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**Parent Perceptions of Invitations for Involvement: Effects on Parent  
Involvement at Home and School**

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**Parent Perceptions of Invitations for Involvement: Effects on Parent  
Involvement at Home and School**

**by**

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## **Dedication**

This dissertation is dedicated to my parents, family, and friends, whose ongoing support and encouragement enabled me to persevere.

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# **Parent Perceptions of Invitations for Involvement: Effects on Parent Involvement at Home and School**

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Research has demonstrated much evidence for the positive effect of parent involvement on academic achievement in children (Jeynes, 2003, 2007; Hoover-Dempsey, Walker, Sandler, Whetsel, Green, Wilkins, & Closson, 2005; Fan & Chen, 2001; Griffith, 1996). As children from low income and ethnic minority families are at the greatest risk for academic failure, it is important to study the processes that lead parents to become involved within at-risk populations. A comprehensive model such as the one proposed by Hoover-Dempsey and Sandler (1995, 1997) provides a map of important constructs to study. Research using this model appears promising as a way to conceptualize the processes that lead to parent involvement (Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). However, there are few studies that have tested this model with minority populations, and none that have focused on a primarily Latino

population. Parent involvement research indicates inconsistent findings regarding the role of family background variables in the process of parent involvement (Ho & Willms, 1996; Griffith, 1998). The purpose of this study was to examine the effects of parent perceived invitations for involvement on parent involvement behavior with a primarily low-income, urban, Latino population. Two levels of the Hoover-Dempsey and Sandler model were tested: parent perceived invitations for involvement (child invitations, school invitations, and teacher invitations) and parent involvement behavior (home-based and school-based). Child invitations and teacher invitations were both found to be important types of invitation for total parent involvement (home-based and school-based combined). Home language, employment status, and parent education level moderated the effect of child invitations on total parent involvement. When parent involvement was differentiated into home-based and school-based involvement as separate dependent variables, child invitations had a significant effect on both types of involvement. Home language, employment status, and parent education level moderated the effect of child invitations on home-based parent involvement. For this population, child invitations for involvement appear to be the most important means to invite parent participation. Future research should continue to investigate the utility of Hoover-Dempsey and Sandler's model of parent involvement with specific ethnic groups, and consider family background variables due to their potentially moderating role.

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## **Chapter I: Introduction**

The academic achievement of students in the United States continues to be a focus of research and educational policy. Although students in the United States have demonstrated consistent academic gains over time, significant gaps persist between White, African American, and Hispanic students. In addition, African American and Hispanic students continue to have lower high school graduation rates (National Center for Educational Statistics, 2000, 2010; Hong & Ho, 2005). Research has suggested that academic difficulties are much more likely among poor children and nonnative speakers of English, including Latino children (Snow, Burns, & Griffin, 1998; Barone, 1998; National Center for Educational Statistics, 2004). The goal of much educational research has been to identify factors that can influence achievement. Some of these influencing factors include parent involvement and family background variables such as socioeconomic status and family structure. As the Latino population is the largest minority population in the United States, it is important to identify factors that impact their achievement in order to most effectively improve their academic outcomes (U.S. Census Bureau, 2008).

An important factor related to academic outcomes is parent involvement, which has been well established in the research literature as having a positive influence on achievement for children (Christenson, Rounds, & Gorney, 1992; Reynolds, 1992; Fan & Chen, 2001; Jeynes, 2003, 2007). Within the research base, however, parent involvement lacks a unified definition (Fan & Chen, 2001). Some researchers propose that parent

involvement should include both home-based and school-based elements (Anderson & Minke, 2007), while others conceptualize parent involvement more in terms of school activities that support the goals of the school (Lawson, 2003).

Parent involvement may also vary for different ethnic groups (Ho, 1997; Feuerstein, 2000). For example, some studies have shown African American parents to be less involved at school than Caucasian parents and more involved than Latino parents, whereas other studies indicated no difference in involvement between African American and Caucasian parents (Ho & Willms, 1996; Griffith, 1998). Inconsistencies among parent involvement research results may be due to differences in terms of how parent involvement is defined, how constructs are conceptualized and measured, and methodological limitations (Kohl, Lengua, & McMahon, 2000; Manz, Fantuzzo, & Power, 2004). Inconsistencies may also be attributed to the differential inclusion of background variables among studies.

Socioeconomic status has been included in analyses for a number of research studies. Family-level and student-level SES have both been found to correlate with academic achievement and this association has been noted across grade levels (Sirin, 2005). The trend among studies suggests that higher family SES is associated with higher parent involvement and higher student achievement, while lower SES is associated with lower parent involvement and lower student achievement (Sirin, 2005; Keith et al., 1993; Cooper, 2010; Okpala, Okpala, & Smith, 2001). In addition, a negative association

has been found between family poverty and school-based parent involvement (Cooper, 2010).

Parent education level has also been associated with parent involvement and academic achievement. Parents with higher education levels are more involved in their children's education than those with less education, both at school and home (Stevenson & Baker, 1987; Englund, Luckner, Whaley, & Egeland, 2004). Higher parent education is also associated with higher achievement (Trusty, Plata, & Salazar, 2003). Parent education has also been found to act as a moderator between family poverty and school-based parent involvement (Cooper, 2010).

Parents' employment status can also impact parent involvement. Depending on the type of job and the hours required, many parents' involvement could be limited at home or at school. Parents who work during the daytime are often not able to attend school activities that occur during typical school hours. Those who work at night may have difficulty attending evening school activities and helping their children with schoolwork at home (Finders & Lewis, 1994).

In terms of family structure, parents from single-parent and step-parent households have been found to be among the groups with the lowest levels of school involvement. Research has suggested that parents from two-parent families demonstrate the highest level of participation in children's education (Dornbusch & Ritter, 1992). In addition, changes in family structure, such as divorce, have been associated with declines in parent involvement (Astone & McLanahan, 1991). Family structure can also impact



student achievement. Students from single-parent and step-parent households are at greater risk for academic, behavioral, and emotional problems (Entwisle & Alexander, 1995; Lee, Burkham, Zimiles, & Ladewski, 1994; Haveman, Wolfe, & Spaulding, 1991; Pong, 1997). In terms of academics specifically, research has suggested that student achievement can be depressed in schools with large concentrations of students from single-parent families, regardless of individual students' race, SES, or family structure (Bankston & Caldas, 1998).

Language can impact both parent involvement and academic achievement. According to Census 2000, Spanish-speakers comprise more than 10% of the total population in the United States, and more than 60% of the language-minority population (Shin & Bruno, 2003). Tinkler (2002) observed that English language proficiency is a major barrier to parent involvement in their children's education. Parents can feel inadequate in school settings when they do not speak fluent English (Finders & Lewis, 1994). This is the case for many Latino families, particularly those who are immigrants. Lack of English proficiency can make it difficult for parents to feel comfortable communicating with school personnel and may impede their ability to help their children with schoolwork (Lopez, Scribner, & Mahitivanichcha, 2001).

Regarding achievement outcomes for Latino students, Garcia-Vazquez, Vazquez, Lopez, and Ward (1997) found that English language proficiency was significantly correlated with standardized achievement scores and grade point average. Spanish reading and writing skills were also significantly related to achievement scores and grade

point average. Wong and Hughes (2006) found that Spanish-speaking Hispanic parents reported having significantly lower levels of parent-teacher shared responsibility for children's education, compared to White, African American, and English-speaking Hispanic parents. Wong and Hughes suggested that this might have been due to lack of English language skills or familiarity with the American curriculum (2006).

As mentioned earlier, parent involvement can vary among different ethnic groups (Ho, 1997; Feuerstein, 2000). Further, parents may demonstrate differing amounts of involvement depending on if it is in the home or school setting (Wong & Hughes, 2006; Griffith, 1998). Hispanic parents have been found to have less contact with their children's school and report lower levels of school involvement compared to White parents (Floyd, 1998; Martinez-Lora & Quintana, 2009). Suizzo and Stapleton (2007) found that ethnicity was a significant predictor of parental educational expectations and family discussions. Specifically, Latino parents reported higher educational expectations than African American and European American parents (Suizzo & Stapleton, 2007).

Among the Latino population, cultural-specific factors have been identified in the literature that can impact parent involvement. Although some Latino or minority parents may be perceived by their child's school as uninterested in being involved, the opposite is often true (Lareau, 1987; Chavkin & Williams, 1993; Mawjee & Grieshop, 2002). Lack of involvement may be explained more by parents' beliefs. For example, within the Latino culture, parents may consider it disrespectful to intrude into the school environment (Espinosa, 1995). They may also believe it is the school's responsibility to

initiate parent involvement (Chavkin & Williams, 1993). Some Latino parents may have had negative experiences themselves as students, and this may cause feelings of discomfort or mistrust toward the school (Mawjee & Grieshop, 2002). Parent influences such as parent expectations, parent support of achievement, and discussion of school-related concerns have been shown to be strong indicators of achievement in Latino families (Trusty, Plata, & Salazar, 2003).

In order to conceptualize how family background and other variables affect parent involvement and student outcomes, a number of theoretical models have been proposed (e.g., Epstein, 1986, 1995; Eccles & Harold, 1996; Hoover-Dempsey & Sandler, 1995, 1997; Walker et al., 2007). Most of these models consider parent involvement a multidimensional concept and include a variety of constructs such as parent perceived invitations for involvement, parental expectations for achievement and beliefs, teacher practices, and neighborhood/community influences. Among studies that use these models, there is a great deal of variation in terms of scope, inclusion of status and process variables, measures used, type of informant, populations studied, and geographic location. Many parent involvement studies have focused on the frequency of parent involvement behavior. Rather than address this aspect of parent involvement, researchers such as Weiss (2005) recommend that studies should focus on what motivates parents to become involved.

Hoover-Dempsey and Sandler have proposed a promising model of the parent involvement process that considers what motivates parents to become involved in the

education of their children. This comprehensive, five-level model is based on the perspective of parents and includes levels addressing perceptions of invitations for involvement (from teachers, schools, and children), what parent involvement looks like at home and school, and how parent involvement affects student outcomes. The model includes process variables, which have been suggested can help understand differences in and barriers to parent involvement (Christenson & Sheridan, 2001; Christenson, 2004; Hoover-Dempsey & Sandler, 1995, 1997; Anderson & Minke, 2007). Research involving this initial Hoover-Dempsey and Sandler model has yielded support for some levels of the model with African American and Latino parents (Reed, Jones, Walker, & Hoover-Dempsey, 2000; Marinez-Lora & Quintana, 2009). In 2005, a revised version of this model was proposed by Walker, Wilkins, Dallaire, Sandler, and Hoover-Dempsey. The revised model reflected constructs originally displayed across levels one and two as now being listed under three constructs at level one. Green, Walker, Hoover-Dempsey, and Sandler (2007) found that home-based involvement was predicted by perceptions of specific child invitations, self-efficacy beliefs, and perceived time and energy, whereas school-based involvement was predicted by these three constructs along with perceptions of specific teacher invitations. The population studied by Green et al. was an ethnically and socioeconomically diverse sample of elementary-age students. Anderson and Minke (2007) considered levels one and two of the revised model with a primarily low-income African American and Latino population. Invitations from teachers had the strongest effect on three types of parent involvement (home-based, school-based, total

involvement). Differences in results among studies utilizing the Hoover-Dempsey and Sandler model may be due to differences in the model's applicability with African American and Latino populations, different measures used, and different statistical analyses of the data. Given that only two published studies were located (Anderson & Minke, 2007; Martinez-Lora & Quintana, 2009) that utilized the Hoover-Dempsey and Sandler model with large numbers of minority families (African Americans and Latinos), additional research is warranted. Moreover, no studies using the Hoover-Dempsey and Sandler model have focused specifically on Latino populations. Given the importance of understanding how to increase parent involvement among this educationally at-risk population, this study seeks to replicate the findings of Anderson and Minke (2007) by focusing on portions of the revised Hoover-Dempsey and Sandler model and investigating its utility in explaining parent involvement within a primarily low-income Latino population in Texas.

In summary, the importance of parent involvement in children's education and achievement is well-documented. Recent research suggests that perceptions of invitations for involvement play a very important role in parents' decision to become involved in their children's education. These perceptions of invitations appear particularly important for low-income and minority families, who have historically been less involved in their children's education than middle-class, majority culture families, and whose children may have the most to gain from more parent involvement (Epstein, 1995). The present study examined the constructs that contribute to parents' decision to become involved,

from the perspective of parents. Specifically, parent perceptions of invitations for involvement from others and family background variables were examined in terms of their role in the parent involvement process. Levels one and two of the revised Hoover-Dempsey and Sandler model were tested. The study utilized data from a parent survey and demographic data form gathered from parents of children enrolled in grades kindergarten through fifth grade. Children attended an urban, primarily low-income, and Latino public school in central Texas. The following questions were addressed: (1) Do parent perceptions of school, teacher, and child invitations explain total parent involvement behavior? (2) What kind of invitation for involvement has the largest effect on total parent involvement? (3) What is the role of family background variables in parents' decision to become involved in children's education?

This study contributes to the knowledge base regarding parent involvement among minority populations, specifically Latino populations. As this population is the largest minority in the United States (U.S. Census Bureau, 2008) and minority, economically disadvantaged children are at greater risk for academic failure, it is important to study which factors are the most important in motivating Latino parents to become involved in the education of their children. The Hoover-Dempsey and Sandler model of parent involvement appears promising as a way to conceptualize the parent involvement process. Results will also add to the research based regarding family background variables with this population and the role they play in parent involvement.

Finally, results will contribute to the body of work intended to guide efforts in increasing parent involvement.

## **Chapter II: Literature Review**

This chapter will provide a review of the literature regarding educational achievement and parent involvement. Factors that influence achievement and parent involvement will be discussed. Definitions of parent involvement and a number of theoretical models will be reviewed. Finally, achievement and parent involvement within the Latino population will be discussed.

### **EDUCATIONAL ACHIEVEMENT IN THE UNITED STATES**

Since the 1970's, the rate of high school completion in the United States has been between approximately 85 and 89 percent. Although the gap in high school completion between White, African American, and Hispanic students has narrowed over the years, African American and Hispanic students continue to have lower high school graduation rates. Academically, students in the United States have demonstrated progress on national assessments given in reading and mathematics in 4th and 8th grades since the early 1990's. However, significant gaps persist among racial and ethnic groups on math and reading assessments, scores on standardized exams, and completion of advanced level classes in science and math. Such gaps have been noted between Latino and African American students compared to Asian and White students (National Center for Educational Statistics, 2000, 2010; Hong & Ho, 2005). Research has suggested that academic difficulties are much more likely among poor children and nonnative speakers of English (Snow, Burns, & Griffin, 1998; Barone, 1998). This is a problem particularly



in the United States, where one in three children are from an ethnic or racial minority group and one in seven children speak a language other than English as his or her first language (Miramontes, Nadeau, & Commins, 1997). As states implement standardized testing requirements for students, it is increasingly important to understand the factors that influence children's achievement, particularly for children from ethnic minority and economically disadvantaged groups.

**Factors affecting educational achievement.** A number of factors have been identified as playing a role in children's learning. Many of these are considered family background variables and include such factors as ethnicity, socioeconomic status, and family structure. A review of such factors commonly found in the educational literature follows.

*Socioeconomic status/family income.* Socioeconomic status (SES) has been considered in a number of research studies and has been found to be an important predictor of student achievement (Fan & Chen, 2001; Keith et al., 1993; Desimone, 1999; Okpala, Okpala, & Smith, 2001; Caldas & Bankston, 1997, 1999). Students who attend schools with a high poverty level consistently perform lower in math and reading achievement and are less likely to attend four-year colleges when compared to their peers in low-poverty schools (NCES, 2010). According to a meta-analysis by Sirin (2005), family-level and student-level SES were both strong correlates of academic achievement. The trend among study findings suggest that higher family SES is associated with higher

parent involvement and higher student achievement, while lower SES is associated with lower parent involvement and lower student achievement (Sirin, 2005).

The association between SES and achievement has been identified across grade levels (Sirin, 2005). In the elementary school years, students from low-income families are more likely to receive lower grades, be retained, or be placed in special education compared to higher income families (Entwisle & Alexander, 1993; Blaire & Scott, 2002). Additionally, Entwisle and Alexander (1993) found that parents with more resources had first grade students with higher achievement, specifically in math and reading. Higher educational expectations of parents were also linked to higher achievement. In their study of low income fourth graders, Okpala, Okpala, and Smith found that neither parent involvement at school nor instructional supply expenditures were significantly related to math achievement (2001). In studying data for eighth grade students, Keith et al. (1993) found that high SES students had higher achievement than students with low SES.

***Employment status.*** Several studies in the parent involvement literature have included employment status in their statistical analyses. For example, Barnard (2004) considered parents' employment status (full/part time or unemployed) when children were in preschool and fourth grade. When employment status and other background characteristics (e.g., race, eligibility for subsidized lunch, parent education) were controlled for, parent involvement in school was significantly related to positive outcomes for high school students.

***Family structure.*** Family structure has also been linked to school achievement. Compared to students with biological two-parent households, students from single-parent and step-parent households are at greater risk for academic, behavioral, and emotional problems (Entwisle & Alexander, 1995; Lee, Burkham, Zimiles, & Ladewski, 1994; Haveman, Wolfe & Spaulding, 1991). Pong (2007) examined the relationship between school achievement and school concentration of students from step- and single-parent families. Even when demographic and family background characteristics were controlled for, being from a single-parent or stepfamily had a negative effect on students' achievement. Pong noted that this finding was partially explained by the low SES of the students (2007). Similar to Pong's study, research by Bankston and Caldas (1998) found that when schools had large concentrations of students from single-parent households, this depressed individual student achievement regardless of the family structure, race, or SES of individual students. Caldas and Bankston also found that the predominant family structure of a school was a stronger predictor of achievement than school district characteristics such as expenditures per student and amount of teacher experience (1999). For students who have experienced a transition into to a single-parent, step-parent, or nonparental living situation, these family structures have also been associated with lower academic performance and lower probability of high school completion (Thomson, Hanson, & McLanahan, 1994; McLanahan & Sandefur, 1994).

***Family and school.*** The role of family and school is another important factor in student learning and achievement. As children learn in both the home and school settings,

there is no clear boundary between these two settings and they can influence each other (Christenson, Rounds, & Gorney, 1992). Families may interact with their children at home in ways that support classroom performance. For example, they may nurture cognitive behavior that then has an indirect effect on achievement at school. In a review of family process studies, Hess and Holloway (1984) found that the verbal environment of the home, parental beliefs and attributions, parent expectations for achievement, and parental warmth and nurturance toward the child were all associated with student achievement.

#### **PARENT INVOLVEMENT**

Parent involvement has long been associated with a variety of positive academic outcomes for children (Christenson, Rounds, & Gorney, 1992; Reynolds, 1992; Fan & Chen, 2001; Jeynes, 2003, 2007). Interventions that engage families in supporting children's learning at home have been particularly linked to increased achievement (Epstein, Simon & Salinas, 1997; Jordan, Snow & Porche, 2000; Starkey & Klein, 2000). Research suggests that the more families support children's academic progress, the more their children tend to achieve and continue their education (Miedel & Reynolds, 1999; Marcon, 1999). The benefits of parent involvement and support provided in the early years of education can extend through high school. Some of these benefits may include lower drop-out rates, completing high school on time, and higher academic grades (Barnard, 2004).

**Definitions of parent involvement.** Parent involvement has been defined in a variety of ways. For example, Jeynes broadly defined parent involvement as “parental participation in the educational processes and experiences of their children” (2007, p. 83). Others have defined parent involvement in more specific terms to include parent-teacher communication (Epstein, 1991), parent-child communication about school (Christenson, Rounds, & Gorney, 1992; Keith et al., 1993), helping children with school-related activities at home (Ho & Willms, 1996), parent participation in school events (Stevenson & Baker, 1987; Miedel & Reynolds, 1999), and parent expectations about their child’s educational potential (Keith et al., 1998).

Schools and parents may differ in how they define parent involvement. Schools tend to define parent involvement as activities that are specifically related to the goals of the school (e.g., helping with homework, volunteering at the school; Lawson, 2003). In this “schoolcentric” view discussed by Lawson (2003), schools define for parents the types of involvement that are desired, and the purpose of parents’ involvement is to support the goals of the school (e.g., academic achievement, attendance, appropriate behaviors). In contrast, parents define parent involvement in a much broader manner, to include children’s safety and extracurricular activities that take place outside of school.

Parent involvement currently lacks a unified definition (Fan and Chen, 2001). It is important to try to clarify which definition and constructs of parent involvement are the most essential in understanding children’s learning (Keith et al., 1993). Anderson and Minke (2007) suggest that parent involvement should be defined broadly to include both

home-based and school-based elements, and much of the parent involvement literature views parent involvement as taking these two primary forms (e.g., Walker et al., 2005; Pomerantz, Moorman, & Litwack, 2007).

**Models of parent involvement.** As interest in parent involvement has increased, researchers have attempted to conceptualize the processes involved in parent involvement. A variety of models of have been proposed to help explain parent involvement and the factors leading to student outcomes (e.g., Epstein, 1986, 1995; Eccles & Harold, 1996; Hoover-Dempsey & Sandler, 1995, 1997; Walker et al., 2007). A review of parent involvement models follows.

***Epstein.*** Epstein proposed a framework for involvement consisting of six main types of activities that lead to effective partnerships between schools, families, and communities. These include parenting (parenting skills, appropriate home conditions for learning), communicating (school-to-home and home-to-school), volunteering (involve families at school to support students), learning at home (homework and other learning activities), decision-making (school decisions and governance), and collaborating with the community (coordinate services and resources, provide services to the community). Epstein's model focuses on behaviors initiated by the school and teachers rather than those initiated by parents (1986).

Although numerous studies have investigated relationships between Epstein's types of activities and child outcomes, results have been inconsistent. Some have identified positive relationships between parent involvement and academic achievement

(Gauvain, Savage, & McCollum, 2000), whereas others found no significant relationship (Sheldon, 2002).

***Grolnick and Slowiaczek.*** Grolnick and Slowiaczek (1994) hypothesized parental involvement at school as being multidimensional and consisting of three broad dimensions, including behavioral involvement, personal involvement, and cognitive/intellectual involvement. Behavioral involvement includes participating in and regularly attending school functions, thereby modeling the importance of school for children. Personal involvement includes the child's affective experiences that reflect the positive feelings that a parent has conveyed to the child by his participative and interactive engagement in all aspects of schooling. Cognitive or intellectual involvement includes exposing the child to cognitively and intellectually stimulating activities and materials, such as brainteasers, engaging books, and current event discussions.

Support for the three dimensional model of parent involvement was obtained in a factor analytic study of a set of parent involvement measures by Grolnick and Slowiaczek (1994). Subjects included 302 middle school children from four schools in a predominantly Caucasian, middle-class school district. Data were gathered through teacher reports and student report measures, which were a compilation of items from a variety of measures. Grolnick and Slowiaczek also tested a motivational model that specified children's inner motivational resources (self-regulation, perceived competence, control understanding) as mediators between parents' behavior and children's school performance. Results of path analyses indicated indirect effects of mothers' behavior and

intellectual/cognitive involvement on academic performance through perceived control understanding and perceived competence. Father behavior had an indirect effect on academic performance through perceived competence. A criticism of this model is that specific types of involvement are combined into dimensions that are too broad to be meaningful (Kohl, Lengua, & McMahon, 2000). For example, parent activities at home are combined with those at school in the behavioral involvement domain (Kohl, Lengua, & McMahon, 2000).

***Eccles and Harold.*** A theoretical model of parent involvement by Eccles and Harold (1996) takes into account the beliefs and attitudes of parents toward their children's education, and suggests that these impact parent and teacher practices and child outcomes. The model proposes dynamic processes which underlie parent involvement. According to this model, parent involvement is seen as an outcome of influences from parents, teachers, and children, and as a predictor of child outcomes. The model includes exogenous variables that have indirect effects on parent involvement such as family, child, and teacher characteristics, school structural and climate characteristics, and neighborhood/community influences. These variables are found in the first section of the model. The second section includes teacher beliefs and parent beliefs, which are both general and child-specific. These include beliefs such as personal efficacies, proper role of parents, knowledge of techniques, and beliefs about the child's efficacy. The model assumes these beliefs affect each other as well as have a direct effect on the variables in the third section of the model, specific teacher practices and specific parent practices.



These practices include such things as parents volunteering at school and teachers providing meaningful ways for parents to be involved at school. Variables in the second and third sections are assumed to have a direct effect on the child outcomes in the last section. Some of these include efficacy, performance, self-perceptions, and interests. The model proposes that the impact of variables in one section may be mediated by variables in another section. In addition, there is overlap in some of the child characteristics with child outcomes, which the authors feel is representative of the cyclical nature of the relations captured by the model.

In a large longitudinal study, Eccles and her colleagues sampled four primarily white, lower-middle to middle-class school districts. Samples included families of kindergartners, first graders, and third graders who were followed for four years. Results of the study yielded support for five dimensions of parent-initiated involvement, including volunteering at school, monitoring at home (response to teacher's requests for help with school work), involvement (with children's daily homework activities), contacting the school about the child's progress, and contacting the school about how to give extra help at home (Eccles & Harold, 1996). A criticism of this research is that some dimensions could be better conceptualized as one construct instead of two, and that some dimensions were measured by a very limited number of survey items (Kohl et al., 2000).

***Fantuzzo.*** Fantuzzo and colleagues proposed a comprehensive view of parent-school collaboration to better understand how important transactions relate to important developmental outcomes for urban, low-income children. In their study, a

multidimensional view of parent involvement was identified in a Head Start sample. Parent involvement was measured by the Parent Involvement in Children's Education Scale (Fantuzzo, Tighe, McWayne, Davis, & Childs, 2002), 40-item self-report instrument completed by parents. Exploratory factor analyses revealed three reliable parent involvement dimensions: Supportive Home Learning Environment (parent behaviors that promote learning at home), Direct School Contact (parents' communication with school personnel and involvement in school-based activities), and Inhibited Involvement (barriers to parents' involvement). Survey items measured the frequency of specific involvement behaviors by parents. Another study by McWayne, Hampton, Fantuzzo, Cohen, and Sekino (2004) extended this research to a demographically similar kindergarten sample and yielded similar findings.

***Kohl, Lengua, and McMahon.*** Another multidimensional model of parent involvement was proposed by Kohl, Lengua, and McMahon (2000). This model considered the strengths and weaknesses of the Epstein model, the Eccles and Harold model, and the model by Grolnick and Slowiaczek. In their model, Kohl et al. included three dimensions designed to measure the quality of parent involvement: quality of the parent-teacher relationship, teacher's perception of the parent's value of education, and parent's satisfaction with the school. Other parent involvement factors include parent-teacher contact, parent involvement at school, and parent involvement at home. Participants in the study were part of a longer longitudinal multisite investigation of conduct problems in children. They were selected from four different areas of the U.S.

with populations including primarily African American, largely Caucasian, a mix of African American and Caucasian families, and an ethnically diverse population which included Latinos. SES was in the low to middle range. Parent involvement factors were measured using the Parent-Teacher Involvement Questionnaire, which has both a parent and a teacher version and has been validated with children in kindergarten and first grade. The teacher report is a 21-item measure which assesses the amount, type and initiator of contact between teachers and parents; the quality of the parent/teacher relationship; the teachers' perception of the parent's value of education; and the parent's involvement in the child's school. The parent version is similar with 26 items, although it measures parent involvement at school, the parent's degree of satisfaction with the school, and the degree of academic stimulation in the home along with the quality of the parent-teacher relationship and the contact between parent and teacher. Results of a confirmatory factor analysis of the theoretical model identified the six parent involvement factors listed above. Path analyses were then employed to examine the relations among three specific family and demographic risk factors (parent education, single-parent status, and maternal depression). Results indicated no significant differences between ethnic groups. The three risk factors showed different associations with the six parent involvement factors.

***Hoover-Dempsey and Sandler.*** Hoover-Dempsey and Sandler proposed a theoretical process variable model (1995, 1997) that investigated parent involvement from the perspective of parents. The model was grounded in research in the fields of educational, developmental, and social psychology. It sought to explain the process of

parent involvement and capture the reasons parents get involved, what that involvement looks like, and how this involvement affects student outcomes. Of the five levels, the first level addressed parents' decision to get involved in their children's education (parental role construction, parental self-efficacy for helping children succeed in school, perceptions of general invitations for involvement from the school, perceptions of general invitations for involvement from the child). The second level addressed contextual factors that influenced parents' choice of involvement forms (time and energy, perceptions of specific invitations for involvement from the child and the child's teacher). Levels three through five delineate ways in which parent involvement can have a positive effect on children's achievement. Level three identified mechanisms through which parent involvement influenced school outcomes (modeling, reinforcement, and instruction). In level four, it was hypothesized that these mechanisms were mediated by the extent that parents' actions fit with the child's developmental needs and the school's expectations for involvement. Level four also considered parents' use of developmentally appropriate strategies as a mediating variable. At the fifth level, student outcomes were proposed to include skills and knowledge as well as students' self-efficacy for school success.

Constructs in level one of the original model were studied by Reed et al. (2000) and Marinez-Lora and Quintana (2009). Reed et al. found that the model's ability to predict parent involvement activity was confirmed in their results and that parental efficacy mediated parents' involvement decisions (2000). Constructs in levels one and two were studied by Marinez-Lora and Quintana (2009). Their study sample included

low-income African American and Latino parents living in an inner city environment in a midwestern state. Also, the majority of the Latino participants reported being foreign born. Results of Marinez-Lora and Quintana's study indicated that compared to African Americans, Latino parents scored lower on at-home, at-school, and total parent involvement practices. They also scored lower on perceptions of invitations from teachers. Perceptions of teacher invitations were found to mediate the effects of annual income and race on parent involvement. Perceptions of teacher invitations was the only construct from the HDS model found to consistently predict parent involvement at home and school for both African Americans and Latinos. Results suggest that level one constructs may predict parent involvement differently for different ethnic groups. The HDS model was not fully supported by results of this study.

A revised version of the model was proposed by Walker, Wilkins, Dallaire, Sandler, and Hoover-Dempsey in 2005. In comparing the two versions of the model, the revised model reflected constructs originally displayed across levels one and two as now being listed under three constructs at level one (see Appendix A). Parental role construction and self-efficacy fall under parents' motivational beliefs. Parents' perceptions of invitations for involvement from others consists of perceptions of general school invitations, perceptions of specific invitations from the child, and perceptions of specific teacher invitations. General invitations from the school include broad attributes or activities that convey a sense of welcome to parents and cause them to feel their involvement is useful in their children's learning and success (Hoover-Dempsey &

Sandler, 1997). An example of this might be an overtly welcoming school climate. Another form of parent perception of invitation is specific invitation from the child, which is important because it encourages parents to become involved and this type of invitations shapes what form the parents' choice of involvement takes (e.g., asking parent for help with homework; Hoover-Dempsey & Sandler, 1995). Specific teacher invitations are another type of perceived invitation to parent involvement (Epstein, 1986, 1991; Epstein & Van Voorhis, 2001; Hoover-Dempsey, Bassler, & Burow, 1995). Examples of these may include assigning homework that specifically involves parents, or encouraging parents to visit to classroom regularly (Balli, Demo, & Wedman, 1998; Epstein & Dauber, 1991; Shumow & Miller, 2001). Formerly at level two, parents' perceptions of available time and energy, and specific skills and knowledge for involvement are now under a level one construct of parents' perceived life context. The revised model includes links within and between levels that express hypothesized relationships.

This revised model was studied by Green, Walker, Hoover-Dempsey, and Sandler (2007). The study sample was comprised of first through sixth graders who were diverse in ethnicity and SES. Families were sampled from schools in the mid-south of the U.S. Green et al. found that level one constructs (parents' motivational beliefs, parents' perceptions of invitations for involvement from others, parents' perceived life context) predicted home- and school-based parental involvement at level two of the model when controlling for socioeconomic status. Home-based involvement was predicted by perceptions of specific child invitations, self-efficacy beliefs, and perceived time and

energy, whereas school-based involvement was predicted by these three constructs along with perceptions of specific teacher invitations.

Anderson and Minke (2007) also studied the first two levels of the revised Hoover-Dempsey and Sandler model. They proposed a revised representation of the psychological factors underlying parents' involvement behaviors and described the conceptual and methodological processes contributing to their development. For their study, the sample included elementary schools within a large school district in the southwest United States. Students were fifty-seven percent Caucasian or African American, and almost thirty percent were Latino. The majority of students were from a low SES background. Although results of their study showed that parental role construction had a significant effect on parents' choice to get involved, the construct with the strongest effect on parent involvement was specific invitations from teachers. When teachers estimated home-based activities for families, they underestimated the activities in minority families more than in nonminority families. Families rated their own involvement higher than their children's teachers. This clearly indicates a difference in perceptions from teachers and parents alike that is not indicative of reality. Minority families appear to be at a disadvantage compared to nonminority families when teachers rate their involvement level. In addition, these findings suggest that perhaps parent involvement in minority families takes a different form from the involvement behavior typically expected by teachers. The slight difference between Anderson and Minke's findings and those of Green et al. may be due in part to differences in the model's

applicability with African American and Latino populations, different measures used, and different statistical analyses of the data (multiple regression versus path analysis). This difference is additional evidence that the model should be studied further to examine its utility in explaining parent involvement.

**Comparison of models.** The parent involvement models discussed here are all multidimensional in nature and include parent involvement behavior. Many of the models consider both the home and school as settings for parent involvement. However, the models differ in terms of the number and types of constructs they include. For example, the models proposed by Grolnick and Slowiaczek (1994) and Fantuzzo and colleagues (2002) both have approximately three primary dimensions, whereas Hoover-Dempsey and Sandler's model (Walker et al., 2005) has multiple levels and constructs. Some of the models focus on parent beliefs and parent behavior, while others, like Eccles and Harold's model (1996), also consider the influence of indirect effects such as school and community in children's educational outcomes. The models also differ in terms of whose perspective is considered. For example, Hoover-Dempsey and Sandler's model is the only one that considers only the perceptions of parents and children, whereas Kohl, Lengua, and McMahon (2000) consider both teacher and parent perceptions in their model.

As mentioned previously, parent involvement lacks a unified definition (Fan and Chen, 2001). This lack of consistency is also evident in the models proposed to conceptualize the parent involvement process. Given these inconsistencies, it is difficult



to compare results from parent involvement studies when they use different definitions, measures, constructs, and perspectives. These methodological limitations will be discussed next.

**Methodological limitations of models.** Among the parent involvement literature, an area of inconsistency is the methodology of research studies. Some research studies are qualitative in nature, while others utilize a quantitative or mixed-method approach. Studies also vary in the type of measure used to measure aspects of parent involvement and the type of informant. For example, some research relies on parent-reported data, while others consider teacher and student reports. Fishel and Ramirez (2005) also noted methodological weaknesses across parent involvement studies. Although many theoretical models conceptualize parent involvement as a multidimensional manner, some models are more comprehensive than others in terms of the constructs they include.

The role of family background variables in parent involvement (e.g., ethnicity, family structure, income, education level, marital status) has been investigated although results of this research has been mixed (Ho, 1997; Feuerstein, 2000; Fan & Chen, 2001; Hoover-Dempsey & Sandler, 1997; Ho & Willms, 1996). For example, some studies have shown African American parents to be less involved at school than Caucasian parents and more involved than Latino parents, whereas other studies indicated no difference in involvement between African American and Caucasian parents (Ho & Willms, 1996; Griffith, 1998). These mixed results may be due to inconsistencies in how constructs are conceptualized and measured such that it is difficult to integrate results

across studies. Methodological limitations such as single-reporter ratings and social desirability of respondents may also limit conclusions. In addition, indicators of family involvement have typically been restricted to single or few behaviors, and are often identified through teacher reports rather than reports from family members (Manz, Fantuzzo, & Power, 2004).

Often these studies have not addressed process variables such as perceptions, beliefs, attitudes and practices of parents, teachers, and children. These variables can differ within particular status groups, and the influence of status variables is often attenuated when process variables are considered. For example, Epstein (1990) found that teacher practices accounted for more variance in parent involvement than either marital status or education level. Although process variables have not been studied a great deal (Griffith, 1998), it has been suggested that they can be used to understand differences in and barriers to parent involvement (Christenson & Sheridan, 2001; Christenson, 2004; Hoover-Dempsey & Sandler, 1995, 1997; Anderson & Minke, 2007). As mentioned earlier, the Hoover-Dempsey and Sandler model of parent involvement incorporates process variables and has been studied in recent research (Anderson & Minke, 2007; Martinez-Lora & Quintana, 2009; Green, Walker, Hoover-Dempsey & Sandler, 2007).

**Factors related to parent involvement.** In addition to the methodological limitations and inconsistencies among the models of parent involvement, there are a wide variety of important participant characteristics included in studies that can impact parent

involvement and student achievement as well. Several of these characteristics will be reviewed next.

***Socioeconomic status/family income.*** Among kindergarten students, Cooper (2010) found a negative association between family poverty and school-based parent involvement. This association was weaker when parents and teachers had higher levels of education. Okpala, Okpala, and Smith (2001) also investigated how SES and parent involvement were related to student math achievement, as well as the role of instructional supply expenditures. In their study of low-income fourth graders, the percentage of students in a free or reduced-price lunch program was negatively correlated with math achievement. In studying data for eighth grade students, Keith et al. (1993) found that high SES parents were generally more involved than low SES parents.

***Parent education level.*** Another factor associated with parent involvement is parent education level. Research has found that parent education is a significant predictor of parent involvement, both at school and at home (Stevenson & Baker, 1987; Keith et al., 1998). Parents with higher education levels are more involved in their children's education than those with less education (Englund, Luckner, Whaley, & Egeland, 2004). Parent education has also been found to act as a moderator between family poverty and school-based parent involvement (Cooper, 2010).

Some studies have looked specifically at maternal education level and its predictive role in child outcomes and parent involvement (Magnuson, 2007; Bornstein, Hahn, Suwalsky, & Haynes, 2003). Englund, Luckner, Whaley, and Egeland (2004)

found that among low-income families, maternal education was a significant predictor of school-based parent involvement in first grade. Education level had a significant indirect effect on parent involvement in third grade as well, and on student achievement in first and third grade. Suizzo and Stapleton (2007) also investigated the role of maternal education in parent involvement. Results suggested that maternal education accounted for small to moderate amounts of variance in parent involvement. Mothers with more education also had higher expectations for achievement than less educated mothers.

***Previous student achievement.*** Although parent involvement has been linked to higher student achievement, some researchers have suggested that the relationship between these two variables is bidirectional in that student achievement can predict parent involvement (Englund, 2001; Shumow & Miller, 2001; Wong & Hughes, 2006). Eccles and Harold (1996) noted that parents of high-achieving children tend to show more participation in school activities compared to parents of low-achieving students. Keith et al. (1993) found that the greater a student achieved, the more parents were involved, which led to even higher achievement for the student. Keith et al. (1993) noted that previous learning should be controlled for when research is conducted on the effects of learning.

***Employment status.*** Parent involvement can also be constrained by parents' type of employment and the hours they must work. Many occupations, particularly those with lower salaries, do not allow the flexibility and autonomy seen in professional positions. If parents work during the daytime, they are often not able to attend school activities that

occur during typical school hours. Those who work at night may have difficulty attending evening school activities and helping their children at home. In addition, parents with multiple jobs are limited greatly by time constraints and their priority must often be to meet their family's basic needs (Finders & Lewis, 1994).

Castro, Bryant, Peisner-Feinberg, and Skinner (2004) studied the relationship between parent involvement in a Head Start program and characteristics of families, teachers, and classrooms. Parent characteristics included parent employment status (full time, part time, unemployed), home activities with children, and parent satisfaction with the Head Start program. Compared to other parent characteristics, employment status was the strongest predictor of parent involvement in the Head Start program.

***Family structure.*** In terms of parent involvement, Dornbusch and Ritter (1992) found that parents from single-parent and step-parent households were among the groups with the lowest levels of school involvement. Two-parent families demonstrated the highest level of participation. Research by Astone and McLanahan (1991) yielded similar findings regarding home-based involvement. Results from their study indicated that children from single-parent families reported less parent involvement in schoolwork and less supervision of their activities outside the home than children from two-parent families. Astone and McLanahan also noted that changes in family structure, such as divorce, were associated with declines in parent involvement (1991).

***Ethnicity and language.*** Parent involvement can vary among different ethnic groups who may demonstrate differing amounts of involvement depending on if it is in

the home or school setting (Wong & Hughes, 2006; Griffith, 1998). In their study of parents of kindergartners, Suizzo and Stapleton (2007) found that ethnicity was a significant predictor of parental educational expectations and family discussions. Specifically, Latino parents reported higher educational expectations than African American and European American parents.

Language can impact parent involvement as well. According to Census 2000, Spanish-speakers comprise more than 10% of the total population in the United States, and more than 60% of the language-minority population (Shin & Bruno, 2003). Tinkler (2002) observed that English language proficiency is a major barrier to parent involvement in their children's education. Parents can feel inadequate in school settings when they do not speak fluent English (Finders & Lewis, 1994). Garcia-Vazquez, Vazquez, Lopez, and Ward (1997) found that among Hispanic students, English language proficiency was significantly correlated with standardized achievement scores and grade point average. Spanish reading and writing skills were also significantly related to achievement scores and grade point average. Wong and Hughes (2006) found that Spanish-speaking Hispanic parents reported having significantly lower levels of parent-teacher shared responsibility for children's education, compared to White, African American, and English-speaking Hispanic parents. Wong and Hughes suggested that this may have been due to lack of English language skills or familiarity with the American curriculum.

## **LATINO ACHIEVEMENT AND PARENT INVOLVEMENT**

The Latino population, both native and foreign-born, is one of the fastest growing ethnic groups in the United States and in Texas. In the 1990's, the percentage of Latino elementary students in metropolitan public schools in the United States increased by more than fifty percent (Zhou & Logan, 2003). Between 1988 and 2008, the percentage of Hispanic public school students increased from 11 to 22 percent between 1988 and 2008 (National Center for Educational Statistics (NCES), 2010). Latino students have consistently performed lower academically when compared to their Anglo and African American peers. In reading and math, they typically perform lower than Anglo peers (NCES, 2002). Latino children, as well as those from economically disadvantaged families, are at greater risk for academic failure and dropping out of school than children from the majority culture (NCES, 2003, 2004). However, research specifically targeting the Latino population is limited, especially studies with Texas schools. Some factors have been identified in the literature base that can influence the educational achievement of Latino children and educational involvement of their parents. A review of these factors is presented next.

**Parent involvement and the Latino population.** As noted earlier, parent involvement may vary for different ethnic groups. For example, African American and Hispanic parents have been found to have less contact with their children's school when compared with White parents (Floyd, 1998). Hispanic parents often report lower levels of

school involvement than African American parents, and African American parents are less involved at school than Caucasian parents (Marinez-Lora & Quintana, 2009).

**Latino culture and beliefs.** Although each family is unique, it is important to note some of the characteristics and beliefs that characterize the Latino culture and how these may impact parent involvement. One aspect of Latino culture is the way parents view the school and teachers. In many Latin American countries, parents believe education should be left to the schools and consider it disrespectful to intrude into the school environment (Espinosa, 1995). Some research suggests that low-income, minority parents may be viewed as uninterested in their children's education by school personnel (Lareau, 1987). However, research has suggested that minority parents, including Latino parents, are very interested in being involved in their children's education, including looking to the teacher for ways to help their child and making sure homework is complete (Chavkin & Williams, 1993; Dauber & Epstein, 1993; Mawjee & Grieshop, 2002). Ethnic minority parents are more likely than majority culture parents to believe it is the school's responsibility to initiate and create parent involvement opportunities (Chavkin & Williams, 1993).

In a study of low-income, immigrant, Spanish-speaking parents, Orozco (2008) found that parents were concerned about their children and wanted to be involved in their educational experiences. Similar findings have been noted in research indicating that Latino parents have high educational aspirations for their children (Goldenberg & Gallimore, 1995, Cooper et al., 1994). For example, Goldenberg, Gallimore, Reece, and



Garnier (2001) found that among primarily Mexican immigrant parents, their educational aspirations remained high over the course of their children's elementary school years (through sixth grade). In addition, formal schooling was highly valued by parents regardless of how long they had lived in the United States.

Latino parents' own school experiences can be associated with their beliefs about school as well as their own educational level and their level of involvement in their children's education. For example, some Latino parents may have had learning difficulties or were forced to drop out of school in order to help support their families (Finders & Lewis, 1994). They may have come from a family background where educational success was not valued, or have feelings of discomfort or distrust toward their child's school. This may cause parents to limit their involvement and interactions with the school. For these parents, their limited education and background may make it difficult to help their own children be successful academically and to foster motivation to achieve (Mawjee & Grieshop, 2002).

Communication can also impact parent involvement for Latino parents. Compared to European American culture, parents in the Latino culture often communicate with their children in a directive way, rather than engaging in a collaborative conversation. A relaxed sense of time, a need for an informal environment for communicating, and the importance of a personalized manner of interacting with others may also characterize Latino culture (Espinosa, 1995). When Latino parents communicate with their child's school or teacher, they may find the typical American public school environment to be

fast-paced and task-oriented, which can discourage participation and lead to negative perceptions about the school.

*Perceptions of invitations for involvement.* Minority parents often perceive barriers to their involvement with their child's school, including poor communication or inadequate knowledge about the policies or procedures of the school (Liontos, 1992). This is important in that parent perceptions of schools and teachers has been shown to be a fundamental factor in how much parents are involved (Epstein, 1986). In addition, research has suggested that parent perceptions of invitations for involvement from the school can influence parents' decisions to become involved in their children's education (Eccles & Harold, 1993; Epstein, 1986). If parents perceive the school's attempts to get them more involved as being directly linked to their child's academic achievement, research indicates that parents will be more likely to get involved (Christenson, Rounds, & Franklin, 1992; Christenson, Rounds, & Gorney, 1992). These perceptions of invitations appear particularly important for low-income and minority families, who have historically been less involved in their children's education than middle-class, majority culture families, and whose children, perhaps, have the most to gain from more involvement (Epstein, 1995).

Efforts to increase parent involvement can lead to more contact with their child's school. However, this does not necessarily lead parents to have a more positive perception of the school (Bauch, 1992). For Latino parents, many may still feel they are not listened to, despite having more contact with the school (Espinosa, 1995). Research

has suggested that although Latinos hold teachers in relatively high regard, they often feel intimidated by teachers or view certain behaviors (e.g., asking questions about assignments) as disrespectful (Hyslop, 2000; Trumbull, Rothstein-Fisch, Greenfield, & Quiroz, 2001). In their study of high-performing Hispanic schools along the Texas/Mexico border, Scribner, Young, and Pedroza (1999) found that schools provided a welcome environment, stressed personal contact and communication, and facilitated structural accommodations for parents, all of which increased parent involvement. This involvement appears to be key in increasing student achievement outcomes.

***Language.*** Language can also be a factor in the home environment. Latino parents, particularly those who are monolingual Spanish-speakers, may have a difficult time reading, helping children with homework, or teaching concepts in English (Lopez, Scribner, & Mahitivanichcha, 2001). In Marinez-Lora and Quintana's study of parent involvement with Latino and African American parents, home-based parent involvement for Latino parents was predicted by their sense of efficacy and their perceptions of teacher invitations. In contrast, only teacher invitations predicted home-based parent involvement for African American parents. Study authors suggested that the difference in results may have been due in part to their Latino sample's lack of proficiency with English as many of them were immigrants who only spoke Spanish. Language issues discussed here are further compounded by the fact that most of elementary and secondary teachers in the United States are of European ancestry, despite the fact that student populations continue to become more ethnically and culturally diverse (Gay, 2000).

**Educational Achievement in the Latino population.** As Latino students are typically at risk for academic failure and have lower levels of academic achievement, it is important to review research that studies factors associated with educational outcomes for this ethnic group. Similar to research on parent involvement and Latino students, family background variables such as language and socioeconomic status have been associated with achievement. For example, children from non-English speaking families tend to score below their English-speaking peers on national tests of reading and math achievement (Institute of Education Sciences, 2005). Garcia-Vazquez, Vazquez, Lopez, and Ward (1997) found that among Hispanic students, English language proficiency was significantly correlated with standardized achievement scores and grade point average. Spanish reading and writing skills were also significantly related to achievement scores and grade point average. Trusty, Plata, & Salazar (2003) also considered the role of language in their study of Mexican American students. When English was the home language, this was a predictor of academic achievement, especially in verbal and reading achievement, beyond the effect associated with ethnicity. In addition to language, parent influences also had an impact on achievement. Parental expectations of academic attainment, parent support of achievement, and discussion of school-related concerns with students were all strong indicators of achievement. In addition, family background variables of SES, parent education, and family income were all associated with higher achievement for these students (Trusty, Plata, & Salazar, 2003).

As discussed earlier, parent involvement is associated with positive educational outcomes for children. These positive effects are seen in Latino populations as well. For example, Keith & Lichtman (1994) studied the role of home-based parent involvement in the achievement of Mexican-American eighth grade students. Background variables included parents' English language proficiency, previous student achievement, home rules, student gender, family background (parents' occupation, education level, income) and parents' birthplace. Results indicated that parent involvement had a moderate direct effect on the academic achievement of students. In addition, parents' English language proficiency had a small negative effect on parent involvement (Keith & Lichtman, 1994).

A study by Cornelius-White, Garza, and Hoey (2004) investigated factors related to high-achieving Mexican American high school students in Texas. Results indicated that fathers' education level, equal use of Spanish and English in the home, and students' openness to experience were correlated the most with achievement. In addition, when both parents engaged in home-based parent involvement, this created a home environment that promoted higher levels of achievement.

### **STATEMENT OF THE PROBLEM**

Research has demonstrated much evidence for the positive effect of parent involvement on academic achievement in children (e.g., Jeynes, 2003, 2007; Hoover-Dempsey et al., 2005; Fan & Chen, 2001). This is especially important for children from economically disadvantaged and ethnic minority populations as they are at greater risk for academic failure. As it often difficult to get all parents involved, studying the

processes that lead parents to become involved may help provide information to schools and teachers that can increase parent involvement. Current research in parent involvement appears to be looking more at these processes rather than focusing on the frequency of parent involvement behavior (Weiss, 2005). Using a theoretical model grounded in educational research can be helpful in studying the parent involvement process. A comprehensive model such as the revised Hoover-Dempsey and Sandler model provides a map of important constructs to study. Research using the Hoover-Dempsey and Sandler model makes this model appear promising as a way to conceptualize the processes that lead to parent involvement and the factors that contribute to student achievement. There are few studies that have investigated the utility of the recently revised Hoover-Dempsey and Sandler model. It is important to determine the model's utility with a low income, primarily Latino urban population since this has not yet been explored. In addition, the inconsistency among results in terms of the role of status and family background variables and model constructs for different ethnic groups warrants further study. Within the model, it is also important to identify which constructs contribute the most to parents' decisions to become involved.

## *Research Questions and Hypotheses*

### *Question 1*

Do parent perceptions of school, teacher, and child invitations explain total parent involvement behavior?

### *Hypothesis 1*

Parent perceived invitations for involvement (as measured by a composite of child invitations, teacher invitations, and school invitations) will have a significant effect on total parent involvement behavior (as measured by a composite of school-based parent involvement and home-based parent involvement).

### *Rationale 1*

Parent perceptions of schools and teachers have been shown to be a fundamental factor in how much parents are involved in their children's education (Epstein, 1986). This perception can take the form of invitations for involvement. Research has suggested that parent perceptions of invitations for involvement from their child's school can influence their decision to become involved in their children's education (Eccles & Harold, 1993; Epstein, 1986). In Hoover-Dempsey and Sandler's model of the parent involvement process, parent perceived invitations for involvement (level one construct) contribute to parent involvement behavior (level two construct). Research by Reed, Jones, Walker, and Hoover-Dempsey (2000) found support for these two levels of the Hoover-Dempsey and Sandler model with a primarily African American, low-income population. Marinez-Lora and Quintana (2009) also studied these two levels of the

Hoover-Dempsey and Sandler model and found that with a low-income African American and Latino population, teacher invitations predicted parent involvement. Given these findings, parent perceived invitations for involvement are expected to have a significant effect on parent involvement behavior in the current study with this low-income, primarily Latino population.

### *Question 2*

What kind of invitation for involvement has the largest effect on total parent involvement?

### *Hypothesis 2*

Of the three subtypes of parent perceived invitations for involvement (child invitations, school invitations, teacher invitations), teacher invitations will have the largest effect on total parent involvement behavior (home-based involvement and school-based involvement) when controlling for significant moderating variables. It is hypothesized that each type of invitation will be statistically significant at the  $p < .05$  level.

### *Rationale 2*

A recent study by Green, Walker, Hoover-Dempsey, and Sandler (2007) found that level one constructs of the Hoover-Dempsey and Sandler model (parent perceptions of invitations for involvement) predicted level two constructs of home-based and school-based parent involvement while controlling for socioeconomic status. The sample for this study involved a multi-ethnic and socioeconomically diverse elementary school population. Results indicated that home-based parent involvement was predicted by



perceptions of specific child invitations, while school-based involvement was predicted by child invitations and teacher invitations. Anderson and Minke (2007) also studied the first two levels of the Hoover-Dempsey and Sandler model with an African-American and Latino population. Results indicated that teacher invitations had the strongest effect on home-based, school-based, and total parent involvement. For the current study, these prior research findings suggest that teacher invitations may have the most important impact on total parent involvement for this primarily Latino population.

### *Question 3*

What is the role of family background variables in parents' decision to become involved in children's education?

### *Hypothesis 3*

Family background variables (ethnicity, free or reduced lunch, employment status, family structure, home language, and years of education) will moderate the relationship between parent perceived invitations for involvement and total parent involvement behavior.

### *Rationale 3*

Research has suggested that the effect of family background variables on parent involvement and student success may vary for different ethnic groups. These variables have included gender, ethnicity, socioeconomic status, language, and education level (Ho, 1997; Feuerstein, 2000; Epstein, 1986). Barriers to parent involvement have been noted in research across cultures as well. These may include language, economic

constraints, and time constraints (Comer & Haynes, 1991; Bermudez, 1993; Christenson, 2004). Family structure and marital status have also been shown to vary across studies in their relation to parent involvement (Hoover-Dempsey & Sandler, 1997; Fan & Chen, 2001; Ho & Willms, 1996). Although there is variation among research results in terms of these family background and status variables, it is important to identify the role of these variables for the population in the current study. By understanding more about how these variables impact the relationship between invitations for involvement and parent involvement, these variables can then be taken into account when schools consider ways to increase parent involvement.

## **Chapter III: Method**

### **PROJECT APPROVAL**

This study complied with the ethical standards of research as required by the American Psychological Association, the University of Texas at Austin, and the Austin Independent School District. Permission was first obtained from the principal of the school where data were gathered to conduct the study. Research materials were then submitted to and approved by a Review Committee from Austin Independent School District and the Institutional Review Board of the University of Texas at Austin.

### **PARTICIPANT RECRUITMENT AND INFORMED CONSENT**

Participation was solicited in the spring 2009 semester. The sample was recruited from parents of students in kindergarten through fifth grade at a public, urban elementary school in Austin, TX. According to school district records, the population of the school was 88% Hispanic, 6% White, and 5% African American. Economically disadvantaged students comprised 90.9% of the population. In terms of language, 54.6% were limited English proficient, 4.2% were classified as English as a Second Language (ESL), and 49.2% were considered bilingual.

At the time of data collection, enrollment in kindergarten through fifth grade classes was approximately 611 students. The researcher provided all enrolled students a packet of materials to take home to their parents. This packet contained a cover letter describing the study, informed consent form and signature sheet, parent survey,

demographic data sheet, and a stamped, addressed envelope. Parents were invited to participate by means of the cover letter and informed consent sheet. Copies of each can be found in Appendices B and C.

## **MEASURES**

**Demographic data form.** A demographic form developed by the researcher was used to gather information from parents including ethnicity, primary language spoken in the home, parent education level, family structure, employment status, and eligibility for free or reduced lunch. It should be noted that survey item 3 (What is your highest level of education?) was not used in data analyses due to its high correlation with item 4 (What is the highest number of total years of education completed by a parent living in the home?) ( $r=.797$ ,  $p<.01$ ); item 4 was used instead. A copy of this measure can be found in Appendix D.

**Parent Involvement Project Parent Questionnaire.** Data for this study was obtained using a self-report parent involvement questionnaire revised by Walker, Wilkins, Dallaire, Sandler, and Hoover-Dempsey (2005). Based on Hoover-Dempsey and Sandler's original theoretical model of the parent involvement process (Hoover-Dempsey & Sandler, 1995, 1997), Walker et al. revised the model by operationalizing constructs in levels one and two of the model and testing the model's hypotheses. This yielded a revised model of the parent involvement process with sets of questionnaire items for each construct. The questionnaire is available in English and Spanish versions. In the current study, the primary construct of interest is parents' perceptions of invitations of

involvement from others. This construct is comprised of three scales: perceptions of general school invitations, perceptions of specific child invitations, and perceptions of specific teacher invitations. Perceptions of general school invitations are coded on a 6-point scale ranging from “disagree very strongly” to “agree very strongly.” Items in the scales measuring perception of specific child invitations and specific teacher invitations are coded on a 6-point scale ranging from “never” to “daily.” The scales measuring parent involvement behavior at home and parent involvement at school each consist of 5 items. They are also coded on a 6-point scale ranging from “never” to “daily.”

Walker et al. administered all three perceptions of invitations scales to 495 parents of children in grades one through six with the following alpha coefficients: perceptions of general school invitations ( $\alpha=.88$ ; six items); perceptions of specific child invitations ( $\alpha=.70$ ; six items), and perceptions of specific invitations from the teacher ( $\alpha=.81$ ; six items). Scales measuring parent involvement at home and school were administered to 421 parents of children in grades four through six. For home-based parent involvement, the alpha was .85; school-based parent involvement yielded an alpha of .82. Internal reliability for the current study sample of 86 participants was obtained using SPSS statistical software.

Prior to data analysis, the reliability for survey items was examined. As seen in Table 1, Cronbach’s alphas indicate adequate inter-item reliability for each type of invitation and for parent and school involvement for this sample. These values are

comparable to those obtained in previous research for these survey subscales. A copy of the parent involvement questionnaire can be found in Appendix E.

Table 1

*Means, Standard Deviations, and Reliability for Parent Involvement Survey Items*

<u>Item</u>		<u>N</u>	<u>Minimum</u>	<u>Maximum</u>	<u>M</u>	<u>SD</u>	<u>alphas</u> <u>from</u> <u>literature</u>	<u>alphas</u> <u>from</u> <u>sample</u>
School Invitations	Q1	83	4	6	5.49	.57	.88	.86
	Q2	83	2	6	5.40	.72		
	Q3	82	2	6	5.07	.87		
	Q4	81	2	6	5.40	.70		
	Q5	81	1	6	5.27	1.06		
Teacher Invitations	Q6	82	2	6	5.55	.70	.81	.83
	Q1	82	1	6	5.09	1.51		
	Q2	82	1	6	4.22	2.03		
	Q3	77	1	6	2.92	1.66		
	Q4	75	1	6	2.39	1.49		
Child Invitations	Q5	81	1	6	3.95	1.66	.70	.76
	Q1	82	1	6	5.09	1.25		
	Q2	81	1	6	5.17	1.46		
	Q3	80	1	6	3.41	1.69		
	Q4	79	1	6	2.94	1.84		
Parent Involvement-Home	Q5	82	1	6	2.94	1.85	.85	.62
	Q1	82	1	6	5.29	1.28		
	Q2	82	2	6	5.71	.73		
	Q5	74	1	6	4.79	1.64		
	Q8	78	1	6	4.96	1.43		
Parent Involvement-School	Q9	79	2	6	5.56	.87	.82	.75
	Q3	76	1	6	2.59	1.67		
	Q4	76	1	6	2.95	1.44		
	Q6	72	1	6	2.03	1.64		
	Q7	75	1	6	2.23	1.55		
Total Parent Involvement	Q10	70	1	6	2.73	1.81		.77
	Q1-10							
Total Survey Items								.89

*Note:* Range for all items is 1 to 6. For General School Invitation items, 1=Disagree Very Strongly and 6=Agree Very Strongly; for all other items 1=Never and 6=Daily.

## **PROCEDURE**

Permission was obtained from the principal of the school to conduct the study. In coordinating with the school, a change to the original study proposal was made. The survey items regarding parent-teacher relationship (six items) were deleted in order to make the parent survey shorter. This was in response to concerns from school staff about parents' willingness to complete a more lengthy survey.

Due to the high number of Spanish-speaking parents in the school population, all materials given to parents in this study were printed in English on one side and Spanish on the reverse. The cover letter, informed consent form, and demographic data form were first translated from English to Spanish, then back-translated by a different person to ensure reliability. The parent survey items were already available in Spanish; no translation was carried out on those items. Each informed consent form had a unique code that matched the code on the parent survey and demographic forms. No names were written on the parent survey or demographic form to help ensure confidentiality.

Kindergarten through fifth grade teachers were asked to distribute survey packets to all students in their classes. Teachers instructed students to put the packets in a folder they took home on Monday each week ("Monday folder") and asked them to give the packets to their parents. As an incentive, individual classes were offered a pizza party if most of the class (75%) returned their packets. School staff suggested this was an appropriate expectation for a return rate and the school principal agreed.

Parent participation was completely voluntary. Parents could read about the research study in the cover letter and informed consent form. A separate informed consent form allowed parents to indicate their desire to participate in the study or decline participation. If parents chose to participate, they signed the consent form and completed the parent survey and demographic forms. Parents were allowed to skip any items. Parents of fourth and fifth grade students also had the option of giving the researcher permission to access their child's educational record at school to gather information about previous achievement through state standardized tests (scores on third and fourth grade Texas Assessment of Knowledge and Skills). This was done by signing in a separate place on the consent form. Once parents completed their study materials, they placed them in the provided envelope and returned them to the researcher by mail. Upon receipt, the researcher detached each consent form from the parent survey and demographic form and stored the consent forms in a separate locked filing cabinet drawer.

## **PARTICIPANT CHARACTERISTICS**

Of the 611 survey packets distributed, 86 parents (14%) agreed to participate and returned completed survey packets. Approximately equal numbers of packets were completed by parents for male (n=46) and female students (n=40). The response rate ranged from one to six packets per class with an average of three per class; the mode was two. Packets were received from 28 classrooms (5 kindergarten (15 packets), 7 first grade (25 packets), 5 second grade (17 packets), 5 third grade (15 packets), 4 fourth grade (10 packets), 2 fifth grade (4 packets)). As the highest return rate per classroom was 43%, no



pizza parties were provided. Since only five parents gave permission for the researcher to access student records, previous achievement was not included in data analyses. This was a change from the original study proposal. Descriptive statistics can be seen in Table 2. The majority of respondents were Hispanic, which is consistent with the school demographics reported by Austin ISD. Almost all of the surveys were completed by biological mothers. Most of the respondents (70%) completed their surveys using the Spanish side of the forms. Participants' children primarily lived with either their biological mother and father (62.7%), or their biological mother (21%). Although many families' education level was less than high school (43%), a similar number (40%) reported that they continued their education beyond high school. Most mothers and fathers reported being employed full time. Approximately three-fourths of the sample were eligible for free or reduced lunch.

Table 2  
*Demographic Characteristics of Participants (N=86)*

Characteristic	n	%
Person child lives with most of the time		
Biological mother and father	52	62.7
Biological mother	21	25.3
Biological father	1	1.2
Stepfather and biological mother	6	7.2
Stepmother and biological father	2	2.4
Grandparent(s)	3	3.6
Aunt or uncle	1	1.2
Cousins	1	1.2
Other	1	1.2
Relationship of respondent to student		
Biological mother	75	90.4
Biological father	6	7.2
Stepmother	1	1.2
Grandparent	1	1.2
Highest education level completed		
Less than 8th grade	24	28.9
Less than high school graduation	12	14.5
Finished high school/GED	8	9.6
Some college beyond high school	21	25.3
Completed college or beyond	12	14.5
Race/ethnicity		
Mexican	63	75.9
Puerto Rican	1	1.2
Other Hispanic	6	7.2
Black or African American	3	3.6
Biracial Hispanic/White	2	2.4
White	8	9.6
Language spoken most at home		
English	31	37.3
Spanish	49	59
Employment status of parent/caregivers in home		
Mother		
Part time (20 hours per week)	14	16.9
Full time (40 hours per week)	28	33.7
More than full time (more than 40 hours per week)	5	6.0
Unemployed	4	4.8
Father		
Part time (20 hours per week)	6	7.2
Full time (40 hours per week)	36	43.4
More than full time (more than 40 hours per week)	9	10.8
Unemployed	1	1.2
Eligibility for free or reduced lunch at school		
Yes	62	74.7
No	16	19.3

*Note.* Categories with no respondents were deleted: relationship of respondent to student: stepfather, aunt or uncle, other; race/ethnicity: biracial black/Hispanic, biracial black/white, Asian, American Indian or Alaskan native; language spoken most at home: Other.

## **Chapter IV: Results and Analyses**

This study involved three research questions. The first investigated whether parent perceived invitations for involvement had a significant effect on total parent involvement behavior. Next, specific types of invitations for involvement were examined to see which had the greatest effect on parent involvement behavior. Lastly, family background variables were investigated to determine their moderating role in the effect of parent perceived invitations for involvement on parent involvement behavior.

### **PRELIMINARY ANALYSES**

To help clarify terms and coding, Table 3 includes a list of variables and descriptions of their coding. Prior to data analysis, categorical variables were dummy coded. These included ethnicity, family structure, language, and eligibility for free or reduced lunch. Data reduction was carried out for some variables. Employment status originally included data for mother's employment and father's employment. Final coding included only mother's employment, as this was believed to represent more variance than father's employment. Data for family structure were also grouped to include two categories: two parent household and other. This decision was made since the majority of families were two parent families (n=60) and there was a much smaller number of families representing other family structure categories. In addition, demographic categories with no respondents were deleted. Missing data were addressed using the full information maximum likelihood estimation method in AMOS (Graham, 2009). For

analysis of hypothesis three, centered versions were created for the variables child invitations, teacher invitations, parent education level, and employment status (mother), by subtracting the mean of each variable from each subject's survey scores.

Table 3

*Description of Study Variables and Coding for Survey Items*

<u>Variable</u>	<u>Description</u>	<u>Final Coding</u>
Parent Involvement	Total parent involvement (PI)=school-based parent involvement (5 items) + home-based parent involvement (5 items)	MeanPItotal=mean of all ten parent involvement survey items MeanPIschool=mean of school-based parent involvement items MeanPIhome=mean of home-based parent involvement items
Parent Perceived Invitations for Involvement	Specific invitations from children (6 items); general school invitations (school invitations; 6 items); specific invitations from teachers (teacher invitations; 6 items)	MeanCI=mean of child invitation items MeanGI=mean of general school invitation items MeanTI=mean of teacher invitation items
Ethnicity	Non-Hispanic (included Black, White) Hispanic (included biracial Black/Hispanic, biracial Hispanic/White, and Other Hispanic categories)	0 Non-Hispanic 1 Hispanic
Free or reduced lunch	Eligibility for free or reduced lunch	1 Yes 0 No
Employment status	Father's employment Other caregiver's employment Mother's employment	Mother's employment: 0 unemployed 1 part time 2 full time 3 more than full time
Family structure	Two parent household (included biological mother and father, stepfather and biological mother, stepmother and biological father) Other household (included biological mother, biological father, grandparent(s), aunt or uncle, cousins, other)	1 two parent household 0 other household
Home language	Language spoken most at home (English or Spanish)	1 Spanish 0 English
Years of education	Highest number of years of education by a parent living in the home	Years of parent education

*Note.* Survey items for parent involvement and parent perceived invitations for involvement are from the Parent Involvement Project Parent Questionnaire (Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005).

Pearson correlations were calculated to determine the relationship among all independent and dependent variables. Intercorrelations between all variables can be seen in Table 4. Most were small to moderate, which suggests multicollinearity did not impact statistical validity. This was further verified using SPSS. The tolerance values ranged from .372 to .798; larger values are better. The Variance Inflation Factor (VIF) values ranged from 1.253 to 2.687. These values were within the acceptable range of 0 to 7, suggesting the independent factors each contributed uniquely to the model with no significant overlap (Keith, 2006).

Table 4

*Intercorrelations for Parent Involvement and Predictor Variables: Invitations for Involvement and Demographic Characteristics*

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Parent Involvement-Home	--											
2. Parent Involvement-School	.436**	--										
3. Parent Involvement-Total	.789**	.897**	--									
4. School Invitations	.282**	.222*	.290**	--								
5. Teacher Invitations	.443**	.429**	.510**	.494**	--							
6. Child Invitations	.441**	.572**	.607**	.246*	.385**	--						
7. Ethnicity	-.124	.207	.080	.116	.087	.247*	--					
8. Highest Household Education	.071	-.370**	-.218*	-.347**	-.272*	-.467**	-.346**	--				
9. Employment Status (mthr)	.174	-.152	-.018	-.127	.088	.044	-.143	.311**	--			
10. Family Structure	-.200	-.136	-.191	-.136	-.193	-.067	.230*	.106	-.265*	--		
11. Dominant Language at Home	-.123	.214	.088	.204	.129	.500**	.514**	-.660**	-.271*	.107	--	
12. Free or reduced lunch	-.178	.030	-.070	.190	.122	.289*	.174	-.569**	-.312**	-.111	.542**	--

*Note.* \*\*p < .01. \* p < .05.

Ethnicity includes Hispanic or Nonhispanic. Dominant language at home: English or Spanish.

## TESTING OF HYPOTHESES

A single simultaneous multiple regression was conducted to test hypotheses one and two. A regression model was created that included the independent variables teacher invitations, school invitations, and child invitations, while controlling for background variables of ethnicity, free or reduced lunch, employment status, family structure, home language, and years of education.

**Research question 1.** Do parent perceptions of school, teacher, and child invitations explain total parent involvement behavior?

**Hypothesis 1.** Parent perceived invitations for involvement (as measured by child invitations, teacher invitations, and school invitations) will have a significant effect on total parent involvement behavior (as measured by a composite of school-based parent involvement and home-based parent involvement).

The overall multiple regression model with all variables entered together was statistically significant ( $R^2 = .605$ ,  $F[9, 63] = 10.725$ ,  $p < .001$ ) and accounted for 60% of the variance in total parent involvement. Parent perceived invitations (child, teacher, and school) did relate significantly to parent involvement behavior, and hypothesis 1 was supported. Child invitations and teacher invitations both had a statistically significant effect on total parent involvement. The unstandardized regression coefficient (b) for child invitations was .493 ( $t[63] = 7.078$ ,  $p < .001$ ), indicating that as child invitations increased, total parent involvement increased, while controlling for school invitations, teacher invitations, and background variables. The unstandardized regression coefficient (b) for



teacher invitations was .146 ( $t[63] = 2.311$ ,  $p = .024$ ), indicating that as teacher invitations increased, total parent involvement increased, while controlling for school invitations, child invitations, and background variables. See Table 5 for standardized regression coefficients and p-values.

Table 5

*Effects of Child Invitations and Background Variables on Total Parent Involvement*

Variable	$\beta$	$b(SE_b)$	P
School invitations	.000	.000(.119)	.998
Teacher invitations	.229	.146(.063)	.024
Child invitations	.728	.493(.070)	<.001
Education level	.023	.004(.022)	.851
Employment status (mother)	-.296	-.340(.106)	.002
Family structure	-.152	-.255(.149)	.092
Dominant language	-.226	-.351(.202)	.087
Free or reduced lunch	-.316	-.594(.200)	.004
$R^2=.605$			

**Research Question 2.** What kind of invitation for involvement has the largest effect on total parent involvement?

**Hypothesis 2.** Of the three subtypes of parent perceived invitations for involvement (child invitations, school invitations, teacher invitations), teacher invitations will have the largest effect on total parent involvement behavior (home-based involvement and school-based involvement) when controlling for important background variables. It is hypothesized that each type of invitation will be statistically significant at the  $p<.05$  level.

An examination of the regression results obtained for research question one indicated that child invitations and teacher invitations both had a significant effect on

total parent involvement. School invitations did not have a significant effect on total parent involvement. Child invitations had the largest (furthest away from zero) standardized regression coefficient (.728) compared to teacher invitations (.229) and school invitations (.000). Hypothesis two was not supported since invitations from teachers did not have the largest effect on parent involvement. See Table 5 for all standardized regression coefficients and p-values.

**Research Question 3.** What is the role of family background variables in parents' decision to become involved in children's education?

**Hypothesis 3.** Family background variables (ethnicity, free or reduced lunch, employment status, family structure, home language, and years of education) will moderate the effect of parent perceived invitations for involvement on total parent involvement behavior.

Child invitations and teacher invitations both had a significant effect on parent involvement; therefore, these variables were utilized in the interaction analyses. Cross-product variables were created to test whether interaction terms were statistically significant when added to the regression equation. This was done by multiplying child invitations (CI) by each of the family background variables (ethnicity, free or reduced lunch, employment status, home language, years of education, and family structure) and adding each cross-product variable separately to the regression model. These cross-product variables included child invitations X ethnicity, child invitations X free or reduced lunch, child invitations X employment status, child invitations X home language,

child invitations X years of education, and child invitations X family structure. The same procedure was carried out for teacher invitations (TI).

When each child invitation cross-product variable was added to the regression model, ethnicity, free or reduced lunch, and family structure did not create a statistically significant increase in  $R^2$ . However, home language, employment status, and years of education each created a significant increase in  $R^2$ , indicating that they moderated the effect of child invitations for involvement on parent involvement behavior. For home language,  $\Delta R^2 = .034$ ,  $F[1,62] = 5.896$ ,  $p = .018$ ; for employment status,  $\Delta R^2 = .050$ ,  $F[1,62] = 8.892$ ,  $p = .004$ ; for years of education,  $\Delta R^2 = .028$ ,  $F[1,62] = 4.692$ ,  $p = .034$ . Hypothesis three was partially supported. Table 6 provides change in  $R^2$  values as well as p-values for each family background variable.

Table 6  
*Test of the Interaction Between Child Invitations and Family Background Variables in their Effects on Total Parent Involvement*

Variable	$R^2$	$\Delta R^2$	P
Employment status (mother)	.655	.050	.004
Family structure	.607	.001	.633
Ethnicity	.621	.016	.474
Language	.639	.034	.018
Education level	.633	.028	.034
Free or reduced lunch	.623	.018	.093

To understand the nature of each of the three significant child invitation interactions (home language, employment status, years of education), two separate regressions were conducted for each interaction variable. This was done to determine if the effects of child invitations on parent involvement were statistically significant for the two groups making up each variable (home language=Spanish speakers vs. non-Spanish

speakers; employment status (centered)=employed higher than average vs. employed lower than average; years of education (centered)=education higher than average vs. education lower than average). Results indicate that for Spanish speakers, child invitations had a larger effect on parent involvement (standardized regression coefficient = .720,  $p < .001$ ) compared to non-Spanish speakers (standardized regression coefficient = .547,  $p < .001$ ). See Figure 1 for a graph of these results.

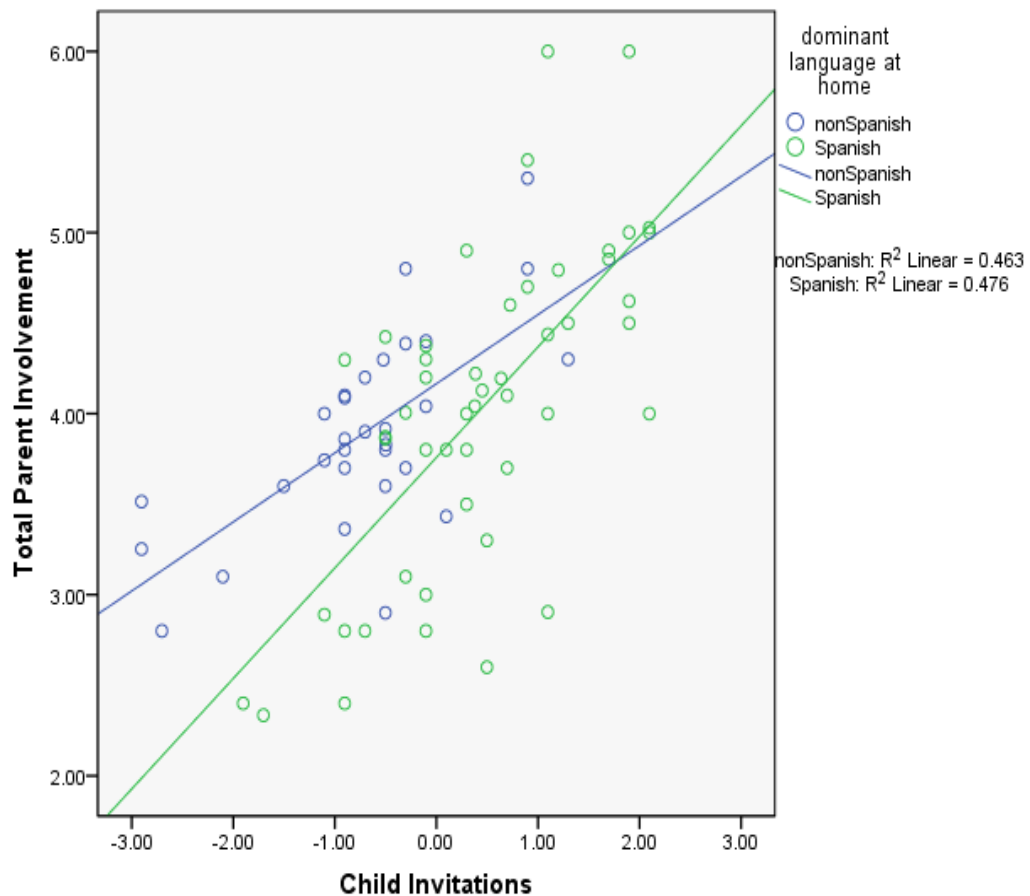


Figure 1  
*Regression Lines Illustrating the Interaction of Home Language and Child Invitations in Their Effects on Total Parent Involvement*

For employment status, child invitations had a greater impact on parent involvement when parents were employed less (standardized regression coefficient = .761,  $p < .001$ ), compared to families where parents were employed more (standardized regression coefficient = .645,  $p < .001$ ). See Figure 2 for a graph of these results.

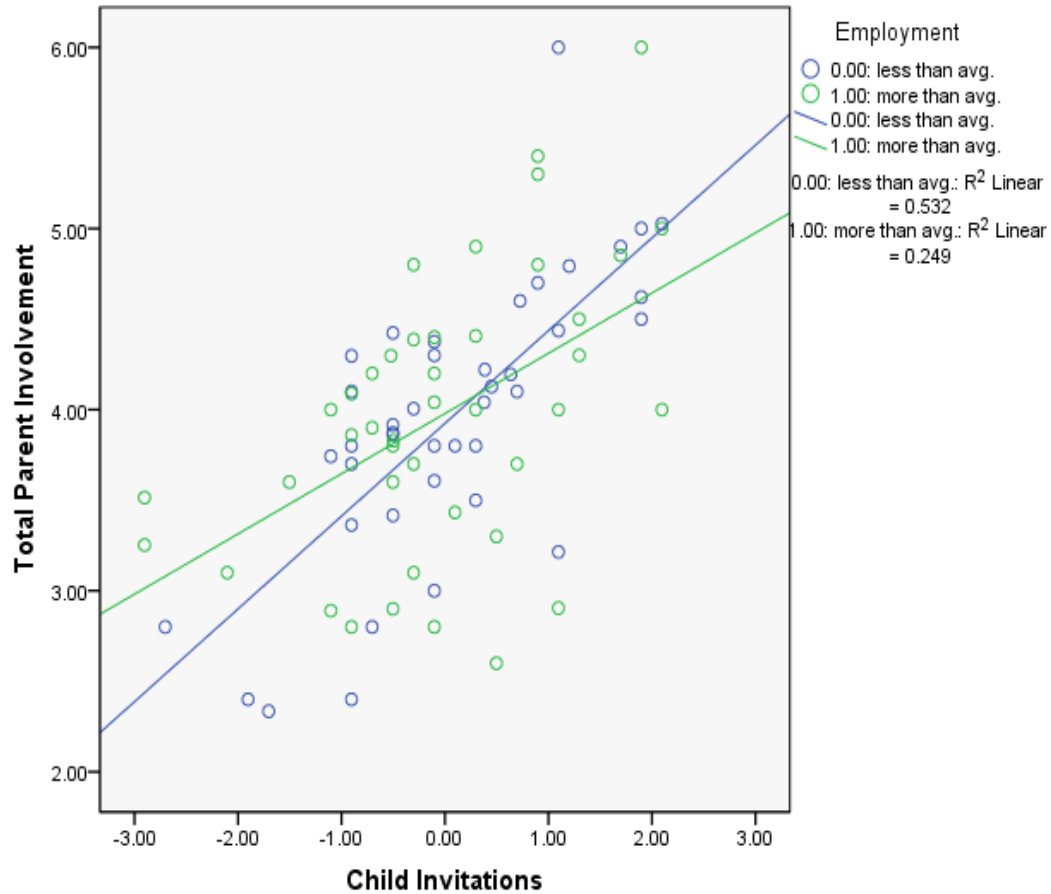


Figure 2  
*Regression Lines Illustrating the Interaction of Employment and Child Invitations in Their Effects on Total Parent Involvement*

In terms of parent education, child invitations were more important for parent involvement for families where parents had less education (standardized regression

coefficient = .713,  $p < .001$ ) compared to families with more education (standardized regression coefficient = .609,  $p < .001$ ). See Figure 3 for a graph of these results.

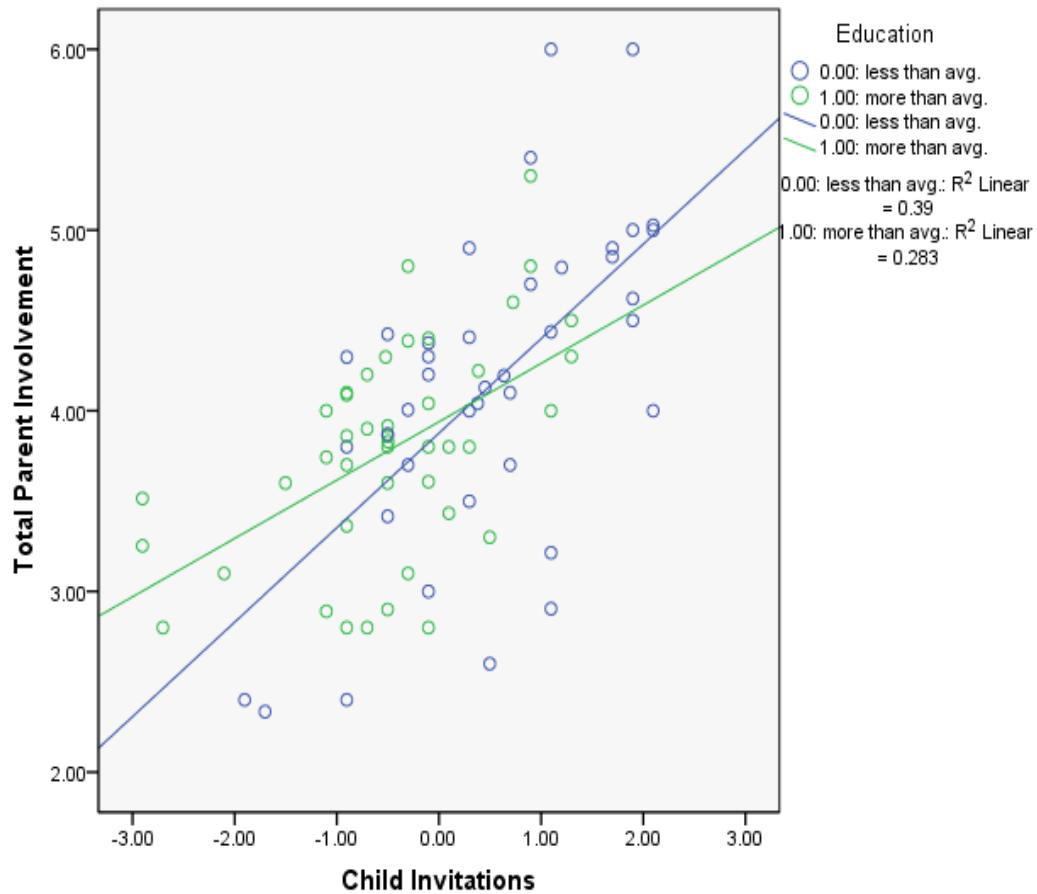


Figure 3  
*Regression Lines Illustrating the Interaction of Education and Child Invitations in Their Effects on Total Parent Involvement*

Cross-product variables for teacher invitations were also created and added separately to the regression model, following the same procedure described above for child invitations. These cross-product variables included teacher invitations X ethnicity, teacher invitations X free or reduced lunch, teacher invitations X employment status,

teacher invitations X home language, teacher invitations X years of education, and teacher invitations X family structure. When each teacher invitation cross-product variable was added to the regression model, none of the family background cross-product variables created a statistically significant increase in  $R^2$ , suggesting that they did not moderate the effect of teacher invitations on parent involvement behavior. See Table 7 for change in  $R^2$  values as well as p-values for each family background variable.

In summary, home language, parent education, and employment status moderated the effect of child invitations on total parent involvement. Child invitations had a greater effect on parent involvement for parents who spoke Spanish, parents who were employed less than average, and parents with less than average education. Family background variables did not play a moderating role in how teacher invitations affected parent involvement.

Table 7  
*Test of the Interaction Between Teacher Invitations and Family Background Variables in their Effects on Total Parent Involvement*

Variable	$R^2$	$\Delta R^2$	P
Employment status (mother)	.618	.013	.150
Family structure	.624	.019	.083
Ethnicity	.607	.002	.604
Language	.610	.005	.388
Education level	.611	.006	.341
Free or reduced lunch	.610	.005	.363

## FOLLOW-UP ANALYSES

The study hypotheses and results were based on a measure of total parent involvement. A limitation of this approach is that it blurs possible distinction between parent's home involvement and school involvement. Research has suggested that parents

can demonstrate differing amounts of involvement depending on whether the involvement is in the home or school setting (Wong & Hughes, 2006). In addition, ethnic minority parents have been shown to participate less in school-based parent involvement activities than nonminority parents (Chavkin & Williams, 1993). Hispanic parents often report the least involvement in school compared to White and Black parents (Steinberg, Lamborn, Dornbusch, & Darling, 1992).

Considering the findings of previous research, follow up analyses were conducted that differentiated home and school parent involvement. The single regression used in research questions one and two was replaced with two multiple regression analyses, with home-based parent involvement and school-based parent involvement as dependent variables, respectively. As in the initial testing of hypotheses one and two, the regression models included the independent variables teacher invitations, school invitations, and child invitations, as well as background variables of ethnicity, free or reduced lunch, employment status, family structure, home language, and years of education. The model with home-based parent involvement as the dependent variable was statistically significant ( $R^2 = .511$ ,  $F[9, 63] = 7.314$ ,  $p < .001$ ), as was that for school-based parent involvement as the dependent variable ( $R^2 = .532$ ,  $F[9, 63] = 7.967$ ,  $p < .001$ ). See Tables 8 and 9 for standardized regression coefficients and p-values.



Table 8

*Effects of Invitations for Involvement and Background Variables on Home-Based Parent Involvement*

Variable	$\beta$	$b(SE_b)$	p
School invitations	.133	.167(.132)	.210
Teacher invitations	.197	.125(.070)	.079
Child invitations	.653	.439(.077)	.<.001
Ethnicity	-.069	-.145(.227)	.526
Education level	.280	.052(.025)	.040
Employment status	-.083	-.095 (.117)	.420
Family structure	-.114	-.190(.164)	.251
Dominant language	-.225	-.347(.222)	.124
Free or reduced lunch	-.168	-.313(.220)	.160
$R^2=.511$			

Table 9

*Effects of Invitations for Involvement and Background Variables on School-Based Parent Involvement*

Variable	$\beta$	$b(SE_b)$	p
School invitations	-.096	-.166(.178)	.353
Teacher invitations	.192	.168 (.094)	.080
Child invitations	.590	.547(.104)	<.001
Ethnicity	.125	.363(.306)	.241
Education level	-.170	-.043(.033)	.198
Employment status (mother)	-.372	-.586(.158)	<.001
Family structure	-.139	-.320 (.222)	.154
Dominant language	-.167	-.354 (.300)	.242
Free or reduced lunch	-.340	-.875(.297)	.004
$R^2=.532$			

Given that research question three was also based on total parent involvement, two follow up analyses were conducted where total parent involvement was replaced with home-based parent involvement and school-based parent involvement as dependent variables. To examine whether family background variables (ethnicity, free or reduced lunch, employment status, family structure, home language, years of education) moderate the effect of child invitations for involvement on home-based involvement, the same

cross-product variables used in research question three were each added to the regression model separately. These included child invitations X ethnicity, child invitations X free or reduced lunch, child invitations X employment status, child invitations X family structure, child invitations X home language, and child invitations X years of education.

When each child invitation cross-product variable was added to the regression model, only employment status created a significant increase in  $R^2$ , indicating that this moderated the effect of child invitations for involvement on home-based parent involvement behavior ( $\Delta R^2 = .031$ ,  $F[1,62] = 4.234$ ,  $p = .044$ ). Table 10 provides change in  $R^2$  values as well as p-values for each family background variable.

Table 10

*Test of the Interaction Between Child Invitations and Family Background Variables in their Effects on Home-Based Parent Involvement*

Variable	$R^2$	$\Delta R^2$	P
Employment status	.542	.031	.044
Family structure	.526	.015	.170
Ethnicity	.513	.002	.659
Language	.522	.011	.228
Education level	.511	.000	.875
Free or reduced lunch	.516	.005	.406

To understand the nature of each of the significant interaction for home-based parent involvement, two separate regressions were conducted to determine if the effects of child invitations on parent involvement were statistically significant for the two groups making up the employment variable: employment status (centered)=employed higher than average vs. employed lower than average. Results indicate that for families who are employed more, child invitations have a larger effect on home-based parent involvement

(standardized regression coefficient = .618,  $p = .004$ ) than for families who are employed less (standardized regression coefficient = .573,  $p = .002$ ). See Figure 4 for a graph of these results.

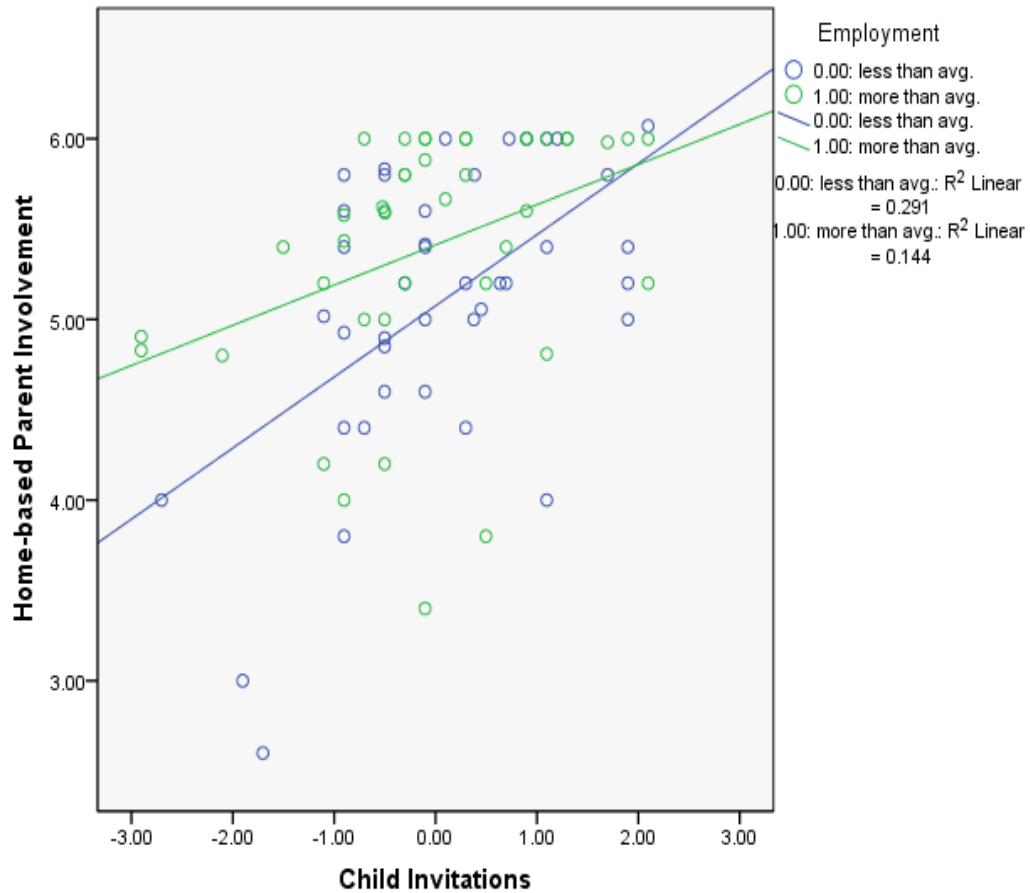


Figure 4  
*Regression Lines Illustrating the Interaction of Employment and Child Invitations in Their Effects on Home-Based Parent Involvement*

Cross-product variables for teacher invitations were also created and added separately to the regression model, following the same procedure described above for child invitations. These included teacher invitations X ethnicity, teacher invitations X free or reduced lunch, teacher invitations X employment status, teacher invitations X

family structure, teacher invitations X home language, and teacher invitations X years of education. When each teacher invitation cross-product variable was added to the regression model, none of the family background variables created a statistically significant increase in  $R^2$ , suggesting that they did not moderate the effect of teacher invitations on home-based parent involvement behavior. See Table 11 for change in  $R^2$  values as well as p-values for each family background variable.

Table 11

*Test of the Interaction Between Teacher Invitations and Family Background Variables in their Effects on Total Parent Involvement*

Variable	$R^2$	$\Delta R^2$	P
Employment status (mother)	.528	.017	.140
Family structure	.517	.006	.400
Ethnicity	.513	.002	.595
Language	.514	.003	.539
Education level	.524	.013	.192
Free or reduced lunch	.527	.016	.148

To examine whether family background variables (ethnicity, free or reduced lunch, employment status, family structure, home language, years of education) moderate the effect of child invitations for involvement on school-based parent involvement, the same cross-product variables used in research question three were each added to the regression model separately. These included child invitations X ethnicity, child invitations X free or reduced lunch, child invitations X home language, child invitations X years of education, and child invitations X family structure.

As in the original analysis of question three, results indicated statistically significant increases in  $R^2$  with the addition of the child invitation cross-product variables for home language, employment status and parent education. Ethnicity, free or reduced

lunch, and family structure did not moderate the effect of child invitations on school-based parent involvement.

Teacher invitation cross-product variables resulted in no significant change in  $R^2$  values as each was added to the regression model. This suggests that family background variables did not moderate the effect of teacher invitations on school-based parent involvement. Tables 12 and 13 provide change in  $R^2$  values as well as p-values for each family background variable.

Table 12

*Test of the Interaction Between Child Invitations and Background Variables in their Effects on School-Based Parent Involvement*

Variable	$R^2$	$\Delta R^2$	P
Employment status (mother)	.571	.039	.021
Family structure	.533	.001	.713
Ethnicity	.557	.025	.069
Language	.570	.037	.024
Education level	.587	.055	.006
Free or reduced lunch	.552	.020	.103

Table 13

*Test of the Interaction Between Teacher Invitations and Background Variables in their Effects on School-Based Parent Involvement*

Variable	$R^2$	$\Delta R^2$	P
Employment status (mother)	.528	.017	.140
Family structure	.517	.006	.400
Ethnicity	.513	.002	.595
Language	.514	.003	.539
Education level	.524	.013	.192
Free or reduced lunch	.527	.016	.148

To understand the nature of the three significant interactions between child invitations and family background variables of home language, employment status, and years of education, two separate regressions were conducted for each interaction variable.

This was done to determine if the effects of child invitations on school-based parent involvement were statistically significant for the two groups making up each variable (home language=Spanish speakers vs. non-Spanish speakers; employment status (centered)=employed higher than average vs. employed lower than average; years of education (centered)=education higher than average vs. education lower than average). Results indicate that for Spanish speakers, child invitations have a larger effect on school-based parent involvement (standardized regression coefficient = .657,  $p < .001$ ) compared to non-Spanish speakers (standardized regression coefficient = .380,  $p = .048$ ). See Figure 5 for a graph of these results.

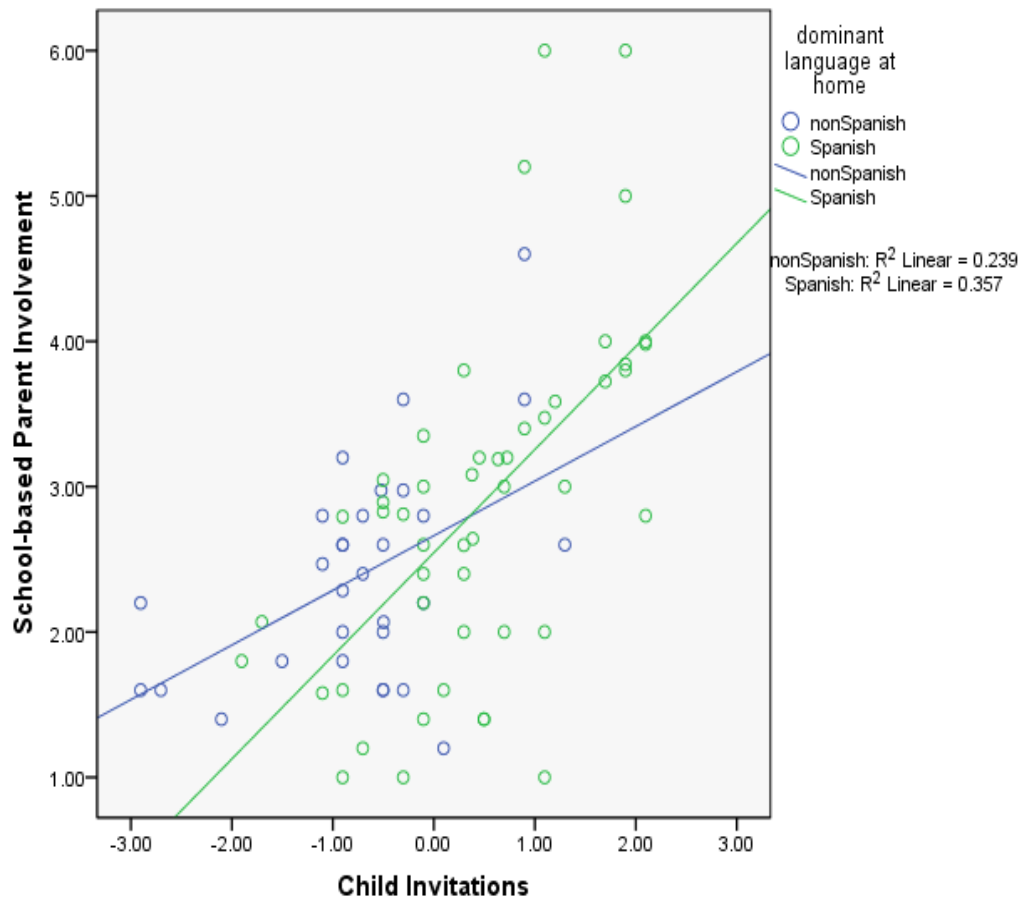


Figure 5  
*Regression Lines Illustrating the Interaction of Home Language and Child Invitations in Their Effects on School-Based Parent Involvement*

For employment status, child invitations had a greater impact on school-based parent involvement when parents were employed less (standardized regression coefficient = .710,  $p < .001$ ), compared to families where parents were employed more (standardized regression coefficient = .527,  $p = .012$ ). See Figure 6 for a graph of these results.

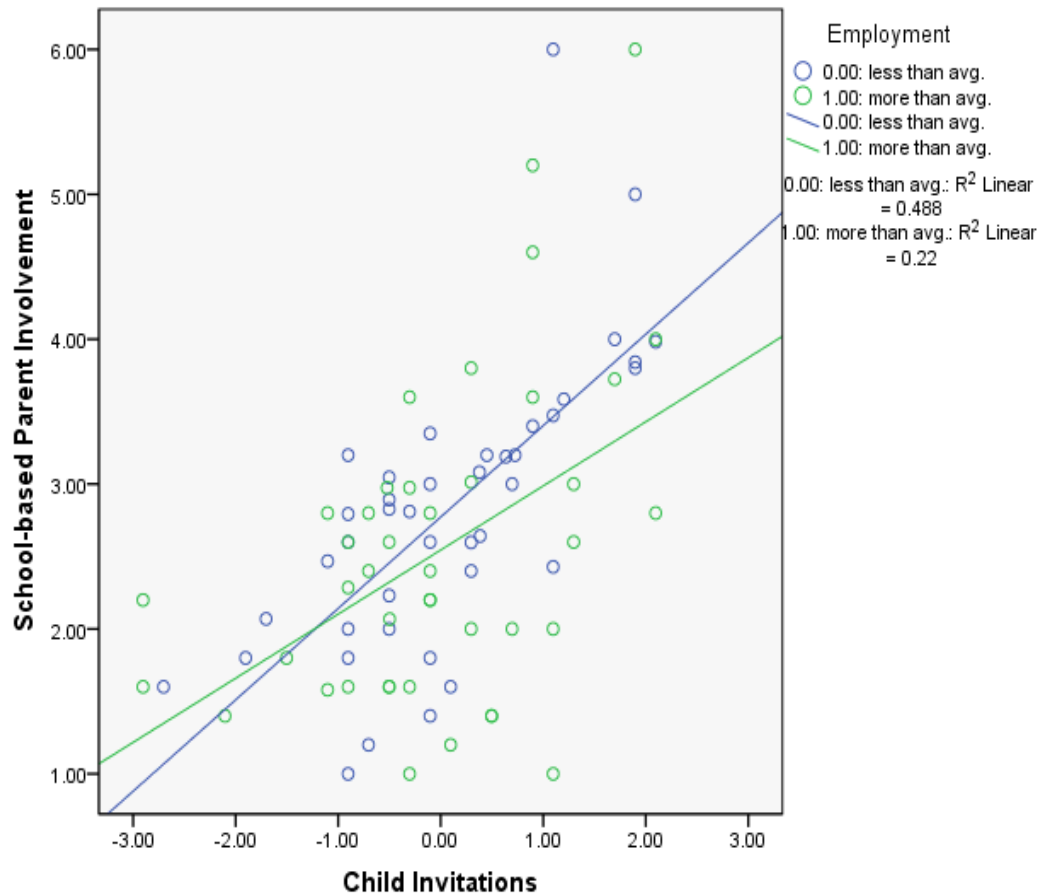


Figure 6  
*Regression Lines Illustrating the Interaction of Employment and Child Invitations in Their Effects on School-Based Parent Involvement*

In terms of parent education, child invitations were more important for school-based parent involvement for families where parents had less education (standardized regression coefficient = .738,  $p < .001$ ) compared to families with more education (standardized regression coefficient = .423,  $p = .005$ ). See Figure 7 for a graph of these results.



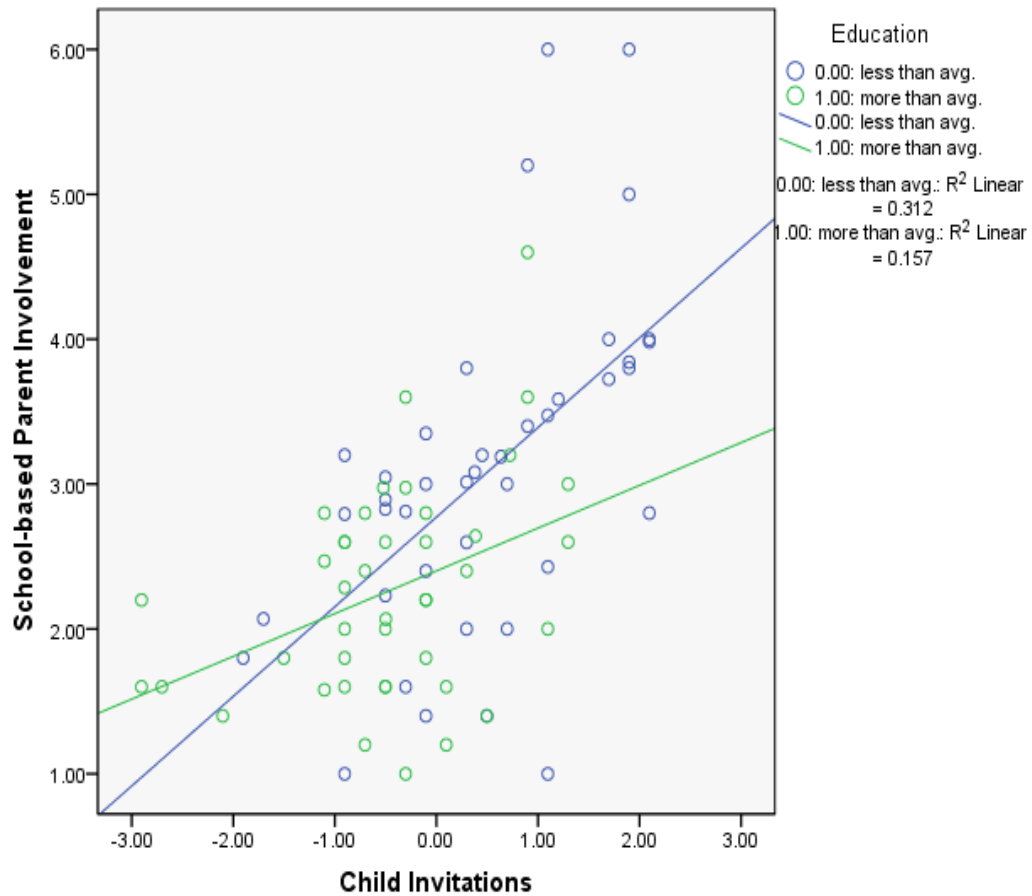


Figure 7  
*Regression Lines Illustrating the Interaction of Education and Child Invitations in Their Effects on School-Based Parent Involvement*

Several analyses were conducted to examine the relations among the moderating variables. First, chi-square ( $X^2$ ) analyses were conducted to examine differences between groups for home language, parent education, and employment status. Parent education and employment status were transformed into dichotomous variables for the analysis (more than average education/less than average education, more than average employment/less than average employment). Results revealed significant associations between home language and employment [ $X^2$  (1, 83)=11.87,  $p<.001$ ], home language and

parent education [ $X^2$  (1, 83)=33.26,  $p<.000$ ], and employment and education [ $X^2$  (1, 83)=11.57,  $p<.001$ ]. Results indicated that 82 percent of Spanish speakers were employed less than average, compared to 18 percent of nonSpanish speakers. 95 percent of Spanish speakers were employed less than average, compared to 5 percent of nonSpanish speakers. In terms of parent education, 68 percent of parents with more than average employment levels had a higher than average education level. Regarding employment and education, parents employed more than average had more education than parents employed less than average.

Second, correlational analyses were then conducted to investigate the relationship between home language and employment status, home language and parent education, and employment status and parent education. A moderate negative correlation was found between home language and employment [ $r(77)=-.271$ ,  $p<.05$ ]. A moderate positive correlation was found between parent education and employment status [ $r(80)=.311$ ,  $p<.01$ ]. A strong negative correlation was found between home language and parent education [ $r(77)=-.660$ ,  $p<.01$ ]. These results suggest that the more education parents have, the more hours they are employed. Compared to non-Spanish speaking parents, Spanish speaking parents are more likely to be employed less and have less education.

Third, two independent samples t-tests were then conducted to compare employment status in Spanish speakers and nonSpanish speakers, and education level in Spanish speakers and nonSpanish speakers. There was a significant difference in employment status for Spanish speakers ( $M=-.126$ ;  $SD=.67$ ) and nonSpanish speakers

( $M=.2391$ ;  $SD=.59$ );  $t(77)=-2.47$ ,  $p<.016$ . There was also a significant difference in education level for Spanish speakers ( $M=-2.11$ ;  $SD=3.10$ ) and nonSpanish speakers ( $M=3.48$ ;  $SD=3.17$ );  $t(76)=-7.668$ ,  $p<.000$ . These results suggest that home language is related to employment and education level. Specifically, when parents are Spanish speakers, they reported being employed less and having less education than nonSpanish speakers.

Taken together, these results indicate that home language, education level, and employment status were important variables for the parents in this study. These variables moderated the effect of child invitations on parent involvement at school. Results further suggest that there is a relationship between home language, education level, and employment status. Specifically, Spanish-speaking parents reported lower levels of education and fewer employment hours than English-speaking parents. The more educated parents were, the more likely they were to be employed more hours. Please see Table 14 for a summary of study results.

Table 14  
*Summary of Results*

Hypotheses	Results: Total Parent Involvement as Dependent Variable	Follow-Up Results: Home-based and School-Based Parent Involvement as Dependent Variable
1. Parent perceived invitations for involvement (as measured by child invitations, teacher invitations, and school invitations) will have a significant effect on total parent involvement behavior (as measured by a composite of school-based and home-based parent involvement).	Invitations for involvement had a significant on total parent involvement.	Invitations for involvement had a significant effect on home-based and school-based involvement.
2. Of the three subtypes of parent perceived invitations for involvement (child invitations, school invitations, teacher invitations), teacher invitations will have the largest effect on total parent involvement behavior when controlling for significant moderating variables.	Child and teacher invitations both had a significant effect on total parent involvement.	Child invitations had a significant effect on home-based and school-based parent involvement.
3. Family background variables (ethnicity, free or reduced lunch, employment status, family structure, home language, and years of education) will moderate the effect of parent perceived invitations for involvement on total parent involvement behavior.	Home language, employment status, and parent education moderated the effect of child invitations on total parent involvement. These had a greater impact on parent involvement for Spanish speakers, those with less education, and those employed less.	Only employment status moderated the effect of child invitations on home-based parent involvement. This had a greater impact on parent involvement at home for families employed more. For school-based parent involvement, home language, employment status, and parent education were moderators. As in the original analysis, these variables had a greater impact on parent involvement for Spanish speakers, those with less education, and those employed less.

## **Chapter V: Discussion**

The purpose of this study was to investigate the effect of parent perceived invitations for involvement on parent involvement behavior. The Hoover-Dempsey and Sandler theoretical model of parent involvement framed this research (see Appendix A). This five level model seeks to explain the parent involvement process by considering why parents get involved in their children's education, what this involvement looks like at home and school, and how their involvement ultimately affects student outcomes. Portions of levels one and two of this model were tested in this study: parent perceptions of invitations for involvement (school invitations, teacher invitations, child invitations) and parent involvement behavior (home-based and school-based parent involvement).

For this study, it was hypothesized that parent perceived invitations for involvement (school invitations, child invitations, teacher invitations) would relate significantly to total parent involvement behavior. As predicted, results showed that parent perceived invitations for involvement had a significant effect on total parent involvement behavior (home-based and school-based combined). Given the findings of previous research (e.g., Anderson & Minke, 2007), the second study hypothesis predicted that teacher invitations would have the largest effect on total parent involvement behavior when controlling for significant moderating variables. Hypothesis two was partially supported because results indicated that both child and teacher invitations contributed to parent involvement. Hypothesis three predicted that family background variables would moderate the effect of parent perceived invitations for involvement on parent

involvement behavior. Analyses included ethnicity, eligibility for free or reduced lunch, employment status, family structure, home language, and years of education as family background variables. Hypothesis three was partially supported in that some family background variables (home language, employment status, and parent education) moderated the effect of child invitations on parent involvement. Post-hoc analyses were conducted to determine for whom the moderating variables were most important. Results indicated that the effect of child invitations on parent involvement was more important for parents who were Spanish-speaking, employed less, and with less education, compared to parents who were non-Spanish speakers, had higher employment levels, and more education. None of the family background variables moderated the effect of teacher invitations on total parent involvement.

As previous research suggests that different ethnic groups demonstrate different levels of involvement at home and school (e.g., Green, Walker, Hoover-Dempsey, & Sandler, 2007), follow-up analyses were carried out to determine if results would vary when parent involvement was differentiated into home-based and school-based involvement. Results indicated that child and teacher invitations continued to be significantly related to parent involvement for home-based parent involvement; only child invitations were significantly related to school-based parent involvement. In the effect of child invitations on home-based parent involvement, the only moderating variable was employment. For parents employed more hours, the effect of child invitations on home-based parent involvement was slightly more important than for parents who were employed fewer hours. The effect of child invitations on school-based

parent involvement was moderated by home language, employment status, and parent education. As in the results for total parent involvement, the effect of child invitations on school-based parent involvement was more important for parents who were Spanish speakers, employed less, and with less education. None of the family background variables moderated the effect of teacher invitations on parent involvement at home or school. Since home language, employment status, and parent education appeared as moderators in the original and follow-up analyses, additional analyses were conducted to gain further information about the relationship among these three variables. Results indicated significant correlations between all three variables, although the relationship between home language and parent education was the strongest among the three. Significant differences were also found between Spanish-speaking parents and non-Spanish-speaking parents in that Spanish-speaking parents reported lower levels of employment and fewer years of education.

Results from this study confirmed previous findings that invitations for involvement contribute to parent involvement behavior (Green et al., 2007; Anderson & Minke, 2007; Martinez-Lora & Quintana, 2009). Study results align with portions of levels one and two of the Hoover-Dempsey and Sandler model, which propose that parent perceived invitations for involvement contribute to parent involvement behavior. However, level one of the Hoover-Dempsey and Sandler model indicates that child invitations, teacher invitations, and school invitations all contribute to parent involvement at level two. This suggests that when the Hoover-Dempsey and Sandler model is applied to the current study's low income, primarily Latino, urban population, results are both in

alignment and in contrast with previous research. Just as in the current study, Green et al. (2007) found that child invitations predicted home-based involvement. However, Green et al. also found that both teacher and child invitations predicted school-based involvement (2007). This contrasts with the current study's finding that only child invitations were related to school-based parent involvement. The sample used in the current study also differs from that used by Green et al.

The difference in findings from the current study and previous research may be explained in part by the moderating family background variables of home language, employment status, and parent education. In this study, almost sixty percent of parents reported speaking Spanish as their dominant home language. English language proficiency has been noted as a major barrier to parents getting involved in their children's education (Tinkler, 2002). Due to this barrier, Spanish speaking parents may respond more favorably to invitations for school involvement from their children than from teachers or the school. Many teachers are not bilingual and are likely to be of European American ancestry (Gay, 2000), which may cause some parents to be reticent to get involved.

Latino families with less education and lower levels of employment may experience other barriers that make teacher and school invitations less effective than child invitations (Liontos, 1992). For example, parents may have negative beliefs about their ability to be involved at school if their own education level is low. Parents with lower education levels have been shown to be less involved than those with more education (Stevenson & Baker, 1987; Keith et al., 1998; Englund, Luckner, Whaley, & Egeland,



2004). Parents may also feel intimidated by information they receive from the school or teacher about involvement (Hyslop, 2000; Trumbull, Rothstein-Fisch, Greenfield, & Quiroz, 2001). Parents with lower levels of employment may have specific reasons they are not able to be involved at school, such as having to care for a family member at home on a regular basis or being unable to work. These concerns may make it difficult for them to participate in their child's education at school. Financial concerns, imagined or real, may also prevent parents with low education and low employment from being involved at school. For example, they may not have transportation to the school or may fear that school involvement will require them to spend money for materials.

In Anderson and Minke's study (2007), teacher invitations had the strongest effect on parent involvement at home and at school. Compared to the current study, this difference in results may be due in part to the population of their study. Data were gathered from a multi-ethnic population that was two-thirds African American and participants lived in a southwestern state. African American parents typically do not encounter the language barrier experienced by parents whose dominant language is Spanish. In addition, significant differences in culture, beliefs, and aspirations for education may be present between Anderson and Minke's population and the current study's Latino population, which may have contributed to this strong effect for teacher invitations (Espinosa, 1995).

Results of the study by Martinez-Lora and Quintana (2009) contrasted with those of the current study as well. Martinez-Lora and Quintana found that teacher invitations were the only consistent predictors of home-based and school-based parent involvement

for the African American and Latino groups in their sample, whereas the current study found that only child invitations affected home-based and school-based parent involvement. This finding aligns with Anderson and Minke's finding that teacher invitations had the strongest effect on parent involvement at home and school (2007). Marinez-Lora and Quintana also found that compared to African Americans, Latino parents had significantly lower school-based, home-based, and total parent involvement scores. Latinos also scored significantly lower in their perceptions of teacher invitations. Although constructs from the Hoover-Dempsey and Sandler model predicted parent involvement for both Latinos and African Americans, they were in different combinations for each of the ethnic groups. Similar to Anderson and Minke's study (2007), constructs included parental role construction, sense of efficacy, and perception of being welcome or invited to participate by teachers. Study authors suggested that factors influencing parent involvement may be different for different ethnic groups (Marinez-Lora & Quintana, 2009). In contrast to Marinez-Lora and Quintana, constructs for the current study included perceived invitations from the school, from children, and from teachers.

Parents in the current study may have felt that school invitations were not as meaningful as those from their children and teachers. Given that some research has indicated higher educational expectations among Latino parents compared to African American and European American parents (Suizzo & Stapleton, 2007), the parents in the current study may be more likely to act on invitations for involvement when it comes directly from a person they know such as their child or their child's teacher. In addition,

different levels of acculturation among Latino families in this study and previous studies may cause parents to feel varying levels of comfort with the school, and this may have an effect on how receptive parents are to school invitations.

Differences in participants' ethnic and socioeconomic backgrounds may also contribute to inconsistency among findings. Although participants in Anderson and Minke's (2009) study were from a low socioeconomic background, only about 30% were Latino. Participants in Green et al.'s study (2007) represented diverse ethnic and socioeconomic backgrounds. The fact that the school population in the current study was a more homogeneous group in terms of low SES and Latino ethnicity may have contributed to differing results as well, in that as a community, these parents may have common beliefs and life circumstances that parents in a more homogeneous community do not have.

The current study provides important information for the research base in parent involvement and educational outcomes for minority students. Although the Latino population has been addressed in some research on parent involvement, the number of studies is limited. Previous research is even more limited with a low-income, urban Latino population in Texas, one of few states with a large, fast-growing Latino population. Given that low-income, Latino students are at greater risk for academic failure compared to White students and parent involvement is a recognized means for improving academic outcomes, it was important to study parent involvement for this population. The Hoover-Dempsey and Sandler model conceptualizes the parent involvement process in a comprehensive way that lends itself to testing with different

populations. This study builds upon previous parent involvement research by testing portions of this model with a primarily low-income Latino population. Although this model has been utilized in very few studies, it allows for consideration of unique cultural characteristics. Current study results do lend additional support for the model in terms of how invitations for involvement influence parent involvement. These results may help inform efforts to increase parent involvement among Latino populations, which may in turn improve educational outcomes for Latino students.

#### **LIMITATIONS AND FUTURE RESEARCH**

The results of this study must be considered in light of its limitations, many of which are associated with the methodology, measures used, and the sample obtained. Although the measure used in this study is reported to have adequate reliability and has been used in prior research, self-report measures have limitations. Response bias may have caused respondents to choose answers that made them appear more involved than they are in reality. This could have resulted in a stronger correlation between invitations for involvement and actual parent involvement behavior. By relying only on self-report ratings, there is no way to consider objective reports of the level and manner parents are involved. More information about the processes associated with parent involvement may be gained through observational techniques as well as through other sources such as teachers, children, or daily logs of involvement behavior. In addition, the survey items used in this measure address only a limited number of ways that parents perceive invitations and are involved in their children's education. If the measure included open-

ended questions in each section, there would undoubtedly be rich information shared by parents that is not captured by this small number of items. Measures used in future research could include a broader range of parent involvement behavior. This may include parent involvement that occurs outside of the home and school settings, such as in the community. Demographic data could also be expanded in future studies to allow for more detailed information about children's households. For example, by only allowing respondents for the current study to indicate with whom the child primarily resides and their relationship to the child, it is not possible to gain information about other household members who may also care for the child and engage in significant involvement activities.

The low survey response rate is another area of limitation for this study. Given that so few parents participated, this suggests that there were likely participant factors involved. Parents who chose to complete surveys likely differed in significant ways from those parents who did not participate. Participants may have believed it was important to complete paperwork from their child's school or a university, whereas other parents may have felt uncomfortable sharing personal information, perhaps due to their perception of the school, or their immigration status. Although survey responses were kept anonymous, parents were required to sign their name on a separate consent form and this may have discouraged participation. In addition, parents who did not participate may demonstrate just as much involvement as parents who did participate, but their involvement is not captured by this study. Future research could include follow-up procedures to attempt to contact parents who did not respond to the initial survey distribution.

Many of the families who completed surveys spoke Spanish as their primary language and had less than a high school education. Although all materials were translated into Spanish, it may have been difficult for some parents to fully understand what items were asking due to differences in dialect or reading comprehension skills. A small number of packets were returned without a signed consent form or with a blank survey, suggesting that parents perhaps did not understand the instructions. In addition, the practical aspects of completing and returning the survey may have caused some parents to not participate. Parents were required to read a cover letter and informed consent information before completing the demographic information and parent survey. They may have perceived this time requirement as too lengthy. Parents were asked to return the survey packet by mail due to university requirements. Although each packet had a self-addressed, stamped envelope, finding a mailbox is an additional step that may have been difficult for some parents.

Another area of limitation of this study is that school characteristics were not considered by measures in this study. Qualitative and quantitative data about specific school district initiatives to increase parent involvement, such as that utilized by the school district in this study, would be helpful for future research. It would also be interesting to learn specifically how children are inviting parents to get involved and the kinds of activities in which they are asking them to participate.

## **IMPLICATIONS FOR RESEARCH AND PRACTICE**

Results from this study suggest that portions of the model proposed by Hoover-Dempsey and Sandler may be useful in studying parent involvement within a low income, primarily Latino, urban population. For this population, child invitations for involvement appear to be the most important means to invite parent participation. When studying child invitations, it will be important to consider family background variables due to their potentially moderating role. Results from this study suggest that these background variables may have differing effects depending on whether the parent involvement is occurring in the home or school setting.

When these findings are considered with previous research, it is clear that the constructs within the Hoover-Dempsey and Sandler model are important in understanding factors that affect parents' decisions to become involved. Continued research is needed to understand how these constructs interact for other populations, including those from diverse ethnic, socioeconomic, cultural, and geographic backgrounds. For example, studies by Anderson and Minke (2007) and Martinez-Lora and Quintana (2009) both investigated the role of teacher invitations, parental role construction, and parental sense of efficacy in parent involvement. As research findings begin to demonstrate patterns among groups of constructs from the Hoover-Dempsey and Sandler model, this will help inform the research base in parent involvement regarding which constructs are the most important for specific populations. Research should continue to study those populations who are the most at-risk for negative educational outcomes and who have the most to gain from parent involvement. As the demographics of the United States continue to

change and gains are made among historically at-risk groups, research will need to shift as well.

The results of this study have implications for the practice of school psychology as well. In many school districts, school psychologists are in a position to work directly with parents to become more involved. They can act as a liaison between families and schools to foster relationships between parents, teachers, and administrators, which may encourage parents to become more involved at school. School psychologists can take current research and use it to inform and train teachers in best practices for increasing parent involvement. Since schools are now required to formulate and implement parent involvement initiatives, school psychologists can assist with the design of such plans. As knowledge is gained about specific ethnic groups and socioeconomic levels, parent involvement strategies can be tailored for those groups to meet their unique needs. School psychologists can also use this knowledge to help guide Response to Intervention committees. Since academic intervention strategies often need to be implemented at home as well as school, school psychologists can play a key role in helping parents implement and reinforce these strategies at home. Similarly, school psychologists can enlist the help of parents to address student difficulties at school, which may cause parents to become more involved in both the home and school settings.

## **CONCLUSIONS**

In summary, results from this study found that parent perceived invitations for involvement were related to parent involvement, most notably, invitations from children

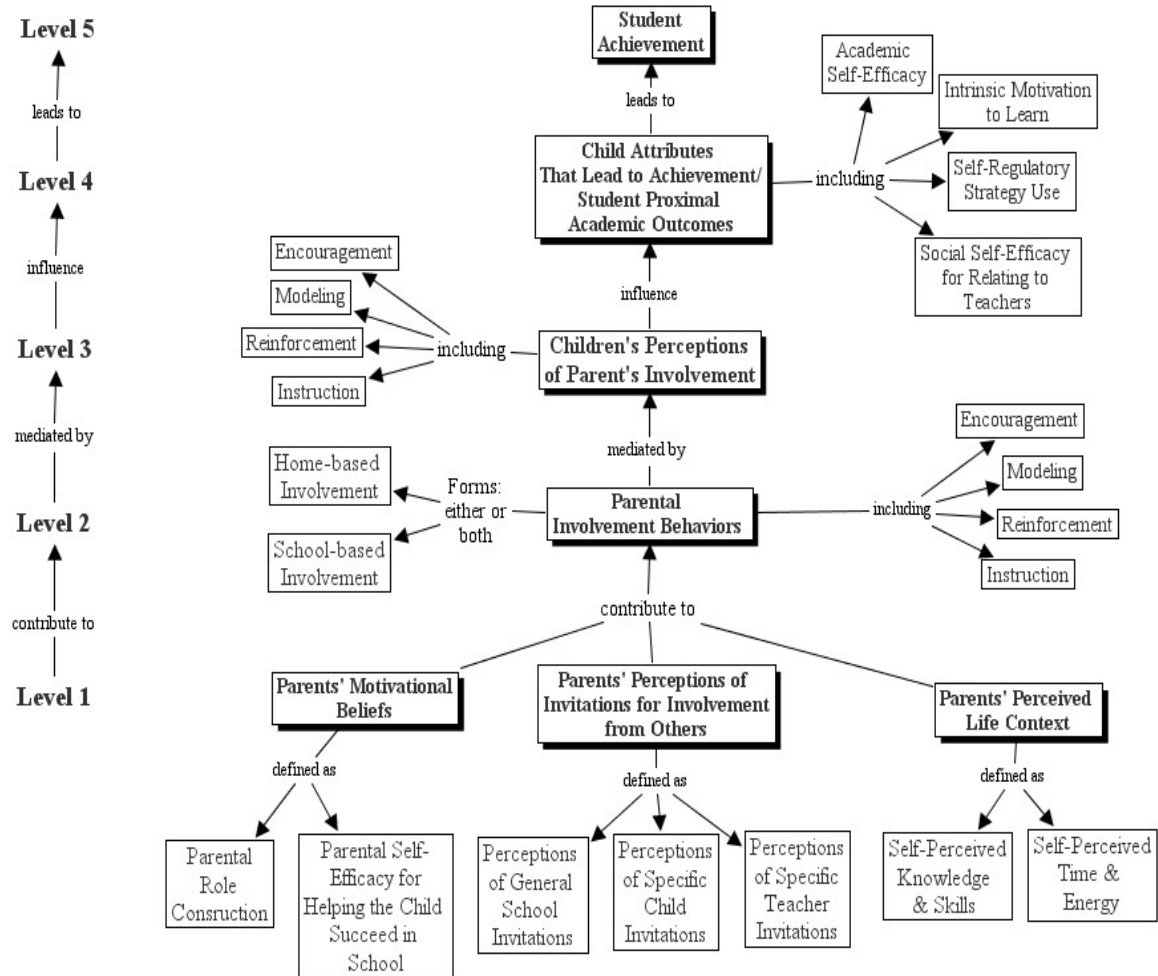


and teachers. Moderating family background variables included home language, employment status, parent education, and eligibility for free or reduced lunch. When parent involvement at home and school were differentiated, child invitations and teacher invitations were both significantly related to home involvement, but only child invitations were significantly related to school involvement.

These findings provide support for portions of the Hoover-Dempsey and Sandler model of the parent involvement process with a low income, primarily Latino urban population. Study results both align and contrast with previous research in parent involvement with ethnic minority populations. Although this study has limitations, it contributes to the growing research base in parent involvement. Continued research is warranted regarding the effect of invitations for involvement on parent involvement for specific ethnic and socioeconomic populations.

## Appendix A

### Revised Hoover-Dempsey and Sandler Model of the Parent Involvement Process



Walker, J.M.T., Wilkins, A.S., Dallaire, J.R., Sandler, H.M., & Hoover-Dempsey, K.V. (2005). Parental involvement: Model revision through scale development. *The Elementary School Journal*, 106(2), 85-104.

## **Appendix B**

### **Cover Letter**

Dear Parent,

You are invited to participate in a research project about parent involvement. Along with this letter is a short questionnaire that asks a variety of questions about how you are involved in your child's education and your feelings about the school. There are also some questions about your family background. I am asking you to look over the questionnaires and, if you choose to do so, fill them out and send them back to me in the stamped envelope provided. It should take you about fifteen minutes to complete. You can skip any items you do not feel comfortable answering and your responses will be kept private.

The results of this project will be used for a research study through the University of Texas. Through your participation I hope to better understand what helps parents to get involved, or what gets in their way. This information can help the school understand your needs, which can end up helping the students at Galindo. I hope you will take the time to complete this questionnaire and return it.

Thank You!

Diane Cox  
Graduate Student

## Appendix C

### Informed Consent

Title: Parent Perceptions of Invitations: Effects on Parent Involvement at Home and School

Conducted By: Diane Cox, M.A.  
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You are being asked to participate in a research study. This form will give you information about the study. The researcher, Diane Cox, is available to describe the study to you and answer any questions you may have. Please read the information below and ask any questions before deciding whether or not to take part. Your participation is entirely voluntary. You can refuse to participate without penalty to you or your child. Your refusal will not impact current or future relationships with UT Austin, Austin ISD, or Galindo Elementary. The researcher will provide you with a copy of this consent for your records.

The purpose of this study is to examine what contributes to parents' decision to become involved in their children's education. The parent survey you will receive looks at parent involvement behavior at home and school, and your perceptions of invitations for involvement from the school, your child, and your child's teacher. The study will also consider family variables such as parent education and family structure and how these variables influence parent involvement. Parent survey packets will be distributed to all students at your child's school (approximately 616) with a goal of obtaining approximately 220 completed packets.

If you agree to be in this study, we will ask you to do the following things:

- Complete the attached consent form, parent survey, and demographic form
- Place all forms in the provided envelope and return it to the researcher by mail (postage provided)
- If your child is a fourth or fifth grader, we would like your permission to access your child's educational records at school to obtain previous TAKS scores in reading and math

The total estimated time to participate in the study is approximately fifteen minutes.

Risks of being in the study:

- Completing the parent survey and demographic data form may involve risks that are currently unforeseeable. It is possible that thinking about and responding to survey items may cause some emotional discomfort. **You may skip any question at any time.** If you wish to discuss the information above or any other risks you may experience, you may ask questions now or call the Principal Investigator listed at the top of this form. It is believed that participation in the study will pose minimal risks to you.

Benefits of being in the study:

- Your participation in this study will lead to greater understanding of factors associated with parent involvement at home and school. Results of this research will likely yield suggestions for ways school personnel can better help parents get involved in their children's education, which can lead to increased achievement for students. The information you share about your family can also lead to important findings about what family characteristics are related to parent involvement.

Confidentiality and Privacy Protections:

- The parent survey and demographic data forms will be identified by a code number only. No personal identifying information will be on the forms that could link you or your family to them. Your responses will be kept confidential. Once parent survey packets are returned, the researcher will remove each consent form and keep them separate from the survey and demographic form so that the signed consent form cannot be linked to your personal responses on the other forms.
- The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate you with it, or with your participation in any study.

The records of this study will be stored securely and kept confidential. Authorized persons from The University of Texas at Austin and members of the Institutional Review Board have the legal right to review your research records and will protect the confidentiality of those records to the extent permitted by law. All publications will exclude any information that will make it possible to identify you as a subject. Throughout the study, the researchers will notify you of new information that may become available and that might affect your decision to remain in the study.

Contacts and Questions:

If you have any questions about the study please contact Diane Cox. If you have questions, want additional information, or wish to withdraw your participation later, please call the researcher conducting the study. Her name, phone numbers, and e-mail address are at the top of page one. If you have questions about your rights as a research participant, complaints, concerns, or questions about the research please contact Jody Jensen, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects at (512) 232-2685 or the Office of Research Support and Compliance at (512) 471-8871 or email: [orsc@uts.cc.utexas.edu](mailto:orsc@uts.cc.utexas.edu).

*You will be given a copy of this information to keep for your records.*

Statement of Consent:

I have read the above information and have enough information to make a decision about participating in this study. I give my consent to participate in this study about parent involvement. I understand that all personal information I give will be kept confidential and the forms I fill out will not have my name on them. By signing below, I understand that I will be asked to:

\*Fill out a parent survey and a form about family background

\*Return the forms to the researcher by mail (postage provided)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

My Child's Name: \_\_\_\_\_ My Child's Teacher: \_\_\_\_\_

If my child is a fourth or fifth grader this year, I give the researcher permission to view his or her previous TAKS tests scores by signing here:

\_\_\_\_\_

My Child's Student ID Number: \_\_\_\_\_

Signature of Investigator: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix D

### Demographic Form

1. With whom does your child live most of the time? (check all that apply)
  - ☐ Biological mother and father
  - ☐ Biological mother
  - ☐ Biological father
  - ☐ Stepfather and biological mother
  - ☐ Stepmother and biological father
  - ☐ Grandparent(s)
  - ☐ Aunt or uncle
  - ☐ Cousins
  - ☐ Other (describe: \_\_\_\_\_)
2. What is your relationship to the student?
  - ☐ Biological mother
  - ☐ Biological father
  - ☐ Stepfather
  - ☐ Stepmother
  - ☐ Grandparent
  - ☐ Aunt or uncle
  - ☐ Other (describe: \_\_\_\_\_)
3. What is your highest level of education? Choose one:
  - ☐ Less than 8th grade
  - ☐ Less than high school graduation
  - ☐ Finished high school/GED
  - ☐ Some college beyond high school
  - ☐ Completed college or beyond
4. What is the highest number of total years of education completed by a parent living in the home? \_\_\_\_ years
5. In what country did you complete your schooling? \_\_\_\_\_
6. For how many generations has your family lived in the United States? \_\_\_\_\_
7. What is your race/ethnicity? (check only one)
  - ☐ Mexican    ☐ Puerto Rican    ☐ Other Hispanic (describe: \_\_\_\_\_)
  - ☐ Black or African American    ☐ Biracial Black/Hispanic    ☐ Biracial Black/White
  - ☐ Biracial Hispanic/White    ☐ White    ☐ Asian    ☐ American Indian or Alaskan Native
8. What language(s) does your family speak at home?
  - ☐ English    ☐ Spanish    ☐ Other: \_\_\_\_\_
9. Which language do you speak the most?
  - ☐ English    ☐ Spanish    ☐ Other: \_\_\_\_\_
10. What is the employment status of parents/caregivers living in your home? Please check all that apply.
 

	Employed Part-Time (20 hours per week)	Employed Full Time (40 hours per week)	Employed More Than Full Time (more than 40 hours per week)	Unemployed
Mother				
Father				
Other care-givers				
11. Is your child eligible for free or reduced lunch at school? \_\_\_\_ Yes    \_\_\_\_ No

## Appendix E

### Parent Survey

Please indicate how much you AGREE or DISAGREE with each of the following statements (✓). Please think about the current school year as you consider each statement.	<i>Disagree very strongly</i>	<i>Disagree</i>	<i>Disagree just a little</i>	<i>Agree just a little</i>	<i>Agree</i>	<i>Agree very strongly</i>
Teachers at this school are interested and cooperative when they discuss my child.						
I feel welcome at this school.						
Parent activities are scheduled at this school so that I can attend.						
This school lets me know about meetings and special school events.						
This school's staff contacts me promptly about any problems involving my child.						
The teachers at this school keep me informed about my child's progress in school.						

Please indicate how often the following have happened since the beginning of this school year (✓).	<i>Never</i>	<i>1 or 2 times this year</i>	<i>4 or 5 times this year</i>	<i>Once a week</i>	<i>A few times a week</i>	<i>Daily</i>
My child's teacher asked me or expected me to help my child with homework.						
My child's teacher asked me to talk with my child about the school day.						
My child's teacher asked me to attend a special event at school.						
My child's teacher asked me to help out at the school.						
My child's teacher contacted me (for example, sent a note, phoned, e-mailed.)						



Please indicate how often the following have happened since the beginning of this school year (✓). Someone in this family...	<i>Never</i>	<i>1 or 2 times this year</i>	<i>4 or 5 times this year</i>	<i>Once a week</i>	<i>A few times a week</i>	<i>Daily</i>
...talks with this child about the school day.						
...supervises this child's homework.						
...helps out at this child's school.						
...attends special events at school.						
...helps this child study for tests.						
...volunteers to go on class field trips.						
...attends PTA meetings.						
...practices spelling, math or other skills with this child.						
...reads with this child.						
...goes to the school's open house.						

Please indicate how often the following have happened since the beginning of this school year (✓).	<i>Never</i>	<i>1 or 2 times this year</i>	<i>4 or 5 times this year</i>	<i>Once a week</i>	<i>A few times a week</i>	<i>Daily</i>
My child has asked me to help explain something about his or her homework.						
My child has asked me to supervise his or her homework.						
My child asked me to attend a special event at school.						
My child asked me to help out at the school.						
My child asked me to talk with his or her teacher.						

THANK YOU!

## **Appendix F**

### **Spanish Cover Letter**

Queridos Padres,

Los invitamos a participar en un proyecto de la participación de los padres. En esta carta hay una lista de varias preguntas. Estas preguntas es investigan como usted se interesa en la educacion de sus hijos. También hay preguntas de la vida de su familia.

Por favor conteste las preguntas y mande en el sobre que le mandamos. Para contestar las preguntas se tarda como 15 minutos. Conteste las preguntas que sean apropiadas. Sus respuestas son privadas.

El resultado de este proyecto va a ser para La Universidad De Texas. Con la participación de ustedes, puedo entender mejor que es mejor para el interés de los padres. También la escuela Galindo comprende las necesidades de los estudiantes. Espero que conteste las preguntas y devuelva su respuesta.

Gracias,

Diane Cox  
Estudiante Postitulado

## Appendix G

### Spanish Informed Consent

Título: Percepciones sobre Invitaciones a los Padres de Familia: Efectos sobre la participación de los Padres de Familia en el Hogar y en la Escuela.

Conducido por: Diane Cox, M.A.

Supervisor de la UT: Cindy Carlson, Ph.D.

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Dirección electrónica (e-mail): [ddcox@mail.utexas.edu](mailto:ddcox@mail.utexas.edu)

Usted ha sido escogido para participar en un estudio de investigación. Este documento les dará información acerca del estudio. La investigadora, Diana Cox, está disponible para describirles el estudio y para resolverles cualquier duda o pregunta que tengan. Favor de leer toda la información y hagan preguntas antes de decidir si quieren o no participar en este estudio. Su participación es totalmente voluntaria. Ustedes pueden rechazar su participación sin ningún riesgo de penalización para ustedes o para sus niños. Su rechazo no impactará de ninguna manera, actual o futura, su relación con UT Austin, AISD o con la Escuela Primaria Galindo. La investigadora les proporcionará una copia de este consentimiento para sus expedientes.

El propósito de este estudio es para examinar qué hechos contribuyen para que los padres de familia tomen la decisión de involucrarse en la educación de sus niños. La encuesta que recibirán, ve cómo los padres de familia se comportan al involucrarse con la educación de sus niños, tanto en el hogar, como en la escuela, opiniones acerca de su relación con los maestros de sus niños, opiniones acerca de las invitaciones que recibirán por parte de la escuela, por parte de sus niños o por parte del maestro(a), para involucrarse en la educación de sus niños. El estudio también considerará variables familiares, tales como la educación de los padres y la estructura familiar, para ver como influyen al involucrarse con la educación de sus niños. Las encuestas serán distribuidas en las escuelas de sus niños (aproximadamente 616 encuestas) con el objetivo de obtener aproximadamente 220 respuestas con encuestas aceptadas y llenadas.

Si ustedes aceptan involucrarse en el estudio, les vamos a pedir que por favor hagan lo siguiente:

- Llenar debidamente las formas de consentimiento, información de los Padres de familia e información demográfica.
- Regresar las formas al investigador por correo (timbre incluido)
- Si su niño(a) va en cuarto o quinto grado, nos gustaría pedirles permiso para tener acceso a los archivos educacionales de su niño(a) para obtener información acerca de sus evaluaciones en lectura y matemáticas (TAKS).

El tiempo total estimado para participar en este estudio, es de aproximadamente quince minutos.

Riesgos por participar en este estudio:

- El llenado de las formas con información de los Padres de Familia e información demográfica, puede involucrar riesgos que no están actualmente previstos. Es probable que al estar pensando acerca de las respuestas a las preguntas que se hacen, pueda ocasionar un malestar emocional. **Pueden omitir cualquier pregunta que quiera.** Si usted necesita discutir acerca de la información señalada en la parte de arriba, o acerca de algún otro riesgo que usted pueda experimentar, usted puede hacer preguntas ahorita o puede llamarle por teléfono a la investigadora, cuyo nombre aparece en la parte superior

de esta forma. Creemos que su participación en este estudio, no traerá riesgos para ustedes.

**Beneficios por participar en el estudio:**

- Su participación en este estudio, nos ayudará a entender varios factores asociados cuando los padres de familia se involucran en la educación de sus niños, ya sea en el hogar o en la escuela. Los resultados de esta investigación nos brindarán la oportunidad de crear sugerencias para el personal de las escuelas para que así, por medio de varios caminos, puedan ayudarles a los padres de familia a involucrarse en la educación de sus niños, lo cual ayudaría para incrementar los logros de los estudiantes. La información que ustedes comparten con nosotros acerca de su familia, nos ayuda para determinar qué tipo de características familiares se relacionan con los padres de familia que desean involucrarse.

**Protecciones de Privacidad y Confidencialidad:**

- La información que sea recibida con los datos de los padres de familia y los datos demográficos, será identificada bajo un código numeral únicamente. No habrá ninguna información personal que pueda ser usada para identificarlos a ustedes o a su familia. Todas sus respuestas serán confidenciales. Una vez que las formas sean regresadas, la investigadora separará las formas, para que la forma firmada, no se pueda vincular con las demás formas y de esa manera nadie más podrá ver sus datos personales.
- Es probable que en un futuro, toda la información recibida por parte de ustedes, esté disponible para otros investigadores, quienes puedan necesitar dicha en estos casos, la información que se les dará a los otros investigadores, no incluirá sus datos personales, por lo cual, no los podrán asociar a ustedes con este estudio ni con ningún otro estudio que se lleve a cabo.

Todos los documentos sobre este estudio serán guardados bajo llave y permanecerán confidenciales. Únicamente personal autorizado por parte de la Universidad de Texas y miembros del Gabinete Revisor Institucional tendrán el derecho de revisar dichos estudios y la información permanecerá confidencial. Todas las publicaciones excluirán todo tipo de información que los pueda vincular a ustedes con el estudio. A todo lo largo del estudio, los investigadores los mantendrán al tanto de toda nueva información que podría afectar su decisión para permanecer en el estudio.

**Contactos y Preguntas:**

Si ustedes tienen alguna pregunta acerca del estudio, por favor se ponen en contacto con Diane Cox. Si tienen alguna pregunta, necesitan más información, o desean salirse del estudio, por favor se ponen en contacto con la investigadora que esté a cargo del estudio. Su nombre, números telefónicos y dirección electrónica, se encuentran en la parte superior de la primera página. Si tienen alguna pregunta acerca de sus derechos civiles como participante, quejas, dudas o preguntas acerca de la investigación, le pedimos que se ponga en contacto con la Dra. Jody Jensen al teléfono (512)232-2685 o al teléfono (512)471-8871, o por e-mail: [orsc@uts.cc.utexas.edu](mailto:orsc@uts.cc.utexas.edu).

*Ustedes recibirán una copia de esta información para guardar en sus expedientes.*

Declaración del Consentimiento:

He leído y entendido todo lo anterior y tengo suficiente información para decidir acerca de mi participación en éste estudio. Doy mi consentimiento para participar en este estudio acerca de involucrar a los Padres de Familia en la educación de sus niños(as). Tengo entendido que toda la información personal que voy a proporcionar, será mantenida confidencialmente y que las formas que llene, no tendrán mi nombre. Al firmar esta hoja, entiendo que tendré que hacer lo siguiente:

- Llenar la encuesta y la forma con la información familiar.
- Regresar las formas al investigador por correo (timbre incluido)

Firma: \_\_\_\_\_ Fecha: \_\_\_\_\_

Nombre del Niño(a): \_\_\_\_\_ Maestro(a): \_\_\_\_\_

Si mi hijo está en el grado 4 o 5 este año, firmando aquí, yo le doy permiso al investigador ver los resultados previos del examen de TAKS:

\_\_\_\_\_

Número de identificación del estudiante de su niño(a): \_\_\_\_\_

Firma del Investigador: \_\_\_\_\_ Fecha: \_\_\_\_\_

## Appendix H

### Spanish Demographic Form

1. ¿Con quién vive su niño(a) la mayoría del tiempo? (chechar las que correspondan)

- ☐ Padres naturales  
☐ Mamá  
☐ Papá  
☐ Padrastro y mamá natural  
☐ Madrastra y papá natural  
☐ Abuelo/a(s)  
☐ Tía o Tío  
☐ Primos  
☐ Otro (describir: \_\_\_\_\_)

2. ¿Cuál es su relación con el estudiante?

- ☐ Mamá  
☐ Papá  
☐ Padrastro  
☐ Madrastra  
☐ Abuelo(a)  
☐ Tía o Tío  
☐ Otro (describir: \_\_\_\_\_)

3. ¿Cuál es su grado máximo de educación? Escoja uno:

- ☐ Menos que el octavo grado  
☐ No se graduó de la preparatoria  
☐ Sí terminó la preparatoria  
☐ Algo de estudios universitarios  
☐ Se graduó de la universidad y/o tiene alguna maestría.

4. De los dos padres de familia que viven en la casa, ¿cuántos años completó el que más estudió? \_\_\_\_ años.

5. ¿En qué país usted completó sus estudios? \_\_\_\_\_

6. ¿Por cuántas generaciones su familia ha vivido aquí en los Estados Unidos? \_\_\_\_\_

7. ¿A qué grupo étnico pertenece usted? (favor de checar una)

- ☐ mexicano(a)   ☐ puertorriqueño(a)   ☐ hispano(a) (de dónde: \_\_\_\_\_)  
☐ afroamericano(a)   ☐ dos razas (afroamericano/hispano)   ☐ dos razas (afroamericano/anglo)  
☐ dos razas (hispano/anglo)   ☐ anglo   ☐ oriental   ☐ indioamericano o nativo(a) de Alaska.

8. ¿Qué idioma hablan en su casa?

- ☐ inglés   ☐ español   ☐ otro: \_\_\_\_\_

9. ¿Qué idioma habla usted la mayoría del tiempo?

- ☐ inglés   ☐ español   ☐ otro: \_\_\_\_\_

10. ¿Qué tipo de empleo tienen los padres o los guardianes que viven en la casa? (chechar las que correspondan)

	Empleada de tiempo parcial (20 horas a la semana)	Empleada de tiempo completo (40 horas a la semana)	Más de un empleo (más de 40 horas a la semana)	No está empleado(a)
Mamá:				
Papá:				
Guardián:				

11. ¿Su niño(a) es elegible para recibir almuerzos gratis o a costo reducido en la escuela? \_\_\_\_Sí \_\_\_\_No\_\_\_\_

## Appendix I

### Spanish Parent Survey

Por favor indique que tanto esta usted de ACUERDO o NO con cada una de las preguntas(✓). Por favor piensen el presente año escolar al contestar cada pregunta.	<i>En total desacuerdo</i>	<i>Desacuerdo</i>	<i>Poco desacuerdo</i>	<i>Poco en acuerdo</i>	<i>Acuerdo</i>	<i>En total acuerdo</i>
Los maestros de la escuela se interesan y cooperan cuando ellos hablan acerca de mi hijo(a).						
Yo me siento comfortable en la escuela.						
Las actividades para padres de familia se llevan a cabo en la escuela para que podamos atender.						
La escuela me deja saber acerca de eventos especiales y juntas.						
El personal de la escuela hace contacto conmigo por cualquier problema con mi hijo(a).						
Los maestros de la escuela me mantienen informado(a) acerca del progreso académico de mi hijo(a).						

Estimados padres, por favor indique que tan seguido se ha comprometido con las siguientes conductas por lo que va DEL PRESENTE AÑO ESCOLAR(✓).	<i>Nunca</i>	<i>Una vez hasta ahora</i>	<i>Una vez al mes</i>	<i>Una vez cada 2 semanas</i>	<i>Una vez a la semana</i>	<i>A diario</i>
El maestro de mi hijo(a) me pregunta o espera que ayude a mi hijo(a) con las tareas.						
El maestro de mi hijo(a) me pide que hable con mi hijo(a) acerca del día escolar.						
El maestro de mi hijo(a) me pidió que asistiéra a un evento especial en la escuela.						
El maestro de mi hijo(a) me pidió que ayudára en la escuela.						
El maestro de mi hijo(a) se comunica conmigo (por ejemplo: envi notas, por telefono o correo electronico).						

Estimados padres, por favor indique que tan seguido se ha comprometido con las siguientes conductas por lo que va DEL PRESENTE AÑO ESCOLAR (✓). Alguien en la familia...	<i>Nunca</i>	<i>Una vez hasta ahora</i>	<i>Una vez al mes</i>	<i>Una vez cada 2 semanas</i>	<i>Una vez a la semana</i>	<i>A diario</i>
...habla con en niño(a) acerca del año escolar.						
...superviza las tareas del niño(a).						
...ayuda en la escuela.						
...atiende eventos especiales.						
...ayuda el niño(a) a estudiar para el exámen.						
...es voluntario(a) en paseos escolares.						
...atiende a las juntas de PTA.						
...practica matemáticas, ortografía y otras materias estudiante.						
...lee con el niño(a).						
...asiste a "open house" en la escuela.						

Estimados padres, por favor indique que tan seguido se ha comprometido con las siguientes conductas por lo que va DEL PRESENTE AÑO ESCOLAR (✓).	<i>Nunca</i>	<i>Una ves hasta ahora</i>	<i>Una vez al mes</i>	<i>Una vez cada 2 semanas</i>	<i>Una vez a la semana</i>	<i>A diario</i>
Mi hijo(a) me pide ayuda cuando no entiende su tarea.						
Mi hijo(a) me pide que supervise sus tareas.						
Mi hijo(a) me pide que atienda algun evento especial en la escuela.						
Mi hijo(a) me pide que ayude a la escuela.						
Mi hijo(a) me pide que hable con sus maestros.						

GRACIAS!



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## **Vita**

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