (as would ESL and bilingual education teachers and aides), schools do more to involve LM parents in the educational experiences of their children.

The analyses in chapter 5 showed that school sector was a strong and consistent predictor of opportunities for involvement at the school. The analyses in this chapter demonstrate that this is true for methods of facilitation as well. The effect of school sector was not explained by any of the factors investigated in this study. As noted above, there was a positive interaction between schools being both rural and private in terms of the number of methods of facilitation schools employed. This effect was even larger as the number of students educated by the rural private schools increased. However, even
then, this positive effect does not really overcome the overall negative relationship between a school’s being private and facilitation for rural schools, all else being equal.\textsuperscript{59} The regression equation from model 6 would predict that only among larger rural schools, specifically those that educate 300 or more students, would the methods of facilitation would be greater in private than public schools.\textsuperscript{60} However, there are no rural private schools that educated 300 or more students in the population of LEP schools included in this study. 

Therefore, rather than showing that private schools did more to facilitate the involvement of the families who were paying for their children to attend, the data demonstrate that public schools offered more services than private schools to the families of language minority and limited English proficient children in their schools. This was true even when the percentage of LEP students in the school and school resources were taken into consideration. In other words, it was not specifically because private LEP schools had less need to provide such services (i.e., not because they educated fewer students whose parents would need language assistance\textsuperscript{61}), or because they had fewer resources, that they used fewer methods for facilitating LM-family involvement.

\textsuperscript{59} Computing the number of methods of facilitation from a regression analysis that uses just those measures pertaining to school sector, workshops and school location, shows that, all else being equal, rural private schools offer fewer opportunities than rural public schools. The specific regression equation is: Constant + b(private) + b(rural) + b(rural*private*size) + b(workshop) + b(rural*workshop). For the smallest rural private schools that offer workshops about once a year, the regression equation is 1.11 + -1.28(1) + .64(1) + .63(1)(1)(1) + .23(1) + (-.54*1) = .79. For the smallest rural public schools that offer workshops about once a year, the regression equation is 1.11 + 0 + .64(1) + 0 + .23(2) + (-.54*1) = 1.67.

\textsuperscript{60} The regression equation identical to the one presented in the previous footnote for rural private schools that educate at least 300 students (school size category=3) is 1.11 + -1.28(1) + .64(1) + .63(1)(1)(3) + .23(1) + (-.54*1) = 2.05. This is just slightly larger than the number of methods of facilitation predicted by the equation for rural public schools, for which size has no effect on facilitation.

\textsuperscript{61} Public schools had a mean of 1.62 on the categorical percent LEP measure, while private schools had a mean of 1.35. The difference was not significant ($t=1.61$).
There may be several possible explanations, found in the research literature, as well as the data themselves, for why these sector differences continued to exist after controlling for other factors. First, the composite measure of facilitation used in this study indicates how many different *types* of services schools offer for the families of LM/LEP students; it is not a measure of how often schools offer these services. While any given private school may use only a limited number of facilitation methods, they may use them more often. If this is the case, private schools would actually facilitate LM family involvement to a greater extent than public schools, but the data would not be capturing that. However, these results do cast doubt on the likelihood that this is what is occurring, as a substantial number of private LEP schools (almost one third) do not offer any types of assistance to LM/LEP families. They are also much less likely than public LEP schools to offer any one type of service, including that which, arguably, would take the least amount of effort (and therefore have the lowest cost): providing translations of written communications.

Another possible explanation is related to the fact that these measures of facilitation are asked of the school administrator and likely reflect services provided at the school level, rather than the classroom level. It is not clear whether administrators were taking into account whether there were any teachers in the school that provided translated materials or were able to speak to their students’ parents in the parents’ native languages. In private schools, facilitation may be more likely to happen at the classroom level, which would not be picked up in these analyses either.

These explanations suggest that the sector differences demonstrated by the data are opposite those which were predicted because the data are not identifying facilitation
in a way that truly assesses how often facilitation occurs in private schools. It may be the case, however, that these differences reflect a real difference in facilitation, and that private schools offer fewer services that focus on language assistance to LM/LEP families. It should be noted that private schools appear to use fewer methods of facilitation, in part because they offer fewer opportunities to be involved. When opportunities were added to model 5, the effect for the private school dummy was reduced to $b = -.88$.

As was explained with respect to opportunities, it may be that parents who send their children to private schools are more likely than public school parents to trust the schools to educate their children well, and therefore do not press schools for information. This may be especially true of Latino and Asian language minority parents, whose cultural beliefs that teachers and school staff know best when it comes to educating their children may lead them to have lower involvement at the school (Ritter, Mont-Reynaud, and Dornbusch 1993; Yao 1993).

Alternatively, private LEP schools have characteristics indicating that they educated more disadvantaged populations than private non-LEP schools. They educated larger percentages of minority students, relative to total enrollment, and were more likely to be urban and to have student populations that were at least 50 percent low-income. Cultural capital theory would explain that, in such schools, less emphasis may be placed on involving parents whose personal situations may make it difficult for them to be involved or to be positive educational role models for their children. In these instances, schools may perceive that it is better not to spend their resources trying to involve parents
who are not likely to become involved or whose involvement may not be perceived as advantageous for either the student or the school staff.

It may also be the case that many language minority students who attend these disadvantaged private schools may do so on scholarship. If so, the argument that private schools will be more accommodating of parents needs and desires because parents pay for their children to attend is not applicable for these families. Therefore, the needs of language minority parents are not met because they lack the power that comes with paying tuition, along with the lack of power due to linguistic and cultural differences.

The measures of school’s financial resources represent another set of characteristics, besides school sector, that did not consistently demonstrate relationships to facilitation as hypothesized. As was expected, when schools received funding from a greater number of additional sources, they used a greater number of methods of facilitation. Two sources included in the composite measure of additional funding are bilingual and migrant aid, which are specifically targeted to programs for language minority children and their families. It is likely that inclusion of this aid in the composite measure contributes greatly to the positive effect of additional sources of funding on facilitation.

Schools may use their bilingual and migrant aid to develop and implement programs aimed at increasing LM parent involvement. A good portion of the literature on LM parent involvement discusses programs implemented by schools particularly for this reason (e.g., Bermudez 1993; Rivera 1993). However, migrant and bilingual aid that is spent, first and foremost, to meet the educational needs of the students can be beneficial for facilitating LM parent involvement as well. In meeting the needs of
students, schools hire staff that, in addition to educating the students, can provide language assistance to families. As demonstrated by these analyses, facilitation is greater when there is more staff employed by a school that is qualified to provide the special services asked about in the ECLS-K survey instrument. Therefore, receipt of migrant and bilingual aid affects language minority parents indirectly as a result of having their children’s needs being met.

Unexpectedly, the concentration of low-income students in a school was positively related to methods of facilitation, both in bivariate analyses and controlling for other factors. The number of methods of facilitation is greater in more disadvantaged schools, as indicated by the concentration of low-income students. The overall positive relationship likely exists for several reasons. Schools whose student populations were more than 50 percent low-income had the largest percentages of LEP students, whose parents would need language assistance. They also had the largest percentages of ESL/bilingual and Latino/Asian teachers, who could provide language assistance. In addition, schools whose student populations were more than 50 percent low-income were more likely to be public than private, and public schools generally used more methods of facilitation.

Yet the positive relationship exists even controlling for these other factors, meaning that there is some other reason such schools use more methods of facilitation. As discussed in Chapter 5, schools serving disadvantaged student populations are eligible for Title 1 funding, but to receive such funding, schools must implement programs aimed at increasing parental involvement in the school. Schools receiving Title 1 funding may use special services such as those investigated here as part of such programs.
The positive relationship between schools’ experiencing a loss in human or financial resources in the previous three years also was unexpected and curious, given that other factors such as current sources of funding and school composition were controlled. Schools that experienced a loss in resources were those with higher percentages of LEP students, as well as public schools, schools that had additional sources of funding, and schools that had student population that were at least 50 percent low-income. Given that all these characteristics with which it was associated were positively related to facilitation, it is not surprising that the overall (bivariate) relationship between loss of resources and facilitation was positive. However, this relationship held when all these factors were controlled. Again, it could be that these schools are those who are likely to receive Title 1, and the loss of resources was not related to Title 1 funding. Given the Title 1 requirement related to parental involvement programs, schools may not have felt that such programs could be eliminated despite a loss of other types of resources. Another possibility is that, when faced with a loss of resources, schools reach out to parents to help them overcome any problems they might encounter as a result of such a loss. In order to reach out to the language minority parents, school staff needed to provide services that would allow these parents to be involved in a meaningful way.

The indicator of parental power, parental presence on a school-based management committee, was significantly related to facilitation. It was hypothesized that with the greater degree of power afforded to parents when they sit on a committee that has input in the decisions of the school, parents will be able to lobby for the implementation of school policies and practices that address their needs. It may be that language minority parents who speak English well enough to be on such a committee act on behalf of other parents
with whom they can identify and who need assistance and encouragement in order to be involved at the school. An alternate interpretation of these findings is that when language minority parents sit on these committees, schools proactively offer language assistance, either by translating materials sent home or providing translators at the meetings, so that LM parents can be involved in a meaningful way. According to this explanation, parental power is not what is affecting methods of facilitation, but rather the desire of school staff to involve parents effectively. There are no data available in the ECLS-K that would allow for further investigation of this issue.

Some measures were significantly correlated with facilitation but did not appear significant in regression analyses when many factors were controlled simultaneously. While school size had a large impact on the opportunities schools provided parents to be involved at the school, it exerted no independent direct influence on methods of facilitation. The significant three-way interaction between school sector, school size, and a school being rural showed that school size does condition the relationship between school sector and facilitation for rural schools; the number of methods of facilitation was larger in larger rural private schools than in smaller rural private schools. However, given the extremely low number of rural private schools that educated LEP students (unweighted n=2), little should be made of this finding. The positive overall relationship between size and facilitation likely exists because of school sizes’ significant correlation with other factors that have a direct positive effect on facilitation, such as the number of ESL/bilingual teachers and aides in a school and a school being public.\(^\text{62}\) It appears that

\[^{62}\text{Correlation between school size and number of ESL/bilingual teachers and aides: } r = .31,\text{ } p < .001.\text{Correlation between school size and a school being public: } r = .46,\text{ } p < .001.\]
language minority parents are better served in larger schools because they employ a larger staff that can meet their language needs.

While schools that employed a full-time parent liaison used a greater number of types of methods of facilitation, having a parent liaison did not have a direct effect on facilitation. The positive overall relationship between having a parent liaison and facilitation exists because public schools, which used more methods of facilitation, were much more likely than private schools to employ a full-time parent liaison (23 percent compared to 3 percent in the sample of LEP schools, \( t = 6.21, p < .001 \)). Schools probably had too few liaisons to have a significant effect on the number of ways in which schools facilitated the involvement of language minority parents. No school in this sample employed more than one full-time equivalent parent liaison. In the next chapter, however, analyses will investigate whether their presence actually affects the extent to which parents are involved.

The analyses in this chapter show that the majority of schools are attempting to meet the needs of their students with limited English proficiency by hiring the staff that can help them best. The presence of this staff benefits the families of all children from a non-English language background, as the larger specialized staff size results in families of language minority students receiving more assistance that may reduce the costs of involvement associated with overcoming language barriers. As a result of these reduced costs, language minority parents may become more involved at the school. If so, the fact that almost 15 percent of schools that educated LEP students do not have any special services to assist language minority families will have negative consequences for the families in these schools. In the next chapter, analyses are undertaken to determine
whether schools’ facilitation efforts do result in greater parental participation in those activities described in the previous chapter.
CHAPTER 7

LANGUAGE MINORITY FAMILIES’ PARTICIPATION IN FORMAL SCHOOL ACTIVITIES

This chapter presents analyses related to the actual level of familial participation in formal school activities for the nation’s kindergartners. While the relationships of many factors to familial involvement for all students are examined, emphasis is placed on describing the familial involvement of students whose parents are language minorities (LM) and comparing this level of involvement to that of students whose parents speak only English.63

7.1 Description of Kindergartners, Their Families, Households, and Schools, by Parents’ Language Minority Status

As can be seen below in table 7.1, most students have parents who only use English in the home (78 percent). Nevertheless, a substantial portion of kindergartners have parents who come from language minority backgrounds. Specifically, students with non-English-speaking language minority parents comprise approximately 12 percent of

63 The reader is reminded that the three analytic groups are: 1) students whose parents do not use English as a primarily language in the household (non-English-speaking language minority parents (or non-English LM); 2) students whose parents do use English as a primarily language in the household (English-speaking language minority parents, or English LM); and 3) students whose parents use only English in the home (students with non-language minority parents, or non-LM).
TABLE 7.1
NUMBER AND PERCENT OF KINDERGARTNERS, BY PARENTS’ LANGUAGE MINORITY STATUS
IN SCHOOLS IN THE UNITED STATES:
1998-1999

<table>
<thead>
<tr>
<th></th>
<th>Unweighted n</th>
<th>Weighted n</th>
<th>Percent of weighted n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students with non-language minority parent(s)</td>
<td>12,974</td>
<td>3,020,092</td>
<td>78</td>
</tr>
<tr>
<td>Students with non-English LM parent(s)</td>
<td>2,103</td>
<td>444,995</td>
<td>12</td>
</tr>
<tr>
<td>Students with English LM parent(s)</td>
<td>1,821</td>
<td>396,585</td>
<td>10</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16,898</strong></td>
<td><strong>3,861,672</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>


NOTE: Eight students with parent data in both fall and spring do not have data for parents’ home language use. They are excluded from these analyses.

the nation’s kindergartners, while students with English-speaking language minority parents are approximately 10 percent of this population.64

Table 7.2 shows estimates for the examined student, family, household, and school characteristics separately for students with non-English-speaking language minority parents, students with English-speaking language minority parents, and students

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64 The estimates in this table only pertain to students with parent data but are not limited only to students who attended the same school all year, in order to present national totals for these three groups. The remaining analyses in this chapter are limited to students who attended the same school all year. The unweighted sample size for this group of students is 16,198. The sample sizes of the three groups categorized by parents’ language status, both weighted and unweighted, are slightly smaller than those presented in this table, but the percentage distribution is exactly the same. This is because students in each group were equally likely to change schools between fall and spring: approximately 7 percent of students in each group did so.
TABLE 7.2
DESCRIPTIVE STATISTICS
FOR KINDERGARTENERS WHO ATTENDED THE SAME SCHOOL ALL YEAR, BY PARENTS’ LANGUAGE MINORITY STATUS
IN THE UNITED STATES
1998-1999

<table>
<thead>
<tr>
<th>STUDENT CHARACTERISTICS</th>
<th>LM, non-English Speakers</th>
<th>Mean</th>
<th>s.e.</th>
<th>L.M. English Speakers</th>
<th>Mean</th>
<th>s.e.</th>
<th>Non-LM</th>
<th>Mean</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>Range</td>
<td>Mean</td>
<td>s.e.</td>
<td>Mean</td>
<td>s.e.</td>
<td>Mean</td>
<td>s.e.</td>
<td>Mean</td>
<td>s.e.</td>
</tr>
<tr>
<td>Female</td>
<td>0-1</td>
<td>.49</td>
<td>.012</td>
<td>.50</td>
<td>.013</td>
<td>.49</td>
<td>.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student’s race/ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>0-1</td>
<td>.07</td>
<td>.010</td>
<td>.27</td>
<td>.022</td>
<td>.70</td>
<td>.015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>0-1</td>
<td>.01</td>
<td>.003</td>
<td>.06</td>
<td>.009</td>
<td>.19</td>
<td>.014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>0-1</td>
<td>.77</td>
<td>.019</td>
<td>.49</td>
<td>.032</td>
<td>.06</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian, non-Hispanic</td>
<td>0-1</td>
<td>.14</td>
<td>.014</td>
<td>.09</td>
<td>.009</td>
<td>.01</td>
<td>.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other race, non-Hispanic</td>
<td>0-1</td>
<td>.01</td>
<td>.003</td>
<td>.09</td>
<td>.044</td>
<td>.04</td>
<td>.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student has a parent-reported disability</td>
<td>0-1</td>
<td>.07</td>
<td>.007</td>
<td>.13</td>
<td>.010</td>
<td>.16</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student is a citizen</td>
<td>0-1</td>
<td>.88</td>
<td>.009</td>
<td>.99</td>
<td>.002</td>
<td>100</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attends full-day kindergarten</td>
<td>0-1</td>
<td>.45</td>
<td>.030</td>
<td>.56</td>
<td>.035</td>
<td>.56</td>
<td>.025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student is first-time kindergartener</td>
<td>0-1</td>
<td>.95</td>
<td>.006</td>
<td>.96</td>
<td>.005</td>
<td>.95</td>
<td>.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student in program for emotional/behavioral problems</td>
<td>0-1</td>
<td>.01</td>
<td>.003</td>
<td>.01</td>
<td>.003</td>
<td>.01</td>
<td>.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher has contacted parents about problems at school</td>
<td>0-1</td>
<td>.27</td>
<td>.017</td>
<td>.30</td>
<td>.013</td>
<td>.32</td>
<td>.006</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FAMILY AND HOUSEHOLD CHARACTERISTICS

<table>
<thead>
<tr>
<th>Family structure</th>
<th>LM, non-English Speakers</th>
<th>Mean</th>
<th>s.e.</th>
<th>L.M. English Speakers</th>
<th>Mean</th>
<th>s.e.</th>
<th>Non-LM</th>
<th>Mean</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>Range</td>
<td>Mean</td>
<td>s.e.</td>
<td>Mean</td>
<td>s.e.</td>
<td>Mean</td>
<td>s.e.</td>
<td>Mean</td>
<td>s.e.</td>
</tr>
<tr>
<td>Two-parent household</td>
<td>0-1</td>
<td>.82</td>
<td>.012</td>
<td>.77</td>
<td>.017</td>
<td>.75</td>
<td>.010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-parent household</td>
<td>0-1</td>
<td>.17</td>
<td>.012</td>
<td>.22</td>
<td>.015</td>
<td>.23</td>
<td>.009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guardian-only household</td>
<td>0-1</td>
<td>.01</td>
<td>.002</td>
<td>.02</td>
<td>.004</td>
<td>.02</td>
<td>.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-1</td>
<td>.04</td>
<td>.004</td>
<td>.05</td>
<td>.006</td>
<td>.05</td>
<td>.003</td>
<td></td>
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<td>------</td>
<td>-----</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family disruption during the year</td>
<td>0-1</td>
<td>.85</td>
<td>.009</td>
<td>.83</td>
<td>.009</td>
<td>.83</td>
<td>.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling(s) in household</td>
<td>0-1</td>
<td>1.64</td>
<td>.040</td>
<td>1.51</td>
<td>.049</td>
<td>1.40</td>
<td>.016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of siblings in household</td>
<td>0-1</td>
<td>.57</td>
<td>.013</td>
<td>.57</td>
<td>.015</td>
<td>.56</td>
<td>.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling in same school</td>
<td>0-1</td>
<td>.85</td>
<td>.009</td>
<td>.83</td>
<td>.009</td>
<td>.83</td>
<td>.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence of family member, other than a parent, age 18 or over in house</td>
<td>0-1</td>
<td>.29</td>
<td>.011</td>
<td>.22</td>
<td>.013</td>
<td>.14</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grandparent lives in household</td>
<td>0-1</td>
<td>.11</td>
<td>.008</td>
<td>.12</td>
<td>.011</td>
<td>.08</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grandparent over age 65 lives in household</td>
<td>0-1</td>
<td>.03</td>
<td>.004</td>
<td>.03</td>
<td>.004</td>
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<td>Number of methods to facilitate LM family involvement³</td>
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NOTE: Detail may not sum to total due to rounding. s.e. is standard error.
¹ Estimate indicates proportion of public schools that are of this type.
² Estimate indicates proportion of private schools that are of this type.
³ Estimate pertains only to students in schools that educated limited English proficient students.
+ Not applicable.
with non-language minority parents. These three groups of students significantly differ on many of the measures investigated in this study.

Not surprisingly, students with non-English LM parents were least likely to be citizens, compared to students with English LM parents ($t= -13.46, p < .001$) and students with non-LM parents ($t= -14.07, p < .001$). Also, students with English LM parents ($t= -13.46, p < .001$) were less likely to be citizens than students with non-LM parents ($t= -2.62, p < .01$).

No significant differences were found among these groups of students in the likelihood that they were female.\(^{65}\) Students with non-English LM parents were least likely to have a parent-reported disability, while students with non-LM parents were most likely to have a parent-reported disability.\(^{66}\) Research suggests that because disability is parent-reported, these differences may not reflect actual differences in the prevalence of disabilities but rather differences in the likelihood that these children have been to medical professionals and had their disabilities diagnosed, as well as in parents’ awareness of and/or willingness to report a disability (Halle et al. forthcoming).

The racial/ethnic composition of these three groups of students differed. Only 7 percent of students with non-English LM parents were white,\(^{67}\) compared to 26 percent of students with English LM parents ($t= -8.71, p < .001$) and 70 percent of students with non-LM parents ($t= -35.84, p < .001$). The difference between students with English LM

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\(^{65}\) T-tests from comparisons between the two groups are as follows: non-English LM vs. English LM, $t= -.47$; non-English LM vs. non-LM, $t= .10$; English LM vs. non-LM, $t= .75$.

\(^{66}\) T-test results for parent-reported disability are as follows: non-English LM vs. English LM, $t= -4.77, p < .01$; non-English LM vs. non-LM $t= -12.71, p < .001$; English LM vs. non-LM, $t= -2.80, p < .001$.

\(^{67}\) In this dissertation, students’ racial identification is exclusive of Latino ethnicity. That is, students referred to as white are non-Latino whites, students referred to as black are non-Latino blacks, etc. Latino students may be of any race.
parents and students with non-LM parents was also highly significant \((t = -21.35, p < .001)\). Similarly, students with non-English LM parents were less likely to be black, compared to students with English LM parents \((t = -6.14, p < .001)\) and students with non-LM parents \((t = -12.31, p < .001)\). Students with English LM parents were also less likely to be black than students with non-LM parents \((t = -8.65, p < .001)\).

Consistent with data showing that the majority of language minorities in the United States are Latino or Asian (Shin and Bruno 2003), in this population of kindergartners, the majority of students with non-English LM parents were Latino or Asian. Almost half of those whose parents are English-speaking language minorities were Latino as well. Interestingly, while only 9 percent of students in this group were Asian, 27 percent were White. Larger percentages of students with non-English LM parents were Latino or Asian, compared to students with English LM parents \((t = 8.79, p < .001\) and \(t = 4.12, p < .001\), respectively) and students with non-language minority parents \((t = 36.04, p < .001\) and \(t = 9.44, p < .001\), respectively). Also, larger percentages of students with English LM parents were Latino or Asian, compared to students with non-LM parents \((t = 13.78, p < .001\) and \(t = 8.19, p < .001\), respectively). In contrast, students with non-English LM parents were less likely than students with English LM parents \((t = -2.07, p < .05)\) and students with non-LM parents \((t = -7.97, p < .001)\) to fall in the “other race” category, although the differences are less pronounced than they are for the other race/ethnicities. Students with English LM parents were not significantly more likely than students with non-LM parents to be of an “other” race/ethnicity \((t = 1.39)\).
Students with non-English LM parents were less likely than other students to
attend full-day kindergarten.\textsuperscript{68} These groups of students did not significantly differ from
one another in the likelihood of being a first-time kindergartener.\textsuperscript{69}

There were no differences by parents’ language background in the likelihood that
students were in programs for students with emotional or behavioral problems.\textsuperscript{70}

Students with non-English LM parents were less likely than students with non-LM
parents to have had their teachers contact their parents about problems they were having
\((t = -2.45, p < .05)\). Neither the difference between students with English LM parents and
students with non-LM parents nor the difference between students with English LM
parents and students with non-English LM parents were significant \((t = -.93\text{ and } t = 1.53,\)
respectively).

Some differences among these three groups were found in household
composition. Students with non-English LM parents were more likely to live in two-
parent homes and less likely to live in single-parent or guardian-only homes than other
students,\textsuperscript{71} with one exception: the difference between the percentage of students with

\begin{itemize}
\item T-tests results for full-day kindergarten are as follows: non-English LM vs. English LM, \(t = 3.26, p < .01\); non-English LM vs. non-LM, \(t = 3.10, p < .01\). The difference between English LM and non-
LM was not significant, \(t = .07\).
\item T-tests results for first-time kindergartener are as follows: non-English LM vs. non-LM, \(t = -.98\); non-English LM vs. English LM, \(t = -1.61\); English LM vs. non-LM, \(t = 1.24\).
\item T-tests results for special program are as follows: non-English LM vs. English LM, \(t = .24\); non-
English LM vs. non-LM, \(t = -.87\); English LM vs. non-LM, \(t = -.14\).
\item T-tests results for two-parent homes are as follows: non-English LM vs. English LM, \(t = 2.98,\)
\(p < .01\); non-English LM vs. non-LM, \(t = 5.22, p < .001\). The difference between English LM and non-LM
was not significant, \(t = 1.12\). T-tests results for one-parent homes are as follows: non-English LM vs.
English LM, \(t = -2.95, p < .01\); non-English LM vs. non-LM, \(t = -4.58, p < .001\). The difference between
English LM and non-LM was not significant, \(t = -.88\). T-tests results for guardian-only homes are as
follows: non-English LM vs. non-LM, \(t = -4.40, p < .001\). The difference between English LM and non-LM
was not significant, \(t = 1.47\).
\end{itemize}
non-English LM parents and the percentage of students with English LM parents living in guardian-only homes was not significant ($t = 1.36$).

With respect to experiencing some sort of familial disruption during the year, either through the addition or loss of a parent-figure to the household, students with non-English LM parents were less likely to experience this than students with English LM parents ($t = -2.57, p < .05$) or students with non-LM parents ($t = -2.04, p < .05$), although the differences were not large. These differences are primarily driven by differences in the likelihood of losing a parent. While no differences were found among the groups in the likelihood of gaining a parent, students with non-English LM parents were less likely to have a parent leave the household during the school year than students with English LM parents ($t = -2.08, p < .05$) or students with non-LM parents ($t = -2.28, p < .05$). Again, the differences on these measures between students with English LM parents and students with non-LM parents were not significant (disruption: $t = .97$; addition of a parent: $t = .42$; loss of a parent: $t = .85$).

Students with non-English-speaking language minority parents were more likely than students with non-language minority parents to have siblings ($t = 2.51, p < .05$) and to have significantly more of them ($t = 5.90, p < .001$). While no differences were found between students with English LM parents and other students in the likelihood of having siblings, they did have significantly more of them than students with non-LM parents ($t = 2.35, p < .05$) and significantly fewer of them than students with non-English LM parents ($t = 2.16, p < .05$). No significant differences were found among students in these

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72 T-tests results for addition of a parent are as follows: non-English LM vs. non-LM, $t = -.53$; non-English LM vs. English LM, $t = -.69$.

73 T-tests results for presence of siblings are as follows: non-English LM vs. English LM, $t = 1.54$; English LM vs. non-LM, $t = 54$. 

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three groups in the likelihood that they had older siblings or siblings in the same school.74

The differences in the likelihood of living in a home with someone other than their parents who was age 18 or older were significant between all groups, with students with non-English LM parents being most likely and students with non-LM parents being least likely.76 More specifically, students with language minority parents were more likely to live in a household with a grandparent, especially if that grandparent was over the age of 65.78 In contrast, they lived close to significantly fewer grandparents, compared to students with non-LM parents.79 Among students with language minority parents, there was no difference between the two groups with respect to the likelihood that they lived in a household with a grandparent (t= .82), but those whose parents did not speak English lived close to fewer grandparents than students whose parents did speak English (t= -10.94, p < .001). This difference probably is due to the fact that parents who did not use English as a primary language in the household were more likely to be immigrants than those who did. Immigrants are likely to have fewer family members in

74 T-tests results for presence of older siblings are as follows: non-English LM vs. non-LM, t= .39; non-English LM vs. English LM, t=.01; English LM vs. non-LM, t=.31.

75 T-tests results for siblings in the same school are as follows: non-English LM vs. non-LM, t=.48; non-English LM vs. English LM, t=-.05; English LM vs. non-LM, t=.27.

76 T-tests results for presence of person age 18 or older are as follows: non-English LM vs. non-LM, t= 13.06, p < .001; English LM vs. non-LM, t= 6.43, p < .001; non-English LM vs. English LM, t= 4.70, p < .001.

77 T-tests results for living with a grandparent are as follows: non-English LM vs. non-LM, t= 2.85, p < .001; English LM vs. non-LM, t= 3.23, p < .001.

78 T-tests results for living with a grandparent over age 65 are as follows: non-English LM vs. non-LM, t= 3.51, p < .001; English LM vs. non-LM, t= 3.80, p < .001.

79 T-tests results for number of grandparents living close by: non-English LM vs. non-LM, t= -21.74, p < .001; English LM vs. non-LM, t= -12.93, p < .001.

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the United States than non-immigrants, but those family members who are here are likely to live with them.

Consistent with Census data showing that immigrants and Latinos tend to have lower incomes and education levels than non-immigrants and non-Latinos, respectively (Larsen 2004; Ramirez and de la Cruz 2003), the average socioeconomic status of students with non-English LM parents was lower than the socioeconomic status of both students with English LM parents and students with non-language minority parents ($t = -11.79$, $p < .001$ and $t = -18.10$, $p < .001$, respectively). Also, close to half of the students with non-English LM parents (43 percent) lived in poverty, compared to 22 percent of students with English LM parents and 17 percent of students with non-language minority parents ($t = 6.64$, $p < .001$ and $t = 13.50$, $p < .001$, respectively). Although estimates on these measures of SES or poverty seem to indicate that students with English LM parents were from a lower socioeconomic background than students with non-LM parents, these two groups of students did not significantly differ on these measures at the .05 level.\footnote{T-tests results were as follows: SES, $t = -1.29$; poverty, $t = 1.74$.}

Generally, significant differences in mothers’ and fathers’ employment status were found between students with non-English LM parents and the other two groups of students for most categories of employment. Specifically, students with non-English LM parents are more likely to have mothers who are not in the labor force,\footnote{Non-English LM vs. non-LM, $t = 14.19$, $p < .001$; non-English LM vs. English LM, $t = -11.43$, $p < .001$.} and less likely to
have mothers who work full time,\textsuperscript{82} or part-time.\textsuperscript{83} The differences on these measures between students with English LM parents and students with non-LM parents were not significant.\textsuperscript{84} Also, none of the groups significantly differed in the likelihood that their mothers were looking for work.\textsuperscript{85}

Fewer differences in fathers’ employment status were found among the three groups of students. Specifically, they did not differ in the likelihood that their fathers were not in the labor force or that their fathers were employed full time.\textsuperscript{86} Students with non-English LM parents were more likely than students with non-LM parents to have a father who worked part-time (\(t = 4.48, p < .001\)) or who was looking for work (\(t = 3.60, p < .001\)). Other differences for these two employment categories were not significant.\textsuperscript{87}

Parents’ expectations for their children’s education significantly differed by parents’ language background. Consistent with literature showing higher educational expectations among immigrants than among non-immigrants, but inconsistent with the findings related to expectations of Latino parents (Vernez, Abrahamse, and Quigley 1996; Hao and Bonstead-Bruns 1998), expectations were highest for students whose

\textsuperscript{82} Non-English LM vs. non-LM, \(t = -7.57, p < .001\); non-English LM vs. English LM, \(t = -6.00, p < .001\).

\textsuperscript{83} Non-English LM vs. non-LM, \(t = -8.34, p < .001\); non-English LM vs. English LM, \(t = -5.27, p < .001\).

\textsuperscript{84} T-tests results for the mothers’ employment statuses are as follows: mother not in the labor force, \(t = .25\); mother works full time, \(t = .27\); mother works part time, \(t = .21\).

\textsuperscript{85} Non-English LM vs. non-LM, \(t = 1.70\); non-English LM vs. English LM, \(t = .29\); English LM vs. non-LM, \(t = .88\).

\textsuperscript{86} T-tests results for father not in labor force: Non-English LM vs. non-LM, \(t = .57\); non-English LM vs. English LM, \(t = 1.60\); English LM vs. non-LM, \(t = .46\). T-tests results for father works full time: Non-English LM vs. non-LM, \(t = .81\); non-English LM vs. English LM, \(t = 1.03\); English LM vs. non-LM, \(t = -.22\).

\textsuperscript{87} T-tests results for father works part time: Non-English LM vs. English LM, \(t = 1.80\); English LM vs. non-LM, \(t = 1.75\). T-tests results for father looking for work: Non-English LM vs. English LM, \(t = 1.69\); English LM vs. non-LM, \(t = -1.95\).
parents were non-English-speaking language minorities (who were primarily Latino), and lowest for students whose parents were non-language minorities. 88 With respect to involvement at home, students whose parents were non-English LM were read to less often than students in the other two groups. 89 No significant differences were found among students in the number of classmates’ parents their parents talked to regularly, either by phone or in person. 90

Turning attention to differences in school characteristics, patterns of differences appear consistent with those described in chapters 5 and 6 between schools that educated limited English proficient (LEP) students and those that did not. Students with non-English LM parents were less likely than students with English LM parents and students with non-language minority parents to go to private schools. 91 A slightly higher percentage of students with English LM parents than students with non-LM parents attended private schools, but the difference was not significant (t = 1.14).

Among private-school students only, there were no significant differences in the likelihood of attending a specific type of private school by parents’ language background, although the lack of statistical difference may be due to the relatively small sample sizes of LM students who attended private schools. About 43 percent of private-school students with non-English LM parents went to Catholic schools, compared to 37 percent

89 Non-English LM vs. non-LM, t = -11.54, p < .001; non-English LM vs. English LM, t = -7.29, p < .001. The difference between English LM and non-LM was not significant (t = 1.41).
90 Non-English LM vs. non-LM, t = .83; non-English LM vs. English LM, t = -.70; English LM vs. non-LM, t = 1.51.
91 Non-English LM vs. non-LM, t = -6.05, p < .001; non-English LM vs. English LM, t = -6.61, p < .001.
of students in each of the other two groups. About 27 percent of private-school students with non-English LM parents went to other religious schools, compared to 37 percent of students with non-LM parents and 32 percent of students with English LM parents.

Lastly, about 30 percent of private-school students with non-English LM parents went to secular schools, compared to 25 percent of students with non-LM parents and 30 percent of students with English LM parents.

Among public-school students, relatively similar percentages of students from each group attended schools of choice or magnet schools (between 7 and 8 percent). Students with non-English LM parents were less likely than students with English LM parents and students with non-language minority parents to attend kindergarten in early childhood centers. Students with non-English LM parents attended schools with the largest number of students. They also attended schools with the largest percentages of minority students and teachers, while students with non-language minority parents attended

---

92 T-test comparisons for Catholic schools are as follows: Non-English LM vs. non-LM, \( t = .80 \); non-English LM vs. English LM, \( t = .90 \); English LM vs. non-LM, \( t = .02 \).

93 T-test comparisons for other religious schools are as follows: Non-English LM vs. non-LM, \( t = -1.53 \); non-English LM vs. English LM, \( t = -1.10 \); English LM vs. non-LM, \( t = -.96 \).

94 T-test comparisons for secular schools are as follows: Non-English LM vs. non-LM, \( t = .72 \); non-English LM vs. English LM, \( t = -.02 \); English LM vs. non-LM, \( t = 1.08 \).

95 There were no significant differences between groups in the percentages who attended a school of choice or magnet school. Results from t-test comparisons are as follows: non-English LM vs. non-LM, \( t = 02 \); non-English LM vs. English LM, \( t = -.78 \); English LM vs. non-LM, \( t = .69 \).

96 Non-English LM vs. non-LM, \( t = -2.90, p < .01 \); non-English LM vs. English LM, \( t = -3.05, p < .01 \). The difference between English LM and non-LM was not significant (\( t = .88 \)).

97 Non-English LM vs. non-LM, \( t = 7.93, p < .001 \); non-English LM vs. English LM, \( t = 7.16, p < .001 \). The difference between English LM and non-LM was not significant (\( t = 1.74 \)).
schools with the smallest percentages of minority students and teachers. The same pattern held when considering the percentage of teachers who were Asian or Latino specifically. About 60 percent of students with non-English LM parents attended schools where at least half of the student population was low income, compared to 41 percent of students with English LM parents ($t = 4.52, p < .001$) and 36 percent of students with non-language minority parents ($t = 5.47, p < .001$). The difference between the two latter groups of students was not significant ($t = 1.45$).

Some differences were found in the location of the schools these three groups of students attended. Students with non-English LM parents were more likely to attend schools in central cities and less likely to attend schools in rural areas, compared to other students. Students with English LM parents were also more likely than students with non-LM parents to attend schools in central cities ($t = 3.15, p < .001$), but no differences were found between these two groups in the percentages that attended rural schools ($t = 1.45$). Only one difference related to attending schools in the suburbs was found: students with non-English LM parents were less likely to attend suburban schools than students with non-LM parents ($t = -2.20, p < .05$).

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98 Non-English LM vs. non-LM, $t = 17.86, p < .001$; non-English LM vs. English LM, $t = 8.08, p < .001$; English LM vs. non-LM, $t = 8.45, p < .001$.

99 Non-English LM vs. non-LM, $t = 5.13, p < .001$; non-English LM vs. English LM, $t = 3.21, p < .001$; English LM vs. non-LM, $t = 4.73, p < .001$.


102 Nonsignificant differences for suburb are English LM vs. non-LM, $t = -1.40$; non-English LM vs. English LM, $t = -1.02$. 

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Consistent with data showing a geographical concentration of language minorities in different areas of the country (Garcia 2001; Shin and Bruno 2003), differences were found in the likelihood that these three groups of students lived in different geographic regions. Students with non-English LM parents were most likely to attend schools in the West, while students with non-LM parents were least likely to do so. In contrast, students with non-English LM parents were least likely to attend schools in the Midwest or the Northeast. Both groups of students with language minority parents were less likely to attend schools in the South, compared to students with non-language minority parents.

Students with non-English LM parents attended schools with the largest percentages of LEP students, while students with non-language minority parents attended schools with the smallest percentages of LEP students. Students with non-English LM parents also attended schools with the largest percentages of Latino and Asian teachers, while students with non-LM parents attended schools with the smallest percentage of such teachers. Students with non-English LM parents attended schools with the largest number of English as a Second Language (ESL) and bilingual education teachers.

\[ t = 9.11, p < .001; \text{non-English LM vs. English LM}, t = 4.39, p < .001; \text{English LM vs. non-LM}, t = 4.72, p < .001. \]

\[ t = -7.29, p < .001; \text{non-English LM vs. non-LM}, t = -2.26, p < .05. \] The difference between English LM and non-LM was not significant ($t$ = 1.49).

\[ t = -2.59, p < .05; \text{non-English LM vs. English LM}, t = -3.09, p < .01. \] The difference between English LM and non-LM was not significant ($t$ = 1.00).

\[ t = 14.39, p < .001; \text{non-English LM vs. English LM}, t = 10.78, p < .001; \text{English LM vs. non-LM}, t = 7.62, p < .001. \]

\[ t = 8.85, p < .001; \text{non-English LM vs. English LM}, t = 5.78, p < .001; \text{English LM vs. non-LM}, t = 5.04, p < .001. \]
and aides, while students with non-LM parents attended schools with the smallest number of such teachers and aides.\textsuperscript{108} Students with non-English LM parents were most likely to attend schools headed by Latino or non-black minority principals, while students with non-LM parents were least likely.\textsuperscript{109}

Some differences were found among these groups of students in the likelihood that their schools had ways of facilitating involvement for all parents. Specifically, students with non-English LM parents were more likely than other students to attend schools that offered child care during parent events.\textsuperscript{110} The difference between students with English LM parents and students with non-LM parents was not significant (\(t=1.16\)). In contrast, compared to other students, students with non-English LM parents attended schools that had fewer activities to make the transition into formal schooling easier for students and their parents.\textsuperscript{111} Students with English LM parents also attended schools that had fewer of these activities, compared to students with non-LM parents (\(t=-3.12\), \(p < .01\)).

A smaller percentage students with non-English LM parents (83 percent) than either students with English LM parents (89 percent) or students with non-LM parents (91 percent) attended schools where administrators placed strong emphasis on good

\textsuperscript{108} Non-English LM vs. non-LM, \(t=11.88\), \(p < .001\); non-English LM vs. English LM, \(t=9.25\), \(p < .001\); English LM vs. non-LM, \(t=6.47\), \(p < .001\).

\textsuperscript{109} Non-English LM vs. non-LM, \(t=4.98\), \(p < .001\); non-English LM vs. English LM, \(t=2.21\), \(p < .05\); English LM vs. non-LM, \(t=4.57\), \(p < .001\).

\textsuperscript{110} Non-English LM vs. non-LM, \(t=4.59\), \(p < .001\); non-English LM vs. English LM, \(t=4.15\), \(p < .001\).

\textsuperscript{111} Non-English LM vs. non-LM, \(t=-8.59\), \(p < .001\); non-English LM vs. English LM, \(t=-4.39\), \(p < .001\).
communication with kindergartners’ parents.\textsuperscript{112} Yet, students with non-English LM parents were more likely than students with non-LM parents to attend a school in which an administrator indicated that parents were welcome to visit any time a class was in session ($t = 2.44$, $p < .05$).\textsuperscript{113} Also, a larger percentage of students with non-English LM parents (31 percent) attended schools that employed a full-time parent liaison, compared to 21 percent and 17 percent of students with English LM parents and students with non-LM parents, respectively.\textsuperscript{114} Again, the differences on these measures between students with English LM parents and students with non-language minority parents were not significant (good communication: $t= 1.00$, liaison: $t= 1.04$). No differences were found in the frequency with which schools sent home informational letters, newsletters, or calendars for parents.\textsuperscript{115}

Overall, students with non-English LM parents attended schools that used more methods to facilitate the involvement language minority parents, compared to other students.\textsuperscript{116} The difference between students with English LM parents and students with non-language minority parents was also significant ($t= 6.15$, $p < .001$). These differences partially result from the fact that students with language minority parents were more likely than students with non-language minority parents to attend schools that educated

\begin{footnotesize}
\textsuperscript{112} Non-English LM vs. non-LM, $t= -2.43$, $p < .05$; non-English LM vs. English LM, $t= -2.01$, $p < .05$.

\textsuperscript{113} The difference between non-English LM and English LM was not significant ($t= 1.48$). The difference between English LM and non-LM was not significant ($t= 1.54$) either.

\textsuperscript{114} Non-English LM vs. non-LM, $t= 3.51$, $p < .01$; non-English LM vs. English LM, $t= 2.24$, $p < .05$.

\textsuperscript{115} Non-English LM vs. non-LM, $t= .35$; English LM vs. non-LM, $t= -.70$; non-English LM vs. English LM, $t= 1.22$.

\textsuperscript{116} Non-English LM vs. non-LM, $t= 15.14$, $p < .001$; non-English LM vs. English LM, $t= 10.52$, $p < .001$.
\end{footnotesize}
LEP students, which were the only schools in which administrators reported on methods of facilitation. However, when analyses of differences are limited only to students in schools that educated LEP students, the same patterns hold: students with non-English LM parents attended schools that used more methods to facilitate the involvement of language minority parents than either students with English-speaking language minority parents ($t = 5.79, p < .001$) or students with non-LM parents ($t = 7.91, p < .001$). The number of methods of assistance also was greater in the schools attended by students with English LM parents compared to the schools attended by students with non-LM parents ($t = 2.63, p < .01$).

It is important to note that 15 percent of the schools of students with non-English LM parents and 35 percent of the schools of students with English LM parents did not provide data on methods of facilitation, because administrators indicated that these schools did not educate LEP students. As a result, estimates for these two groups may be biased downward such that fewer students appear to be in schools that offer assistance to language minority families than is actually true.

Despite the fact that the three groups of students attended schools that significantly differed on many of the characteristics shown to be related to opportunities for involvement in chapter 5 (e.g., school sector and concentration of low-income students in the school), the number of opportunities provided by the schools these groups of students attended were not significantly different. The schools for all three groups offered about 21 opportunities a year, on average.

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117 Non-English LM vs. non-LM, $t = 15.17, p < .001$; English LM vs. non-LM, $t = 7.05, p < .001$; non-English LM vs. English LM, $t = 9.34, p < .001$.

118 Non-English LM vs. non-LM, $t = -.30$; non-English LM vs. English LM, $t = -1.20$; English LM vs. non-LM, $t = .97$. 

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7.2 Characteristics Related to Familial Involvement at the School

Many of the student, family, household, and school characteristics included in this study demonstrate significant overall relationships to the involvement level of students’ families. Table 7.3 shows the mean number of functions attended at the school by all the characteristics measured as categorical or dichotomous variables investigated here. These data show that families of students with non-English-speaking language minority parents are less involved than families of students with English-speaking language minority parents ($t = -4.57, p < .001$) or with non-language minority parents ($t = -6.32, p < .001$), but the differences are not large. On average, families of students with non-English-speaking language minority parents attended 9 functions during the school year, while families of students with non-language minority parents and families of students with English-speaking language minority parents each attended about 12 functions.

Despite this small difference in the average number of activities attended, families of students with non-English LM parents were twice as likely as families of students with non-LM parents and three times as likely as families of students with English LM parents to report that no one had attended any school functions during the school year (6 percent vs. 3 percent and 2 percent, respectively).\textsuperscript{119} There was no difference in the involvement levels of families of students with English LM parents and families of students with non-LM parents, either when considering average number of school functions attended ($t = 1.28$) or attendance at any functions at all ($t = .49$).

A characteristic related to language background that may also be related to involvement, due to differing expectations for the relationship between schools and

\textsuperscript{119} T-tests results for no attendance: Non-English LM vs. English LM, $t = 5.39$, $p < .001$; non-English LM vs. non-LM, $t = 4.75$, $p < .001$. 

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### TABLE 7.3

**MEAN LEVEL OF FAMILY INVOLVEMENT, BY CATEGORICAL MEASURES IN SCHOOLS IN THE UNITED STATES:**

1998-1999

<table>
<thead>
<tr>
<th>Involvement</th>
<th>Mean</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student has non-English LM parent</td>
<td>9.26</td>
<td>0.449</td>
</tr>
<tr>
<td>Student has English LM parent</td>
<td>11.84</td>
<td>0.378</td>
</tr>
<tr>
<td>Student has non-LM parent</td>
<td>12.35</td>
<td>0.261</td>
</tr>
</tbody>
</table>

#### STUDENT CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student’s sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>12.03</td>
<td>0.237</td>
</tr>
<tr>
<td>Male</td>
<td>11.86</td>
<td>0.277</td>
</tr>
<tr>
<td>Student has a parent-reported disability</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>12.02</td>
<td>0.367</td>
</tr>
<tr>
<td>No</td>
<td>11.93</td>
<td>0.236</td>
</tr>
<tr>
<td>Student is a citizen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>12.07</td>
<td>0.753</td>
</tr>
<tr>
<td>No</td>
<td>11.98</td>
<td>0.232</td>
</tr>
<tr>
<td>Student’s race/ethnicity</td>
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<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>13.59</td>
<td>0.285</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>8.25</td>
<td>0.434</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.28</td>
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<td>Asian, non-Hispanic</td>
<td>10.64</td>
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<tr>
<td>Other race, non-Hispanic</td>
<td>10.98</td>
<td>0.556</td>
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<td>Full-day/half-day kindergarten</td>
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<td></td>
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<tr>
<td>Attends full-day kindergarten</td>
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<td>0.291</td>
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<tr>
<td>Attends half-day kindergarten</td>
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<tr>
<td>Student is first-time kindergartener</td>
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<td>Yes</td>
<td>12.01</td>
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</tr>
<tr>
<td>No</td>
<td>10.44</td>
<td>0.530</td>
</tr>
<tr>
<td>Student in program for emotional/behavioral problems</td>
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<tr>
<td>Yes</td>
<td>7.91</td>
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<td>No</td>
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</tr>
<tr>
<td>Teacher has contacted parents about problems at school</td>
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<tr>
<td>Yes</td>
<td>9.88</td>
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</tr>
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#### FAMILY AND HOUSEHOLD CHARACTERISTICS

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<td>Family structure</td>
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<tr>
<td>Two-parent household</td>
<td>13.06</td>
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</tr>
<tr>
<td>Single-parent household</td>
<td>8.49</td>
<td>0.291</td>
</tr>
<tr>
<td>Guardian-only household</td>
<td>8.07</td>
<td>0.621</td>
</tr>
<tr>
<td>Family disruption during the year</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9.20</td>
<td>0.490</td>
</tr>
<tr>
<td>No</td>
<td>12.08</td>
<td>0.234</td>
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TABLE 7.3 (contd.).

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<thead>
<tr>
<th>Involvement</th>
<th>Mean</th>
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<td>Sibling(s) in household</td>
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<tr>
<td>Yes</td>
<td>12.30</td>
<td>.238</td>
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<tr>
<td>No</td>
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<td>.292</td>
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<tr>
<td>Older sibling in household</td>
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<td>Yes</td>
<td>12.67</td>
<td>.263</td>
</tr>
<tr>
<td>No</td>
<td>10.98</td>
<td>.241</td>
</tr>
<tr>
<td>Sibling in same school</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>13.09</td>
<td>.272</td>
</tr>
<tr>
<td>No</td>
<td>10.78</td>
<td>.236</td>
</tr>
<tr>
<td>Presence of nonparent age 18 or over</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>12.41</td>
<td>.242</td>
</tr>
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<td>No</td>
<td>9.57</td>
<td>.281</td>
</tr>
<tr>
<td>Grandparent lives in household</td>
<td></td>
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<tr>
<td>Yes</td>
<td>8.90</td>
<td>.303</td>
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<td>No</td>
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<td>.237</td>
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<td>Poverty status</td>
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<td>7.77</td>
<td>.305</td>
</tr>
<tr>
<td>No</td>
<td>13.03</td>
<td>.237</td>
</tr>
<tr>
<td>Mother’s employment status</td>
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<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>9.63</td>
<td>.188</td>
</tr>
<tr>
<td>Part-time</td>
<td>14.75</td>
<td>.362</td>
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<tr>
<td>Looking for work</td>
<td>8.92</td>
<td>.602</td>
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NOTE: Detail may not sum to total due to rounding. s.e. is standard error.

1 Estimate indicates proportion of public schools that are of this type.

2 Estimate indicates proportion of private schools that are of this type.

+ Not applicable.
parents in other countries, is the immigrant status of parents, which is indicated here by
the proxy measure of students’ citizenship status. These data show that families of
students who were citizens were significantly more involved than families of students
who were not citizens ($t = 2.25$, $p < .001$).

Significant differences in parental involvement also were found by students’
race/ethnicity. Compared to students of all other racial/ethnic backgrounds, white
students’ families were the most highly involved.$^{120}$ Families of black students were least
involved.$^{121}$ No significant differences were found among the involvement levels of
families of Latino students, Asian students, and students of other races/ethnicities.$^{122}$

As expected, having siblings, especially when they were older or in the same
school, was positively related to family involvement. Students with siblings had parents
who were more involved than students who did not have any siblings ($t = 8.24$, $p < .001$).
Similarly, students who specifically had older siblings or siblings in the same school had
parents who were more involved than students who did not (older: $t = 7.99$, $p < .001$;
same school: $t = 10.47$, $p < .001$). However, there was no significant relationship between
the number of children in the family and involvement, although the direction of the
relationship was negative ($r = -.003$).

Contrary to expectations, involvement was lower when students lived in
households that had someone other than a parent age 18 or over living in them ($t = 10.00,

$^{120}$ Comparisons between white students and students of other racial/ethnic backgrounds were as
follows: Black, $t = 10.87$, $p < .001$; Latino, $t = 7.68$, $p < .001$; Asian, $t = 4.95$, $p < .001$; Other race/ethnicity,
$t = 4.40$, $p < .001$).

$^{121}$ Comparisons between Black students and students of other racial/ethnic backgrounds were as
follows: white, $t = -10.87$, $p < .001$; Latino, $t = -3.52$, $p < .001$; Asian, $t = -3.11$, $p < .01$; Other race/ethnicity,
$t = -4.27$, $p < .001$).

$^{122}$ Comparisons were as follows: Latino vs. Asian, $t = -.51$; Latino vs. Other race/ethnicity, $t = -.99$;
Asian vs. Other race/ethnicity, $t = -.41$.  

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This is true also when that person was a grandparent. Again, contrary to expectations, families of students whose grandparents lived with them were less involved than parents of students whose grandparents did not live with them ($t = -10.47, p < .001$).

As discussed in chapter 4, this negative relationship between living with a grandparent and involvement was expected if that grandparent was older. Indeed, family involvement was lower for students who lived in households with grandparents who were over the age of 65 than it was for students who did not ($t = -4.05, p < .001$). In contrast, the number of grandparents who lived close by, but not in the student’s house, was positively related to family involvement ($r = .08, p < .001$).

Involvement also differed by family structure. Students in two-parent households had families who were more involved than students in single-parent homes or who lived with guardians ($t = 15.17, p < .001$ and $t = 7.41, p < .001$, respectively). No significant differences were found between families of students in single-parent homes and students who lived with guardians ($t = .61$). Families of students living in households that experienced some type of family disruption during the year, either through the addition or loss of a parent, were less involved than families of other students ($t = -5.79, p < .001$).123

Socioeconomic status was highly related to parental involvement: involvement increased as socioeconomic status increased ($r = .26, p < .001$). Also, students in non-poor families had families who were more involved than students in poor families ($t = 15.66, p < .001$).

As expected, involvement varied by parents’ employment status, although not always in the expected direction. Students whose mothers were not in the labor force had

123 The reader is reminded that addition and loss of a parent were both negatively associated with involvement when examined separately, and therefore are combined as one measure for analyses. See chapter 4 for more detail.
families who were more involved than students whose mothers were in the labor force (i.e., working or looking for work) ($t= 9.57, p < .001$). However, focusing only on this global employment status measure obscures variation that exists by mothers’ work hours. Students whose mothers worked full time had families that were less involved than students whose mothers worked part time or who were not in the labor force ($t= -16.54, p < .001$ and $t= -13.02, p < .001$, respectively). The difference between students whose mothers worked part time and those whose mothers were looking for work was also significant ($t= 8.85, p < .001$). Unexpectedly, no significant differences were found in family involvement between students whose mothers worked part time and students whose mothers were not in the labor force ($t= 1.89$). Students whose mothers were looking for work also had families who were less involved than students whose mothers were not in the labor force ($t= 8.85, p < .001$). The difference between students whose mothers were looking for work and those whose mothers worked full time was not significant ($t= 1.14$). Overall, families were most involved when mothers worked part time or were not in the labor force.

Patterns of involvement by fathers’ employment status were quite different from those observed by mothers’ employment status. Students whose fathers were not in the labor force had families who were less involved than students whose fathers were in the labor force (i.e., working or looking for work) ($t= -3.16, p < .01$). As with mothers’ employment status, variation by work hours was obscured when using a global measure of employment. Students whose fathers worked full time had families who were most
involved. This difference likely exists because when fathers work full time, mothers are likely to work part time or not at all, and it is in these families that involvement is highest. As was the case with mother’s employment status, students whose fathers were looking for work had families who were less involved than students whose fathers worked part time ($t = -2.40, p < .001$). Involvement did not significantly differ between students whose fathers worked part time or were looking for work and those whose fathers were not in the labor force ($t = .86$ and $t = -1.78$, respectively).

Involvement was related to whether students were having problems at school. However, contrary to expectations, families of students who were in a special program for students with emotional or behavioral problems were less involved at the school than families of students who were not in such programs ($t = -5.13, p < .001$). This result is similar to those of analyses that have found a negative relationship between grades and involvement in activities at the school (Kerbow and Bernhardt 1993; Vaden-Kiernan and McManus forthcoming). Similarly, families of students whose teachers had contacted parents about any problems their children were having were less involved at the school than families of students whose teachers had called their parents only to discuss how well the students were doing or who had not contacted their parents at all ($t = -7.64, p < .001$).

Additionally, families of students who were in kindergarten for the first time were more involved than families of students who were repeating kindergarten ($t = 3.25$, $p < .01$).

The value parents placed on education was significantly related to family involvement in school activities. As parents’ expectations for their children’s education

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124 Comparisons between children with fathers employed full-time and children with fathers with other employment statuses were as follows: part-time, $t = 3.40, p < .01$; looking for work, $t = 6.13, p < .001$; not in the labor force, $t = 5.11, p < .001$.
increased, familial involvement increased as well ($r = .09, p < .001$). Family involvement also increased along with the frequency with which a household member read to the student ($r = .19, p < .001$). With respect to the relationship between social capital and involvement, the number of classmates’ parents a student’s parents had contact with on a regular basis was related to involvement ($r = .35, p < .001$).

There were some student and family characteristics that were not related to involvement. Contrary to the findings from some research that showed differences in involvement by students’ sex (e.g., Ho and Willms 1996; Muller 1998), families of girls were not significantly more or less involved than families of boys ($t = .73$). Familial involvement also did not differ by students’ disability status ($t = .27$). The difference in involvement between families of students who attended full-day kindergarten and families of students who attended half-day kindergarten was not quite significant at the .05 level ($t = 1.96, p = .051$). However, the observed relationship was opposite of that expected, whereby families of students who attended full-day kindergarten were somewhat less involved than families of students who attended half-day kindergarten.

Turning attention to the characteristics of the school, the analyses show that involvement was significantly, although weakly, related to the opportunities schools provided parents to be involved ($r = .05, p < .01$). School size was unrelated to families’ level of involvement ($r = -.02$). Involvement was lower among families of students who attended schools with larger percentages of minority students ($r = -.11, p < .001$), larger percentages of minority teachers ($r = -.09, p < .001$), and that had student populations that were at least 50 percent low-income ($t = -10.27, p < .001$).
Looking at involvement by school location, these data show that families of students who attended suburban schools were more involved than families of students who attended schools in central cities or rural areas ($t = 2.86$, $p < .01$ and $t = 3.72$, $p < .001$, respectively). No significant differences were found between families of students in central city and rural schools ($t = 1.66$). Involvement was higher among families of students in Western schools, compared to students attending schools in the Northeast and South ($t = 3.11$, $p < .01$ and $t = 3.57$, $p < .001$, respectively).

Involvement was higher when school administrators indicated that they placed major emphasis on good communication with kindergartners’ parents ($t = 3.94$, $p < .001$), but it did not vary by whether the school administrator indicated that parents were welcome to visit the school any time classes were in session ($r = .02$). Involvement was higher in schools that used a larger number of activities to facilitate the adjustment of kindergartners and their parents to the formal school setting ($r = .07$, $p < .001$), as well as when schools sent home newsletters more frequently ($r = .05$, $p < .05$), although the associations were somewhat weak. Involvement was actually lower in schools that employed a full-time parent liaison ($t = -3.55$, $p < .001$), compared to schools that did not. No significant differences were found in the involvement levels of families of students who attended schools that offered child care during parent events, compared to families of students who attended schools that did not offer child care ($t = -1.29$).

As expected, involvement levels did vary by school sector and school type. In general, families of private school students were more involved than families of public school students ($t = 7.34$, $p < .001$). More specifically, families of Catholic school

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125 There were no other differences by region. Results from comparisons are as follows: North vs. Midwest, $t = -1.29$; North vs. South, $t = .12$; Midwest vs. South, $t = 1.58$; Midwest vs. West, $t = -1.95$. 288
students and students in other religious private schools were more involved than families of public school students ($t= 8.88$, $p < .001$ and $t= 4.47$, $p < .001$, respectively).

Interestingly, no significant difference was found in the involvement levels of families of students in secular private schools and public school families ($t= .83$). Among families of students in private schools, involvement was higher in Catholic schools, compared to other religious and secular private schools ($t= 2.79$, $p < .01$ and $t= 4.37$, $p < .001$, respectively). Additionally, involvement was higher among families of students in non-Catholic religious schools, compared to families of students in secular private schools ($t= 1.96$, $p < .05$). No significant difference was found between families of students in regular public schools and families of students in magnet schools or other schools of choice ($t= .72$). Also, parents of students in early childhood centers were not more or less involved than parents of students who attended kindergarten in regular schools ($t= 1.12$).

Some factors were hypothesized to affect the involvement levels only of language minority parents. These include the number of ESL/bilingual aides and teachers in a school, the percentage of Latino and Asian teachers, whether the school was headed by a Latino or non-black minority principal, and the number of methods schools use to facilitate LM family involvement. Contrary to expectations, analyses restricted to language minority families only (both English speakers and non-English speakers) show a negative overall relationship between involvement and the number of ESL/bilingual aides/teachers ($r = -.07$, $p < .01$) and the number of methods schools use to facilitate involvement ($r = -.08$, $p < .01$). There was no difference in the level of involvement between families of students with language minority parents who attended schools headed by Latino or non-black minority principals, compared to families of students with
language minority parents who attended schools headed by non-Latino white or black
principals \((t = .02)\). Similarly, there was no overall relationship between the percentage
of teachers who were Latino or Asian and involvement of families of students with
language minority parents \((r = .01)\).

The overall negative relationships between involvement and some of these school
characteristics may be due to the fact that involvement was generally lower for families
of students in the schools that were most likely to have larger numbers of ESL/bilingual
aides/teachers, percentages of Latino and Asian teachers, and methods of facilitation for
the involvement of LM parents, i.e., schools with larger percentages of limited English
proficient (LEP) students. In the total population of students, involvement was very
weakly but negatively related to the percentage of LEP students in the school \((r = -.03, p < .10)\).
This negative relationship between involvement and percent LEP students was
stronger when considering only the students with language minority parents \((r = -.09, p < .01)\). However, it should be noted that the involvement level of families of students
in schools that educated any LEP students (i.e., irrespective of the size of the LEP
population) was not significantly different from the involvement level of families of
students in schools that did not educate LEP students \((t = .48)\).

The beginning of this section noted that, as expected, families of students with
non-English-speaking language minority parents were less involved than families of
students whose parents only spoke English. There were no overall differences between
students with English-speaking language minority parents and students whose parents
only spoke English. This suggests that language barriers play a large part in the observed
lower involvement levels of language minority parents. However, there are other
differences and similarities between students with language minority parents and students with non-language minority parents on characteristics related to level of family involvement that may explain the overall differences in family involvement for these three groups of students.

Students with non-English-speaking language minority parents have characteristics that might predict lower involvement levels, compared to families of students with non-language minority parents, given the relationships between these characteristics and involvement that were described in the previous section. Specifically, they are less likely to be citizens, are more likely to be Latino or Asian, and are more likely to live in households that include any nonparent adult age 18 or over, including a grandparent over age 65. They also have fewer grandparents living close by, on average. They have lower average SES and are more likely to be poor. Family members read to them significantly less often.

Almost every one of the school characteristics on which students with non-English LM parents and students with non-LM parents differ predicts lower involvement for the former group. For example, students with non-English LM parents are less likely to attend private school; more likely to attend schools with a student population that is at least 50 percent low-income; attend schools with larger percentages of minority students and teachers, as well as LEP students; and are more likely to attend schools in central cities and less likely to attend suburban schools. They also attend schools that have fewer transition-to-kindergarten activities that involve parents and in which administrators place strong emphasis on good communication with kindergartners’ parents.

126 These differences in race would predict lower levels of involvement for students with non-English-speaking parents, compared to white students with non-LM parents, but they would predict higher levels of involvement compared to black students with non-LM parents.
On the other hand, students with non-English LM parents demonstrate some characteristics that are related to higher levels of family involvement, compared to students with non-language minority parents. Specifically, they are more likely to have siblings, are more likely to live in two-parent families (and less likely to live in single-parent or guardian-only families), are less likely to experience family disruption between fall and spring of the kindergarten year, are less likely to have mothers who work at all (and, in particular, who work full time), and are less likely to have had their teachers contact their parents about problems. Also, non-English LM parents have higher educational aspirations for their children than non-LM parents. Only two school characteristics could have a positive effect on involvement for families of students with non-English LM parents: they are more likely to live in the West and to attend schools that employ a full-time parent liaison.

There are fewer differences between the students with English LM parents and students with non-LM parents on those characteristics related to involvement, which may explain why no difference was detected in the average levels of family involvement for these two groups. Some differences would predict lower levels of involvement for students with English LM parents. They are less likely to be citizens, are more likely to be Latino or Asian, are more likely to live in households that include any nonparent adult age 18 or over, including a grandparent over age 65, and they have fewer grandparents living close by. However, their parents also have higher educational expectations for them, which would suggest their involvement levels would be higher. The school characteristics on which these two groups of students differ generally would suggest lower levels of involvement for families of students with English LM parents. They
attend schools with larger percentages of minority students and teachers, fewer transition-to-kindergarten activities that involve parents, and they are more likely to attend schools in central cities. However, students with English LM parents are more likely to attend schools in the West where levels of involvement are higher.

Given the overall differences in familial involvement between students with non-English speaking LM parents and students with non-LM parents, it appears that the negative effects on involvement of some characteristics described above outweigh the positive effects of others. Or perhaps it is the language barrier itself, captured in the measure of parents’ language status, that leads to lower involvement, regardless of the effect of other characteristics. In the next section, OLS regression is used to investigate whether the characteristics shown above as related to family involvement remain so when all factors are controlled simultaneously. These analyses also indicate whether the difference in involvement levels between families of students with non-English LM parents and students with non-LM parents hold once other factors are controlled, or whether the relationships just described explain the overall differences in involvement.

7.3 Analyses of Level of Familial Involvement Regressed on Student, Family, and Household Characteristics

As indicated in chapter 4, the effects of the student, family, and household characteristics without consideration of the way in which school characteristics influence these relationships are first assessed through OLS regression analyses in which the standard errors of the estimates are adjusted to account for the complex survey design. Results from these analyses are presented in table 7.4.
# TABLE 7.4

LEVEL OF FAMILY INVOLVEMENT REGRESSED ON SELECTED CHILD, FAMILY, AND HOUSEHOLD CHARACTERISTICS

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<th>Model 1</th>
<th>Model 2</th>
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TABLE 7.4 (contd.).

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<td>Non-English LM * Regular contact with children’s classmates’ parents</td>
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NOTE: Reference categories are in parentheses.  s.e. is standard error.  + p < .10, * p < .05, ** p < .01, *** p < .001
Model 1 includes the two dichotomous measures indicating parents’ language status, i.e., whether a student’s parents are language minorities and whether the parents use English as a primary language in the household. Students whose parents are non-language minorities are the reference group. These results mirror those from t-test comparisons and show that families of students whose parents are non-English-speaking language minorities are less likely to be involved at the school, while there is no significant difference between the involvement levels of families of students with parents who are English-speaking language minorities and those of families of students who are non-language minorities. The beta coefficient for the non-English-speaking language minority measure indicates the difference between the average levels of involvement of the families of students with non-English LM parents and those with non-LM parents. Note that this characteristic explains only about one percent of the variance in familial involvement.

Model 2 includes all the students’ demographic characteristics and the characteristics related to household composition. These factors explain an additional 4 percent of the variance in involvement. While some of these factors were significantly related to involvement, they did not completely explain the lower involvement levels of families of students with non-English LM parents; the coefficient for the dummy variable indicating parents are non-English LM remained significant. However, the difference between this group and students with non-LM parents was reduced somewhat.

Controlling only for student demographics and household characteristics, these results show significant differences in family involvement levels by students’ race/ethnicity. The families of black, Latino, and Asian students, as well as those of
students of other race/ethnicities, are all less involved than families of white students, who constitute the reference category.

Positive and significant relationships exist between involvement and the presence of siblings in the household, as well as whether students had siblings in the same school. Although the correlation between number of siblings and involvement was not significant, these results show that, after controlling for other factors, parent involvement decreases as the number of siblings a student has increases. Having a sibling who was older was not significantly related to involvement once these other factors were controlled.

As expected, families of students who began the school year living with only one parent or living in a guardian-only household were less involved than families of students who began the school year living in a two-parent household. Involvement also was negatively related to the experience of family disruption (i.e., the addition or loss of a family to the household) during the school year.

Several measures related to the presence of non-parent adults living in the household were investigated in the comparisons described in section 1.1. Although t-test comparisons showed significant differences between students who lived in households with anyone over the age of 18 and those who did not, as well as between students living in households with a grandparent over the age of 65 and those who did not, these relationships did not hold once other factors were controlled, and so are not presented in model 2.127 Furthermore, their inclusion resulted in multicollinearity with the measure of

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127 These measures were moderately related to one another ($r = .29$, $p < .001$), but their lack of significance was not the result of multicollinearity with one another. Neither measure was significant when included in the model separately. Results from models in which they were included separately are: grandparent over age 65: $b = -.61$, t=-1.10; anyone 18 or older: $b = -.43$, t=-1.49.
having a grandparent living in the household: when either of these measures was included in the model along with the dummy variable indicating that a student lived in a household with a grandparent, neither measure was significant.\textsuperscript{128} Contrary to expectations, when included on its own, having a grandparent living in the household was negatively related to involvement once other factors were controlled. The effect for number of grandparents who lived close by also was significant, but the relationship to involvement was opposite and that which was expected: familial involvement increased as the number of grandparents who lived close by increased. These relationships are consistent with those observed in correlation analyses.

Many other measures were unrelated to involvement in this model. These include student sex, whether the student was a citizen, and whether the student had a parent-reported disability. These measures, along with having a sibling who was older, were all omitted from further analyses.

Model 3 includes the significant measures included in model 2, as well as those pertaining to parental employment status and socioeconomic status. This model accounts for 12 percent of the variance in familial involvement. As expected, these additional factors are highly related to involvement. As socioeconomic status increases, so does familial involvement. Similarly, students who are not poor have families who are more involved than students who are poor.

When controlling for fathers’ employment status, families are more involved if mothers have any other employment status than working full time. Results for father’s

\begin{footnotesize}
\begin{enumerate}
\item[\textsuperscript{128}] Results from the model that included presence of anyone age 18 or over and presence of grandparent are as follows: anyone 18 or older: $b = -.22, t = -.53$; grandparent in household: $b = -.51, t = -1.00$. Results from the model that included presence of grandparent over age 65 and presence of grandparent of any age are as follows: grandparent over age 65: $b = -.04, t = -.07$; grandparent in household: $b = -.68, t = -1.84$.
\end{enumerate}
\end{footnotesize}
employment are different from those seen in t-test comparisons once other factors are controlled. Rather than finding that families of students whose fathers worked full time were most involved, these results show no difference by fathers work status when mothers’ work status is controlled.

Once employment and SES characteristics were controlled, the effect of having a non-English-speaking language minority parent was reduced by about 40 percent. The relationships between involvement and both the Latino and other race/ethnicity dummy measures became insignificant, indicating that the employment characteristics and lower socioeconomic status of these groups led them to be less involved than families of white students. In contrast, the effects for being black and Asian remained significant and negative. However, the coefficient for black was reduced by more than half, indicating that employment characteristics and their lower socioeconomic status are largely responsible for their lower levels of involvement as well. Interestingly, parental employment status and socioeconomic status do not explain any of the difference in involvement between families of Asian and white students.

The effects of some variables observed in previous models held, while the effects of others became insignificant. As was the case in model 2, students in single-parent and guardian-only homes had families who were less involved than students in two-parent homes, although their effects were substantially reduced after controlling for employment characteristics and socioeconomic status. Also, involvement remained lower when the number of siblings a student had was larger, while involvement was higher when students had older siblings in the same school.
The presence of siblings in the home, regardless of the number, became unrelated to involvement once parental employment status and SES were controlled. Other measures that became insignificant were living with a grandparent, the number of grandparents that lived close by, and experiencing a disruption in the household either through the loss or additional of a parent. It appears that the relationships between these measures and involvement are explained by SES and parental employment characteristics.

Model 4 includes most of the previously entered measures and those related to parents’ expectations, social capital (i.e., the number of classmates’ parents a student’s parents had contact with on a regular basis), and parental involvement at the home (i.e., how often a family member read to the child). Consistent with the correlation analyses, all three of these additional measures were significantly and positively related to involvement, even after controlling for other factors. Students’ families were more involved when parents had higher educational aspirations for their children, when parents regularly interacted with more of their children’s classmates’ parents, and when parents were more involved with their children at home, as indicated by the frequency with which the students were read to by family members. As indicated by the R-square, the measures in this model explained 20 percent of the variance in family participation in school activities.

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129 Whether a student had siblings, whether a student experienced a family disruption, and the number of grandparents who lived close by are excluded from the model presented here. They were originally included in this model, but their effects were insignificant, as they were in model 3 once other factors were controlled. Results for these measures when included separately in model 4 were as follows: Student had at least one sibling: $b = .45$, $t = 1.49$; family disruption: $b = -.32$, $t = -.66$; number of grandparents who lived close by: $b = .01$, $t = .09$. 

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After inclusion of these measures, the absolute magnitude of the coefficients pertaining to parents’ language background increased, such that they actually became more negative. As was discussed above, parents’ educational expectations for their children were higher for students with language minority parents, compared to students with non-language minority parents. Once the positive effect of expectations on involvement was controlled, the differences in family involvement between these groups of students became larger. As in the previous model, the effect of having a non-English LM parent was significant, while the effect of having an English LM parent was not.

Inclusion of these measures in model 4 resulted in the effects of some other variables becoming insignificant. Specifically, the differences in family involvement between white students and both black and Asian students became insignificant when these other factors were taken into account. The relationship between family involvement and living in a guardian-only household also became insignificant.

The lower involvement levels of families of students with these characteristics appear to be explained by parents’ educational expectations, involvement in the home, and contact with classmates’ parents. Specifically, parents of black and Asian students report higher educational expectations for their children than parents of white students,\(^{130}\) which would predict higher levels of involvement, but they also report reading significantly less often\(^{131}\) and having regular contact with fewer of their children’s classmates’ parents,\(^{132}\) which ultimately contribute to their lower levels of involvement.

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\(^{130}\) T-tests results for expectations are as follows: white vs. black, \(t = -4.15, p < .001\); white vs. Asian, \(t = -7.55, p < .001\).

\(^{131}\) T-tests results for reading are as follows: white vs. black, \(t = 14.22, p < .001\); white vs. Asian, \(t = 3.41, p < .01\).

\(^{132}\) T-tests results for contact with classmates’ parents are as follows: white vs. black, \(t = 13.06, p < .001\); white vs. Asian, \(t = 3.87, p < .001\).
overall. Compared to students living in two-parent families, parental expectations 
($t = -4.34, p < .001$), the frequency of being read to ($t = -3.36, p < .01$), and the number of 
classmates’ parents a parent interacted with regularly ($t = -7.92, p < .001$) were all lower 
for students living in guardian-only families, which explains the lower involvement levels 
of families of students living in these households.

The absolute magnitude of the effects of most of the other significant measures 
decreased with the inclusion of expectations, contact with classmates’ parents, and 
reading at home, with one exception: the relationship between familial involvement and 
living in a household with a grandparent became more negative (i.e., the absolute 
magnitude of the coefficient increased) and regained significance, after becoming 
insignificant in model 3 when controlling for SES and parents’ employment 
characteristics. It is not clear why this change in significance occurred here. When 
grandparents lived in the household, families read to their children significantly less often 
and parents regularly interacted with significantly fewer of their children’s classmates, 
compared to when grandparents did not live in the household ($t = -3.17, p < .01$ and 
$t = -5.71, p < .001$, respectively). Inclusion of these measures should work to decrease the 
negative effect of having a grandparent living in the household, yet it increases it. While 
no significant differences were found in parental educational expectations between 
students who were living with grandparents and those who were not ($t = 1.15$), the 
expectations were slightly higher for students living in homes with grandparents ($x = 4.10$ 
vs. $x = 4.07$). Perhaps controlling for the slightly more positive effect of expectations on 
involvement for students who lived in homes with grandparents was enough to reveal the 
overall negative effect of this measure. There may also be some characteristic that is
associated with the error in the grandparent term that is acting as a suppressor. The other, but less likely possibility, is that there is something about the 35 cases lost between models 3 and 4 that has an effect on the effect of the grandparent variable. It is not the case that the effect is insignificant in model 3 due to multicollinearity with the insignificant measures also included in model 3 (i.e., student has at least one sibling, number of grandparents who live close by, and family disruption): when model 3 was run without these three insignificant measures, the coefficient for grandparent lives in household ($b = -.51$) was still insignificant ($t = -1.55$).

In model 5, the school-related measures that are specific to individual students, such as whether the student participated in a special program for students with emotional or behavioral problems, were added. Whether a student was a first-time kindergartener, in full-day kindergarten, or in a program for students with emotional or behavioral problems were not significantly related to involvement.\(^{133}\) The results presented here are those when only teacher contact with parents about behavior problems was included in the model. They indicate that, contrary to expectations, families were less involved in school activities when their children’s teachers had contacted them to discuss problems their children had been having at school. Inclusion of teacher contact about problems had little effect on the significant relationships between the other variables in the model and involvement. Also, addition of this measure did not increase the explanatory power of the model: as with model 4, approximately 20 percent of the variance in involvement was explained.

\(^{133}\) The model that included these measures is not presented here. Results for these three measures when included separately in model 5 were as follows: Student is first-time kindergartener: $b = -.20$, $t = -.42$; student is in full-day kindergarten: $b = .46$, $t = 1.51$; student is in program for students with emotional or behavioral problems: $b = -1.18$, $t = -1.61$. 

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After controlling for all of these student, family, and household characteristics, students with non-English-speaking language minority parents continued to have families who were less involved in school activities than students whose parents were non-language minorities. As was the case in model 1, and consistent with results from the t-test comparisons, no differences existed between students with English-speaking language minority parents and students with non-LM parents.

Extensive tests of interaction effects were also conducted. Specifically, analyses tested interactions between the dummy variables for parents’ language minority status and all the other student, family, and household variables included in the study. Also, analyses tested interactions between other measures that either logic or exploratory analyses not discussed here suggested might exist. For example, in the former case, it is reasonable to posit that having a grandparent living in the house would only be significantly and positively related to involvement for those families who need nonparental child care, such as single-parent families. In the latter case, exploratory analyses suggested that the effect of fathers’ employment status on involvement might be conditioned by mothers’ employment status and teacher contact about problems students were having at school. Model 6 includes the interactions that do not pertain to parents’ language minority status and were significant when included in the model with other interaction terms. Results of significant interactions involving to parents’ language minority status are presented separately in model 7.

Model 6 incorporates several groups of significant interaction effects involving parents’ work status, students’ race/ethnicity, whether a grandparent lives in the household, teacher contact about problems, and parents’ educational expectations. As
can be seen in the model, while the main effects for parents’ work status basically remain
the same as they were in model 5, there are some significant interaction effects between
mothers’ and fathers’ work status. Specifically, the negative interaction for mother not in
labor force * father not in labor force indicates that the positive effect of having a mother
who is not in the labor force is almost nullified\textsuperscript{134} when the father is also not in the labor
force. In contrast, the positive interaction for mother not in labor force * father works
part time indicates that the positive effect of having a mother who is not in the labor force
is enhanced when the father works, but works fewer hours than a full-time employed
father.

Looking at the interaction effects between students’ race/ethnicity and educational
expectations, we see that expectations did not have differential effects on the involvement
of parents of Latino, Asian, or other race/ethnicity students, compared to white students.
The effect for the family involvement of black students is quite different. The coefficient
for the black*expectations interaction is significant and negative. In addition, its absolute
magnitude ($b = -.93$) is larger than the absolute magnitude of the main effect for
expectations ($b = .66$), indicating that educational expectations had a net negative effect
for black students: the higher the parents’ educational expectations, the less the family
was involved at the school. Also, the disparity gets larger as expectations increase.
When black students’ parents expect them to earn a master’s degree or equivalent (coded
5 on the expectation scale), the net effect of expectations is $0.66(5) + -0.93(5) = -1.35$. The
net effect when parents do not expect their children to get a high school diploma (coded 1
on the expectation scale) is only $-0.27$.

\textsuperscript{134} The coefficient of the main effect for mother not in the labor force ($b=3.81$) added to the
coefficient for the interaction mother not in labor force * father not in labor force ($b=-3.42$) is about .4,
which is only about 1/9 of the main effect for mother not in the labor force ($b=3.81$).
Once the negative effect of expectations on involvement for black students is controlled, the main effect for black becomes significant and positive, indicating that, all else being equal, families of black students would be more involved at the school than families of white students. However, the fact that the effect of expectations was negative for families of black students, and that their expectations were significantly higher than those of white students’ parents (4.12 vs. 3.95, $t = 4.15$, $p < .001$), contribute to their lower level of involvement overall.

This observed positive effect, controlling for other factors, may be explained by the fact that, in contrast to the negative main effect for teacher contact about students’ problems, this contact is positively related to involvement for black students. In a model not presented here, an interaction between the dummy variable for “black” and teacher contact had a positive effect for on involvement ($b = 1.09$, $p < .005$). When this interaction was included in the model with the black*expectations interaction, the main effect for black was reduced and became insignificant ($b = 2.62$, $t = 1.86$). However this lack of significance may have been due to high multicollinearity in the model between the main effect and the interactions (the variance inflation factor for the black main effect was 15.39). Black students’ parents were significantly more likely than white students’ parents to have been called by teachers to discuss problems they were having at school (38 percent vs. 30 percent, $t = 5.51$, $p < .001$), and given this positive effect of teacher contact for black students, it is not surprising then that this would lead to a greater level of involvement on the part of families of black students, all else being equal.

An interaction between SES and having a grandparent living in the household entered into model 5 also demonstrated a negative effect on involvement. This negative
interaction between SES and grandparent in household indicates that as SES increased, the net effect of having a grandparent living in the household became less positive; in fact, it became negative for students who were in the third quintile of SES and above.  

Once the negative effect of SES on involvement for families in which grandparents live in the household was controlled, having a grandparent live in the household was positively related to involvement, as hypothesized.

Significant interactions also existed between living with a grandparent and mothers’ work status. When a grandparent lived in the household and the mother either did not work or was looking for work, there was a negative effect on involvement. Interactions between having a grandparent live in the household and household composition were not significant (grandparent in household* single-parent: $b = .06$, $t = .37$; grandparent in household* guardian-only: $b = .18$, $t = .36$). Also, there was no effect of interactions between the number of grandparents who lived close by and household composition (grandparents live close* single-parent: $b = .04$, $t = .22$; grandparents live close * guardian-only: $b = .02$, $t = .04$). In analyses not shown here, a significant effect was found for an interaction between the number of grandparents who lived close by and mothers’ employment status, whereby involvement increased for students whose mothers were not in the labor force as the number of grandparents who lived nearby increased.

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135 The equation for the net effect of having a grandparent in the household is $b$ (grandparent lives in household) + $b$ (SES* grandparent lives in household). Substituting the appropriate values for a student with an SES category of 3, the equation is $2.47 + (-.92)(3) = -.29$.

136 The number of grandparents who lived close by was included as a main effect in this model.  

137 The number of grandparents who lived close by was included as a main effect in this model. Results from this model are as follows: (grandparents live close* mother not in labor force; $b = .39$, $p < .05$; grandparents live close * mother works part time: $b = .35$, $t = 1.61$; grandparents live close * mother looking for work: $b = .33$, $t = .63$).
There was one last significant interaction found in these analyses between father not in the labor force and teacher contact about students’ problems. Specifically, when fathers were not working, there was a positive effect on involvement if teachers had contacted parents about any problems their children were having in school. This was not the case when fathers had other employment statuses.

Model 7 presents the results for the significant interactions involving parents’ language minority status. Some interesting relationships appear here. Looking at the interactions by family type, we see that the interaction between having a parent who is a non-English-speaking language minority and living in a single-parent household is significant and positive; this suggests that all else being equal, involvement was higher for students with non-English-speaking language minority parents who live in single-parent homes, compared to students with non-LM parents who live in single-parent homes, because the net effect of living in a single parent home for students with non-English LM parents was positive.\(^{138}\)

The negative effects on familial involvement of the interactions between parents’ non-English LM status and some of the other measures indicate that the effects of these other measures are less strong for students with than non-English LM parents they are for other students. This is particularly true for the effect of socioeconomic status on involvement. This measure explains the mean differences between students with non-English LM parents and students with non-LM parents; when entered by itself into model 5 (i.e., controlling for no other interaction effects), the main effect of the non-English-speaking parent dummy variable became insignificant. The significant and negative

\(^{138}\) The coefficient for the main effect of living in a one-parent household is -1.09, while the coefficient for the non-English LM * one-parent household interaction is 2.07.
effect of the non-English-speaking-LM * SES interaction shows that SES had a less positive impact on involvement for students with non-English-speaking-LM parents. In fact, the net effect of SES on familial involvement for these students in the lowest category of SES approaches zero ($b$ for main effect of SES + $b$ for non-English-speaking-LM * SES interaction (1.29 + -.89) = .40). Also, the difference in familial involvement between students with non-English-speaking-LM parents and those with non-LM parents increases as SES increases. For example, given an SES category of 5, the net effect of SES for a student with a non-language minority parent would be 1.29*5= 6.45, while the net effect for a student with a non-English-speaking-LM parent would be 1.29*5 + (-.89*5), for a difference in involvement equal to 4.45 activities in the previous year. This is a much larger difference than the one observed when comparing students in the lowest SES category (indicated above as being .4).

In the results presented here, the interaction between SES and the dummy for having parents who are English-speaking language minorities is significant at the .10 level, but not at the .05 level of significance. This interaction is significant at the .05 level in a model that does not include any of the other the interactions with parents’ language status ($b$= -.62, p < .05). None of the interactions for students with English LM parents in model 7 are significant, which makes it likely that the SES*English LM interaction is just shy of the .05 level of significance here because it is sharing the variance with these other insignificant interactions, and not because it does not matter. This is the first evidence that there is a difference in the involvement levels of families of students with English LM parents and families of students with non-LM parents, all else being equal. The pattern is the same as that described above for students with non-
English LM parents; SES has a less positive impact on involvement for students with English LM parents, compared to students with non-LM parents, and the differences between the involvement levels of families of these two groups of students are exacerbated as SES increases. However, the differences are still not as large as they are between families of students with non-English LM parents and students with non-LM parents.

While there was still a significant and positive main effect for having a sibling in the same school, the effect was less positive, or less strong, for students with non-English-speaking language minority parents.139 Similarly, while there was still a significant and positive main effect for the number of classmates’ parents with which parents had regular contact, the effect was less positive, or less strong, for students with non-English-speaking language minority parents.140

Inclusion of these interactions in models 6 and 7 does not result in an increase in the amount of variance in involvement explained. It does result in a better-specified model in which the relationships between the independent variables and involvement are more accurately represented.

There was one other interaction term that was significant when added to model 7 without other pairs of interactions, but its significance of which did not hold when included in model 7 with the parents’ language minority status * SES interactions. It is mentioned here, because its lack of significance may be due to multicollinearity rather than a true lack of importance. Specifically, a significant positive interaction existed

139 The coefficient for the main effect of having a sibling in the same school is 2.53, while the coefficient for the non-English LM * sibling in same school interaction is -1.67, for a net effect of .86.

140 The coefficient for the main effect of regular contact with parents is 1.45, while the coefficient for the non-English LM * contact with parents interaction is -.45, for a net effect of 1.00.
between having a parent who was an English-speaking language minority and poverty status ($b = 1.54$, $p < .05$). The absolute magnitude of this effect ($b = 1.54$) was larger than the absolute magnitude of the main effect for the poverty measure ($b = -1.30$), suggesting that all else being equal, poor students with English-speaking language minority parents had families who were more involved than poor students with non-language minority parents. Also, when this interaction is included, the main effect of having an English LM parent became significant and positive at the .10 level ($b = -.84$, $t = -1.73$). These results mirror those described above when the interaction with SES was included, and suggest that there are some real differences in the involvement levels between particular students with English-speaking language minority parents and those with non-LM parents in particular socioeconomic groups. The interaction between poverty status and having a parent who is a non-English-speaking language minority was not significant ($b = .91$, $t = 1.41$).

Significant interaction effects did not exist for any of the following interactions computed using parents’ language status when they were added to model 5: parents’ language minority status * female (non-English LM: $b = .96$, $t = 1.41$; English LM: $b = -.06$, $t = -.10$); parents’ language minority status * student had disability (non-English LM: $b = .04$, $t = .04$; English LM: $b = -.19$, $t = -.19$); parents’ language minority status * number of siblings (non-English LM: $b = .36$, $t = 1.28$; English LM: $b = .26$, $t = .77$); parents’ language minority status * whether the student was a citizen (non-English LM: $b = .69$, $t = .43$; English LM: $b = 3.17$, $t = 1.46$); parents’ language minority status *

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141 Each pair of interactions (i.e., parents’ LM status * variable X) was added separately to model 5. Also, many of the interactions listed below incorporate measures that do not appear in model 5 because the main effects were not significant (e.g., child is citizen). When interactions with these variables were tested, the main effects were also included in the model.
number of grandparents who lived close to the family (non-English LM: \( b = .08, t = .27 \); English LM: \( b = -.33, t = -1.09 \)); parents’ language minority status * whether a grandparent lived in the household (non-English LM: \( b = 1.68, t = 1.57 \); English LM: \( b = 1.12, t = 1.24 \)); parents’ language minority status * experience of family disruption (non-English LM: \( b = 1.25, t = .69 \); English LM: \( b = 1.00, t = .69 \)); parents’ language minority status * teacher’s contact regarding problems at school (non-English LM: \( b = .84, t = .96 \); English LM: \( b = 1.31, t = .97 \)); parents’ language minority status * educational expectations (non-English LM: \( b = -.35, t = -1.28 \); English LM: \( b = -.03, t = -.09 \)); and parents’ language minority status * frequency of reading (non-English LM: \( b = -.21, t = -.63 \); English LM: \( b = -.26, t = -.56 \)).

7.4 Bivariate Analyses of the Effects of Methods of Facilitation on Family Involvement

In the previous sections, it was shown that family involvement in school functions differed by the language status of students’ parents. This study hypothesizes several school characteristics that would facilitate the involvement of language minority families. These include the number of types of assistance schools provide to such families, the number of ESL and bilingual aides and teachers a school employs, the percentage of teachers who are Latino or Asian, and whether the principal is Latino or a non-black minority. It also was thought that the larger the population of LEP students a school educated, the more likely LM parents might be to participate at the school, because there would be a larger community of students and parents who understood LM parents’ concerns and experiences, and with whom LM parents could identify and interact. In addition, a select few measures are investigated as affecting the involvement of all
families. These include whether the school offers child care, the frequency with which schools send home letters or newsletters to provide parents with information about the school, the number of transition-to-kindergarten activities schools have, and whether schools employ a full-time parent liaison.

Before proceeding with the hierarchical linear modeling analyses, tests were conducted to see whether and how these characteristics of facilitation were related to familial involvement for each group of students this study considers. T-tests were used to investigate differences in involvement by dichotomous measures while bivariate regressions were used to investigate whether there was a significant relationship between involvement and the continuous measures.

Looking at the characteristics thought to facilitate involvement of all parents, analyses show that the frequency with which schools sent home informational newsletters was not related to level of involvement for the two groups of students with language minority parents (students with non-English LM parents: $b = 1.07, t = 1.44$; students with English LM parents: $b = .84, t = .99$) but did have a significant positive effect on familial involvement for students with non-LM parents ($b = .94, t = 3.52, p < .001$).142 Similarly, the number of transition-to-kindergarten activities a school had was not related to level of involvement for the two groups of students with language minority parents (students with non-English LM parents: $b = -.03, t = .08$; students with English LM parents: $b = .30, t = .74$) but did have a significant positive effect on familial involvement.

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142 The lack of difference found for the two groups of students with LM parents may be due to the lower variance on this measure in these populations. The highest score on the frequency scale for this measure is 7, and the majority of students’ school administrators (95 percent) reported this frequency. The mean score for students with non-English LM parents was 6.87 (s.e. = .053), and for students with English LM parents the mean score was 6.90 (s.e. = .030). In contrast, the mean score for frequency newsletters are sent home for students with non-LM parents was slightly lower ($x = 6.85$, s.e. = .040), suggesting there is more variation on this measure.
involvement for students with non-LM parents \((b= 1.17, p < .001)\). The involvement level of families of students with non-English LM parents was higher in schools that offered child care during parent events than it was in schools that did not offer child care \((t= 2.20, p < .05)\). There were no differences in involvement by child care for the other two groups of students (students with English LM parents: \(t= .27\); students with non-LM parents: \(t= 1.45\)).

These analyses reveal some interesting differences in the relationships between the measures of facilitation specifically for families of students with language minority parents and involvement. As hypothesized, involvement was greater for families of students with non-English LM parents who attended schools with Latino or non-black minority principals, compared to students with non-English LM parents who attended schools with non-Latino white or black principals \((t= 2.01, p < .05)\). In contrast, involvement was lower for families of students with English LM parents who attended schools with Latino or non-black minority principals, compared to students with English LM parents who attended schools with non-Latino white or black principals \((t= -2.35, p < .05)\). For comparison, no difference was found for students with non-LM parents by the race/ethnicity of the school principal \((t= -.22)\).

Contrary to expectations, there was a negative relationship between the number of ESL and bilingual aides and teachers a school employs and involvement for students with English LM parents \((b= -.60, p < .01)\). No relationship was found between this measure and familial involvement for the other two groups of students (students with non-English LM parents: \(b= -.02, t = -.13\); students with non-LM parents: \(b= -.10, t = -.68\)). Also, no relationship was found between the percentage of Latino and Asian teachers in the school
and familial involvement for any group of students (students with non-English LM parents: $b = .05, t = 1.11$; students with English LM parents, $b = .01, t = .39$; students with non-LM parents: $b = .04, t = .94$).

The pattern of relationships between percent of LEP students in the school and involvement is similar to that seen for the number of ESL/bilingual teachers and aides. There is a negative relationship between percent LEP students and involvement for students with English LM parents ($b = -1.05, p < .001$). No relationship was found between this measure and familial involvement for the other two groups of students (students with non-English LM parents: $b = -.05, t = -.14$; students with non-LM parents: $b = .20, t = .72$).

There was no overall relationship between the number of methods of facilitation of LM parent involvement and involvement for students with non-English LM parents ($b = -.15, t = -.52$). Contrary to what was predicted, the relationship between assistance and involvement was significantly negative for students with English LM parents: ($b = -2.28, p < .05$). Again for comparison, no relationship was found between language assistance and familial involvement for students with non-LM parents ($b = -.02, t = -.13$).

The results of these analyses suggest that the characteristics conceptualized as facilitators of involvement are differentially related to familial involvement for the three groups of students, and not in the manner expected. However, the relationships evident in these bivariate analyses may be a function of the types of schools these different groups of students attend; that is, other school characteristics that are related to the examined facilitation measures and are characteristic of the schools students in different groups attend may be driving the observed relationships. In the next section, the
relationships between these factors and involvement are examined while holding other school characteristics constant in HLM analyses.

### 7.5 Hierarchical Linear Models of the Effects of School Characteristics on Family Involvement

These analyses estimate the two-level intercepts- and slopes-as-outcomes model described in chapter 4 using hierarchical linear modeling. Level-1 characteristics include those pertaining to the student, family, and household. Level-2 characteristics are those pertaining to the school. As a first step, a fully unconditional model was estimated in which no specific student, family, household, or school characteristics were included in the model. Such a model is useful as a baseline for determining how much of the variance in the outcome is attributable to level-1 characteristics, and how much is attributable to level-2 characteristics. As can be seen from the variance components of the fully unconditional model (table 7.5), a much greater proportion of the variance in family involvement is due to individual-level, rather than school-level, characteristics, i.e., there is more variation between students within schools than between schools. Nevertheless, there is substantial variation in involvement between schools. The intraclass correlation, which indicates the proportion of variance that is between schools, is .14, indicating that about 14 percent of the variance in family involvement is between schools, or due to school characteristics.

Another important diagnostic from the fully unconditional model is the reliability estimate for the random intercept, which indicates how reliable the sample mean is as an

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143 The estimated model includes two equations. The level-1 equation is \( Y_{ij} = B_{0j} + r_{ij} \). The level-2 equation is \( B_{0j} = y_{00} + u_{0j} \).

144 The intraclass correlation is computed as \( \text{between-group variation} / \text{(between-group variation + within-group variation)} \).


### TABLE 7.5

**VARIANCE COMPONENTS OF THE HLM MODELS**

<table>
<thead>
<tr>
<th></th>
<th>Unconditional model</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within-school variation</td>
<td>140.76</td>
<td>137.79</td>
<td>117.31</td>
<td>117.21</td>
<td>117.26</td>
</tr>
<tr>
<td>Between-school variation</td>
<td>22.90</td>
<td>23.10</td>
<td>24.50</td>
<td>14.24</td>
<td>14.29</td>
</tr>
<tr>
<td>Non-English LM</td>
<td>32.63</td>
<td>26.96</td>
<td>27.18</td>
<td>23.68</td>
<td></td>
</tr>
<tr>
<td>English LM</td>
<td>10.85</td>
<td>11.45</td>
<td>11.61</td>
<td>10.04</td>
<td></td>
</tr>
<tr>
<td>Total variance</td>
<td>163.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra class correlation</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


estimator of the true school mean. The reliability estimate for the random intercept, which indicates the school mean of family involvement, is .704. This reliability is relatively high, indicating that there is a substantial enough portion of the variance in involvement that is potentially explainable with these data to allow for the modeling of level-1 effects as a function of level-2 predictors.\(^{145}\)

Model 1 in table 7.6 includes only the measures of parents’ language status as level-1 predictors of involvement. It is an unconditional level-2 model in which the school-level effects are partitioned out, but the direct effects of particular school characteristics on the level-1 parameters are not assessed. In this model, as in all models, the two dummy variables for parents’ language minority status are specified as having a random effect. In subsequent models, other level-1 characteristics are specified as having a fixed effect. For random effects, the error term is left in the level-2 equations. When

\(^{145}\) A low reliability would have indicated that more of the variance in the outcome was due to model error, reducing the likelihood that any investigated level-2 predictors would be found to significantly influence the level-1 effects on involvement.
effects are specified as fixed, their error terms are constrained to be zero. The hypotheses of this study assume a random effect for parents’ LM status, because they posit that level of involvement for families of students with LM parents will vary by certain school characteristics, in particular language assistance and the composition of the school staff. These characteristics have an effect on familial involvement only for these groups of students, rather than having an equal effect across all schools and parents regardless of the students’ and parents’ characteristics. As such, these school-level variables are believed to influence the effect only of parent language status on involvement. This is, by definition, a random effect (Bryk and Raudenbush 1992).

### TABLE 7.6
HIERARCHICAL LINEAR MODELS OF LEVEL OF FAMILY INVOLVEMENT,
FIXED EFFECTS

<table>
<thead>
<tr>
<th>FIXED EFFECTS</th>
<th>Coefficient</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>7.06***</td>
<td>.203</td>
</tr>
<tr>
<td>Parents’ language background (Non-LM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-English LM parent</td>
<td>-2.89***</td>
<td>.543</td>
</tr>
<tr>
<td>English LM parent</td>
<td>-1.12**</td>
<td>.416</td>
</tr>
</tbody>
</table>

The HLM diagnostics generally support the presence of a random effect for parents’ language minority status. Bryk and Raudenbush (1992) outline several methods for determining whether a variable should be specified as random or fixed. These methods include: examination of the chi-square statistic for a variable’s random effect to determine whether the random effect of the variable contributes a significant amount to the overall variability in the outcome; examination of the variable’s reliability (explained above); and examination of the change in model deviance between two models, one that specifies the variable as fixed and the other that specifies the variable as random. Most of these tests indicate that parents’ LM status is more properly specified as random.

Specifically, in the model that includes only the parent language status dummy variables, the chi-square values for the non-English LM and English LM dummy variables are 446.95 (p < .001) and 306.59 (p > .500), respectively. The first value indicates that the non-English LM variable should be treated as random; the random effect of this measure contributes a significant amount to the overall variance in involvement. The chi-square value for the English LM variable suggests that it should not be treated as random. However, the chi-square statistics are computed only for 312 schools that have sufficient data to compute level-1, within-school variance (about 40 percent of the sample of schools); therefore, this result may not be truly reliable as an indicator of whether the variable should be specified as having a random or fixed effect.

Bryk and Raudenbush (1992) suggest that when the chi-square statistic may not be reliable due to a low number of schools having enough data to estimate the statistic, the variable’s reliability and changes in model deviance can be investigated for more information. They assert that, in practice, they have found that variables with reliabilities...
less than .05 should be treated as fixed (p. 110). The reliabilities for the non-English LM and English LM dummy variables are .262 and .120, respectively, indicating that they may be treated as random. In addition, changes in model deviance indicate that the model is better specified when these two measures are specified as random. The chi-square test for the change in model deviance between a model with both measures specified as random and a model with both measures specified as fixed is 55.71 (p < .001), with the model deviance for the model in which both are specified as random being lower,\textsuperscript{146} indicating a better fit. The chi-square test for the change in model deviance between a model with both measures specified as random and a model with the non-English LM variable specified as random and the English LM dummy variable specified as fixed is 18.77 (p < .01), with the model deviance for the model in which both are specified as random being lower.\textsuperscript{147} Lastly, the chi-square test for the change in model deviance between a model with both measures specified as random and a model with the non-English LM variable specified as fixed and the English LM dummy variable specified as random is 40.14 (p < .001), with the model deviance for the model in which both are specified as random being lower.\textsuperscript{148} Given all this evidence that the parents’ language minority status variables should be specified as random, they are for all analyses presented here.

\textsuperscript{146} The model deviance for the model with both LM variables specified as random was 107996.102 (d.f.=7). The model deviance for the model with both LM variables specified as fixed was 108051.812 (d.f.=2).

\textsuperscript{147} The model deviance for the model with both LM variables specified as random was 107996.102 (d.f.=7). The model deviance for the model with non-English LM specified as random and English LM specified as fixed was 108014.869 (d.f.=4).

\textsuperscript{148} The model deviance for the model with both LM variables specified as random was 107996.102 (d.f.=7). The model deviance for the model with non-English LM specified as fixed and English LM specified as random was 108036.2402 (d.f.=4).
It should be noted that these same diagnostic tests were used to examine whether other variables in the model should be treated as random or fixed. There was evidence that other variables, such as SES, would have been better specified as random. However, there is a limit to the number of measures the data will support as being specified as random. The greater the number of measures specified as random, the larger the number of parameters HLM has to compute, and the more difficult it becomes for HLM to converge in order to estimate a model. Bryk and Raudenbush (1992) indicate that in their sample from the High School and Beyond dataset, which had 160 schools and about 60 students within each school, the data only supported 3 random coefficients plus a random intercept (p. 203). As noted in chapter 4, each school in this sample of schools from the ECLS-K data set has a relatively low number of students (between 5 and 26). Because a primary goal of this study is to investigate the involvement of language minority parents and how specific school-level characteristics uniquely affect their level of involvement, the variables indicating parents’ language minority status are the only ones specified as random in these analyses.

The inability to include many random effects is also the reason why interaction effects are not included in these analyses. Generally, when an interaction includes a main effect that is specified as random, the interaction effect should also be specified as random. Inclusion of all the interaction effects in this model would require HLM to estimate 12 random effects. In fact, the HLM software would not estimate such a model.149 While specifying the model with fewer random effects than exploratory analyses indicate should be specified as such does not bias the point estimates of the

149 An error message was returned that HLM was unable to compute starting values based on the specified model, because every level-1 predictor matrix was near singular.
level-2 coefficients, the standard errors may be biased and the estimates would be more efficient in other models in which more level-1 effects are specified as random (see Bryk and Raudenbush 1992: 207).

Results for model 1, shown below in table 7.6, show that without controlling for other level-1 characteristics, families of both students with non-English-speaking and English-speaking language minority parents are less involved than families of students with non-language minority parents within schools, when other factors are not taken into account. While a similar result was shown consistently for students with non-English-speaking language minority parents in the OLS regressions, this was not the case for students with English-speaking language minority parents. These results indicate that there is between-school variation, or a school effect, that is captured in the individual level effects. When this between-school variation is not partitioned out, the true relationships between individual-level characteristics and involvement are masked. The fact that the differences between students with English LM parents and students with non-LM parents appear insignificant when school-effects are not partitioned out suggests that students with English LM parents tend to be clustered in schools with characteristics that work to increase their family involvement to levels that are more equal to those of families of students with non-LM parents in the general population of kindergartners.

A measure of variance explained can be computed using the following equation:

\[
\frac{\text{variance (unconditional model)} - \text{variance (conditional model)}}{\text{variance (unconditional model)}}
\]

Substituting the values of the variance components for model 1 (shown in table 7.5) into this equation, we see that parents’ language status accounts for about 2 percent of the within-school, student-level variance. While low, this is actually double the
amount of variance explained by these measures in the OLS regression analyses that did not decompose the within- and between-school variances.

HLM Model 2 in table 7.7 presents the level-1 model estimated here, which is a simplified version of the models estimated in OLS regressions. It includes most of the significant level-1 effects from OLS model 5. Two measures are not included here: having a grandparent live in the household and teacher contact about problems at school. Teacher contact regarding problems, for which more than 600 cases were missing information, was dropped from these analyses to preserve the maximum number of cases possible, given that a substantial number of cases without administrator data were already being excluded. Also, having a grandparent living in the household was dropped for two reasons: its main effect was not understood without an interaction effect and its inclusion had no effect on the relationship between parents’ language status and involvement.¹⁵⁰

For comparison, the simplified OLS model further restricted to include only the sample of students who had school administrator data is presented in table 7.7 as well.¹⁵¹

As can be seen in model 2, all of the level-1 characteristics significant in the OLS regression remain significant in the HLM level-1 model, and their effects are relatively the same when the school-level variance is partitioned out. An exception here pertains to the race/ethnicity measures, for which there were some changes. Specifically, these

¹⁵⁰ A comparison between the results of the OLS model 5 presented in section 3.1 and the results of the simplified model that does not include grandparent living in the household or teacher contact regarding problems for the sample of students with parent data who were in the same school all year shows that the exclusion of these measures does not affect the relationship between parents’ language status and involvement. Exclusion of these measures does not affect the relationships between any of the other independent measures and involvement either, with one exception: living in a guardian only family. The effect for this measures becomes stronger, but not significant. This change is likely due to the fact that living in a household with a grandparent and living in a guardian-only household are moderately correlated (r = .33, p < .001).

¹⁵¹ The reader is reminded that the models presented in section 3.1 were not restricted to students who only had school administrator data in order to take advantage of all the individual-level data available.
TABLE 7.7

LEVEL-1 MODELS OF FAMILY INVOLVEMENT

<table>
<thead>
<tr>
<th></th>
<th>OLS Simplified Model 5</th>
<th>HLM Model 2: Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>Standard error</td>
</tr>
<tr>
<td><strong>LEVEL 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-.72</td>
<td>.752</td>
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<tr>
<td>Parents’ language background (Non-LM)</td>
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<td></td>
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<tr>
<td>Non-English LM parent</td>
<td>-1.51**</td>
<td>.561</td>
</tr>
<tr>
<td>English LM parent</td>
<td>-.40</td>
<td>.471</td>
</tr>
<tr>
<td>Student’s race/ethnicity (White)</td>
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<td></td>
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<tr>
<td>Black</td>
<td>-.69</td>
<td>.478</td>
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<tr>
<td>Latino</td>
<td>.12</td>
<td>.469</td>
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<td>Asian</td>
<td>-.47</td>
<td>.698</td>
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<tr>
<td>Other race/ethnicity</td>
<td>.26</td>
<td>.620</td>
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<tr>
<td>Number of siblings</td>
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<td>.126</td>
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<td>Sibling in same school</td>
<td>2.43***</td>
<td>.233</td>
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<tr>
<td><strong>Family structure (Two-parent)</strong></td>
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<td></td>
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<tr>
<td>One-parent</td>
<td>-.98**</td>
<td>.285</td>
</tr>
<tr>
<td>Guardian-only</td>
<td>-1.49*</td>
<td>.633</td>
</tr>
<tr>
<td>Socioeconomic status</td>
<td>1.20***</td>
<td>.116</td>
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<tr>
<td>Student is poor</td>
<td>-1.27***</td>
<td>.328</td>
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<tr>
<td>Mother’s employment status (Mother works full time)</td>
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<td></td>
</tr>
<tr>
<td>Mother not in labor force</td>
<td>3.87***</td>
<td>.318</td>
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<tr>
<td>Mother works part time</td>
<td>3.34***</td>
<td>.300</td>
</tr>
<tr>
<td>Mother looking for work</td>
<td>1.89**</td>
<td>.595</td>
</tr>
<tr>
<td>Father’s employment status (Father works full time)</td>
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<td></td>
</tr>
<tr>
<td>Father not in labor force</td>
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<td>.626</td>
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<td>Father works part time</td>
<td>-1.54</td>
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<td>Father looking for work</td>
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<td>Parental expectations</td>
<td>.40**</td>
<td>.120</td>
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<td>Number of classmates’ parents student’s parents have regular contact with</td>
<td>1.41***</td>
<td>.064</td>
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<tr>
<td>Family member reads to student</td>
<td>1.29***</td>
<td>.137</td>
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</tbody>
</table>

NOTE: Reference categories are in parentheses. * p < .05, ** p < .01, *** p < .001
analyses show that, within schools, the average involvement level of the families of black and Latino students was significantly lower than the involvement levels of families of non-Latino white students, controlling for the factors included in this model. In the regression analyses that did not decompose the within- and between-school variance, these racial/ethnic differences became insignificant once factors such as SES, parental employment, and involvement at home were controlled.

Also, importantly, the student-level measures in this model explain the differences between the involvement of families of students with English LM parents and students with non-LM parents. These results indicate that, within any given school, the differences between these two groups of students are primarily related to the individual-level characteristics included in the model. This set of predictors explains about 17 percent of the variance within schools.

Model 3 (see table 7.8) includes the significant school characteristics that predict level of family involvement. They explain about 37 percent of the between-school variance in involvement. As predicted, involvement increased with the number of opportunities schools provided parents to be involved. The first set of dummy variables in the model, which pertain to school location, indicate that, as expected, family involvement was lower in rural schools than it was in suburban schools. Although correlation analyses indicated that families of students in city schools were less involved than families of students in suburban schools, no difference was found between these two

\footnote{The following are the coefficients and t-tests for the variables not discussed below that were not significant when added one at a time to model 2: School size, $b = -.10, t = -.63$; school is one of choice or magnet school, $b = .80, t = 1.49$; school is an early childhood center, $b = -.63, t = -1.02$; parents are welcome to observe any time classes are in session, $b = .28, t = 1.06$.}
<table>
<thead>
<tr>
<th>FIXED EFFECTS</th>
<th>Coefficient 1</th>
<th>Standard error 1</th>
<th>Coefficient 2</th>
<th>Standard error 2</th>
</tr>
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<td><strong>LEVEL 1</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Intercept</td>
<td>7.11***</td>
<td>.935</td>
<td>12.38***</td>
<td>.945</td>
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<tr>
<td>Parents’ language background (Non-LM)</td>
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<td>Non-English LM parent</td>
<td>-1.54**</td>
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<td>1.900</td>
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<td>1.754</td>
<td>-4.89**</td>
<td>1.677</td>
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<tr>
<td>South</td>
<td>-3.24*</td>
<td>1.595</td>
<td>-3.24*</td>
<td>1.595</td>
</tr>
<tr>
<td>West</td>
<td>-4.89**</td>
<td>1.677</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City</td>
<td></td>
<td></td>
<td>.57</td>
<td>1.026</td>
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<tr>
<td>Rural</td>
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<td></td>
<td>2.80</td>
<td>1.694</td>
</tr>
<tr>
<td>School educates LEP students</td>
<td></td>
<td></td>
<td>-.88</td>
<td>1.434</td>
</tr>
<tr>
<td>Percent Latino and Asian teachers</td>
<td></td>
<td></td>
<td>.10*</td>
<td>.046</td>
</tr>
<tr>
<td>School offers child care</td>
<td></td>
<td></td>
<td>2.45*</td>
<td>1.070</td>
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<tr>
<td>English LM parent</td>
<td>-.85</td>
<td>.451</td>
<td>.07</td>
<td>1.120</td>
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<tr>
<td>Midwest</td>
<td></td>
<td></td>
<td>-.70</td>
<td>1.204</td>
</tr>
<tr>
<td>South</td>
<td></td>
<td></td>
<td>-.33</td>
<td>1.201</td>
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<tr>
<td>West</td>
<td></td>
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<td>-1.17</td>
<td>1.181</td>
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<td>.19</td>
<td>.867</td>
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<td>Rural</td>
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<td></td>
<td>-.27</td>
<td>1.037</td>
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<tr>
<td>School educates LEP students</td>
<td></td>
<td></td>
<td>-2.53**</td>
<td>.938</td>
</tr>
<tr>
<td>Percent Latino and Asian teachers</td>
<td></td>
<td></td>
<td>.10**</td>
<td>.038</td>
</tr>
<tr>
<td>School offers child care</td>
<td></td>
<td></td>
<td>1.32+</td>
<td>.804</td>
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<tr>
<td>Student’s race/ethnicity (White)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>-1.34**</td>
<td>.419</td>
<td>-1.31**</td>
<td>.419</td>
</tr>
<tr>
<td>Latino</td>
<td>-1.06*</td>
<td>.448</td>
<td>-1.14*</td>
<td>.455</td>
</tr>
<tr>
<td>Asian</td>
<td>-.82</td>
<td>.743</td>
<td>-.70</td>
<td>.734</td>
</tr>
<tr>
<td>Other race/ethnicity</td>
<td>-.77</td>
<td>.656</td>
<td>-.73</td>
<td>.656</td>
</tr>
<tr>
<td>Number of siblings</td>
<td>-.48***</td>
<td>.114</td>
<td>-4.8***</td>
<td>.114</td>
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<tr>
<td>Sibling in same school</td>
<td>2.43***</td>
<td>.240</td>
<td>2.43***</td>
<td>.240</td>
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<tr>
<td>Family structure (Two-parent)</td>
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<td>One-parent</td>
<td>-.93**</td>
<td>.271</td>
<td>-.94**</td>
<td>.271</td>
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<tr>
<td>Guardian-only</td>
<td>-1.33*</td>
<td>.619</td>
<td>-1.35*</td>
<td>.618</td>
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<tr>
<td>Socioeconomic status</td>
<td>1.02***</td>
<td>.108</td>
<td>1.02***</td>
<td>.108</td>
</tr>
<tr>
<td>Student is poor</td>
<td>-1.42***</td>
<td>.339</td>
<td>-1.41***</td>
<td>.339</td>
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</tbody>
</table>
### TABLE 7.8 (contd.).

<table>
<thead>
<tr>
<th><strong>FIXED EFFECTS</strong></th>
<th>Model 3: Levels 1 and 2</th>
<th>Model 4: Levels 1 and 2</th>
</tr>
</thead>
</table>
| Mother’s employment status  
(Mother works full time) | | |
| Mother not in labor force | 3.55*** .287 | 3.55*** .287 |
| Mother works part time | 3.20*** .290 | 3.19*** .289 |
| Mother looking for work | 2.00** .553 | 1.99** .555 |
| Father’s employment status  
(Father works full time) | | |
| Father not in labor force | -.38 .667 | -.39 .668 |
| Father works part time | -1.93 .693 | -1.89 .695 |
| Father looking for work | -1.49 .801 | -1.42 .800 |
| Parental expectations | .34** .108 | .34** .108 |
| Number of classmates’ parents  
student’s parents have regular contact with | 1.37*** .062 | 1.37*** .061 |
| Family member reads to student | 1.29*** .144 | 1.29*** .145 |
| **LEVEL 2** | | |
| School location (Suburb) | | |
| City | -.69 .400 | -.70 .403 |
| Rural | -1.46** .427 | -1.39** .436 |
| School type (Public) | | |
| Catholic | 6.46*** .676 | 6.50*** .680 |
| Private, other religious | 2.47** .739 | 2.54** .740 |
| Private, secular | 1.31 1.131 | 1.38 1.119 |
| Region (Northeast) | | |
| Midwest | 1.25** .473 | 1.27** .476 |
| South | 1.33** .461 | 1.34** .469 |
| West | 4.26*** .613 | 4.15*** .650 |
| Percent minority students | -.41** .155 | -.44** .159 |
| Percent minority teachers | -.02** .009 | -.02* .009 |
| At least 50% low income students | -2.43*** .360 | -2.43*** .364 |
| Emphasis on good communication with parents | 1.07** .515 | 1.08* .518 |
| Opportunities for involvement | .24*** .031 | .24*** .031 |
| School educates LEP students | | .17 .369 |
| Percent Latino and Asian teachers | | .02 .027 |
| School offers child care | | -.01 .354 |


NOTE: Reference categories are in parentheses. * p < .05, ** p < .01, *** p < .001
groups once other factors were controlled. These overall differences are explained by other variables in included in this model.

The second set of dummy variables, which pertain to school type, indicate that, as expected, family involvement was generally higher in private schools, compared to public schools, with one exception: the difference between kindergartners in secular private schools and public schools was not significant, controlling for other factors. Note too that the variable indicating that a public school was a magnet or other school of choice was not included in the model: the difference between these types of public schools and regular public schools was not significant, controlling for other factors.

Interestingly, there were differences in family involvement by region, whereby families of students attending schools in the Northeast were less involved than families of students attending schools in the Midwest, South, or West. The difference between families of students in the Northeast and families of students in the West is particularly large and somewhat unexpected, given the residential concentration of Latinos and Asian students, whose families tend to be less or equally involved as families of white students, in the West (Garcia 2001).

Involvement decreased as the percentages of minority students and minority teachers within a school increased. Also, involvement was lower in schools in which at least 50 percent of the student body was low-income. As expected, when principals

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153 These analyses were also run with city schools as the reference category. The insignificant effect for rural ($b = -.78, t = -1.76$) indicated that the difference in involvement between students in rural and city schools was not significant, controlling for other factors. This is consistent with results of correlation analyses showing no overall difference between involvement in city and rural schools.

154 When added to this model, the coefficient and t-test for the variable indicating that a school was a public school of choice or magnet school was $b = .80, t = 1.49$. 

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placed strong emphasis on good communication with parents, family involvement in the school was higher.

Importantly, significant differences in the average level of involvement were not found between schools that educated LEP students and schools that did not ($b = .18$, $t = .51$), and average involvement did not vary by the percentage of LEP students in a school ($b = -.04$, $t = -.24$). It was thought that involvement differences might only be found in those schools with the highest concentrations of LEP students,\textsuperscript{155} so the effects of two other dichotomous variables indicating increasing concentrations of LEP students were tested. The first variable (HILEP) was coded “1” if at least 6 percent of a school’s student population was LEP, “0” otherwise. The second variable (HILEP2) was coded “1” if at least 26 percent of a school’s student population was LEP, “0” otherwise.\textsuperscript{156} The effects of both of these measures were not significant (HILEP: $b = -.28$, $t = -.60$; HILEP2: $b = -.19$, $t = -.29$).

When added to this model, the measures of facilitation for all parents were not related to involvement for the general population of students, controlling for other factors. The coefficients and t-test values for the facilitation measures, when added one-by-one to this model, were as follows: transition to kindergarten activities: $b = .16$, $t = .74$; school offers child care for parent event: $b = .05$, $t = .15$; frequency of newsletters: $b = .33$, $t = 1.37$; and school employs a full-time parent liaison: $b = .08$, $t = .16$.

\textsuperscript{155} Given that non-English LM parents were more likely than other parents to have LEP children, and these parents were less likely to be involved, overall involvement in the school may be lower when the size of the LEP population, relative to the school population, is larger.

\textsuperscript{156} These measures were created from the categorical measure indicating percent LEP described in chapter 5. The highest category, which indicates that a school educated a student population that was more than 50 percent LEP, contained only 24 cases, unweighted. This unweighted sample size is too small to produce reliable estimates, and so a dichotomous measure based on this highest concentration of LEP students was not created.
It was not hypothesized that the number of methods used to facilitate the involvement of language minority parents, the school principal being Latino or a non-black minority, the percentage of Latino and Asian teachers in the school, or the number of ESL/bilingual teachers and aides in a school would affect involvement for all students in general. These analyses demonstrate that these characteristics indeed did not affect level of family involvement for the general population of students. The specific insignificant results are as follows: principal is Latino or non-black minority, \( b = -0.26, t = -0.35 \); percent Latino and Asian teachers, \( b = 0.02, t = 0.88 \); number of ESL/bilingual aides and teachers, \( b = -0.07, t = -0.70 \); and the number of methods of language assistance, \( b = -0.05, t = -0.45 \). The effect of an additional dichotomous measure coded “1” if a school used any method of language assistance was also found to be insignificantly related to general level of involvement (\( b = -0.12, t = -0.33 \)).\(^{157}\)

This study does hypothesize that the school characteristics just mentioned would affect the involvement of parents with language minority backgrounds. Model 4 in table 7.6 shows the results of analyses in which school characteristics are entered as predictors of the slopes of the effects of parents’ language minority status on level of family involvement.\(^{158}\) Doing this tests for cross-level effects, or level-1*level-2 interactions. The main effects of the school characteristics remain relatively the same as they were in model 3, except where noted below. Also, note that the main effects of school-level

\(^{157}\) It was thought that a more important factor in facilitating involvement for LM parents than how many methods of assistance schools employed (given the failure to find an association between number of methods and involvement), may be whether schools offered any assistance at all. This dichotomous measure was computed to test for this possibility.

\(^{158}\) All of the school characteristics investigated in this study were tested as predictors of the effect of language minority status on involvement. Only the significant characteristics are presented in model 4.
variables that only exhibit significant effects in conjunction with level-1 characteristics have been added to the model as predictors of the intercept.

Some hypotheses with respect to the effects of school characteristics were supported by the data and some were not. Although bivariate analyses revealed no overall relationship between involvement and the percentage of Latino and Asian teachers for LM parents, once other factors were controlled, the level of familial involvement increased as the percentage of Latino and Asian teachers in a school increased, as expected, for both students with English-speaking language minority parents and those with non-English-speaking language minority parents. This was true in spite of a negative effect for the percentage of teachers from all minority backgrounds. The two assistance measures (number of methods used and school used any method) had no effect on the family involvement for students with language minority parents when added to model 4 with the other significant level-2 measures.\textsuperscript{159} The number of ESL/bilingual aides and/or teachers in a school and the racial/ethnic background of the principal also were not related to involvement for either group of students with LM parents when added to model 4 with the other significant level-2 measures.\textsuperscript{160}

Unexpectedly, as shown in model 4, the involvement level of families of students with English LM parents was lower when these students attended schools that educated LEP students. The presence of LEP students in a school had no effect on family

\textsuperscript{159} Results from the model with any assistance added as a predictor of the language status coefficients are as follow: non-English speaking-LM: $b = -2.30, t = -.83$; English LM: $b = .67, t = .49$. Results from the model with number of methods of assistance added as a predictor of the language status coefficients are as follow: non-English speaking-LM: $b = -.51, t = -1.19$; English LM: $b = -.06, t = -.20$.

\textsuperscript{160} Results from the model with number of ESL/bilingual aides and teachers added as a predictor of the language status coefficients are as follow: non-English speaking-LM: $b = .03, t = .11$; English LM: $b = -.32, t = -1.45$. Results from the model with principals’ race/ethnicity added as a predictor of the language status coefficients are as follow: non-English speaking-LM: $b = 1.62, t = 1.08$; English LM: $b = -.31, t = -.27$. 

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involvement for students with non-English LM parents. This is not surprising given that most students with non-English LM parents were in schools identified by administrators as educating LEP students; there is little variation on this measure with which to explain differences in involvement. The percentage of LEP students in a school, and being in a school with a high concentration of LEP students, were unrelated to involvement for either group of students with LM parents when added to model 4 with the other significant level-2 measures.\footnote{Results from the model with percentage of LEP students added as a predictor of the language status coefficients are as follow: non-English speaking-LM: \( b = .23, t = .32 \); English LM: \( b = -.19, t = -.36 \). Results from the model with HILEP added as a predictor of the language status coefficients are as follow: non-English speaking-LM: \( b = -.14, t = -.12 \); English LM: \( b = -.79, t = -.84 \). Results from the model with HILEP\(^2\) added as a predictor of the language status coefficients are as follow: non-English speaking-LM: \( b = 2.01, t = 1.32 \); English LM: \( b = -.35, t = -.28 \).}

Interestingly, while schools’ provision of child care for parent events had no effect on familial involvement for the general student population, it did significantly increase the number of events families of students with non-English LM parents attended during the school year, controlling for the number of children in the household. Also, the effect of child care was significant at the .10 level for students with English LM parents.

The significant differences by region, whereby involvement was lower for students in the Northeast compared to students in other regions, only seems to hold for students whose parents were non-language minorities. These results show that the net effect of region on involvement for students with non-English LM parents is negative in the South, Midwest, and West; that is, families of such students are \textit{more} involved in the Northeast than in any other region. Also, the differences are less pronounced between Northeastern students with non-English LM parents and those living in the West, than they are between such students living in the Northeast and such students living in the \textit{other} regions.
South or Midwest. This is in stark contrast to the differences for non-language minority students which show the largest differences between students who live in the Northeast and students who live in the West. Also, it should be noted that the effect for the South regional variable only became significant once the measures for school location were entered into the model (which is why the location measures are included, despite their insignificance). The most likely reason for this is that there is a positive, although not significant, effect on involvement of being in a rural school for students with non-English LM parents. Once this slightly positive effect is controlled, the effect of being in a school in the South becomes more strongly negative and, as a result, significant. This finding of a positive effect for being in a rural school for students with non-English LM parents is interesting in and of itself, given that the main effect for rural is highly negative.

7.6 Examination of Specific Family Members Involved at the School

An advantage of data from the ECLS-K is that it ascertains the involvement of anyone in a student’s household in activities at the school, rather than just focusing on parents. The ability to do this may be particularly relevant in an examination of involvement for students whose parents are language minorities. Researchers have suggested that language minority and immigrant students are likely to have family members other than parents who are involved in their educational lives, including at the school (Davies 1993; Garcia 2001; Inger 1992). The analyses presented below describe who was most likely to be involved in the activities examined in this study both for all students, as well as for the different groups of students, compared to one another.

As can be seen in table 7.9, among all kindergartners who were in the same school for the entire academic year, half of them had parents who reported that the
### TABLE 7.9

PERCENTAGE OF STUDENTS WITH VARIOUS FAMILY MEMBERS INVOLVED

AT THE SCHOOL, TOTAL POPULATION AND BY PARENTS’ LANGUAGE MINORITY STATUS AND BY HOUSEHOLD COMPOSITION

IN SCHOOLS IN THE UNITED STATES:

1998-1999

<table>
<thead>
<tr>
<th>All students</th>
<th>All students</th>
<th>Non-English-speaking LM</th>
<th>English LM</th>
<th>Non-LM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother attends majority of school events</td>
<td>.52 (.007)</td>
<td>.62 (.013)</td>
<td>.52 (.014)</td>
<td>.51 (.009)</td>
</tr>
<tr>
<td>Father attends majority of school events</td>
<td>.02 (.001)</td>
<td>.04 (.004)</td>
<td>.03 (.005)</td>
<td>.02 (.002)</td>
</tr>
<tr>
<td>Mother and father attend majority of school events about equally</td>
<td>.29 (.007)</td>
<td>.17 (.010)</td>
<td>.28 (.013)</td>
<td>.30 (.010)</td>
</tr>
<tr>
<td>Nonparent attends majority of school events</td>
<td>.01 (.001)</td>
<td>.01 (.002)</td>
<td>.01 (.004)</td>
<td>.01 (.001)</td>
</tr>
<tr>
<td>Nonparent has ever attended school event</td>
<td>.02 (.001)</td>
<td>.02 (.003)</td>
<td>.02 (.005)</td>
<td>.02 (.002)</td>
</tr>
</tbody>
</table>

**Students in two-parent households**

<table>
<thead>
<tr>
<th>All students</th>
<th>All students</th>
<th>Non-English-speaking LM</th>
<th>English LM</th>
<th>Non-LM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother attends majority of school events</td>
<td>.45 (.008)</td>
<td>.58 (.015)</td>
<td>.45 (.016)</td>
<td>.43 (.010)</td>
</tr>
<tr>
<td>Father attends majority of school events</td>
<td>.02 (.001)</td>
<td>.04 (.005)</td>
<td>.03 (.005)</td>
<td>.01 (.001)</td>
</tr>
<tr>
<td>Mother and father attend majority of school events about equally</td>
<td>.36 (.008)</td>
<td>.20 (.012)</td>
<td>.34 (.015)</td>
<td>.38 (.010)</td>
</tr>
<tr>
<td>Nonparent attends majority of school events</td>
<td>.001 (.0001)</td>
<td>.003 (.001)</td>
<td>.002 (.002)</td>
<td>.002 (.0004)</td>
</tr>
<tr>
<td>Nonparent has ever attended school event</td>
<td>.01 (.001)</td>
<td>.01 (.002)</td>
<td>.004 (.002)</td>
<td>.01 (.001)</td>
</tr>
</tbody>
</table>


NOTE: Standard errors are in parentheses.
majority of school activities were attended by mothers only. For 29 percent of students, the majority of school events were reported as being attended by both their mothers and fathers about equally. For only 2 percent of students were the majority of school functions attended by fathers only. The majority of school functions were attended by someone other than the students’ mothers or fathers for only about 1 percent of students.

Differences in who attended the majority of school functions were found among the different groups of students. Students with non-English LM parents were more likely than students with English LM parents or students with non-language minority parents to have the majority of school functions be attended only by their mothers ($t = 5.04, p < .001$ and $t = 7.31, p < .001$, respectively). The difference between students with English LM parents and students with non-language minority parents was not significant ($t = .88$). Students with non-English LM parents were about twice as likely as students with non-language minority parents to have the majority of school functions be attended only by their fathers ($t = 3.13, p < .01$). Students with English LM parents did not differ from the other two groups of students on this measure.162

Conversely, students with non-English LM parents were less likely than students with English LM parents or students with non-language minority parents to have the majority of school functions be attended by both their mothers and fathers about equally ($t = -7.44, p < .001$ and $t = -9.14, p < .001$, respectively). Again the difference between students with English LM parents and students with non-language minority parents was not significant ($t = -1.61$). Contrary to what research would suggest, no significant differences were found among the groups in the likelihood that someone other than their

162 Non-English LM vs. English LM, $t = .86$; English LM vs. non-LM, $t = 1.56$. 

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parents attended the majority of school functions.\textsuperscript{163} Consistent with the overall percentage, about 1 percent of students in each group had a nonparent attend a majority of the school functions examined here.

Focusing on what person attends the majority of school events may obscure whether students with language minority parents were more likely to ever have someone other than a parent attend a school function. Although a nonparent may not attend a majority of school events, they may still act as a significant participant at the school. Analyses show that there were no significant differences between groups in the likelihood that someone other than a parent had ever been involved at the school.\textsuperscript{164} Just about 2 percent of students in each group had parents who reported that someone other than a parent attended any of the functions asked about in the survey.

Parents’ responses as to who participated in the school (i.e., mother, father, both, or neither) are dependent upon whether or not a household has two parents. Students with non-language minority parents were more likely than students with language minority parents to live in single-parent households, which may explain why they were just as likely to have nonparents involved at the school. In order to examine differences while controlling for family structure, these analyses were rerun for just students in two-parent households. Results were somewhat different. Among two-parent households, a larger percentage of students with non-English LM parents ever had someone other than a parent be involved at the school, compared to students with English LM parents ($t=$

\begin{align*}
\text{163} \text{ Non-English LM vs. non-LM, } t = -.75; \text{ Non-English LM vs. English LM, } t = .11; \text{ English LM vs. non-LM, } t = -.60.
\text{164} \text{ Non-English LM vs. non-LM, } t = -1.23; \text{ Non-English LM vs. English LM, } t = -.31; \text{ English LM vs. non-LM, } t = -.36.
\end{align*}
Again, however, these groups of students did not significantly differ in the likelihood that someone other than a parent attended a majority of school events.\(^{166}\)

### 7.7 Barriers to Involvement

The ECLS-K information from parents themselves about whether certain things made it difficult for them to participate in activities at their children’s schools. The percentage of parents who reported that the different reasons asked about made involvement more difficult are presented in table 7.10. Analyses of these items support the hypothesis that language barriers kept language minority parents who did not use English as a primary language in the home from being as involved at the school as other parents. Twenty percent of non-English LM parents reported that their families found it difficult to attend school functions because school meetings were conducted only in English. This is a significantly higher percentage than either non-LM parents (1 percent) or English LM parents (2 percent) \((t = 14.81, p < .001 \text{ and } t = 14.43, p < .001)\). Eighteen percent of non-English LM parents reported that they did not hear about things going on at the school in which they might want to be involved. This too was a significantly higher percentage than either non-LM parents (12 percent) or English LM parents (13 percent) \((t = 4.53, p < .001 \text{ and } t = 2.84, p < .01)\). English LM parents were not more or less likely than non-LM parents to report either of these as a barrier to involvement (language: \(t = 1.74\); do not hear of things in which to be involved: \(t = 1.46\)).

Although a substantial percentage of language minority parents cited language differences and not hearing about things to be involved as barriers to involvement, these differences

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\(^{165}\) Non-English LM vs. non- LM, \(t = 1.44\); English LM vs. non- LM, \(t = -.1.29\)

\(^{166}\) Non-English LM vs. non- LM, \(t = 1.33\); Non-English LM vs. English LM, \(t = .63\); English LM vs. non-LM, \(t = .26\).
### TABLE 7.10

PERCENTAGE OF STUDENTS’ PARENTS REPORTING VARIOUS REASONS THAT MAKE INVOLVEMENT AT THE SCHOOL MORE DIFFICULT, TOTAL POPULATION AND BY PARENTS’ LANGUAGE MINORITY STATUS IN SCHOOLS IN THE UNITED STATES:

1998-1999

<table>
<thead>
<tr>
<th>Reasons that make involvement more difficult:</th>
<th>LM, non-English Speakers</th>
<th>LM, English Speakers</th>
<th>Non-LM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family members cannot get off of work</td>
<td>49 (1.707)</td>
<td>55 (1.673)</td>
<td>52 (.573)</td>
</tr>
<tr>
<td>Inconvenient meeting times</td>
<td>47 (1.579)</td>
<td>42 (1.586)</td>
<td>37 (.578)</td>
</tr>
<tr>
<td>Lack of child care</td>
<td>31 (1.331)</td>
<td>26 (1.187)</td>
<td>23 (.591)</td>
</tr>
<tr>
<td>Family members speak a non-English language and school meetings held only in English</td>
<td>20 (1.161)</td>
<td>2 (.354)</td>
<td>1 (.340)</td>
</tr>
<tr>
<td>Family doesn’t hear about things going on at school that they might want to be involved in</td>
<td>18 (1.194)</td>
<td>13 (1.140)</td>
<td>12 (.485)</td>
</tr>
<tr>
<td>Problems with transportation</td>
<td>9 (.800)</td>
<td>6 (1.021)</td>
<td>5 (.306)</td>
</tr>
<tr>
<td>School does not make family feel welcome</td>
<td>6 (1.249)</td>
<td>7 (1.174)</td>
<td>5 (.571)</td>
</tr>
<tr>
<td>Problems with school safety</td>
<td>4 (.490)</td>
<td>3 (.463)</td>
<td>1 (.123)</td>
</tr>
</tbody>
</table>


NOTE: Standard errors are in parentheses.
were not the primary reasons reported by language minority parents that made involvement more difficult. Three other reasons were cited more often than language issues by non-English LM parents. The most common reason reported by parents in all groups, about half of them, was that family members could not get time off from work. Non-English LM parents were less likely to give this reason than English LM parents ($t = -2.82, p < .01$). The differences between language minority and non-LM parents were not significant.\(^{167}\)

The second most commonly cited reason by all groups of parents, which is related to difficulty getting time off from work, was that school meetings were held at inconvenient times. While a substantial percentage of students’ parents in all three groups cited this reason, non-English LM parents were more likely to give this reason than non-LM parents ($t = 5.84, p < .001$). Also, inconvenient meeting times was cited more often by English LM parents than non-LM parents ($t = 3.45, p < .01$). The difference between non-English-speaking and English LM parents was not quite significant at the .05 level ($t = 1.94$).

The third most commonly cited reason was that parents were prevented from going to school meetings or events because the parents did not have child care. Non-English LM parents were more likely to give this reason than either non-LM parents or English LM parents ($t = 5.18, p < .001$ and $t = 2.79, p < .01$). Also, English LM parents cited this reason more often than non-LM parents ($t = 1.99, p < .05$).

Factors that made parental involvement more difficult for non-English LM parents that were cited less often than language barriers were that they had problems

167 Non-English LM vs. non- LM, $t = -1.80$; English LM vs. non-LM, $t = 1.88$. 

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finding transportation to the school, they felt unwelcome at the school, and they felt unsafe going to the school. About 9 percent of non-English LM parents reported that problems with transportation made it more difficult for them to go to school events, compared to 6 percent of English LM parents (a difference that was not significant, $t=1.64$) and 5 percent of non-LM parents ($t=5.23$, $p<.001$).\footnote{The difference between English LM and non-LM parents was not significant ($t=1.70$).} Among these families of students who attended the same school all year, non-English LM parents were not more likely than other parents to report feeling unwelcome at the school (non-LM: $t=1.04$; LM, English-speakers, $t=.58$).\footnote{The difference between English LM and non-LM parents was not significant ($t=1.77$).} Although very small percentages of parents reported that there were problems with safety going to the school (between 1 percent and 4 percent), both groups of language minority parents were more likely to give this reason than non-LM parents (English LM parents, $t=3.55$, $p<.001$; non-English LM parents, $t=4.16$, $p<.001$).

7.8 Discussion

The analyses in this chapter lead to a better understanding of the student, family, household, and school characteristics that are related to family participation in formal school activities. They identify factors that are directly related to involvement levels, explain the observed overall differences between some groups of students’ families, and delineate the intricate ways in which some factors differentially affect the level of family involvement for some groups of students. In the discussion that follows, focus is placed on the findings related to the involvement of language minority families. These findings are discussed in conjunction with those from the analyses that pertain to the general
population of students, because knowledge of these basic relationships inform the
discussion about LM parent involvement.

The review of research regarding the involvement levels of language minority
parents showed that, although researchers often assert that LM parents are less involved
than non-LM parents, this conclusion more often than not is based on the observations of
school staff or of researchers conducting qualitative analyses. Little research has actually
examined the issue using a quantified measure of involvement, and no study was found
that assessed the effect of language background while controlling for other factors. The
analyses presented in this chapter add to the literature on LM family involvement by
providing empirical support for the observations made by other researchers. They show
that families of students with non-English speaking language minority parents are less
involved than other students’ families, both those with parents from language minority
backgrounds for whom English is a primary language and those with parents for whom
English is their only language.

These differences are due, in part, to many factors, including race/ethnicity, the
number of siblings students with LM parents have, socioeconomic status, and various
school characteristics. The negative effects of these characteristics outweigh the positive
effects of other characteristics that lead to higher levels of involvement, such as living in
a two-parent family, having a mother who is not in the labor force, and parents’ higher
educational expectations.

Yet even after controlling for all these other factors that are commonly included
in research on parental involvement, as well as some additional factors hypothesized to
affect involvement solely for students with language minority parents, the difference in
involvement levels between families of students with non-English speaking language minority parents and students with non-language minority parents remains. This strongly suggests that the difference in involvement is due to language barriers. Non-English LM parents themselves indicate that language differences are a factor affecting their participation in school activities: one-fifth of them said that language differences made it difficult for them to be involved at the school. Thus, while cultural differences may partially explain why families of students with non-English-speaking parents are not as involved as other parents, language barriers appear to be a primary reason for such lower involvement.

Results with respect to students with English LM parents were different than those for students with non-English LM. While results from the most basic HLM model indicate that, within any given school, their families were less involved than families of students with non-LM parents, the involvement levels of families of students with English LM parents and students with non-LM parents are more similar than were the involvement levels of families of students with non-English LM parents and students with non-LM parents. The difference between English LM parents and non-LM parents was completely explained by the individual-level characteristics included in subsequent models. In general, students with English LM are more similar to students with non-LM parents than they are to students with non-English LM with respect to the characteristics considered here. The only characteristic on which students with English LM parents and students with non-LM parents differ that is also related to involvement is race/ethnicity: the former group is more likely than the latter to be Latino or Asian. These results suggest that the barriers to involvement experienced by English LM parents are related to
cultural differences. They clearly are not related to language differences: only 2 percent of these parents indicated that school meetings held in English made their families’ involvement more difficult.

An interesting interaction was found between socioeconomic status and parents’ language status controlling for a host of other factors. For all students, the effect of SES on involvement found in numerous other studies (e.g., Stevenson and Baker 1987; Lareau 1987; Kerbow and Bernhardt 1993) was replicated here: families of higher socioeconomic status were more involved at school than families of lower socioeconomic status. Lower socioeconomic status significantly contributes to the lower involvement levels of non-English-speaking language minority parents, as well as the families of many other students, including those who are black or Latino, and those who live in single-parent and guardian-only homes.

Higher SES parents have various resources, or capital, that enable them to interact more easily in a school setting. Their greater power, greater comfort, greater ease, greater knowledge, and greater confidence, make involvement at the school easier, i.e., less costly, for them, compared to parents of lower socioeconomic status. For students with language minority parents, however, regardless of whether English was used as a primary language in the household, the effect of SES on involvement was less positive than it was for students with non-language minority parents. This indicates that there was less variation in involvement by socioeconomic status within the two populations of students with language minority parents than there was within the population of students with non-language minority parents. Furthermore, these findings indicate that the differences in the involvement levels between the families of students with language

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minority parents and those of students with non-language minority parents were exacerbated as SES increased. When families were of low SES, involvement levels between students with parents with differing language backgrounds were more similar than the involvement levels of families with high SES.

Consideration of parents’ acquired capital provides a possible explanation for these findings. While high SES LM parents possess capital (human, financial, cultural) acquired through education and their occupations, those who come from other countries and/or minority backgrounds do not necessarily possess the capital that is valued in American society. For example, high levels of education acquired in a foreign country, which may allow an immigrant to have prestigious occupations in their native countries, are not immediately recognized in the United States as qualifying people for the same types of positions here. Familiarity with foreign educational systems, in particular proper home-school relationships within them, may actually work against parents being involved at the school, if such involvement was not customary in their home countries. For these reasons, language minority parents’ capital does not translate into power and confidence or bestow on them the benefits of capital acquired in the United States.

This study is unique in that it assessed differences in involvement by language background separately from differences in involvement by race/ethnicity. Overall differences in the involvement of families of students of different racial and ethnic backgrounds exist, whereby the families of white students are more involved than families of students of other backgrounds. These differences were largely, but not completely, explained by other characteristics related to the students’ family, household, and school characteristics. Notably, families of Latino and Asian students were less
involved than families of White students controlling for language background in the OLS regressions. While language differences may explain these parents’ lower levels of involvement, at least in part, they are not the primary contributor to lower involvement.

There were differences between students of different racial and ethnic backgrounds that were only observed once the school-level effects were disentangled from the student-level effects in the HLM analyses. In the OLS models, the difference between the involvement levels of families of Latino and non-Latino white students appeared to be completely explained by students’ demographic, parental language, socioeconomic, and parental employment characteristics. In contrast, the HLM analyses demonstrated that, within schools, these differences continued to exist, even after controlling for other factors, including parents’ language background. Given that many characteristics related to structural constraints on involvement have been controlled, these analyses support the contention of cultural capital theory that cultural differences related to parents’ proper role at the school, as well as differences between the culture of the school and that of the home, contribute to the lower levels of involvement of Latino parents. Latino parents have been reported to feel that the school is the domain of educational professionals in which they should not interfere (Ritter, Mont-Reynaud, and Dornbusch 1993) and uncomfortable and/or alienated in the school’s “white,” middle-class environment (Moles 1993). To provide explicit empirical support for cultural capital theory, more research is need that ties these parents’ quantified levels of involvement to their beliefs about involvement and their relationships with school personnel.
As expected, the greater the social capital parents’ possessed, measured as the number of classmates’ parents with whom students’ parents talked regularly, the more school functions parents attended. There is an issue with causality that must be acknowledged here, however. The measure of communication with other parents is taken from the spring data collection, after parents had time to be involved at the school and at the same time that parents reported on their involvement. For this reason, it is unclear whether knowing more parents encouraged more involvement at the school or whether regular contact with other parents was a result of being more involved.

The direction of the relationship between this measure of social capital and involvement is particularly important when trying to explain the finding that this relationship is less strong for students with non-English LM parents. If social capital as measured here affects involvement, then these findings suggest that non-English LM parents use their parent networks to obtain information about the school and how their children are doing, rather than attending school functions to do so. On the one hand, this may indicate that they use their social networks to their advantage more so than other parents. On the other hand, these parents might actually be settling for less information than they really need.

If the causal relationship is in the other direction and involvement affects the regular contact parents have with other parents, these analyses suggest that attendance at school functions does not generate social networks for non-English speaking language minority parents to the same degree as it does for other parents. Given these parents’ language barriers, this is a likely scenario, especially if there are few parents with whom they can communicate in their native language. It is not hard to imagine a small group of
parents interacting and speaking a non-English language among themselves while being isolated from other parents at school functions. Findings from qualitative studies show that this does occur in schools. Primarily Spanish-speaking and primarily-English-speaking parents have been found to form separate parent “cliques,” and to interact mostly with members of their own group, to the exclusion of interaction with others outside their group (Peña 2000).

The ECLS-K did not have a similar measure of social capital from the fall data collection, which would be a temporal antecedent to reports on involvement and, therefore, could be argued as a predictor, rather than a consequence, of involvement. More research is needed to investigate the relationship between these two factors and better explain why social capital does not have as strong a relationship to involvement for non-English-speaking language minority parents as it does for other parents. It is important to keep in mind, though, that there is a net positive relationship between social capital and involvement for all parents, indicating that high levels of one result in high levels of the other.

In general, and as expected, parents with higher educational expectations for their children are more involved in school activities than parents with lower expectations. Some researchers have noted, however, that high expectations do not always translate into a high level of involvement for some parents (e.g., Garcia 2001, Muller and Kerbow 1993). This appears to be the case for non-English-speaking-language minority parents: they are least involved, compared to parents with other language backgrounds, even though they have the highest educational expectations for their children. These analyses support the explanation put forth by other researchers (e.g., Garcia 2001) that these lower
levels of involvement occur despite high expectations because parents have lower levels of education; socioeconomic status, of which education is a component, at least partially accounts for the lesser involvement of non-English LM parents. Yet this is not the only factor. In addition, these analyses show that language barriers and structural constraints also contribute to their lower levels of involvement, relative to other parents.

Turning attention to the school characteristics related to the involvement of language minority parents, these analyses indicate that, contrary to expectations, the efforts schools undertake to reduce the problems associated with language barriers do not appear to increase involvement in the school setting. These data show no effect of methods of facilitation for language minority parents (i.e., the provision of language assistance and outreach) on level of involvement for these parents. This lack of effect may be due to the way facilitation is measured here.

The measure of facilitation indicates whether schools provided any special assistance to LM/LEP families, and if so, how many different methods of assistance they use. There is no measure of the frequency with which schools employ these methods. For example, these data indicate whether schools ever offered translators at school meetings, but they do not indicate whether schools offered translators at all school meetings or only a few. Yet it may be the frequency, rather than just the presence, of facilitation that more readily affects involvement. If translators are available only at the first meeting of the school year, then this may be the only meeting language minority parents attend, because it is too difficult (i.e., too costly) for them to attend other meetings held only in English for which translators are not provided. Peña (2000) did find that Spanish-speaking parents generally did not attend school meetings at which only
English was spoken. Despite these issues with the measure itself, it may be the case that schools just do not use these methods of facilitation often enough to have a real effect on family involvement.

Another issue may involve the way the categories for parents’ language status were created in this study. In the ECLS-K, there is no way to determine whether both parents/guardians in a household had difficulty with English. It may be the case that even though English was not a primary language used in the household, at least one parent was able to speak English well enough to participate at the school. If so, then the schools would not need to incorporate the use of a parents’ home language in order to make them feel comfortable enough to participate, resulting in no effect for assistance. However, the analyses of barriers suggest that a substantial proportion of parents who did not use English as a primary language in the household found it difficult to be involved at the school as a result of language barriers. Oddly, no difference was found in the likelihood of reporting language as a barrier to involvement between non-English speaking LM who were in schools that offered assistance and those that were not. Again, this lack of difference may have to do with the fact that the frequency of assistance is not incorporated into the analyses. The conclusion of results presented here, however, is that the methods schools use to reduce difficulties associated with language differences do not increase involvement in formal school activities for the families of students with language minority parents.

One factor that was predicted to increase involvement for language minority parents, and did so for both groups of students with LM parents, was the percentage of Latino and Asian teachers in a school. This factor only emerged as having a positive
effect once other factors, in particular the percentage of minority teachers in a school, were controlled. For students in general, family involvement in school was lower when the percentage of minority teachers in a school increased. There is a high correlation between the measure of percentage of minority teachers in general, and percentage of Asian and Latino teachers in particular, which probably drives the overall negative relationship between the percentage of Asian and Latino teachers and involvement. When these measures are entered simultaneously, the positive effect of the percentage of Asian and Latino teachers on the involvement of language minority families is partitioned out from the negative effect of the percentage of minority teachers, which probably is capturing primarily the percentage of teachers in a school who are black.

When a larger proportion of these teachers is Asian or Latino, rather than non-Latino black, this encourages the involvement of language minority parents, who are primarily Asian or Latino. This supports the hypothesis set forth in chapter 4 that when parents have someone in the school with whom they can identify culturally, and possibly linguistically, they will feel more comfortable participating at the school and involvement will be higher. It also supports the suggestion above that the barriers to involvement experienced by English LM parents are cultural; these barriers are diminished when such parents have teachers of the same cultural background with whom they can interact.

There probably is a reciprocal relationship whereby parents and teachers of the same racial, ethnic, and cultural background feel more comfortable reaching out to and interacting with one another. As these data show, the result is more parental involvement at school functions. Unfortunately, research shows that, while language minority students are more likely to have Latino teachers than other students, the overwhelming
majority of them have non-Latino white teachers (Halle et al., forthcoming). This mismatch between the racial and cultural identities of teachers, students, and their parents, which has negative consequences for parents’ involvement, appears to be the norm, rather than the exception, in schools. As discussed in chapter 2, teachers often find it difficult to reach out to parents who are different from them and with whom they are not trained to engage. Similarly, language minority parents find it difficult to interact with teachers who are not familiar with their cultural background and who do not speak their languages. The result is lower levels of involvement for LM parents.

While some characteristics hypothesized to facilitate involvement specifically for language minority families were not significant, one factor hypothesized to facilitate involvement for all parents was only related to involvement for language minority families: the provision of child care. This relationship was apparent in the bivariate analyses relating child care to involvement without holding other factors constant, and held up in HLM analyses after controlling for a myriad of other school- and student-level factors. For several reasons, it is understandable that offering child care at school leads to greater involvement specifically for LM families. These families, especially those that do not use English as a primary language in the household, are likely to be immigrants who have a smaller network of family and friends they can draw upon for child care. They may also be more socially isolated from the surrounding community and therefore be unaware of individuals or organizations that provide child care. Essentially, it may be much more difficult for them to find affordable, trustworthy child care themselves, compared to non-language minority families. They are also more likely to have other children who need supervision during school events than families of students with non-
language minority parents. Child care during school functions leads to greater involvement for these families, because it reduces the costs associated with finding and paying for child care, for which they have a greater need compared to families of students with non-LM parents.

Unexpectedly, it was found that families of students with English LM parents were less involved in schools that educated LEP students than they were in schools that did not educate LEP students. This negative relationship explains the pattern of negative relationships discussed at the beginning of section 8.4 between involvement and some of the measures predicted to facilitate language minority involvement (e.g., whether the principal was a Latino or non-black minority, the number of ESL/bilingual aides and teachers in a school) for students with English-speaking language minority parents. Also, this negative relationship held after controlling for a host of other school-level factors that are both more common for LEP schools and negatively related to involvement (e.g., concentration of low-income students and higher percentages of minority teachers and students). Therefore, the relationship between involvement and being in an LEP school is not spurious as a result of these measures’ common association with other factors. Instead, there appears to be something specific about being in an LEP school for parents of English LM parents that leads them to be less involved.

There are some possible explanations for why this may be so. In these schools, English LM parents may associate with other language minority parents, both English-speakers and non-English speakers, and act in similar ways. Assuming those non-English LM parents are less involved than non-LM parents, the English LM parents would be less involved as well.
Alternatively, it may be the case that, in LEP schools, staff interactions with language minority parents who speak English result in their lower levels of involvement. In schools with LEP students, teachers and administrators may treat all language minority parents the same, regardless of how well they speak English. If staff interactions with language minority parents are at all negative, as theory and research suggest they might be, English-speaking language minority parents might avoid them. English-speaking language minority parents also might avoid interactions with teachers if they resent being treated like non-English-speaking parents. The former LM group is generally better-off than the latter, and they may be bothered that their language background, rather than their social class, is the primary factor by which they are identified. There is much variation within the population of language minorities, and social class differences often are more important in determining relationships than similarities associated with sharing a common background. A failure on the part of school staff to recognize such variation is probably viewed negatively by those parents whose stature may be diminished as a result of this failure. However, there is some suggestion in the data that these latter explanations do not accurately reflect what is occurring in schools. English LM parents in schools with the highest percentages of LEP students (26 percent or more) are less likely than English LM parents in schools with lower percentages of LEP students to say that they do not feel welcome in their children’s schools (3 percent vs. 8 percent, respectively; \( t = 2.01, p < .05 \)). Further investigation of these possibilities is needed to explain this unexpected finding.

Students with non-English LM parents were less likely than students with non-language minority parents to have had their teachers contact their parents about problems
they were having at school. With respect to involvement in the school activities investigated here, this was positive, since involvement was actually lower when such contact did occur. However, while this lack of contact is used here as a proxy for whether the student is having problems at school, it may be more telling about the relationship between language minority parents and schools. It could represent a lack of home-school communication that may be very important for the students’ school experiences. There is no reason to assume that students with language minority parents would be less likely than other students to have problems at school, which would be a valid reason for less teacher-parent contact. The objective measure of participation in programs for students with behavioral and/or academic problems used in this study indicates no differences among the groups of students in the likelihood that they are enrolled in such programs. Also, research on the adjustment and achievement of language minority students suggests that LM students would actually have more problems adjusting to the school environment, given their cultural and linguistic differences (Garcia 2001).

Future research should incorporate a more objective measure of behavior problems to assess their effect on parents’ involvement. The more objective measure included here was not related to involvement, but the indicator did not represent general problems at school. Instead it was a measure of participation in a very specific type of program in which few students participated. This low level of students’ participation in programs for students with behavioral or academic problems may have made it difficult to detect any differences in involvement based on such participation.
There are other interesting findings from these analyses that have less pertinence to the issue on language minority involvement but that deserve attention in this discussion. With respect to the effects of student-level characteristics on involvement, this study confirms the findings of other research summarized in chapter 2, which has consistently found relationships between involvement and factors such as family socioeconomic status, parental work hours, and involvement at home. Some factors were consistently related to involvement across all models using both analytic methods. These include household composition and structure, socioeconomic status, poverty status, parental educational expectations, parental contact with their children’s classmates’ parents, and involvement at home, which is measured as the frequency with which a family member reads to the child. Most of these measures were related to level of familial involvement in the manner predicted.

These results clearly show that structural constraints impact how involved parents can be at the school. Parents themselves indicated that structural constraints made it difficult for them to attend school functions; the most common barriers to involvement cited by parents of all language backgrounds were related to work, the scheduling of meeting times, and lack of child care. When parents have more demands on their time, the costs of being involved either in addition to, or instead of, meeting those other demands increase, making involvement less likely. When these demands are lower, costs are reduced, and involvement is higher. These findings support the hypotheses generated by exchange theory that as the costs to involvement increase, actual level of parental involvement will decrease.
For example, a specific hypothesized relationship generated by exchange theory was that families of students living in single-parent households would be less involved than families of students living in two-parent households, because the lack of a second parent-figure would make it more difficult (i.e., more costly) for the single parent to be involved at the school. This hypothesis was clearly and consistently supported. The effect of living in a single-parent home was significant and negative in every model, even after controlling for a host of other factors. The effect was reduced, however, after factors such as socioeconomic status, employment status, and reading at home were controlled. As has been found in other research (e.g., McLanahan and Sandefur 1994), the experience of living in a single-parent household has negative effects on certain outcomes not only as a direct result of a lack of a second parent, but also because of other circumstances brought about by the lack of another contributing adult in the household, such as a greater likelihood of living in poverty. Here, single-parent families’ lower levels of SES, greater likelihood of living in poverty, greater likelihood of having a mother who works full-time, lower educational expectations, lesser contact with their children’s classmates parents, and lower involvement at home all contribute to their lower involvement at school.

Interestingly, as with the effects of some of the race/ethnicity variables, the negative effect on familial involvement of living in a guardian-only household appeared to be completely explained by some student-level variables included in the OLS regression models, in particular socioeconomic status and parents’ employment. However, once the school-level variance was partitioned out of the student-level effects in the HLM models, the within-school difference in family involvement between students
in two-parent households and students in guardian households held. These differences are not explainable by a lack of a second adult in the household, because this category includes homes with two adults in them. However, these families seem to have other characteristics that lead them to be less involved like one-parent families, in particular lower socioeconomic status, a greater propensity to be poor, and a greater likelihood of mothers working full-time. All of these factors make it more difficult, and therefore more costly, for them to be involved at the school. In addition, guardian-only households often are formed by adults who accept the responsibility to care for children for whom they had not planned on caring, for example when grandparents take in their grandchildren because the students’ parents are no longer able to provide care themselves. In such cases, guardians, who may be unprepared to take on the daily tasks associated with caring for a young child, may not consider adding to those responsibilities by attending school functions as well. Even if they are willing to do so, they may also feel uncomfortable doing so or feel they lack the knowledge to do so, especially if they have not been in an educational environment for many years.

It also was hypothesized that having a grandparent living in the household and/or nearby would have a positive effect on involvement, because these grandparents could either provide child care while parents attended school events or attend the events themselves, thereby reducing the costs of involvement for parents. The overall relationship for the number of grandparents who lived nearby was in the direction expected, but did not hold once other factors were controlled. The positive overall relationship of living near grandparents appears to be explained by its positive association with other factors that positively affect involvement, specifically socioeconomic status.
and living in a two-parent household. Students from higher SES families live near a larger number of grandparents than do students from lower SES families ($r = .20$, $p < .001$), as do students living in two-parent households, compared to those living in single-parent households ($t = 11.67$, $p < .001$) and those living in guardian-only households ($t = 6.71$, $p < .001$).

In contrast to what was predicted, the overall relationship between having a grandparent living in the household and involvement was negative. The difference in the direction of the relationships between the two measures related to grandparents and involvement is likely due to the circumstances under which grandparents are likely to live in the household. When grandparents live in the household, it may be an indication that they are too old or ill to be independent and need care themselves. In contrast, when grandparents live close by, but not in the household, they are more likely to still be independent and capable of caring for children when parents need it.

Further investigation showed that this negative relationship only held for students in the top 60 percent of the socioeconomic scale. For students in the lower 40 percent, having a grandparent living in the household did positively predict family involvement. These differences may exist because of the different circumstances for high SES and low SES students under which they are likely to live in the same household as their grandparents. It may be more common for extended family members to live in the same household as their adult children in lower-income households, because family members pool whatever income they bring in to provide more efficiently for all the family members (see Ward, Logan, and Spitze 1992 or Cherlin 1992 for a discussion of this issue). Also, it may be the case that either the grandparents or the student’s family
simply cannot afford their own place to live. Under these circumstances, grandparents are likely to be of any age and also be of any health status. Therefore, they are more likely to be able to provide child care or attend school events themselves.

In contrast, it may be the case that when grandparents live together with grandchildren in higher SES households, it is because the grandparents are incapable of living on their own and/or caring for themselves. Under these circumstances, grandparents would not able to provide child care or attend school functions. That is, they would not make it easier for parents to be involved at school. In fact, their presence may even increase the costs of involvement at school for parents who must provide care for the grandparents. The time parents might spend attending school functions is used to care for the grandparents, or vice versa. Many adults today, in the so-called “sandwich generation (Miller 1981),” are in fact being faced with the challenge of caring for both their parents and their children. The ECLS-K data do not have any indicators of the health status of those grandparents living in students’ households. Future research should investigate how caring for their own parents affects parents’ level of involvement in their children’s educational lives.

Parents’ employment also acts as a structural constraint on involvement at the school. Families of students whose fathers worked full time were more involved than families of students whose fathers had other employment statuses (and therefore worked less). This finding seems to contradict the hypothesis generated from exchange theory that as work hours increase, the costs to be involved at the school increase and, as a result, involvement at school is lower. However, the analyses presented here suggest that the overall differences by fathers’ employment status exist only because fathers’ full-time
employment allows mothers to work less and, therefore, to be more involved at the school. Mothers’ employment status was highly related to the level of familial involvement, whereas fathers’ employment status generally demonstrated no effect on involvement levels when controlling for other factors. When fathers work full time, mothers have more time to spend attending school functions. Consistent with exchange theory, when mothers have more time outside of work (i.e., when they work less) they are more involved at the school.

There were a few instances in which father’s employment seemed to matter for involvement. In the first instance, there was an additional positive effect on involvement when mothers were not in the labor force and fathers worked part time. In this case, exchange theory was supported; with fewer work hours between both parents, there were fewer work-related costs associated with involvement. As a result, both mothers and fathers had more time to attend school functions, and so level of family involvement was higher. Also, families of students whose teachers had contacted them about problems the students were having were more involved when fathers worked part time. Presumably, these fathers and mothers were attending more school functions like parent-teacher conferences in order to attend to the needs of their children who were having problems at school. Teacher contact did not increase involvement for students whose fathers had other work statuses.

In the second instance, involvement was actually lower when both the mother and father were not in labor force. This finding contradicts exchange theory as applied to the effect of work hours on involvement. It is likely, however, that families in which neither parent is working have other characteristics not measured here that make involvement at
the school more difficult, i.e., more costly. For example, this would be true if one parent was disabled and the other was not working in order to care for that parent.

The results for the effect of teacher contact regarding problems at school are contrary to those predicted. Interpretation of these findings is not straightforward. As an indicator of real problems students are having, parents may be dealing with these problems at home. While addressing these problems, there is less time for parents to go to events at the school. Also, if the problems are behavioral, parents may be anxious about how their children will act in the care of others and therefore chose not to hire babysitters or use other care providers to watch their children while they attend school events. Another explanation is that because parents have more frequent contact with teachers on the phone regarding their children’s school problems, they do not feel it is necessary to attend meetings with the teacher at the school. Conversely, teachers may be more likely to call home if parents do not attend school functions, such as back to school nights and conferences, at which teachers can discuss any problems the students are having. Lastly, students who have problems at school may be less likely to participate in some of the school functions included in this study, such as class plays. This lower level of student involvement would lead to lower levels of involvement for the parents, as there are fewer events in which parents can watch their children participate.

As was the case with the individual-level factors, these analyses replicated the relationships of many school-level characteristics to involvement found in other studies. In fact, most school characteristics hypothesized to be related to involvement were. Importantly, as predicted, the opportunities schools provided families to be involved were significantly and positively related to level of involvement. Thus, a primary hypothesis
put forth in this dissertation was supported. When schools offered more opportunities, parents attended school functions more often. This relationship held even after controlling for factors that were simultaneously related to opportunities and involvement (i.e., the observed overall relationship between opportunities and involvement was not spurious or indirect). Simply put, parents can only attend school functions that exist for them to attend.

The introduction to this study indicated that research that identifies individual-level differences in parental involvement but does not control for opportunities may misidentify differences that result from school-level differences in opportunities as differences related to student, family, and other school characteristics. While the strength of the relationships between involvement and both individual- and school-level characteristics might be overestimated when opportunities are not controlled, it does not appear that the relationships identified in other studies are erroneous. Even after controlling for opportunities, differences by characteristics commonly identified in research on parental involvement, such as race/ethnicity, socioeconomic status, poverty status, educational expectations, and involvement at home are still evident.

In particular, differences in opportunities for involvement available at the school do not explain differences in actual level of involvement by parents’ language background. Students with LM parents attend schools with some characteristics shown in chapter 5 to be related to fewer opportunities for involvement, such as a high concentration of low-income students and larger percentages of minority students. At the same time, they are more likely than students with non-LM parents to attend larger schools and public schools, both of which offer more opportunities for parents to be
involved at the school, compared to smaller and private schools, respectively. The result is that students in all three groups identified by parents’ language background attended schools with similar numbers of opportunities for involvement.

In chapters 5 and 6, it was found that private schools offered fewer opportunities for involvement and used fewer methods of facilitation than public schools. It was suggested that these differences might be related to private school parents’ being less likely to be involved and, therefore, less likely to press for opportunities for involvement. The analyses in this chapter do not support such an argument. Families of some private school students are more involved than families of public school students, in spite of their having fewer opportunities for involvement and controlling for characteristics that typically differentiate private and public school students, such as socioeconomic status.

Interestingly, public-private differences in involvement were found only for religiously-affiliated private schools, both Catholic and non-Catholic. Parents of students attending secular private schools were not more involved than parents of students attending public schools, all else being equal. There may be several reasons for this. Schools organized around a religious community may be more effective at creating a true community in which all members are encouraged to participate. Sharing a common faith helps in this endeavor. In particular, such schools may be doing a better job than public and secular private schools of encouraging and facilitating involvement in ways not investigated here. For example, emphasis may be placed on the creation of strong teacher-parent relationships, which would lead parents to be more involved in the formal activities of the school. Such an explanation is consistent with the argument that Catholic
schools place special emphasis on creating a communal atmosphere in which all members of the school community are welcomed and valued (Bryk, Lee, and Holland 1993).

Characteristics of the private school parents themselves likely contribute to their higher levels of involvement as well. Parents of children in religious schools who adhere to religious teachings may place more emphasis on family and volunteering, which would lead them to be more involved at the school. It also might be the case that when parents choose their children’s schools, as private school parents do, they become more interested, and therefore more involved, in their children’s education. The act of choosing a school and paying for education may be a reflection of greater interest in education and is a form of parental involvement in and of itself (Coleman, Schiller, and Schneider 1993).

While the analyses related to opportunities provide evidence that school practices, affect involvement, the analyses related to facilitation demonstrated an unexpected lack of association between the measures of facilitation of involvement for all parents and actual level of involvement once other factors were controlled. Transition-to-kindergarten activities, provision of child care, and the frequency of newsletters sent home demonstrated overall positive effects on involvement, but these relationships did not hold in multivariate analyses. Some of these measures were positively correlated with opportunities for involvement (frequency of newsletters, $r = .09$, $p < .01$, provision of child care, $r = .12$, $p < .01$), as were the methods of facilitation specifically for language minority families, which was shown in chapter 6. Thus, schools that offer more opportunities are the schools that most encourage parental involvement. These schools are very active when it comes to sending home information to all parents in the form of
newsletters, letters and calendars, providing child care so parents can be involved, and providing special services to LM families in order to increase their awareness and understanding of what happens at school.

The lack of association for the measure of parent liaison may be due to the fact that this question was not limited only to asking about parent liaisons or home-school coordinators, but instead included attendance aides and a vague “etc.” in the description of the types of staff for which to report staff size. It is not clear exactly what the functions of the staff who were reported here were. Having an attendance aide would do little to facilitate involvement at the school. The measure does not discriminate between students in schools that have true parent liaisons and those in schools for which staff with functions unrelated to parent outreach are reported. This lack of differentiation may explain why no effect was found for this measure. Or, it may be the case, as discussed in chapter 6, that schools employ too few parent liaisons to have a significant impact on the level of parental involvement in the school.

Involvement also did not vary by whether the school administrator indicated that parents were welcome to observe classes anytime they were in session. It may be that this feeling of being welcome was not adequately conveyed to parents and therefore had no way of being a facilitator of involvement. Given the very high percentage of administrators who agreed that parents were welcome to observe (82 percent), it also is possible that administrators’ answers to this question were biased to give socially-desirable responses, and that these responses do not reflect reality. If so, parents may be less welcome than administrators make them out to be.
An alternative explanation is that, while this measure was included as an indicator of the general atmosphere of the school and whether it was welcoming of parents, the item itself pertains to parents being welcome to observe classes, rather than at specific parent events. Being welcome for this specific type of activity has no effect on whether parents attend the functions investigated here. There is no reason for parents to suspect that they are unwelcome to attend formal functions that are offered specifically for them to attend, such as parent-teacher conferences. Indeed, there was no relationship between parents’ feeling welcome at the school and administrators’ reports of whether parents were welcome to visit the school any time classes were in session ($r = -.01$).

It may be the case that these methods of facilitation have positive effects only for those parents who would most benefit from them, i.e., they interact with specific individual-level characteristics to increase involvement. For example, provision of child care may be important only for families with more children, or only for single-parent families, which is why an effect for child care is not found for the general population of kindergartners. Such interactions were not tested in the analyses, due to the data limitations described in section 7.5 and the specific focus of this dissertation on facilitation for language minority families. This is an issue that should be addressed in future research.

One factor that was not specifically hypothesized to facilitate involvement but that was, even controlling for other characteristics, was emphasis on good communication with kindergartners’ parents. It seems that when this is a goal of administrators, parents feel more encouraged to attend school functions. This may help them overcome any hesitancy they feel about interacting in the school environment. As a
measure of institutional support for parental involvement, this emphasis also
demonstrates to teachers that parental involvement is important. As a result, teachers
may engage in more activities at the classroom level that encourage familial involvement
at the school. When teachers are more supportive of, and responsive to, parents, parents
do become more involved (Epstein and Sanders 2000).

Although significant differences in involvement levels exist between students
who attend schools in the suburbs and students who attend city schools, these differences
did not hold once other factors were controlled. In particular, these differences seem to
be explained by the fact that city schools have higher percentages of minority students
and teachers and are more likely to have student populations that are at least 50 percent
low-income, compared to suburban schools. All of these factors predict lower levels of
involvement.

In contrast, the characteristics included in these analyses do not explain the lower
levels of involvement in rural schools. It is likely that these observed differences in
involvement are due to the distance parents in rural areas have to travel to get to the
school. As discussed in chapter 6, rural schools tend to educate students who live in a
much larger geographical area than suburban schools. Parents in rural areas probably
find it more time consuming and difficult (i.e., more costly) to travel to the school to
attend school events. It is not clear why, if this is the case, involvement in rural schools
is not lower than involvement in city schools as well. It may be that some parents have to
travel farther to the school in cities as well, compared to parents in suburban areas, if
urban districts utilize busing and choice programs that result in students attending schools
that are not close to their homes. Also, travel to schools that may not be too far from
home may nevertheless be more difficult to get to in urban areas, compared to suburban areas, due to traffic and increased reliance on public transportation. This is an area that can be investigated in future research.

Another issue that needs more investigation has to do with the differences in involvement by geographic region. These differences are not readily explainable either with existing research or by the theoretical underpinnings of this dissertation. In fact, they seem to contradict somewhat the finding that involvement in at least some activities is lower in the Southeast than in other areas of the country (Carey and Farris 1996). Characteristics such as socioeconomic status and race/ethnicity, which differ by geographic region, have been controlled, and therefore would not explain the geographic differences in involvement. There may be geographic differences with respect to the attitudes surrounding parental involvement and customary levels and types of involvement that drive the differences seen here. These issues should be explored in future research.

On a closing note, researchers of language minority students and families point out that extended family members often play a large and important role in these students’ lives. The analyses presented here show that this role does not extend into the school, at least for kindergarteners. Among all students, regardless of parents’ language background, participation in school activities by family members other than parents was virtually nonexistent. Therefore, research that focuses only on the involvement of parents does not underestimate the involvement of the language minority home at school.

Nonparent participation may be minimal because schools generally do not welcome, or at least do not prefer, the involvement of nonparents. Inger (1992) asserted
that schools generally fail to include extended family members in the educational process. However, it may be the case that language minority parents actually prefer to be involved themselves, rather than send other family members to represent them at the school. Either way, the result is less involvement, overall, for families of students with non-English speaking LM parents, compared to other students. When non-English speaking language minority parents do not attend school functions, for whatever reason, no one makes up for their absence.
8.1 Contributions of This Research to the Study of Parental Involvement

This dissertation fills gaps in the existing research on parental involvement, specifically by examining language minority parent involvement in more detail than has been done before. These analyses demonstrate that, unequivocally, language minority parents who do not use English as a primary language in the home are less involved in formal activities at their children’s schools than other parents. While other studies have reported the same findings based on qualitative interviews or bivariate analyses (e.g., Peña 2000; Vaden-Kiernan and McManus forthcoming), this is the first study to demonstrate this difference controlling for other factors and using a quantified measure of involvement. As a result, it strengthens the argument that language minority parents who do not use English as a primary language are less involved than other parents as a result of their language differences. Consistent with Bourdieu’s (1977) theorizing around the concept of linguistic capital, language differences pose a significant barrier for LM parents, who lack the linguistic capital that makes participation in school functions easier.

The analyses of involvement by language background add to the body of research that looks at how individual-level characteristics affect parents’ participation in formal school activities. At the same time, the analyses of opportunities and facilitation
presented in chapters 5 and 6, respectively, add to a second body of involvement research that focuses on school characteristics, practices, and policies. This dissertation takes the perspective that while characteristics of parents’ lives affect their levels of involvement, school characteristics and practices also play a role in encouraging parents to participate in school activities and the school community. It was thought that schools could facilitate the involvement of LM families, thereby making involvement easier, by providing language assistance to them using methods such as providing translations of written materials and holding parent meetings in parents’ non-English native languages. Unexpectedly, schools’ efforts to reduce language barriers do not result in non-English speaking language minority parents being more involved at the school.

However, it must be kept in mind that schools may offer the services conceptualized here as methods of facilitation for other purposes than to increase parental participation in the activities investigated. Therefore, the results presented in chapter 7 should not be used to conclude that the language services included in this study are not beneficial at all. They likely have positive effects on other aspects of the home-school relationship, for example by improving parent-school communication and increasing parents’ awareness of their children’s educational experiences. This is an issue that needs further investigation.

The examination of how school characteristics and practices affect involvement also addressed an issue relevant for any study that investigates differences in involvement by student and parent characteristics: whether opportunities for involvement are the same across schools and whether these opportunities are predictive of level of involvement. This is the first study to show that opportunities are not equal across schools and that the
variation is due to characteristics such as school sector, school size, and both financial and human resources. Opportunities are also predictive of students’ families’ level of involvement, but differences in opportunities for involvement do not explain differences in involvement by parents’ language background. Also, as discussed in chapter 7, there were some parents who were more involved than others, in spite of their children attending schools that offered fewer opportunities, and vice versa. These are important findings, because little research has considered, let alone controlled for, opportunities when investigating differences in involvement among individual parents. In general, when opportunities are offered, parents will take advantage of them. Schools that want to encourage parental involvement need to be active in generating activities for parents and in making them aware of the activities’ availability.

In investigating the issues of opportunities for, facilitation, and level of involvement, this dissertation drew primarily on social exchange theory, supplemented by the concepts of cultural and linguistic capital, to provide a theoretical foundation for the study of parental involvement. This study is unique in its explicit identification of exchange theory as the theoretical underpinnings of the hypotheses about involvement. Yet it is similar to others that have used the logic of exchange theory to assert that level of involvement is related to the characteristics of children, their families, and schools that constrain or facilitate the home-school relationship. The two most general hypotheses of this research were the following: 1) the ease with which schools could provide opportunities for involvement and services to language minority parents would predict the actual opportunities and services that they provided, and 2) the ease with which parents could be involved at the school would predict their actual level of involvement.
The general assumption was that when schools and parents had more resources (e.g., human, financial, cultural, and linguistic capital), the costs associated with providing opportunities and services, and with being involved, would be lower. As a result, opportunities and involvement would be higher. In general, these hypotheses, and therefore, exchange theory, were supported by the analyses.

More specifically, the propositions of exchange theory were used to explain the relationship of almost every student, family, and school characteristic examined here to opportunities, facilitation, and/or level of involvement. Each characteristic was related to an increase or reduction in cost associated with being involved at the school. In most cases, the expected relationship held. For example, it was explained that as work hours increased, the costs of being involved at school would increase, and involvement would be lower.

In those few instances in which the observed relationship was opposite of the one expected, a different relationship to cost than that which was originally proposed was offered as explanation for the contrary finding. The effects of the concentration of low-income students in the school-level analyses in particular were contrary to those that were expected. Schools with high concentrations of low-income students offered more opportunities and used more methods of facilitation than schools with student populations that were less than 50 percent low-income. It was expected that because such schools generally have fewer financial resources coming in from taxes and parents themselves, opportunities and facilitation would actually be lower. Yet the vast majority of these schools received financial resources from Title 1 funding, which carries with it programmatic requirements related to parental involvement. These requirements make
the costs of not offering parents opportunities to be involved or services to language minority parents greater than the costs of doing so. Schools that serve disadvantaged students rely on Title 1 funding to help them better meet the needs of such students; it is not funding they can easily do without.

While the findings presented in this dissertation support the tenets of exchange theory, they were not meant to be a formal test of it. A researcher guided by exchange theory can hypothesize about the constraints of particular characteristics, and therefore the costs that will be incurred to overcome them, in pursuit of a relationship. However, while these costs may seem clear to the researcher, they may not be to individuals involved in relationships. The perceptions about costs and benefits of particular social relationships are of utmost importance in the decision to pursue them. In particular, if the perceived benefits of a relationship are particularly large, the relationship may be pursued in spite of large costs. Perceptions are influenced by an individual’s background and the particular context in which he or she finds him- or herself.

In analyses incorporating exchange theory, information about an individual’s perceptions of the costs and benefits of a relationship is essential. This dissertation incorporated some measures that assessed, at some level, parents’ perceptions of the costs associated with overcoming constraints to be involved at the school. The substantial number of parents who indicated that it was difficult for them to be involved because they could not get off of work or lacked child care validate the contention of exchange theory that the costs of pursuing a relationship are high when the constraints to the relationship are more formidable, thereby reducing the likelihood that the relationship will be pursued. Language minority parents perceive that the costs associated with
language differences are high, so their interactions with schools occur less frequently. These findings related to perceptions, in conjunction with the direct effects of specific characteristics on involvement, indicate that under some conditions, the costs of involvement stemming from the constraints posed by these characteristics outweigh the benefits of involvement. The result is lower levels of parent participation in school activities.

Findings related to schools’ provision of activities and special services for language minority parents are similar in that they demonstrate direct effects of characteristics that make it easier or more difficult to provide these things to parents. In particular, having more human resources leads to more opportunities and more services. This is not surprising since the home-school relationship is ultimately an interpersonal one in which school personnel and parents form and maintain relationships with one another. With fewer school staff, it is more difficult to create and sustain such relationships.

The analyses at the school-level are less complete than those at the student-level with respect to their support of exchange theory, because they lack definitive indicators of teacher and administrator perceptions about the importance of parental involvement. Nevertheless, the fact that the indicators of institutional support for parental involvement used here (frequency of workshops about parental involvement and emphasis on good communication with kindergarteners’ parents) were positively related to opportunities and services in certain circumstances does suggest that when schools perceive that the parent-school relationship is important, they will be more proactive in involving parents.
The ECLS-K lacks indicators of the importance parents themselves give to their involvement at the school, as well as whether they believe parents have a legitimate role at the school. In other words, these data lack information about parents’ perceptions of the benefits of their involvement. The analyses themselves rest on the assumption that the benefits of the home-school relationship are recognized by parents, who will pursue the relationship within the limits presented by other characteristics of their lives. Yet, research has suggested that not all parents recognize or experience the benefits of involvement (e.g., Reay 1999), particularly language minority parents who may come from cultural backgrounds that do not afford parents an established role in the school (Chavkin and Gonzalez 1995; Ritter, Mont-Reynaud, and Dornbusch 1993; Yao 1993). Without information on perceived benefits to balance against perceived costs, these analyses can only provide partial support for exchange theory.

While social exchange theory proved useful for generating hypotheses about the conditions under which families would be more or less involved, it is unable to explain the process by which parents come to perceive the costs and benefits of the home-school relationship. Exchange theory takes as a basic assumption that the motivator for action is the need or desire for a reward, or benefit, that can be gained from a relationship. It also assumes there are costs involved in being in any relationship. Yet it provides no theoretical basis for identifying exactly what the specific costs and benefits of a particular relationship might be for the individuals involved in it. As indicated above, the only mechanism within exchange theory for assessing costs and benefits is to ask respondents for this information directly. The need for researchers to conduct their own data collection in order to obtain information on costs and benefits tailored to their particular
questions is a rather large impediment to the application of exchange theory to real-life phenomena. This is particularly true for researchers who want to produce nationally representative results and are reliant on data collected by others to do so.

Even if such information on an individuals’ perceived benefits and costs were available, the understanding gained from such information would be limited. This is because exchange theory also lacks a mechanism for determining why individuals perceive certain benefits to and costs of a relationship, or why these perceptions vary from person to person and from group to group. An understanding of these issues may not be important for a researcher whose primary concern is to support or refute the basic tenets of exchange theory. However, this understanding is important for studies such as this one whose results have implications for real-life practices and policies. To know that a characteristic affects an outcome is not the same as knowing how or why the characteristic has such an effect. In order to recommend policies and practices, or to evaluate their potential effects, the mechanisms by which certain characteristics affect a given outcome must be fully understood. Otherwise, enacted policies and practices are very likely to have unintended, or perhaps no, effect.

These limitations of social exchange theory can only be overcome by introducing other theories and conceptual frameworks into the discussion of interpersonal relationships. In hypothesizing about the costs and benefits of involvement for all parents, this dissertation primarily drew upon the conceptualizations, hypotheses, and findings of other researchers. To fully understand the factors affecting the involvement, or lack thereof, of language minority parents, the concepts of linguistic and cultural capital were introduced into the overall discussion of social exchange. In doing so, the
study was able to conceptualize the costs of the home-school relationship for LM families, as well as understand why they may not perceive the same benefits from involvement as non-LM families. This explication of costs and benefits, coupled with the findings from the analyses, lead to a finer understanding of the implications of this study for school policy and practices related to parental participation in school activities, which are discussed in section 8.3.

8.2 Limitations of This Study and Directions for Future Research

Despite the breadth of the analyses in this dissertation, in some ways they only scratch the surface of the types of analyses that can be done to examine the issue of opportunities for involvement, facilitation of involvement, and actual involvement at the school, particularly for language minority families. This study focused on a measure of parental involvement that represented frequency of parents’ involvement in all formal activities at the school without making a distinction between types of activities. Using such a measure was necessary to validly and accurately test the hypothesis that as opportunities for involvement increased, so would involvement. Also, the type of measure used here more accurately reflects parents’ overall involvement at the school than does a measure focusing on one particular type of activity, because it accounts for all ways in which parents choose to participate. In studies that focus on a particular type of activity, parents who choose not to participate in that one activity become characterized as “uninvolved.” Such a characterization may be inaccurate and unfair if those parents are more involved than others in different activities than the ones investigated.

However, it should be kept in mind that the effects of certain child, family, and school characteristics observed here may be different in analyses that focus on
involvement in specific activities. For example, studies have found differences in the
likelihood of participating in parent-teacher organizations and communicating with
teachers by race/ethnicity (e.g., Ho and Willms 1996; Muller and Kerbow 1993). In
particular, language differences may have a much larger effect on attendance at events
where parents are expected to speak directly with school personnel, such as at parent-
teacher conferences, than on attendance at events where such interaction may not be
necessary, for example a sporting event. The relationships between language background
and participation in specific types of activities should be investigated in future research.

A choice also was made in this dissertation to focus on a measure of facilitation
for language minority involvement that indicated the number of methods of facilitation
used by schools, with the hypothesis that involvement would be higher when the number
of methods was greater. That hypothesized relationship was not borne out by these data.
It is possible that certain methods of facilitation have more impact than others, or that
certain methods have an impact on involvement only for specific groups of language
minority parents. For example, there was some indication in exploratory analyses that
home visits had a positive effect on involvement for poor language minority families, but
not for other families. Future research should examine the possibilities that some
methods of facilitation do, in fact, increase involvement in the school setting, at least for
some parents.

This study incorporated analyses that focused on two levels, the individual child
level and the school level. In doing so, it examined relatively formal opportunities for
involvement in the school. There exists a third, middle level that research indicates has a
major role in the home-school relationship: the classroom. In contrast to formal school-

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wide opportunities for involvement, which require substantial planning, involvement at the classroom level includes less formal interaction between parents and teachers that can occur more spontaneously (and therefore more frequently). It is at this level that parents probably have the closest contact with the school as they interact with teachers.

Relationships between teachers and parents may differ considerably in schools and for parents with different characteristics. In particular, it may be that teacher characteristics and practices have a larger effect on language minority parent involvement than characteristics and practices of the school in general. For example, it may be more important that a student’s particular teacher is of the same racial, ethnic, or linguistic background as parents than if the school in general employs staff with these characteristics. Future analyses should examine whether the nature of the parent-school relationship is different at the classroom level than at the school-level by examining opportunities for involvement in the classroom, as well as how teacher and classroom characteristics are related to parental involvement.

Another area for future research has to do with making further differentiations among language minority parents. Chapter 5 provided rationale for the necessity to treat language minority families as two distinct groups based on English-language use, rather than treat them as a homogenous group. Doing so was clearly justified based on the results of this research. On almost all characteristics, including parental involvement at the school, students with English-speaking language minority parents looked more similar to students with non-language minority parents than they did to students with non-English speaking language minority parents. This may be due to the fact that the former group is probably more likely to have families who have been in this country for
at least a generation or two, whereas students in the latter group are more likely to be immigrants. Future research may want to examine differences among these groups by race/ethnicity, specifically by comparing Latino and Asian parents. Research has found differences among these groups in socioeconomic characteristics (Denton forthcoming), as well as on measures related to involvement such as educational expectations (Hao and Bonstead-Bruns 1998). Treating them as one group, as was done here, is unlikely to affect the measured levels of involvement, as both of these groups have been consistently shown to be the least involved. However, the specific reasons explaining their lesser involvement, beyond linguistic differences, may vary, and is an issue worthy of future investigation.

One last major direction for future research is to look at language minority family involvement by grade level. Given the tendency for parents to become less involved at the school as their children age, these analyses focus on a year in which levels of parental involvement may be at their highest for all groups of parents. However, this pattern of a decline in involvement across time may not hold for language minority parents. As they acquire better English-language skills and more knowledge about their children’s schools and their expected role within them, LM parents may become more involved at the school. If so, the gap in involvement between LM parents who have been in the school system for awhile and non-LM parents may decrease. Data for the students in the ECLS-K kindergarten class of 1998-99 are now available up through the third grade and could be used to examine families’ participation in school activities as children age.
8.3 Implications for School Policy and Practice

By integrating the research on the effects of individual-level and school-level characteristics on parents’ participation in the formal school activities, this dissertation provides insight into the way in which the schools students attend can affect the participation of language minority parents in school activities. On a general level, this study demonstrates that LM parents’ involvement is affected by the same factors that affect the involvement of all parents, such as socioeconomic status and children’s behavior problems. Like all parents, many aspects of LM parents’ lives that are beyond the reach of the school (e.g., longer work hours and less flexible employment, lower incomes, more children) make it more difficult for them to be involved.

Yet difference in these characteristics of parents’ lives do not fully explain why LM parents’ rates of participation are lower than those of other parents. It is clear that there are issues unique to LM parents, such as language barriers, that result in their attendance at fewer school activities. Schools concerned with increasing LM parent involvement must simultaneously consider methods for doing so that address both LM parents’ specific needs and the needs of all parents. These analyses show that providing language assistance is not enough to draw LM parents into the school. Assistance that helps to overcome the structural barrier of lack of child care, which is assistance no specifically related to language background, appears to be particularly effective for increasing the involvement of language minority parents. Schools should also consider using their meetings for LM parents and translated communications to solicit these parents’ opinions about ways in which the schools could reduce other structural barriers to involvement.
This dissertation provides some suggestion, in support of cultural capital theory, that cultural differences affect the involvement of LM parents to a certain extent. Schools should focus their efforts on finding ways to counteract the negative effect these differences have on parents’ participation. The analyses presented here show that hiring school staff with the same ethnic and cultural background as the language minority families they serve is an effective way to draw more of these parents to school functions. These findings are consistent with the conclusions of other researchers who believe that involvement of African American parents is higher in schools with larger percentages of African American teachers because there is a large amount of social capital generated within such schools (Kerbow and Bernhardt 1993). Also, research has shown that programs successful at increasing minority parent involvement, including language minorities employ school staff that identifies with and values parents’ cultures, at the same time that it educates parents about their expected role in education (e.g., Rivera 1993; Scribner, Young, and Pedroza 1999). Therefore, schools educating language minority students would do well to focus on hiring school staff, teachers in particular, with backgrounds that reflect those of the students and their parents. Emphasis should be placed on developing relationships between these teachers and LM parents in order to make parents feel comfortable in and welcome at the school.

These analyses provide no support for the contention that students with language minority parents are more likely than other students to have family members other than parents participate in school functions. Whether this is because other family members do not want to participate at the school or because schools fail to encourage or support the participation of non-parents is not known. However, schools with an interest in
increasing the presence of these students’ families at the school should consider encouraging the participation of any family member with an interest in the students’ education, not just parents. A policy that encourages the involvement of many people from a family may result in more equal levels of family participation than policies that favor parental participation to the exclusion of others.

Lastly, the findings related to language minority parents’ social networks point to another area of concern for school personnel interested in increasing these parents’ involvement. The social capital generated among LM parents is not as effective as it is for other parents in encouraging greater participation in school activities. Schools should examine how LM parents are interacting with other parents when they come to the school, and how these social networks are used to enhance LM parents’ knowledge of the school and its activities. On the one hand, existing social networks within the LM community could be used more effectively to make it easier for parents to be involved, for example by offering babysitting, provided for members of the network by members of the network, during school functions. School staff can play an integral part in establishing such a service by proposing and publicizing the idea and providing the space for child care.

On the other hand, school staff should consider whether their policies and practices isolate LM families from other non-LM families. Such isolation could result in LM families feeling uncomfortable or unwelcome at school functions attended primarily by non-LM families. For example, some schools may only provide special meetings for LM families and make no effort to incorporate them at other school functions. As a result, LM families may avoid attending any function not specifically oriented toward
them, thereby limiting the relationships they develop outside of their network. School policies and practices should provide LM families with the specific services they need without isolating them from the larger school community in the process.

The lower levels of involvement for language minority parents who do not use English as a primary language should be of concern for researchers, policymakers, and educational practitioners. Unless these parents’ levels of involvement increase, or at least do not decrease at a rate proportional to that of other parents, they will continue to be less involved throughout their children’s years of formal schooling. This disadvantages even further those students who are already at an educational disadvantage due to other factors such as their minority status and lower socioeconomic status. Schools would do well to develop programs that effectively increase language minority parent involvement, despite the challenges involved in doing so. An emphasis on reducing cultural barriers, educating parents about the roles schools desire that they have in the school setting, and effectively utilizing parents’ social networks are promising methods for doing so.
APPENDIX A

BIAS ANALYSES OF STUDENTS MISSING DATA FROM THE
SCHOOL ADMINISTRATOR QUESTIONNAIRE (SAQ)

A.1 Introduction

In chapter 7, analyses investigated the effects of child, family, and school-level characteristics on the level of families’ involvement in their children’s education. A substantial number of students with parent data were missing data from the student administrator questionnaire (SAQ) (n=2081). These students did not have any data at the school level, because no administrator from their schools completed the ECLS-K self-administered survey. The decision was made not to impute missing values, because these cases would have had all their data imputed. Therefore, all of these cases dropped out of analyses when school-level variables were entered into multivariate models. When such a loss of data occurs, there is concern that the results are biased if the cases for which data are missing systematically differ from the cases for which data are available.

Bias analyses conducted by the National Center for Education statistics indicates that school nonresponse generally does not bias the estimates (Rathbun, West, and Germino Hausken 2004; U.S. Department of Education 2001). However, analyses were conducted for this study to determine whether the child, family and household characteristics of children who had administrator data available, and therefore are
included in all analyses, significantly differed from the characteristics of those students who were missing such data. Results from these analyses, detailed below, show that there were significant differences.

However, additional regression analyses suggest that the loss of these cases does not bias the observed relationships between the examined characteristics and involvement when all factors are controlled simultaneously. Specifically, separate regressions, in which parental involvement was regressed on all child, family, and household characteristics considered in this study, were run for the population of all students and for just those students who had administrator data. All but one variable that were significant in one model were significant in the other, and the magnitudes of most variables were about the same in both models. Exceptions are noted below. First, however, results from a bias analysis conducted by NCES to determine which schools, if any, were less likely to have administrators complete a questionnaire are presented to frame the discussion of differences in child, family, and household characteristics.

A.2 School Characteristics Associated with School Administrator Nonresponse

It is not possible here to determine whether the loss of cases missing administrator data affected the relationships between the school-level characteristics and involvement when all factors are controlled simultaneously. However, NCES has used information available through the school sampling frame to investigate whether certain types of schools were more or less likely to have a completed administrator questionnaire. Results of analyses discussed in the ECLS-K Base Year User’s Manual (U.S. Department of Education 2001) show that, while there are some differences, they are few and not large. Response rates were lower for: schools in the West, compared to schools in other
parts of the country; schools in larger cities, compared to schools in other locales; public schools, compared to private schools; and for schools with 90 percent or more minority student enrollment, compared to schools with lower percentages of minority students. The average response rate for all schools was 87.2 percent, and no particular group of school had a response rate lower than 77 percent, with the exception of one: the response rate for schools with 90 percent or more minority student enrollment was 65 percent.

A.3 Child, Family, and Household Differences Between Students with School Administrator Data and Those Without Administrator Data

It might be expected that students who attend the types of schools that were less likely to respond would be less likely to have administrator data. Specifically, students who are commonly identified as disadvantaged (e.g., minority, of low socioeconomic status, living with a single-parent, etc.) tend to be concentrated in urban schools and high minority schools, and are more likely to attend public schools, compared to private schools. These are the students for whom it was expected that administrator data would be more likely to be missing. The analyses discussed in this section show that this is generally the case.

Estimates for the child, family, and household characteristics examined in this study are shown separately for students with school administrator data and those without it in table A-1. These two groups of students significantly differ on many of these measures. This is true of the variables at these levels that are of most import to this research. Specifically, a larger percentage of students without administrator data have parents who are language minorities (LM), compared to students with administrator data (non-English speakers, \( t = 4.77, p < .001 \); English speakers, \( t = 2.52, p < .05 \)). This is
consistent with schools’ response pattern by region noted above: non-English language speakers are concentrated in the Western part of the United States (Shin and Bruno 2003), where the response rate for schools was lowest. Approximately one sixth of students with English-speaking language minority parents are lost in analyses that include school-level data, while about one-fourth of students with non-English-speaking language minority parents drop out due to having missing data. Also, a larger percentage of students with SAQ data were citizens, compared to students without SAQ data, and the difference is about nine percent ($t = 2.52, p < .05$). These two groups of students also differ in their families’ involvement at school: families of students with administrator data report being more involved than families of students without administrator data ($t = 3.32, p < .01$).

The likelihood of having school administrator data varied by race/ethnicity. About 62 percent of students with school administrator data were white, while only 34 percent of students without school administrator data were white ($t = 7.09, p < .001$). In contrast, a larger percentage of students without SAQ data were Black or Latino, compared to students with SAQ data ($t = 3.07, p < .001$ and $t = 4.52, p < .001$, respectively). No differences were found between these two groups of students in the likelihood that they were Asian ($t = 1.07$) or of another racial/ethnic background ($t = .03$).

Some differences were found in household composition as well. Students with administrator data were more likely to live in two-parent homes ($t = 2.74, p < .01$) and less likely to live in single-parent or guardian-only homes ($t = -2.40, p < .05$ and $t = -2.39$, $p < .05$, respectively) than students without administrator data. More specifically, a smaller percentage of students with SAQ data lived in a household specifically with no
mother (t= -2.20, p < .05) or no father (t= -2.74, p < .01), compared to students without SAQ data. Students with school administrator data had significantly fewer siblings, on average, than students without such data (t= -2.78, p < .001). Students with administrator data were less likely to live in homes with someone other than their parents who was age 18 or older (t= -4.28, p < .001). More specifically, they were less likely to live in a household with a grandparent (t= -4.49, p < .001), especially if that grandparent was over the age of 65 (t= -2.24, p < .05), but they lived close to a significantly larger number of grandparents, compared to students without SAQ data (t= 6.67, p < .001).

The socioeconomic status of students with administrator data was significantly higher than the socioeconomic status of students without such data (t= 4.04, p < .001), and the former group was less likely to live in poverty than the latter (t= -3.80, p < .001).

Few differences were found in the likelihood of having administrator data were found by mothers’ or fathers’ employment status. Students with SAQ data were more likely than students without SAQ data to have mothers who worked part time (t= 2.01, p < .05) or fathers who worked full time (t= 3.24, p < .01). No other differences by parents’ employment status were found.\textsuperscript{170}

Parents’ expectations for their children’s education significantly differed between students with SAQ data and those without. Interestingly, expectations were higher, on average, for students who did not have data reported by school administrators (t= 3.52, p < .001).

There were no differences in the likelihood of having administrator data by child’s sex (t= .20); the presence of siblings in the household (t= .15); having older

\textsuperscript{170} T-tests results for the other employment statuses are as follows: mother not in the labor force, t=.92; mother works full time, t=.27; mother looking for work, t=1.29); father not in the labor force, t=.84; father works part time, t=1.62; father looking for work, t=1.69).
siblings in the same school ($t = .70$); experiencing household disruption ($t = -.75$), either through the loss ($t = -1.22$) or addition ($t = .33$) of a parent; attending full-day kindergarten ($t = .08$), or being in a program for children with behavior or emotional problems ($t = 1.84$).

Results from these comparisons show a clear pattern whereby those students in schools in which administrators did not complete a questionnaire are more disadvantaged than students in schools in which administrators completed a questionnaire. They come from single-parent or guardian-only homes, have families with a lower socioeconomic status, and are more likely to be poor. They are also more likely to be racial/ethnic and language minorities. In addition, many of the factors on which these two groups of children differ are related to familial involvement, and the patterns of differences seem to explain why families of students without SAQ data are less involved than families of students with SAQ data. That is, students without administrator data are more likely to demonstrate those characteristics that are negatively related to involvement. This suggests that the analyses employing school-level measures are biased because they exclude the most disadvantaged students whose families are least involved. However, as the analyses presented in the next section demonstrate, loss of these cases does not seem to affect substantially the relationships between the child, family, and household characteristics and involvement when all factors are controlled simultaneously.

### A.4 Multivariate Analyses of Familial Involvement Regressed on Child, Family, and Household Characteristics for the Full Population of Students and for Students with School Administrator Data

Table A.1 presents results of analyses in which familial involvement was regressed on the full set of child, family, and household characteristics separately for the
TABLE A.1
LEVEL OF FAMILY INVOLVEMENT REGRESSED ON SELECTED CHILD, FAMILY, AND HOUSEHOLD CHARACTERISTICS

<table>
<thead>
<tr>
<th></th>
<th>Total Population of Students</th>
<th>Students with Administrator Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
<td>s.e.</td>
</tr>
<tr>
<td>Constant</td>
<td>-.15</td>
<td>.696</td>
</tr>
<tr>
<td>Parents’ language background (Non-LM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-English LM</td>
<td>-2.02***</td>
<td>.484</td>
</tr>
<tr>
<td>English LM</td>
<td>-.54</td>
<td>.443</td>
</tr>
<tr>
<td>Student’s race/ethnicity (White)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>-.77+</td>
<td>.438</td>
</tr>
<tr>
<td>Latino</td>
<td>.18</td>
<td>.436</td>
</tr>
<tr>
<td>Asian</td>
<td>-.54</td>
<td>.656</td>
</tr>
<tr>
<td>Other race/ethnicity</td>
<td>-.09</td>
<td>.580</td>
</tr>
<tr>
<td>Number of siblings</td>
<td>-.47***</td>
<td>.115</td>
</tr>
<tr>
<td>Sibling in same school</td>
<td>2.43***</td>
<td>.228</td>
</tr>
<tr>
<td>Grandparent lives in household</td>
<td>-.72*</td>
<td>.314</td>
</tr>
<tr>
<td>Family structure (Two-parent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One-parent</td>
<td>-.92**</td>
<td>.276</td>
</tr>
<tr>
<td>Guardian-only</td>
<td>-.51</td>
<td>.752</td>
</tr>
<tr>
<td>Socioeconomic status</td>
<td>1.17***</td>
<td>.103</td>
</tr>
<tr>
<td>Student is poor</td>
<td>-.93**</td>
<td>.314</td>
</tr>
<tr>
<td>Mother’s employment status (Mother works full time)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother not in labor force</td>
<td>3.64***</td>
<td>.304</td>
</tr>
<tr>
<td>Mother works part time</td>
<td>3.17***</td>
<td>.274</td>
</tr>
<tr>
<td>Mother looking for work</td>
<td>1.72**</td>
<td>.530</td>
</tr>
<tr>
<td>Father’s employment status (Father works full time)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father not in labor force</td>
<td>-.67</td>
<td>.583</td>
</tr>
<tr>
<td>Father works part time</td>
<td>-.52</td>
<td>.658</td>
</tr>
<tr>
<td>Father looking for work</td>
<td>-.85</td>
<td>.756</td>
</tr>
<tr>
<td>Parental expectations</td>
<td>.38***</td>
<td>.103</td>
</tr>
<tr>
<td>Number of classmates’ parents’ parents have regular contact with</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.40***</td>
<td>.060</td>
</tr>
<tr>
<td>Family member reads to student</td>
<td>1.24***</td>
<td>.125</td>
</tr>
<tr>
<td>Teacher contacted parent about student’s problems</td>
<td>-.50*</td>
<td>.242</td>
</tr>
<tr>
<td>R-square</td>
<td>.20</td>
<td>.20</td>
</tr>
<tr>
<td>N</td>
<td>Unweighted: 15,211</td>
<td>13,396</td>
</tr>
<tr>
<td></td>
<td>Weighted: 3,375,590</td>
<td>2,976,913</td>
</tr>
</tbody>
</table>


+ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$
were available. entire population of students and for only those students for whom administrator data The analyses in the first column pertain to the full population of students and are identical to model 5 presented in chapter 7.

Comparisons of the beta coefficients and their significance levels from the two models demonstrate that there are no substantial differences between them. That is, the patterns of relationships between the individual-level characteristics and involvement are generally the same when the analyses omit students with non-responding administrators. The magnitude of the effects of some measures (e.g., child’s race/ethnicity and poverty status) do change slightly. Generally, these are the characteristics that would be expected to change somewhat given that public schools and schools with higher percentages of minority students and in large cities have a greater propensity for nonresponse. In particular, the coefficient for “black” becomes insignificant when students without SAQ data are excluded, but this measure demonstrated only marginal significance to involvement in the model for the full population of students. Similarly, the effect of living with a grandparent became less significant. This is not surprising given that students without SAQ data were more likely to live with a grandparent than students with SAQ data; elimination of them from analyses reduces the size of the sample of students living with grandparents, making it more difficult to detect a significant relationship. The measure of living with a grandparent is not included in HLM analyses assessing the effects of school and individual-level characteristics, so any difference in the effect of this measure in the two samples is of little concern here.

Of most import for the analyses in chapter 7 is the loss of students with language minority parents. Table A.2 shows the sample sizes of the two groups of students with
language minority parents by the presence of administrator data. There is approximately a 16 percent reduction in the unweighted sample size for students with English-speaking language minority parents and a 25 percent reduction in sample size for students with non-English-speaking language minority parents when students without SAQ data are excluded.

**TABLE A.2**

SAMPLE SIZES FOR STUDENTS WITH LANGUAGE MINORITY PARENTS, BY PRESENCE OF SCHOOL ADMINISTRATOR DATA IN SCHOOLS IN THE UNITED STATES:

1998-1999

<table>
<thead>
<tr>
<th></th>
<th>School Administrator Data Available</th>
<th>School Administrator Data Not Available</th>
<th>Total Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students With English LM Parents</td>
<td>1528</td>
<td>293</td>
<td>1821</td>
</tr>
<tr>
<td>Students With non-English LM Parents</td>
<td>1586</td>
<td>517</td>
<td>2103</td>
</tr>
</tbody>
</table>


As can be seen in table A.1, the magnitude of the effects of parents’ language background on involvement for these two groups is reduced. It appears that this reduction primarily results from the loss of power associated with the loss of sample. T-tests comparisons show that there are no significant differences in the involvement levels of non-English LM parents of students who have administrator data and those who do not (t = 1.58). The difference between students with English-speaking language minority
parents who have SAQ data and students with English-speaking language minority parents who do not have SAQ data just attains significance at the .05 level \( (t = 1.97, p = .05) \). However, this measure is not significantly related to involvement controlling for other factors, so the differences between the two samples do not impact the interpretation of results regarding the pattern of relationships between parents’ language background and involvement.
APPENDIX B

IMPUTATION OF MISSING VALUES IN LEVEL-2 MEASURES
IN HLM ANALYSES OF FAMILY INVOLVEMENT

As discussed in chapter 5, missing values are imputed for the school-level variables included in the HLM analyses predicting level of family involvement. The tables in this appendix provide detailed information about which measures have missing data imputed, how much missing data each measure has, and what variables are used to compute subgroup means for each measure.

Values based on subgroup means are imputed for missing cases. To avoid imputing values from variables that also had values imputed for missing data, the primary characteristics used to generate subgroup means are those that had no missing data. These measures are school size, school sector, and school location. For those measures related to whether a school educates limited English proficient (LEP) students, presence of LEP students was also used to compute subgroup means.171

In most cases, the imputed means are those obtained when two of these school characteristics are crossed by one another. For example, a public school in a central city missing data for percent minority students is assigned the weighted mean of percent minority students for all public schools in central cities that have data on this measure.

171 There were nine cases missing data on whether the school educated LEP students. All of them were public schools. Scores on this dichotomous measure were imputed using school size and location. This measure is not used in the HLM analyses.
For measures that are continuous, or that categorize what are essentially continuous data, such as percent minority students, the subgroup mean itself is imputed.

The procedure for imputing values for dichotomous measures is somewhat different. First subgroup means are computed as they are for continuous measures. Then, if the subgroup mean is greater or equal to .5, the case receives a value of 1. If the subgroup mean is less than .5, the case receives a value of 0. A similar procedure was used to impute missing values for the measure of whether parents were welcome to observe any time classes were in session, which had three categories (0- strongly disagreed, disagreed, or neither agreed nor disagreed; 1- agree; and 2-strongly agree).

The procedure for imputing data for the measure of whether the principal placed strong emphasis on good communication with parents varies from the procedure used for other dichotomous measures, due to the large percentages of cases coded “1” on this measure. If the method just described was used, a value of “1” would have been imputed for all cases missing data on this measure, resulting in an overestimation of the proportion of cases coded “1.” To avoid such overestimation, values of “0” and “1” are imputed in approximately the same proportion as they appeared in the unweighted sample that had data for principals’ emphasis on good communication.

Most schools received a value of “1” on the dichotomous measure; therefore, priority was placed on identifying those schools for which a value of “0” should be imputed. Lower subgroup mean scores on the original measure indicate that, as a group, administrators in the subgroup were less likely to place strong emphasis on good communication. Therefore, the subgroup that had the lowest mean score was identified and assigned a value of “0.” Specifically, all 8 schools from one subgroup, urban public
schools with at least 50 percent of its student body being low income students, were coded “0” on this measure during imputation, because this subgroup had the lowest mean score on the dichotomous measure of good communication. Approximately 6 cases needed to be coded “0” for the fully-imputed measure to have the same distribution as the non-imputed measure; therefore, a value of “0” was not imputed for any other subcategory. The remaining 46 cases were coded “1,” indicating that administrators placed major emphasis on good communication with parents.

As can be seen in table B.3, most of the imputed measures have means that are very close to or are exactly the same as the original variables before imputation. Those measures that differ to a slightly larger degree are those measures for which a larger number of cases have values imputed. Nevertheless, this comparison of means demonstrates that the imputation of values based on subgroup means does not bias the population estimates.
# TABLE B.1
## SUMMARY OF IMPUTATION FOR SCHOOL-LEVEL MEASURES IN ANALYSES OF FAMILY INVOLVEMENT

<table>
<thead>
<tr>
<th>Measures</th>
<th>Missing Data Imputed</th>
<th>Number of missing cases, unweighted</th>
<th>Percent Missing, Unweighted</th>
<th>Percent Missing, Weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>School size</td>
<td>No</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>School sector</td>
<td>No</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>School location</td>
<td>No</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>School is public magnet school or school of choice</td>
<td>Yes</td>
<td>2</td>
<td>.2</td>
<td>.5</td>
</tr>
<tr>
<td>School is early childhood center</td>
<td>Yes</td>
<td>5</td>
<td>.6</td>
<td>.8</td>
</tr>
<tr>
<td>Percent minority students</td>
<td>Yes</td>
<td>13</td>
<td>1.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Percent LEP students</td>
<td>Yes</td>
<td>36</td>
<td>4.5</td>
<td>3.7</td>
</tr>
<tr>
<td>Percent minority teachers</td>
<td>Yes</td>
<td>56</td>
<td>6.9</td>
<td>5.8</td>
</tr>
<tr>
<td>Percent Latino and Asian teachers</td>
<td>Yes</td>
<td>66</td>
<td>8.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Principal is Latino or Asian</td>
<td>No</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of ESL and bilingual teachers and aides</td>
<td>Yes</td>
<td>25</td>
<td>3.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Student population at least 50 percent low-income</td>
<td>Yes</td>
<td>4</td>
<td>.5</td>
<td>.6</td>
</tr>
<tr>
<td>Emphasis on good communication with parents</td>
<td>Yes</td>
<td>54</td>
<td>6.7</td>
<td>6.2</td>
</tr>
<tr>
<td>Parents welcome to visit anytime class is in session</td>
<td>Yes</td>
<td>34</td>
<td>4.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Parent liaison</td>
<td>Yes</td>
<td>24</td>
<td>3.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Transition-to-kindergarten activities</td>
<td>Yes</td>
<td>48</td>
<td>5.9</td>
<td>5.4</td>
</tr>
<tr>
<td>Provision of child care</td>
<td>Yes</td>
<td>10</td>
<td>1.2</td>
<td>.9</td>
</tr>
<tr>
<td>Frequency newsletters are sent home</td>
<td>Yes</td>
<td>12</td>
<td>1.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Opportunities for involvement</td>
<td>Yes</td>
<td>45</td>
<td>5.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Facilitation of involvement for families of language minority/LEP children</td>
<td>Yes</td>
<td>10</td>
<td>1.2</td>
<td>1.1</td>
</tr>
</tbody>
</table>

### Table B.2
SCHOOL CHARACTERISTICS USED TO DETERMINE IMPUTED VALUES FOR SCHOOL-LEVEL MEASURES IN ANALYSES OF FAMILY INVOLVEMENT

<table>
<thead>
<tr>
<th>Measures</th>
<th>Variables used to impute</th>
</tr>
</thead>
<tbody>
<tr>
<td>School is public magnet school or</td>
<td>School size, school location</td>
</tr>
<tr>
<td>school of choice</td>
<td></td>
</tr>
<tr>
<td>School is early childhood center</td>
<td>School sector, school location</td>
</tr>
<tr>
<td>Percent minority students</td>
<td>School sector, school location</td>
</tr>
<tr>
<td>Percent LEP students¹</td>
<td>Percent minority students</td>
</tr>
<tr>
<td>Percent minority teachers</td>
<td>School sector, school location</td>
</tr>
<tr>
<td>Percent Latino and Asian teachers</td>
<td>School sector, school location</td>
</tr>
<tr>
<td>Number of ESL and bilingual teachers</td>
<td>School sector, school size, presence of limited English</td>
</tr>
<tr>
<td>and aides</td>
<td>proficient (LEP) students</td>
</tr>
<tr>
<td>Student population at least 50%</td>
<td>School sector, school location</td>
</tr>
<tr>
<td>percent low-income</td>
<td></td>
</tr>
<tr>
<td>Emphasis on good communication</td>
<td>School sector, school location, concentration of low</td>
</tr>
<tr>
<td>with parents</td>
<td>income students</td>
</tr>
<tr>
<td>Parents welcome to visit anytime</td>
<td>School sector, school location, school size</td>
</tr>
<tr>
<td>class in session</td>
<td></td>
</tr>
<tr>
<td>Parent liaison</td>
<td>School sector, school location</td>
</tr>
<tr>
<td>Transition-to-kindergarten activities</td>
<td>School sector, school location</td>
</tr>
<tr>
<td>Provision of child care</td>
<td>School sector, school location</td>
</tr>
<tr>
<td>Frequency newsletters are sent</td>
<td>School sector, school size</td>
</tr>
<tr>
<td>home</td>
<td></td>
</tr>
<tr>
<td>Opportunities for involvement</td>
<td>School sector, school size</td>
</tr>
<tr>
<td>Facilitation of involvement for</td>
<td>School sector, school location, presence of limited</td>
</tr>
<tr>
<td>families of language</td>
<td>English proficient (LEP) students</td>
</tr>
<tr>
<td>minority/LEP children</td>
<td></td>
</tr>
</tbody>
</table>


¹ Missing values on this measure were imputed as described in chapter 5. Missing values were imputed for all but one case based on the value of percent minority before missing values were imputed for percent minority. For the one case that was missing both percent LEP and percent minority students, a value for percent LEP students was imputed based on the imputed value of percent minority students.
TABLE B.3
WEIGHTED MEANS OF FULLY-IMPUTED AND
NOT IMPUTED SCHOOL LEVEL MEASURES

<table>
<thead>
<tr>
<th>Measures</th>
<th>Imputed measure</th>
<th>Not imputed measure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>School is public magnet school or school of choice</td>
<td>.10</td>
<td>.11</td>
</tr>
<tr>
<td>School is early childhood center</td>
<td>.13</td>
<td>.14</td>
</tr>
<tr>
<td>Percent minority students</td>
<td>2.43</td>
<td>2.43</td>
</tr>
<tr>
<td>Percent LEP students</td>
<td>.65</td>
<td>.61</td>
</tr>
<tr>
<td>Percent minority teachers</td>
<td>13.38</td>
<td>13.22</td>
</tr>
<tr>
<td>Percent Latino and Asian teachers</td>
<td>3.27</td>
<td>3.23</td>
</tr>
<tr>
<td>Number of ESL and bilingual teachers and aides</td>
<td>.57</td>
<td>.57</td>
</tr>
<tr>
<td>Student population at least 50 percent low-income</td>
<td>.32</td>
<td>.32</td>
</tr>
<tr>
<td>Emphasis on good communication with parents</td>
<td>.89</td>
<td>.89</td>
</tr>
<tr>
<td>Parents welcome to visit anytime class is in session</td>
<td>1.28</td>
<td>1.29</td>
</tr>
<tr>
<td>Parent liaison</td>
<td>.14</td>
<td>.14</td>
</tr>
<tr>
<td>Transition-to-kindergarten activities</td>
<td>2.56</td>
<td>2.56</td>
</tr>
<tr>
<td>Provision of child care</td>
<td>.49</td>
<td>.49</td>
</tr>
<tr>
<td>Frequency newsletters are sent home</td>
<td>6.82</td>
<td>6.82</td>
</tr>
<tr>
<td>Opportunities for involvement</td>
<td>18.45</td>
<td>18.51</td>
</tr>
<tr>
<td>Facilitation of involvement for families of language minority/LEP children</td>
<td>1.09</td>
<td>1.06</td>
</tr>
</tbody>
</table>

BIBLIOGRAPHY


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