INFLUENCE OF PARENTAL ROLE CONSTRUCT, PARENT SENSE OF SELF-EFFICACY, AND PERCEPTION OF TEACHER'S INVITATION ON PARENTAL INVOLVEMENT PRACTICES IN SELECTED INTERNATIONAL SCHOOLS

SHEETAL DAHUJA

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The number of International schools in Thailand has increased by more than fifty percent in the last five years. In Thailand, teachers are called *Khru*, which literally means *Guru* in Pali. Here, it is not a custom for students or parents to ask questions or inquire about the teaching methods. School and teachers are believed to be responsible for children's academic life and parents are believed to be responsible for children's moral upbringing (Mulder, 1997). The communication between schools and parents is a one-way communication, where teachers send the students' report card home. Some researchers and authors in Thailand, like Dr. Lorwatanapongsa, have talked about intervention programs to improve students' performance by giving suggestions to teachers and schools in teaching methods. Very few have identified the importance of family involvement in children's academic life. Therefore, there are no intervention programs that deal with teachers' behavior to improve home-school relations.

Parents' involvement in their children's education has been found to be an important factor related to positive outcomes in children's academic performance and social competence. Questions remain, however, about the factors and motivational bases for parents' choices to become involved in the home and school. Research has focused on demographic variables, such as income and parents' education. Although these variables have been found to be good predictors of parent involvement, they do not provide a clear understanding of the dynamic of parent-school relationship. Therefore, the purpose of this study was to gain an understanding of why parents

became involved in their children's education. This was achieved by examining the influence of parental role construction, parents' sense of efficacy, and teacher invitations on overall parent involvement.

Three hundred primary caregivers of elementary school-aged children recruited from selected International Schools and from neutral activities responded to Parent Role Construction and Parent Efficacy questionnaires, vignettes measuring dimensions of parent involvement and perceptions of teacher invitations, and a demographic survey. Two versions of the vignettes were randomly distributed: one included a progress report with a teacher invitation for parent involvement, and one included only a progress report. Half of the participants responded to the vignettes with the invitation, and half completed vignettes without the invitation.

Path analysis was conducted to evaluate the effects of parent self-efficacy, parental role construction (i.e., parent-focused, school-focused, and partnership-focused), and perceptions of teacher invitation on overall parent involvement practices. Results indicated that school-focused and partnership-focused role constructions were directly related to overall parent involvement, while self-efficacy was indirectly related through parental role construction. Also, when teacher invitations were presented to parents, it was a powerful predictor of parent involvement and was directly related to overall parent involvement practices. While it appears that parent's feelings of efficacy and their beliefs about their role in their children's education are important in understanding their level of involvement, it is particularly important for parents to feel welcomed by the school.

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Lastly,

I thank and dedicate this to my parents

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For being very actively involved in my education…and my life!

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Thank you for your love, encouragement, and enthusiasm for everything I do! You'll never know how much that means to me.

I LOVE YOU SO MUCH.

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Chapter 1
Problem and its Background
Introduction

The number of International schools in Thailand has increased by more than fifty percent in the last five years. Dr. Lorwatanapongsa (2003) explained that many groups have criticized the Thai educational system. Some say it is the incompetent teachers, while others blame the curricula and the inadequate facilities. Latest educational reform focuses on making the curricula and instruction more student-centered, to connect the school to real-life situations, and to emphasize understanding and thinking rather than memorization, drill and practice (Lorwatanapongsa, 2003). In Thailand, teachers are called *Khru*, which literally means *Guru* in Pali. In Thai schools, it is not a custom for students or parents to ask questions or inquire about the teaching methods. School and teachers are believed to be responsible for children's academic life and parents are believed to be responsible for children's moral upbringing (Mulder, 1997). The communication between schools and parents is a one-way communication, where teachers send the students' report card home. Some researchers and authors in Thailand, like Dr. Lorwatanapongsa, have talked about intervention programs to improve students' performance by giving suggestions to teachers and schools. Very few have identified the importance of family involvement in children's academic life. Therefore there are very few, if any, intervention programs for teachers in Thailand that may help parents to be more actively involved in their children's school.

The importance of home and school relations for increasing student success in school has been recognized in the research literature (Eccles & Harold, 1993; Epstein & Dauber, 1991; Grolnick, Benjet, Kurowski, & Aposteris, 1997; Grolnick & Slowiaczek, 1994; Reed, Hoover-Dempsey, & Flynn, 2001). Recent researches have focused on determining the factors that motivate parent involvement in the schooling

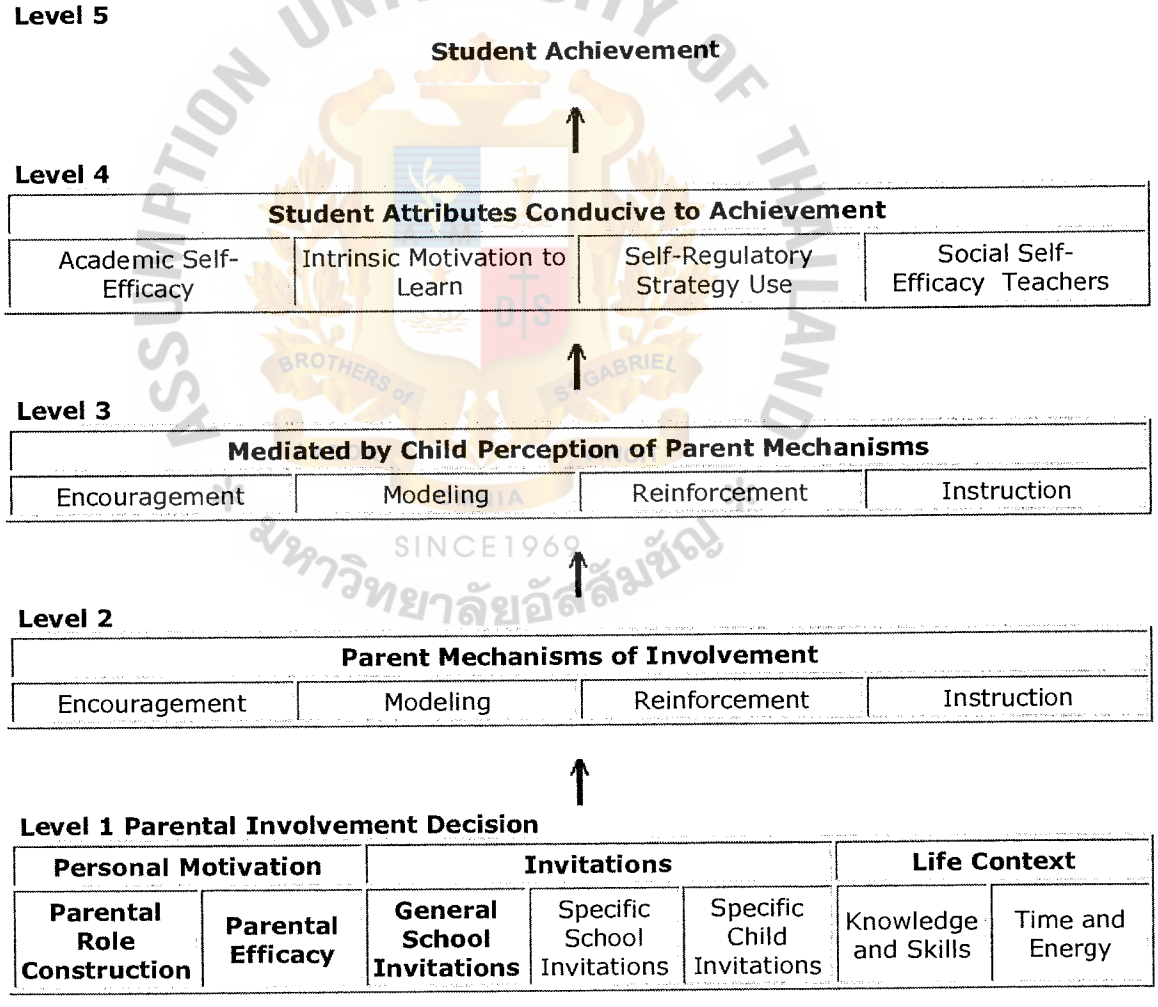
of their children (Hoover-Dempsey & Sandler, 1995, 1997; Griffith, 1998; Grolnick et al., 1997; Kohl, Lengua, & McMahon, 2000; Reed et al., 2001). Much of the research has been on the relationships between variables like income and parent education and how that influences parents to get involved in their children's school. Although these variables have been found to be good predictors of parent involvement, they do not provide a clear understanding of the mechanisms and factors that encourage parents to participate. They also do not give importance to the parent-school relationship (Feuerstein, 2000). More information is needed on factors that influence the decisions of parents to be involved in their children's schooling. Such information is necessary, so that effective intervention programs can be developed and aimed to improve the linkages between home and school.

Hoover-Dempsey and Sandler (1995, 1997) proposed a model of the parental involvement process focusing on factors influencing their decisions. They suggested that parents' involvement is motivated by parental role construction, sense of efficacy for helping the child succeed in school, and perceptions of invitations for involvement from the school and their children. These motivators of parental involvement were identified at the first of five stages in the parental involvement process beginning with parents' decisions to become involved and ending with students' school-related outcomes related to involvement (Figure 1). Reed et al. (2001) tested the model to see the motivational factors that influence parents' decisions to become involved in their children's education. Their investigation supported the model, that parental role construction, self efficacy, and parental perceptions of teacher inviations predict parent involvement. Other researchers like Grolnick et al. (1997) found that parents who perceived their role as teachers of their children and who had feelings of self-efficacy became more involved when teachers encouraged their involvement, whereas those

who did not see themselves in this manner were less affected by teachers' behaviors. The purpose of the present study was to advance understanding of the factors impacting the involvement of parents in their children's education by further evaluating the theoretical model developed by Hoover-Dempsey and Sandler (1995, 1997). The relationships between parental role constructions, sense of efficacy, perceptions of invitations, and parents' choices to become involved in their children's education were examined.

Figure 1

The Hoover-Dempsey & Sandler Model of Parental Involvement



Statement of the Problem

Literature shows that there is a strong correlation between parent involvement and students' positive academic outcomes (Bermudez, 1993; Chen & Stevenson, 1989; Constantino, Cui, & Faltis, 1991; Davies, 1993; Huss-Keeler, 1997; Moles, 1993; Okagaki, Frensch, & Gordon, 1995; Peng & Wright, 1994; Vincent, 1996; Henderson, 1989; Jimerson Egeland & Teo, 1999; Miedel & Reynolds, 2000; Zellman & Waterman, 1998). Academic achievement shows the greatest improvement when parents are involved both at home and at school (Henderson; Jimerson et al.). Hansen (1986) found the children achieve more when there is a match between home and school rules and expectations. Parents who actively participate in their children' schools may learn skills to help their children succeed in school (Miedel & Reynolds). When parents are involved they understand the teacher's proposed education goals, and so they are able to be consistent and help their children in the same manner at home (Bacete & Remirez, 2001, p. 544). This is just a sampling of the mounting evidence up to the present. Although the research literature has demonstrated the importance and benefits of involving parents in their children's education, there has been no consensus on how to measure parent involvement. In addition, more information is needed on what factors influence parent involvement in their children's education. According to Hoover-Dempsey and Sandler's (1997) model of parental involvement process,

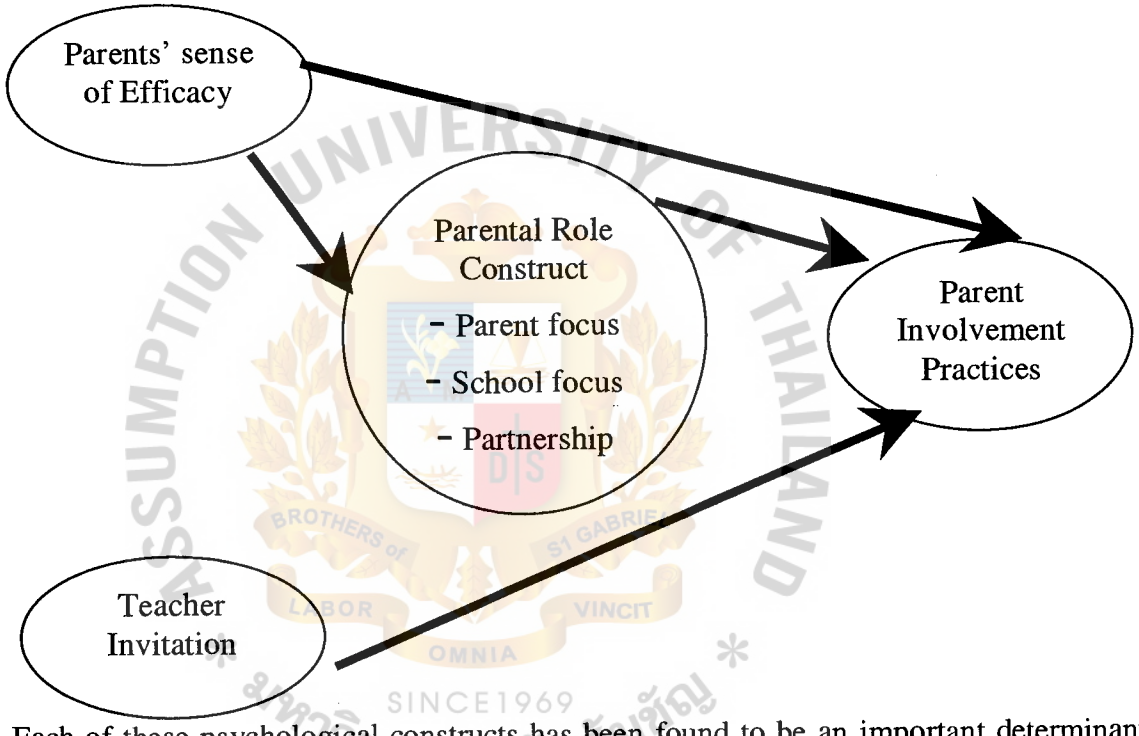
> Parents become involved in their children's education because they have developed a parental role construction that includes involvement, because they have a positive sense of efficacy for helping children succeed in school, and because they perceive general opportunities and invitations for involvement from their children and their children's schools (p. 31)

The present study evaluated Hoover-Dempsey and Sandler's (1995, 1997) theoretical prediction that parental role construction, parental sense of efficacy for helping their

children learn, and parental perception of teacher invitations are related to parents' level of involvement in their children's education (Figure 2). Parental role construction, feeling of self-efficacy, and teacher invitations, were primarily studied in isolation from each other in relation to parental involvement.

Figure 2

Path Analysis ~ Conceptual Framework



Each of these psychological constructs has been found to be an important determinant of parent involvement.

Objectives of the Research

The purpose of this study was to expand upon prior research each of which independently studied these psychological constructs as predictors of parent involvement. More specifically, the intention was to determine

1. Whether there would be a significant direct effect between parental role construction and parent involvement practices.

2. Whether there would be a significant direct effect between parents' sense of efficacy and parent involvement practices.
3. Whether there would be a significant indirect effect between parents' sense of efficacy and parent involvement practices through parental role construction.
4. Whether there would be a significant direct effect between teacher invitation and parent involvement practices

The present study also sought to determine how these variables predict the type of involvement in which parents engage.

Research Questions

This study examined how parental role construction, parental sense of efficacy For helping their children learn, and parental perceptions of teacher invitations influenced parents' levels of involvement after reading vignettes in which children were at risk for academic difficulties. Understanding the reasons that parents choose or choose not to participate in their children's schooling will facilitate the development of interventions to increase parent involvement. The study investigated the following questions:

1. To what extent did parent role construction predict the level of parental involvement? Was there a direct effect of parent role construction on involvement?
2. To what extent did parental self efficacy predict level of parental involvement? Was there a direct effect of parental self efficacy on parental involvement?
3. Was parents' sense of parenting efficacy related to parental role construction and their involvement in educational activities?
4. To what extent did teacher/school invitation predict level of parental involvement? Were invitations directly associated with level of parental involvement?

5. Did parental role construct, self-efficacy, and school/teachers invitation predict level of parental involvement in an attempt to prevent academic difficulties in their children? Were they indirectly associated with level of parental involvement when their children were at risk for academic difficulties?

Hypotheses

The following hypotheses are derived from the research questions and related literature and were tested in this investigation:

1. H_1: There is a significant direct effect between parental role construction and parent involvement practices.
2. H_1: There is a significant direct effect between parents' sense of efficacy and parent involvement practices.
3. H_1: There is a significant indirect effect between parents' sense of efficacy and parent involvement practices through parental role construction.
4. H_1: There is a significant direct effect between teacher invitation and parent involvement practices

Definition of Terms

Parent involvement – Parent involvement in children's schooling has many meanings and can be measured in a number of ways, according to the research literature. Parent involvement has been defined as participation in one specific school activity, such as attending PTA meetings, volunteering in their child's classroom and helping their child with homework (Brody, Flor & Gibson, 1999; Patton, Jayanthi & Polloway, 2001). Other researchers view parent involvement as a broad multidimensional perspective rather than a unitary construct (Epstein, 1987; Epstein, 1992; Grolnick et at., 1997; Grolnick & Slowiaczek, 1994; Hoover-Dempsey & Sandler, 1997). For the purpose of this study,

overall parent involvement was defined as the likelihood of participation in school-based activities, home-based activities, and parent-school collaboration (Fantuzzo, Tighe, & Childs, 2000)

School-based involvement – For the purpose of this study, school-based involvement was defined as parents' participation in activities located in the school. Such activities include volunteering in their child's classroom attending class trips and workshops, and meeting with other parents to plan events and fundraisers (Fantuzzo et al., 2000).

Home-based involvement – For the purpose of the study, home-based involvement referred to the activities and behaviors parents engage in at home to promote their children's learning. Such activities include providing a place in the home for learning materials, initiating participation in learning activities at home, and creating learning experiences for their children in the community (Fantuzzo et al., 2000).

Parent-school collaboration – For the purpose of the study, parent-school collaboration was defined as parents and school personnel maintaining communication about children's educational experiences and progress. Such communication includes parents talking with the teacher about the child's difficulties at school, the child's learning behavior, and the child's accomplishments, and parents practicing techniques at home (Fantuzzo et al., 2000).

Parents' sense of efficacy – Hoover-Dempsey et al. (1992) defined parental sense of efficacy as "parents' belief and knowledge that they can teach their children (content, processes, attitudes, and values) and that their children can learn what they teach" (p. 288). For purpose of this study, parent efficacy referred to parents' assessments of their general

and specific abilities to influence their children's school outcomes. Such abilities include helping their children make good grades in school, motivating their children to do well in school, and helping to make a difference in their children's school performance. Parents' sense of efficacy is measured through the perceptions of parents as expressed in the Parent Efficacy for Helping Children Succeed in School Scale / Thinking about Helping My Child (Hoover-Dempsey et al., 1992).

Teacher invitations – In general, teacher invitations for parent involvement have been measured by how often teachers engage parents in specific activities such as calling families, asking parents to check their children's homework, and inviting parents to observe in the classroom (Grolnick et al., 1997; Reed et al., 2001). Research has found that teacher communicate students' progress to parents most frequently through report cards, personal notes, and phone calls (Connors & Epstein, 1995; Epstein & Dauber, 1991; Fuqua et al., 1985). For the purpose of this study, teacher invitations were manipulated as teachers' attempts to inform parents of the child's progress in school, as well as establishing ways for parents to become involved in the child's education at home and at school. Teachers' practices to communicate with parents were defined as efforts made to inform parents or the child's progress throughout the school year through progress notes or comments written on report cards. Teachers' activities to involve parents in educational activities referred to the degree to which teachers invited parents to contact them to discuss strategies parents could use when working with their children on learning activities (Ysseldyke & Christenson, 1993).

Role construction – Biddle (1986) referred to roles as the beliefs and expectations that people hold for their own behavior and the behavior of others. For the purpose of this study, parental role construction referred to parents' beliefs about their roles in their

children's schooling. According to the model of parent involvement process developed by Hoover-Dempsey and Sandler (1995, 1997), parents become involved in their children's schooling because they construe the parental role as including involvement in their children's education. Parental role construction was defined as consisting of three major categories: parent-focused, school-focused, and partnership-focused. Parental role construction was measured through the perceptions of parents as expressed in the Parent Role Construction questionnaire (Hoover-Dempsey & Jones, 2002).

1. Parent-focused. For the purpose of this study, the term referred to parents' beliefs that it is their responsibility as parents to ensure their children's educational success. Parent-focused role construction was measured through the perceptions of parents as expressed in the Parent Role Construction questionnaire (Hoover-Dempsey & Jones, 2002).

2. School-focused. For the purpose of this study, school-focused role construction was defined as parents' beliefs that the school is primarily responsible for their children's education. School-focused role construction was measured through the perceptions of parents as expressed in the Parent Role Construction questionnaire (Hoover-Dempsey & Jones, 2002).

3. Partnership-focused. For the purpose of this study, this term was defined as parents' beliefs that the parent and teacher should work together and they are both responsible for the child's education. Partnership-focused role construction was measured through the perceptions of parents as expressed in the Parent Role Construction questionnaire (Hoover-Dempsey & Jones, 2002)

Significance of the Study

Parent involvement in the home and at school has been found to be an important factor related to positive outcomes in children's academic performance and social competence (Brody & Flor, 1998; Hoover-Dempsey & Sandler, 1995; Kohl et al., 2000;

Lareau, 1987). Higher levels of parent involvement have been associated with improved student attitudes toward school, better test scores, and improved homework habits (Feuerstein, 2000; Zellman & Waterman, 1998). In addition, research demonstrates that parent involvement is related to student attributes conducive to academic success, such as improved school attendance and stronger self-regulatory skills (Hoover-Dempsey et al., 2002).

Despite evidence indicating benefits of parent involvement, educators continue to report dissatisfaction with the level of involvement and participation of parents in schools (Griffith, 1998; Grolnick & Slowiaczek, 1994). In addition Mattingly et al.'s (2002) evaluation of 41 parent involvement programs found that the majority of programs had no theoretical basis for the design of the interventions. Their analysis of evaluation studies of parent programs also found that these studies contained little information about the program components and participants. Many programs focused only on changing parent behavior rather than teacher practices. It is important that the development of such programs be theory based. Given that there continues to be a need to increase parent involvement in school and develop theoretically sound programs, it is necessary to determine the reasons and motivational bases for parents' choices to become involved in their children's education. Identifying the variables impacting parent involvement is essential in developing interventions to improve and increase parent involvement. Research has predominantly focused on how demographic variables, such as income, parents' education, and marital status, predict parent involvement (Grolnick et al.,1997; Hoover-Dempsey & Sandler, 1995). Although these variables have been found to be good predictors of parent involvement, they do not provide a clear understanding of the mechanisms that encourage parents to participate in their children's education. They also

do not acknowledge the dynamic aspects of the parent-school relationship (Feuerstein, 2000).

Hoover-Dempsey and Sandler (1995, 1997) developed a theoretical mode of the parental involvement process in which they focused on answering the question, "Why do parents become involved in their children's education?" They suggest that parents become involved in their children's education because of their personal construction of the parental role, their personal sense of efficacy for helping their children succeed in school, and their reactions to opportunities presented by their children's schools. This study examined the effects of parental role construction, parents' sense of efficacy, and teacher invitations on overall parent involvement in the home and at school. The variables that were analyzed in this study were derived form Hoover-Dempsey and Sandler's (1995, 1997) model of parent involvement

The results of the present study should be particularly beneficial in identifying characteristics of parents who are likely to have limited school involvement.

Limitations

This present study was limited by several factors.

One limitation of this study was that all the participants were volunteers. Therefore, the results of this study only reflected the beliefs and practices of those parents who will volunteer to complete the questionnaires. It is possible that the parents who choose to participate were not representative of the general population of parents in elementary schools. Parents who were motivated to participate in the study may already be strong advocates of home-school collaboration and parent involvement in education. If so, this

may have resulted in a biased sample of participants who chose to participate, and generalization of the results may be limited. This is called Voluntary-Response Bias.

A second limitation of this study was that generalization of the findings may not have been appropriate. The sample was not fully representative of members of all ethnic groups because a large majority of the participants were parents of children from International schools in Thailand. In addition, the majority of participants probably were middle to upper class parents.

A third limitation of this study has to do with the use of analogue method of vignettes, which allow an investigation of parents' reactions to a range of academic difficulties and teacher invitations. Analogue studies usually involve written, fictitious case studies in which all information is generally held constant except for the particular variables of interest (e.g., academic difficulties, teacher invitations). This type of study allows for greater experimental control over relevant extraneous variables, which allows for increased confidence in the internal validity. However, one limitation of the use of vignettes was a threat to external validity. An important consideration to utilizing vignettes is whether or not respondents considered the vignettes realistic and responded in a thoughtful manner (Huebner, 1991).

A final limitation of this study is that all of the information collection was through self-report measures. According to Anastasi (1992), self-report measures are subject to false responses. For instance, parents may feel pressure to provide responses that they view as more socially desirable rather than disclose their true perceptions. This problem may have been minimized by all participants completing the measures anonymously.

Chapter 2
Review of Related Literature

The following review of literature reflects the current status of theory and research in the area of parent involvement and factors related to parents's decisions to become involved in their children's education. In the sections that follow, four major areas within the field of parent involvement are reviewed. First, the term *Parent Involvement* is explained. Then literature on the various dimensions and theoretical models of parent involvement is presented. This is followed by a review of the research on the benefits of parent involvement on student (e.g., social and academic) and school outcomes. Finally, the review of the literature examines factors identified as being associated with parent involvement in children's education, particularly those presented in Hoover-Dempsey and Sandler's (1995, 1997) model of the parent involvement process.

Parent Involvement

Parents' involvement can take a variety of forms (e.g., help with homework, phone calls to teachers, participation in school-related activities). According to Hoover-Dempsey and Sandler (1995), there are three mechanisms through which parents impact children's educational outcomes. These are through modeling, reinforcement, and direct instruction. Parents model school-related behaviors and attitudes by behaving in ways that demonstrate interest in school activities. This interest can be demonstrated by asking questions about the school day, talking with a teacher after school, spending time reviewing homework, and making phone calls to the teacher (Hoover-Dempsey & Sandler, 1995). Sui-Chu and Willms (1996) found that student-parent discussion in the home was the most powerful predictor of student

academic achievement among four dimensions of parent involvement (i.e., home discussion, school communiction, home supervision, and school participation).

Involvement can also be demonstrated by attending and volunteering at school events (e.g., basketball games, school plays). Reinforcement is another means for parents to become involved. When parents are involved in aspects of their children's schooling, they often give their children praise, attention and rewards for behaviors related to school success (e.g., studying for tests, attending class, completing homework, and asking the teacher questions). Finally, when parents are involved through direct instruction, they promote learning by working with their children on their schoolwork. For instance, parents can practice and review schoolwork with their children, as well as promote higher level thinking by asking questions as to how their children solved problems related to their work (Hoover-Dempsey & Sandler, 1995).

Models of parent involvement

To further investigate why parents become involved and the types of involvement they choose, parental involvement must first be defined. Parent involvement has been defined and measured in a number of different ways across studies, but there has been no consensus with regard to the relevant dimensions to be assessed. Maccoby and Martin (1983) defined parent involvement as the degree to which a parent in "committed to his or her role as a parent and to the fostering of optimal child development" (p. 48). Others have been more specific in defining parent involvement by focusing on home-school collaboration. Some include parent support for education (e.g., homework completion, PTA meetings, etc.). Others focus on parent responsiveness to teachers' concerns (Grolnick & Slowiaczek, 1994; Patton, Jayanthi, & Polloway, 2001). Coots (1998) defined parent involvement as a wide

variety of activities that fall into one of two categories: those which take place at school and those which take place in the home. School-based activities generally include attending parent-teacher conferences and participating on school committees. Home-based activities are those that include parents reading to their children, signing notes sent home from the teacher, and discussing school activities with their children. Schools tend to define parent involvement as either supporting their children academic achievement or as participation in formal school functions. Lopez, Scribner, and Mahitivanichcha (2001) found that parent involvement among marginalized groups (i.e., migrant parents) was improved when schools developed less traditional forms of involvement. These schools initiated parent contact and "held themselves accountable to meet the multiple needs of migrant parents on a daily and ongoing basis" (Lopez et al., p. 281). Parent education focused on increasing awareness of school procedures and providing parents with self-improvement training to help them attain jobs (Lopez et al.). Thus, the growing consensus is that parent involvement cannot be viewed as a unitary construct, but rather a broad multidimensional perspective is necessary that includes emotional and personal aspects, as well as school activities (Grolnick et al., 1997).

A number of models of parent involvement and home-school interactions have been discussed in the literature (Eccles & Harold, 1996; Epstein, 1987; Grolnick & Slowiaczek, 1994; Kohl et al., 2000), In the early twentieth century the literature argued that there be separateness of teachers' and parents' roles in children's schooling (Waller, 1932). Early educational theories stated that families and schools should fulfill separate responsibilities. The family was in charge of the child's social development, while the school was in charge of the child's education (Connors & Epstein, 1995). "Although some educators and some families continue to function

more as separate institutions, there is growing awareness of the need for families and schools to share their mutual interests, knowledge, experience, and resources to promote children's learning" (Connors & Epstein, p. 442)

Swap (1993) discussed four ways schools either resist or encourage family-school partnerships: the protective model, the school-to-home transmission model, the curriculum enrichment model, and the partnership model of family-school relations. The protective model states that schools and parents should have separated roles in educating children. In this model parents give schools the responsibility of educating their children. Parent-teacher communications or involvement of families in their children's learning is not encouraged. In the school-to-home transmission model there is one-way communication from the school to the home. The school communicates curriculum goals, discipline, and policies to the family, but there is little opportunity for the family to provide feedback. The curriculum enrichment model allows for opportunities for parents and teachers to learn about and from each other through active involvement in the children's learning. Finally, the partnership model defines family-school relations as families working together with school staff and sharing responsibility for making decisions. Parents are more actively involved in school activities in the last model.

Grolnick and Slowiaczek (1994) discussed three types of parent involvement in children's schooling: behavioral, cognitive-intellectual, and personal. Behavioral involvement includes the parent's participation in activities at school (e.g., attending parent-teacher conferences) and at home (e.g., helping with homework, asking about school). Cognitive-intellectual involvement is defined as exposing the child to intellectually stimulating activities, such as going to the library or talking about current

events. Parents are described as personally involved when they are kept informed about what is going on with the child in school (Grolnick et al., 1994). The weakness of this model is that the dimensions are too broad. For instance the behavioral domain combines parent activities in the home with activities in the school (Kohl et al., 2000).

Eccles and Harold (1996) discussed five dimensions of parent-initiated involvement. The first dimension was monitoring, in which parents respond to teachers' requests for helping their children with schoolwork (e.g. helping with homework, listening to them read). Volunteering was presented as the second dimension of parent involvement (e.g., parents' participation in school activities, such as the PTA). The third dimension was involvement, which included parents' involvement in their children's daily activities related to homework. Another dimension discussed was contacting the school about their children's progress. The final dimension was contacting the school to find out how to provide extra help (Eccles & Harold, 1996). A weakness in this model that was identified by Kohl et al. (2000) is that the dimensions of monitoring and involvement appear to be behaviors related to homework and might be better conceptualized as one construct.

Kohl et al. (2000) studied three dimensions of parent involvement that were common to models presented by previous researchers (e.g., Eccles & Harold, 1996; Grolnick & Slowiaczek, 1994). They focused on parent-initiated parent involvement. Parent involvement was defined as parent-teacher contact to facilitate monitoring their children's school progress and helping with their homework, parent involvement in school activities, and parent involvement directly with their children at home to facilitate intellectual stimulation and school success. The amount of parent-initiated contact with teachers was measured by how often parents called the child's teacher or

attended parent-teacher conferences. Parent involvement in school activities was defined as parents' participation in school events, as well as Parent-Teacher Organization (PTO) meetings. Finally, parents were asked how often they participated in school-related home activities, such as reading to their children or going to the library with their children (Kohl et al.).

Epstein's (1987) model is characterized by overlapping spheres of influence that modify interactions of parents, teachers, and students. She developed a classification system to identify the number of ways parents can participate in their children's education. A framework describing six major types of parent involvement was developed in order to help schools create comprehensive programs encouraging family-school partnerships. Epstein's (1987) theory of family-school relations is the most comprehensive. In addition, Epstein (1987) has presented practices and programs that schools could implement to develop more comprehensive school and family partnerships. The first type of involvement is that which she refers to as basic obligations of families, which focuses on parenting. These "basic obligations" include providing for their children's health and safety; developing parenting skills that prepare children for school and that maintain healthy child development, and building homes that support school learning and behavior. There should be a two-way exchange of information from schools to help families understand child and adolescent development and the type of home environments that support learning. For instance, schools provide information to families about children's health, safety, nutrition, discipline, and other parenting skills through workshops or other forms of parent education. In turn, families should provide information the schools to help them understand the needs and interests of the family and students. Families must work

independently or obtain help from the schools to provide their children with housing, clothing, and safety.

The second type of involvement in Epstein's (1987) model is defined as the "basic obligations" of schools, which includes schools communication to families about school programs and children's progress. Most schools communicate with families about school programs or students' progress through notices, memos, phone calls, newsletters, report cards, conferences, open-house nights or other visiting opportunities. Families are expected to respond to and act on the information sent home. Schools need to provide parents with opportunities to communicate questions about school programs and give information about their children to the schools.

The third type of involvement occurs at the school, and refers to volunteering. This type of partnership allows parents to volunteer at the school or in the classrooms, by attending performances and sports events to support their children. Schools can increase the number of families that attend by varying the times of these events to accommodate parents' different schedules.

The fourth type discussed by Epstein (1987) describes involvement in learning activities at home. This includes requests and guidance from teachers for parents to help their children at home with learning activities. The responsibility of the schools at this level is to help families become more knowledgeable about the school curricula, the teachers' instructional methods, the skills necessary to pass each grade, and how to support, monitor, discuss, and help with their children's homework. Families may help their children with reading or initiate discussions and interactions about homework depending on the children's levels of schooling.

Involvement in decision making, governance, and advocacy is the fifth type of involvement. Schools encourage parent participation in school decisions by encouraging the organization of parent groups and committees. Families may join and become active in the PTA, PTO, or other committees to participate in school decisions that affect their children (e.g., requesting new programs or procedures).

Finally, Epstein (1987) described the practice of collaboration and exchanges with the community. Schools make connections with agencies, businesses, cultural groups, and other organizations in the community that share responsibility for children's education. Schools inform students and families about community and support services such as after-school programs, tutorial programs, health services, and so forth. Families may or may not choose to obtain community services. They decide how often and in what ways their children should join community activities to broaden their learning beyond the home and school.

More recently, Lawson (2003) incorporated aspects of previous models by defining parent involvement as falling on a continuum. At one end of the continuum parent involvement is primarily focused on creating structured educational environments at home for their children, and parents have little influence over school decision making. Next, parents are involved in clerical, extracurricular, and child development activities at the school. At the next point on the continuum, parents volunteer in the classrooms and participate in PTA meetings. Finally, parents work with the school as partners in problem-solving, and in implementing and evaluating reform strategies.

For the purposes of the current investigation, parent involvement was defined as no involvement, involvement in activities that occur at school, involvement in home

activities, and parent-school collaboration. This definition incorporates four dimensions which are common to the models of Swap (1993) and Epstein (1987). The first dimension was no involvement, in which parents choose not to become involved in their children's education because they believe that it is the school's responsibility to handle issues in relation to educating their children, because of competing demands on their time, or because they feel unable or unwilling to do so. The second dimension was that parents choose to become involved in activities and events that occur at the school, such as volunteering in child's classroom, attending workshops, and participation in PTA meetings. The third dimension was that parents engage in school-related activities at home, including helping their children with homework and providing learning experiences for their children. Finally, the fourth dimension was parent-school collaboration, in which parents and school personnel communicate and work together to achieve educational goals for their children. The construct of overall parent involvement was defined as the combination of these three dimensions (i.e., school-based, home-based, and parent-school collaboration).

Parent Involvement in Homework

The present study did not limit the definition of parent involvement to one specific area, but rather investigated participation in a variety of activities within school and home settings. However, much of the research investigating parental involvement has focused on parental involvement in homework.

Parental involvement behaviors related to homework have been placed on a continuum from less to more complex. Epstein (1992) cited two categories of parental involvement: what she termed "basic obligations" (e.g., establishing physical and psychological structures for homework performance, interacting with the school or

teacher about homework, etc.) and involvement in learning activities at home (e.g., engaging in homework processes and tasks with the child, engaging in interactive processes supporting the child's understanding of homework, etc.).

According to Epstein (1992), parents who become involved in their children's homework performance choose to fulfill "basic obligations" or activities the support learning at home, which can range in level of involvement. For instance, when parents establish physical and psychological structures for the child's homework performance, they either control the structure around homework completion or they follow the child's lead and work to fit homework involvement into the daily life of the family. Another basic obligation of parent involvement discussed by Epstein (1992) is the interaction with the school or teacher about homework. The involvement activities here are also varied, ranging from simple responses to teachers' requests (e.g., sign homework assignments) to more complex efforts requiring the creation of shared home-school goals for the child's learning. At the more complex level, the parents would be committed to the involvement in programs designed to increase the amount of support provided at home for student learning. According to Epstein (1992), parents have a basic obligation to provide a general oversight of the homework process. At the simplest level, parents may provide monitoring or surveillance of homework performance. At a more complex and specific level, parents may check the student's homework by ascertaining the child's understanding of the homework, encouraging and motivating the student's homework performance, and coordinating others' involvement in the child's homework. Finally, parent involvement activities may focus on responding to the child's homework efforts, completion, and accuracy by employing specific approaches to reinforcing desired behavior (e.g., praise, extrinsic

rewards, reference to family standards) or by enhancing the child's self-perception of ability and the value of effort (Hoover-Dempsey et al., 2001).

The second category of parent involvement Epstein (1992) cited is the involvement in learning activities at home, in which parents again choose from a level of simple to more complex commitment. In the previous category parents provide the structure necessary for children to complete their homework, whereas in this category parents are more actively involved in the unstructured process by helping their children do their homework. Parents' active engagement in homework processes and tasks can generally be described as helping with homework, tutoring the child, or doing homework with the child. It has also been examined more specifically as structured, convergent (task-centered) efforts to help the child with assignments, and as informal, student-responsive (child-centered) efforts in homework tasks. Parent involvement activities may include engagement in meta-strategies, which created a fit between the task demands and the child's skill levels. For instance, parents may break homework assignments into manageable components or shape homework demands to the child's capabilities. Parents may engage in interactive processes supporting the child's understanding of homework, in which the parents may focus on the development of problem-solving skills pertinent to a broad range of learning tasks. This may be accomplished through modeling and demonstration, discussion of problem-solving strategies, and efforts to evaluate the child's conceptual understanding. Finally, parents may engage in meta-strategies designed to help the child learn processes conducive to achievement. Within this level of involvement parents may focus on activities targeted towards helping the child attain developmentally appropriate independence for managing learning tasks (e.g. self management skills, coping with distractions; Hoover-Dempsey et al., 2001). It is important for parents to be involved

in homework and help their children develop skills for managing tasks early in their education because homework problems are likely to increase as the students become older and teachers in middle and secondary schools cover more content and assign more homework (Bryan, Burstein, & Bryan, 2001).

Along with understanding the roles parents play in helping their children with homework, researchers have also investigated why parents become involved in homework. Motivations for providing homework help may be related to beliefs about appropriate parental roles and a sense of efficacy for helping the child learn (Hoover-Dempsey & Sandler, 1995, 1997; Hoover-Dempsey et al., 2001). According to Hoover-Dempsey and Sandler (1995, 1997), parents become involved in their children's homework because they believe that they should be involved, that they will make a positive difference in their children's school success, and they perceive invitations to become involved from the teachers. Parents who have a higher sense of efficacy in helping their child succeed are more likely to help with homework (Hoover-Dempsey, Bassler, & Brissie, 1992). Attempts to help children with homework may elicit feelings regarding limitations in knowledge, ability, and resources for helping from parents. These feelings may occur if the child performs poorly, or as the child becomes older and the homework becomes more complex (Bryan et al., 2001; Dauber & Epstein, 1993; Delgado-Gaitan, 1992; Hoover-Dempsey et al., 2001). Even parents who feel competent helping their children learn may experience negative feelings toward helping their children with homework when their children need frequent reminders to complete their homework, become frustrated and angry, or react negatively to their parents' efforts (Hoover-Dempsey et at., 2001). Parents who believe that involvement in their children's schooling is a requirement and responsibility of parenting report that their involvement in homework is important,

express an interest in knowing more about effective strategies for helping with homework, and believe that they should continue to help with homework despite concerns about their limitations or their children's learning difficulties (Hoover-Dempsey, Bassler, & Brissie, 1995).

Benefits of Parent Involvement

The goal of some forms of parent involvement is the prevention of remediation of academic or behavioral problems as evidenced by the home or school. More recently, some schools in U.S.A. have recognized parents as partners in the education and socialization of children (O'Callaghan, 1993). Schools and families share a responsibility for the education and socialization of children. Teachers and parents can most effectively achieve common goals for children when they work together (Epstein, 1986). "Beneficial outcomes for children, teachers, and parents alike hinge on the relationships parents and teachers develop around shared commitments to parent involvement" (Lawson, 2003, p. 78). Within a collaborative relationship, parents and teacher communicate clearly and openly, share information, have mutually agreed upon goals, and share in planning and decision making (Adams & Christenson, 2000). Parent involvement can also take a reactive form, in which a problem has developed or is starting to develop with the child in school. The teacher or other school personnel inform the parent of the difficulty with the intention of eliciting a response from the parent in managing the problem. Overall, parent involvement has been found to be related to positive outcomes in children's social and academic performance (Epstein, 2001; Jimerson, Egeland, & Teo, 1999; Smith, Prinz, Dumas, & Laughlin, 2001), as well as in schools' performance and in parents' behavior (Hoover-Dempsey, Walker, Jones, & Reed, 2002; Pena, 2000).

Social Benefits

Greenwood and Hickman (1991) found that effective parent involvement correlated with students' increased positive behaviors and emotional development. Parent involvement and parents' beliefs about their role as parents were found to be related to children's social competence (Smith et al., 2001). Parental involvement has been associated with increases in student attributes conducive to academic success, such as improved school attendance and behavior, stronger self-regulatory skills, stronger work orientation, and higher educational aspirations (Hoover-Dempsey et al., 2002). Self-regulation in children has been linked to parents' styles of motivation and supporting their children's school-related behavior (Cooper, Lindsay, & Nye, 2000). When parents maintain intermittent contact with teachers it gives them the opportunity to receive feedback about their child's progress and self-regulatory skills (Brody, Flor, & Gibson, 1999). Parental involvement may mediate the impact of socio-emotional difficulties (Jimerson et al., 1999). Morrison, Robertson, and Harding (1998) found that students who were rated as aggressive but were maintaining good academic performance in class had higher self – concepts, more support from teachers, parents, and classmates and they perceived their parents as being more involved. Parent involvement was an important factor in enhancing school learning in aggressive and acting out children (Morrison et al.). Students displaying socio-emotional and behavior problems in school may lack the motivation, attention skills, and self-regulation necessary for academic achievement (Jimerson et al.). Parental involvement and supervision around studying and completing homework appear to help students who may be experiencing behavioral difficulties organize their lives enough to maintain academic performance (Morrison et al.).

Academic Benefits

Parent involvement in education is a topic of increased interest to researchers and educator due to its association with positive academic performance and academic outcomes in children (Brody & Flor, 1998; Hoover-Dempsey & Sandler, 1995; Kohl et al., 2000; Lareau, 1987). In addition, policymakers have included parent involvement as a significant goal and target for educational reform (National Commission on Excellence in Education, 1983; U.S. Department of Education, 1994, 2001). Research demonstrates that students whose parents are more involved in their education earn higher grades and test scores in school (Pena, 2000; Steinberg, Lamborn, Dornbusch, & Darling, 1992). In addition, parent involvement has been positively associated with improved student attitud3s toward school, student behavior, homework habits school attendance, and overall level of academic achievement (Feuerstein, 2000). Higher levels of parent involvement have been found to be associated with better test scores in reading and teacher ratings of fewer learning problems (Zellman & Waterman, 1998).

In a study conducted by Hill and Craft (2003), a relationship was found between African American parents' active involvement in the classroom and their children's match performance when mediated by children's ability to complete classroom assignments. Parents' involvement at school, such as volunteering in the classroom and sending materials to school, improved children' academic skills, which in turn improved the children's math performance. Based on these findings, Hill and Craft concluded that involvement at school provides parents with information about the skills required by the teacher and improves their ability to develop these skills in their children. Hill and Craft also found that among Euro-Americans, parents' involvement in home activities was related to children's social competence, which in turn was related to their math performance. Hill (2001) found that the extent to which teachers

believed that parents valued education and valued the quality of the parent-teacher relationship was positively related to children's pre-reading performance. Jimerson et al. (1999) found that parent involvement in their children's education during the first three years of schooling was associated with improved math achievement. Reynolds. (1992) found that greater parent involvement was positively related to children's development as well as to academic performance. More specifically, parents' participation in school activities and communication with their children about school were related to children's school success (Mantzicopoulos, 2003). Smith et al. (2001) found parental involvement as well as parents' beliefs about the role of the family and developmentally appropriate expectations of their children were related to children's academic competence. In another study conducted by Marcon (1999), increased parent involvement was associated with greater development in all adaptive behaviors (e.g., communication, daily living skills, socialization, and motor skills) and mastery of early basic school skills in preschoolers.

While there is evidence that student achievement is higher when parents monitor their children's homework, participate in school activities, and support the values and work of the school, the impact of the various types of parent involvement seems to depend on the student's age and disability status. For instance, parent involvement in PTA meetings and school activities and volunteering as events appear related to younger children's achievement. High school students' achievement is related to parent involvement in learning activities at home, nurturing educational aspirations, and providing support for autonomy (Bryan et al., 2001). Iverson, Brownlee, and Walberg (1981) found that younger students with academic difficulties in reading benefited from an increase in parent-school contacts, whereas older students did not show positive outcomes. In addition, parents of elementary school children are more likely

than parents of middle school children to spend more time helping their children with homework because they feel more capable of providing the help. As children progress through grades and the curriculum becomes more difficult, parents want more information from schools on how to help their children and adolescents with homework (Dauber & Epstein, 1993), As children move from elementary schools into junior and senior high schools, the practice of partnership between parents and schools typically declines. The form and levels of parental involvement change in the middle and high school years. For instance, elementary schools are more likely to encourage parent involvement, such as volunteering at the school building, attending parent-teacher conferences, and supervising their children's homework, than are middle or senior high schools (Connors & Epstein, 1995; Epstein & Dauber, 1991). Middle school teachers use fewer communication practices and they communicate less often with parents than elementary school teachers (Epstein & Dauber). It may be more difficult to involve parents of older students in learning activities because the abilities and needs of children in upper grades are more diversified and the academic content is more complex (Epstein, 1986)

Low Achievers versus High Achievers

While researchers (e.g., Brody & Flor, 1998; Epstein & Dauber, 1991; Grolnick et al., 1997) have found the parent involvement is related to student success in school, it is difficult to determine whether parents become involved because their children are successful in school or whether children are successful because of their parents' participation. Gutman and McLoyd (2000) found that parents of low achievers were less involved in their children's schooling than parents of high achievers. They also found that parents of high achievers initiated contact with the school to inquire about their children's progress, whereas parents of low achievers only contacted the school in

response to the school's request due to misbehavior or poor work (Gutman & McLoyd). Epstein (1996) suggested that parent-school contacts increase related to student problems because teaches contact parents more often when their children are having difficulties in school. However, parents may initiate contact with the school when their children are doing well. Parents may use their children's behavior to regulate their own actions (Grolnick et al.) Parent-initiated involvement in school may be associated with higher levels of achievement, while teacher-initiated parental involvement may be associated with lower levels of achievement (Hill, 2001). Parents may be more involved because their children's initial level of performance may be high (Marcon, 1999). Parents who have positive experiences at their children's schools and believe that school personnel want to work with them to help their children succeed may be more likely to initiate contact with the school (Gutman & McLoyd). Griffith (1998) found that parents of children in special education and English as a second language classes were less involved in school activities, whereas parents of children in gifted and talented programs were found to be more involved.

Low achieving students may need help from their parents with schoolwork, but parents report increases in feelings of frustration and helplessness when they provide help (Bryan et al., 2001). Parents of lower achieving students were found to view the school as responsible for handling day-to-day and common crises with their children, whereas parents of higher achieving students focused on their responsibilities in their children's day-to-day education and on parent-school partnerships in common crisis situations (Hoover-Dempsey & Jones, 2002), Gutman and McLoyd (2000) found that parents of both high achieving and low achieving students reported helping their children with schoolwork. However, they found that parents of high achievers may

have more effective strategies for helping their children with schoolwork than parents of low achievers.

Benefits for School

Parent involvement not only positively impacts students, but the schools and the parents themselves seem to benefit. For instance, inner-city schools that encourage parent involvement outperformed those with little parent involvement. Schools that have long-lasting and comprehensive parent programs outperform schools without these programs in the areas of children's achievement and in the overall quality of the school (Pena, 2000). Epstein and Dauber (1991) found that parent involvement also positively correlates with teacher efficacy. In turn, teacher behavior has been found to be related to parent involvement. Teacher efficacy and job satisfaction may determine a teacher's ability to engage parents in school activities (Feuerstein, 2000). Teachers who report high levels of teaching efficacy and support from parents tend to be perceived by parents as better teachers (Hoover-Dempsey et al., 2002).

Parents benefit from their increased participation by developing positive attitudes toward their children's teachers, seeking additional education for themselves, developing higher educational aspirations for their children, and improving parent-child communication. Low-income parents who are involved in their children's schools seek additional education for themselves (Pena, 2000). Parents benefit from involvement by improving parenting skills and enhancing self-esteem (Seefeldt, 1985).

Parental involvement seems to be related to the evaluation teachers make of their students (Bacete & Remirez, 2001). Teachers may rate children higher or be move

willing to work with children whose parents appear to be interested in their children's education and show high levels of involvement. This would provide the children with a more enriched school experience, which might enhance the children's sense of accomplishment (Marcon, 1999). Parents who maintain intermittent contact with teachers receive feedback about their children's performance and self-regulatory skills. In turn, teachers anticipate future parent-teacher interaction and are more likely to monitor the academic performance and classroom conduct of students whose parents are more involved (Brody & Flor, 1998).

In summary, parent involvement has been found to be beneficial to students, schools, teachers, and parents. Social competence and academic performance have been found to be related to parent involvement practices (Epstein, 2001; Jimerson et al., 1999; Smith et al., 2001). More specifically, parent involvement has been associated with improved school attendance and behavior, self-regulatory skills, work orientation, and higher educational aspirations among students (Feuerstein, 2000; Hoover-Dempsey et al., 2002). These student attributes are more likely to promote academic success. Studies have found that students earn higher grades and test scores when their parents are more involved in their education (Pena, 2000; Steinberg et al., 1992). Higher levels of parent involvement have also been found to be associated with student's performance in specific areas of academics. For instance, parents' involvement at school was found to improve students' math performance (Hill & Craft, 2003; Jimerson et al.). Hill (2001) found that parents who viewed the parent-teacher relationship as important were more likely to have children with improved pre-reading performance.

Higher academic achievement among students improves the quality of schools. Pena (2000) found that schools that implement comprehensive parent involvement programs outperform schools without these programs in children's academic achievement. Parent involvement has also been reported to be related to teacher efficacy (Epstein & Dauber, 1991). Parents who are more involved in their children's education develop positive attitudes tower their children's teachers, seek additional education for themselves, develop higher educational aspirations for their children, and show improved parent-child communications (Pena).

Factors influencing Parent Involvement

Parental involvement or noninvolvement can be correlated with a number of factors. Parent behavior should not be studied without also taking in account the context within which the parent and family live.

Parent Gender

Mother and father involvement have been found to be positively related to children's cognitive development and educational attainment; however, fathers have been studied less frequently that mothers (Coley, 2001; Shumow & Miller, 2001). In particular, fathers' involvement in their children's schooling has rarely been distinguished from mothers' involvement. For instance, some studies in the area of parents' school involvement have focused on mothers only (Brody & Flor, 1998; Grolnick et al., 1997), some have found that fathers were less likely to participate in the studies (Epstein & Lee, 1995), and some have combined mother and father reports as "parent" or "family" involvement (Bacete & Remirez, 2001; Kohl et al., 2000; Unger, Jones, Park & Tressell, 2001). Family involvement in the literature usually refers to the

mother's involvement in education because service providers tend to focus their interactions with mothers (Turbiville & Marquis, 2001).

Research investigating gender differences in parent involvement in children's education has been limited. A few studies comparing father and mother participation in education have found the fathers tend to be as equally involved as mothers in at-home activities but not as involved in at-school activities (Nord, Brimhall, & West, 1997; Shumow & Miller, 2001). By comparison, a study of parental involvement conducted by Eccles and Harold (1996) found that mothers provided more homework assistance with elementary school children when compared to fathers. Mothers appear to be more likely than fathers to participate in meetings and school conferences (Nord et al.; Shumow & Miller). Grolnick and Slowiaczek (1994) found that mothers were more involved than fathers in all areas of school involvement, including attending parent conferences, discussing and showing an interest with their children about school, and exposing their children to cognitively stimulating activities at home. Fathers were more involved in their children's education than other fathers when mothers were also involved.

In order to encourage fathers to assume a more active role in their children's education, it is important to understand what factors are related to father involvement. For instance, fathers may be discouraged from participating at school due to family roles, cultural norms, and school policy and practices (Shumow & Miller, 2001). Demographic variables, such as father education and employment, have also been correlated with father involvement (Roggman, Boyce, Cook & Cook, 2002). Turbiville and marquis (2001) found that fathers were more likely to participate in early childhood programs when activities included both fathers and mothers, when programs

provided information about their child's needs and educational progress, and when programs scheduled activities at times that did not interfere with their work schedules. Other factors that may be related to father involvement include feelings of inadequacy about participating in children's education and the ambivalence of school staff about father involvement. Schools that do encourage and invite father involvement may not increase participation if fathers do not view this as part of the traditional male role (McBride, Rane & Bae, 2001). More recently, society seems to lack a consensus regarding the appropriate role of a father, which is resulting in greater individual variation in fathering behaviors (Coley, 2001).

Status Variables

By comparison, the relationship between status variables and parent involvement has been more frequently discussed in the research literature. Researchers have demonstrated that family status variables (e.g., income, education, ethnicity, marital status) are related to parental involvement, and ultimately to children's school success (Hoover-Dempsey & Sandler, 1997). For example, Hoover-Dempsey, Bassler, and Brissie (1987) found the lower income, less educated, and single parents were less involved in children's schooling than higher income, more educated, and married parents. Mothers with higher socioeconomic status have a greater tendency to be involved at school. Family-school collaboration is important for children's education at all socioeconomic levels, and there is research to suggest that this is especially true among low income communities (Gutman & McLoyd, 2000). In particular, academic achievement of low income students varies directly with the degree of parent involvement (Pena, 2000). Early home environment and parent involvement have emerged as protective factors in facilitating academic success in children living in impoverished environments (Jimerson et al., 1999). Although some studies have found

that single, low income parents were just as involved as their two parent or more affluent counterpart (Marcon, 1999), other studies found socioeconomic status was related to parental involvement (Kohl et al., 2000). Griffith (1998) found low socioeconomic status to be associated with lower parent participation in school activities. Schools with higher average socioeconomic status have been found to have higher parent participation in parent conferences and higher numbers of parent volunteers in the schools (Hoover-Dempsey et al., 1987). Single, low income parents may not be able to participate in their children's schools because they do not have the time availability, or they have conflicting work hours (Delgado-Gaitan, 1991; Pena, 2000).

In a study conducted by Kohl et al., (2000), it was found that parental education, maternal depression, and single parent status were related to parental involvement. They found low parental education to be associated with lower levels of active school involvement. "Parents' view of their role as teacher and their comfort level communication with teachers and helping their children with school work may, in part, be a result of their own educational experience" (Kohl et al., p.502). Less educated parents may have had life experiences the caused them to feel they do not have the necessary skills to help their children, or they should not interfere with the authority of the school.

Single parents have been reported by teachers to have lower levels of school involvement. Mothers in two parent families have been reported to be more involved than those from single parent families. For instance, mothers in two parent families were more involved at school, exposed their children to more intellectually stimulating activities at home, and kept more abreast of what was going on with their children at

school. However, when socioeconomic status was held constant, mothers from single parent homes were only found to be less involved in activities taking please at school (Grolnick et al., 1997). Kohl et al. (2000) also found that single parent status was related to less active involvement at school. However, single parent status was not associated with the amount of parent-teacher contact or lower levels of involvement with their children at home. Parents from single parent homes may be less involved in school because they have fewer resources, such as money, social support, and time availability (Kohl et al.).

In addition, there are a number of barriers that prevent parent from diverse cultural backgrounds from participation in school activities. These barriers include differences in languages between teachers and parents and a lack of bilingual staff to improve communication. Parents' limited education and lack of fluency in English make it difficult for them to support their children's education, or help them with homework. Other barriers of involvement include conflicting working hours of parents and lack of childcare, which may prevent them from participating in activities at school (Pena, 2000).

These variables do not fully explain why parents decide to become involved in their children's education (Hoover-Dempsey & Sandler, 1997). The relationship of family and demographic variables with parent involvement in schools can be better understood by also studying mediating factors such as parent attitudes (Kohl et al., 2000).

Model of Parent Involvement Process

Hoover-Dempsey and Sandler (1997) proposed a model of the parental involvement process which suggests

> that most parents' fundamental decision to become involved in children's education is a function primarily of three constructs: (a) the parents' construction of his or her role in the child's life, (b) the parent's self-efficacy for helping her or his child succeed in school, and (c) the general invitations, demands, and opportunities for parental involvement presented by both the child and the child's school (pp. 8-9).

Parent' thoughts and beliefs about themselves as parents are thought to influence parent involvement. Parents who believe that they have a role in the teaching-learning process have been reported to be more involved in school activities. Parents' behaviors also have been found to be related to teacher practices. Parents are more involved and feel better about their abilities to help when teachers make parent involvement part of their daily teaching practice (Grolnick et al., 1997).

Parental Role Construction

Role theory defines roles as the beliefs and expectations people hold for their own behavior and the behavior of others (Biddle, 1986). Roles are socially constructed and grounded in expectations for behavior. These expectations are learned primarily through social experience (Hoover-Dempsey & Jones, 2002). The basic tenets of role theory can be applied to parents' choices about involvement in their children's education. Role theory suggests that the groups to which parents belong (e.g., family, child's school) hold expectations regarding parental role behaviors (e.g., parent involvement in children's education and communicated these expectations to parents (Hoover-Dempsey & Sandler, 1997). In addition, parents' role constructions of involvement in children's education are also related to their beliefs about child development and child-rearing. Parents' ideas about the roles they should hold in their

children's education are developed through experiences as members of groups (i.e., family, school), through personal and group beliefs regarding the goals of education and child-rearing, and through the actions of other group members who hold responsibilities for children's development and education (Hoover-Dempsey & Jones, 2002). The construction of parental role of involvement in children's education is associated with

> a) parental values, beliefs, goals and expectations for he child's behavior,
> b) parental beliefs and behaviors related to responsibility for the child's day to day education, and c) parent beliefs and behaviors related to responsibility for common conflicts or major decision in the child's education (Reed et al., 2001, p.3).

Thus, parents' decisions to become involved in their children's education are thought to be largely associated with their construction of the parental role. According to Hoover-Dempsey and Sandler (1995, 1997), parents become involved in their children's schooling because they construe the parental role as including involvement in their children's education. The presence of such a role construction means that the parents have thought about the relevant responsibilities and activities that are necessary for them to act on (Hoover-Dempsey & Sandler, 1995). For instance, Hoover-Dempsey and Sandler (1995) work on parental role construction demonstrated that the parents of elementary school children in their study believed that they should b involved in helping with their children's homework, and they conveyed the belief that helping children with their schooling was part of their parental role.

Hoover-Dempsey and Jones (2002) examined transcripts of parents' interviews regarding parent involvement in their children's education for specific indicators of parents' beliefs about role construction. They focused on how parental role construction for involvement in their children's education is best identified and defined in the beliefs and behaviors of parents when discussing their involvement in their

children's education. In addition, Hoover-Dempsey and Jones (2002) sought to identify the major categories important to understanding parental role construction. Parents' statements focused on one or more of three broad perspectives emphasizing the parents' responsibilities and activities in the child's education process and outcomes (i.e., parent-focused role construction), the teacher's or school's responsibilities and activities (i.e., school-focused role construction), or the interactive and mutual responsibilities and activities shared by the parent and teacher (i.e., partnership-focused role construction). Reed et al. (2001) found that parent-focused role construction, partnership-focused role construction, and perceptions of teacher invitations were the variables most directly related to parental involvement. Parents who believe that it is their responsibility as parents to ensure their children's educational success, or that their children's education is best served by an active partnership with the school are more likely to behave in ways that correspond with these beliefs. When parents have a school-focused role construction they believe that the school is ultimately responsible for their children's education. Although this does not mean that these parents play no role in their children's education, their involvement would be lower than parents holding parent-focused or partnership-focused role constructions (Reed et al., 2001). Role construction alone is not sufficient because the parent must take the construction and act on it is order to be involved. For parents to act on the role, they must believe that they have the skills and opportunities necessary for involvement (Hoover-Dempsey & Sandler, 1995).

Parent Self-Efficacy

Parents also become involved because they have a sense of personal efficacy for helping their children succeed in school (Hoover-Dempsey & Sandler, 1995). Parenting sense of efficacy in school involvement is grounded in efficacy theory (e.g.,

Bandura, 1997). According to Bandura, an efficacy expectation is the belief that one can successfully execute a behavior that is required to produce desired outcomes. Efficacy expectations are major determinants of the activities people choose, the effort they expend, and how long they sustain effort when faced with stressful situations (Bandura).

Parenting self-efficacy has emerged as a powerful correlate of parenting behavior in research studies, and it may be an important construct for understanding individual differences in parenting behavior. Parental self-efficacy beliefs refer to individual differences in parenting behavior. Parental self-efficacy beliefs refer to parents' expectations of whether they are able to competently and effectively perform as parents. In addition, it can also be construed as parents' self-perceptions that their ability and behavior are positively related with the behavior and development of their children. In order for parents to feel efficacious, they must view themselves as possessing knowledge of appropriate child care responses, feel confident in their abilities to carry out such tasks, and hold the belief that their children will respond contingently and that others will be supportive of their efforts (Coleman & Karraker, 1997).

In relation to parental involvement, parent efficacy is defined as "parents' beliefs about their general ability to influence their child's developmental and education outcomes, about their own influence relative to that of peers and the child's teacher" (Hoover-Dempsey & Sandler, 1997, p. 19). A sense of efficacy for helping children succeed in school enables parents to believe that their involvement will be positively associated with children's learning and school performance, and to ultimately act in relation to their children's schooling (Hoover-Dempsey & Sandler, 1995, 1997). Parents' sense

of efficacy that they have some influence over their children's educational development has been found to be independent of their socioeconomic status (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Brody et al., 1999). Parents' sense of efficacy to promote their children's educational achievement enhances their children's beliefs in their own academic efficacy. Children's beliefs in their social and self – regulatory efficacy are raise when they have academically efficacious parents who promote educational, interpersonal, and self-management skills conducive to learning. These children are more likely to resist peer pressure and detrimental behavior (Bandura, et al, 1996).

Research on parenting efficacy has linked efficacy with parental involvement decisions. Reed et al. (2001) found that efficacy was an important but distal variable influencing parent involvement decisions. Role construction was found to mediate the influence of efficacy on involvement (Reed et al., 2001). In another study conducted by Hoover-Dempsey et al. (1992), parent efficacy was related to activities of parent involvement (e.g., volunteering, educational activities, and telephone calls with teachers). Parenting self-efficacy has been found to be indirectly related to children's academic and psychosocial competence. Parenting efficacy beliefs predicted the developmental goals mothers endorsed for their children. Mothers who believed that they could influence their children's development endorsed goals such as educating, respect for others, and concern for others. These mothers were also more likely to use competence-promoting parenting practices (e.g., routinized home environment, affectively positive mother-child relationship, and mother involvement in their children's schooling). These parenting practices were linked with children's ability to regulate their own behavior which was associated with academic and psychosocial competence (Brody et al., 1999).

School Invitations

Parents' decisions about participation in children's schooling have been correlated with patterns of teacher attitudes and invitations. Parents are more likely to become involved because they perceive invitations from their children and /or children's school to do so (Hoover-Dempsey & Sandler, 1995). Parents tend to rely on the direction from school staff for ways they can help their children be more successful in school (Dauber & Epstein, 1993). Parents' attitudes regarding their children's school are important factors in determining their level of involvement. Parents are more likely to initiate contact with their children's school when they have had positive experiences at the school and they believe that school personnel want to work with them in order to help their children succeed. In contrast, parents are less likely to be involved and initiate contact with their children's school when they have had primarily negative interactions with the school, and they believe that school personal only contact them to report bad news about their children. Parents of high achievers frequently visited the school and maintained contact with the school personnel. These parents saw themselves and the school working together to solve any difficulties that arose with their children in school. Parents of low achievers, on the other hand, were involved with their children's school when requests were made by teachers due to problems with their children. When problems arose with their children, parents did not want the school to intervene (Gutman & McLoyd, 2000). Grolnick et al. (1997) found that parents who perceived their roles as teachers of their children and who had feelings of self-efficacy became more involved when teachers encouraged their involvement, whereas those who did not see themselves in this manner were less affected by teachers' behaviors.

Work by Epstein (1986) found that parents were aware of teachers' efforts to involve them in learning activities in the home, and these parents were more likely to respond

positively. Parents' views of the school and their awareness of teachers' interests in their involvement were more positive when teachers engaged parents in more involvement activities (Epstein, 1986). Teacher who provide parents with specific information on their children's learning and progress in school were found to be related to what parents do at home to support their children's learning (Connors & Epstein, 1995). A school environment that invites and encourages parent involvement conveys the belief that helping children with their schooling is part of their parental role (Hoover-Dempsey & Sandler, 1997). There was stronger parent involvement in schools where teachers and parents reported strong feelings about the importance of parental involvement (Hoover-Dempsey & Sandler, 1997). "General invitations from the school influence parents' understanding of teachers' interest in their help, parents' beliefs about being needed in the educational process, and parents' knowledge of their children's work" (Reed et al., 2001, p. 4). Although parents and teachers believe that parents have a role to play in their children's homework, teachers often do not give parents guidelines about the purpose of the homework or how they can best help their children (Connors & Epstein).

In general, the most common methods of informing parents of student progress are through report cards, memos, phone calls, and so forth (Connors & Epstein, 1995). Report-card serves as the ongoing records for informing families of how well students are mastering specific subjects. However, parents report that they want more information regarding their children's performance. The degree of satisfaction parents report that they receive from report cards is related to the amount of supplemental information they are given (Connors & Epstein; Epstein & Dauber, 1991). Families are not usually informed of how the criteria for excellence changes across grade levels, how to interpret grades, or how to guide their children toward improved performance.

Fuqua, Hegland, and Karas (1985) found that he teachers used one of four ways of communication with parents: personal notes and phone calls were used most frequently, followed by home visits and newsletters. However, these methods were not found to be related to parent involvement or improved home-school communication. Another means through which schools inform parents of their children's progress is through parent-teacher conferences. These conferences give schools an opportunity to share their grading practices and help parents understand their children's progress and the expectations of the school (Connors & Epstein).

Reid (1984) conducted a study investigating the forms of reports used by schools, how they were selected, what they contained, and parents' perceptions of these reports. Schools commonly sent home written report slips. Some schools experimented with different forms of reporting such as daily journals, oral reporting to supplement the written report, and special reports for students at particular stages (e.g., 'settling in' reports discussing the progress of students who had recently started in the school). The heads of schools were surveyed as to which items were important to include in these reports. They agreed that reports should include an attendance total, comments on attainment, progress, effort, attitude, and behavior in each subject as well as grades for attainment and effort. Some of the school heads stated that lateness total, record of extracurricular activities, and space for parental comments should also be included. It was reported that the functions of school reports were to inform parents of students' progress and to change the students' attitudes and performance and involve parents in the educational process. The majority of schools only produced two reports per year, while other schools either did not issue any written reports during the school year or sent one report to parents annually. In general, teachers were reported to receive no preparation through initial or in-service training for reporting. Many parents found the

reports to be useful. However, there were a number of areas in which the parents would have like more information, such as the school's grading policy and the basis on which grades were allocated (Reid). In addition, "parents wanted a fuller description of what their child had learned and specific advice on what they should do to help the child improve" (Reid, p. 85). Schools used one of two methods to elicit responses from parents regarding the reports. Parents were asked to write a reply and comments about the report on a slip that was sent to them. However, parents rarely used this method. Another method used was inviting parents to the school for one evening to discuss the report. Attendance was reported to decline after the first year of beginning the school (Reid). Parents tend to participate more in schools when the invitation for their involvement is related to their child's achievement (Ysseldyke & Christenson, 1993)

Griffith (2000) studied student and parent perceptions of the school environment, in which the environment was measured according to three aspects: school climate, school empowers parents, and the school informs parents. The area of school climate was assessed according to the extent to which parents were made to feel welcome, the office staff was helpful and courteous to the parent, and school personnel were interested and cooperative when discussing the parent's child. The area of school empowers parents was measured by asking parents whether the school tells them about school events, meetings, and ways they can help in the school. In addition, the school schedules events at times parents can attend. In Griffith's (2000) study, parents were asked about their perceptions regarding how well the school keeps them informed. Parents were asked whether the teachers informed them of their children's academic progress, problems involving their children, the school rules, and school policies. Griffith (2000) found that higher parent involvement was related to parent perceptions of school climate and the school empowers parents. "Schools having teachers who

develop open communication and collaborative working relationships with parents and who have more positive and understanding attitudes toward parents have high levels of parental involvement and satisfaction"(Griffith, 2000, p. 55).

In summary, a number of studies have investigated factors related to parent involvement. Much of the research has focused on the relationship between parent involvement and demographic characteristics of parents. Parent involvement studies have rarely distinguished between mother and father involvement in children's education. Those studies that have investigated gender differences have found that mothers are more involved in at-school activities (Nord et al., 1997; Shumow & Miller, 2001). Grolnick and Slowiaczek (1994) found that mothers were more involved in all areas of school involvement as compared to fathers. Some studies found the fathers were just as involved as mothers in at-home activities with their children (Nord et al.; Shumow & Miller). Mothers continue to be the focus in studies of parent involvement, and more research is needed on factors related to father involvement.

By comparison, the relationship of status variables (e.g., income, education, ethnicity, marital status) with parent involvement has been more frequently studied. In general, research has found that lower income, less educated, and single parents are less involved than higher income, more educated, and married parents (Griffith, 1998; Hoover-Dempsey et al., 1987; Kohl et al., 2000). Kohl and others found that less educated parents showed lower levels of school involvement. Less educated parents may not feel comfortable talking with teachers and helping their children with school work. Single parents have also been reported to have lower levels of school involvement than mothers in two parent families. Parents from single parent households may not have the money, social support, or time available to be actively

involved in their children's schools (Kohl et al.). Finally, parents from diverse cultural backgrounds have found to have limited school involvement. Barriers preventing culturally diverse parents from participating in school activities include lack of fluency in English, limited education, and conflicting working hours (Pena, 2000).

In addition to status variables, studies have also sought to understand how parents' attitudes influence parent involvement in children's schools. Hoover-Dempsey and Sandler (1997) proposed a model of factors that have been found to be related to parent involvement decisions. They proposed that parents choose to become involved in their children's schooling because parents believe they play an important role in their children's education, parents feel efficacious about helping their children succeed in school, and parents perceive invitations from teachers to become involved.

Hoover-Dempsey and Sandler (1997) proposed that parental role construction is related to parents' decisions to become involved in their children's education. Parental role construction was based on role theory and applied to parent's choices regarding involvement. According to Hoover-Dempsey and Sandler (1995, 1997), parents choose to become involved in their children's education because they believe that involvement in their children's schooling is pat of their parental role. Hoover-Dempsey and Jones (2002) identified three major categories that are important to understanding parental role construction (i.e., parent-focused, school-focused, and partnership-focused role construction). Parents who hold parent-focused role construction emphasize the parent's responsibility in the child's educational outcomes. School-focused role construction emphasizes the teacher's or school's responsibility in educating the child. Finally, partnership-focused role construction is the belief that the parent and teacher share responsibility in the education of the child.

Hoover-Dempsey and Sandler (1995, 1997) also proposed that parents become involved in their children's education because they have a sense of personal efficacy for helping their children succeed in school. Parental sense of efficacy in school involvement is grounded in efficacy theory. Parent self-efficacy refers to parents' expectations that they con competently and effectively perform as parents. In order to feel efficacious, parents must view themselves as knowledgeable, feel confident in their ability to carry out tasks, and believe that their children will respond contingently (Coleman & Karraker, 1997). Parent who hold a sense of efficacy for helping their children succeed in school believe that their involvement will be positively associated with children's learning and school performance (Hoover-Dempsey & Sandler, 1995, 1997).

Finally, Hoover-Dempsey and Sandler (1997) proposed that parents choose to become involved in their children's schooling because they perceive invitations from their children's school for their involvement. Parents are more likely to initiate contact with their children's school when they have been make to feel welcome and they believe that school personnel want to work with them. Studies have found that when parents recognized teachers' efforts to involve them in their children's learning, the parents were more likely to become involved and to view the school positively (Epstein, 1986; Hoover-Dempsey & Sandler, 1997).

Demographic Variables and Teacher Invitations

Since the study will be conducted in Thailand, we must consider some demographic variables that might affect the results of the research.

Lower socio-economic-status has been associated with lower parent involvement at school (Griffith, 1998). Lareau (1987) argued that culturally and economically disadvantaged parents have lower levels of involvement because schools embody the social and cultural values and practices of parents from the dominant culture and middle to upper classes. Research has concluded that the culture of the school often differs from that of the home for many ethnically and linguistically diverse children (Delgado-Gaitan, 1991). Many schools represent middle or upper class values and forms of communication, making teachers better able to communicate effectively with middle and upper class parents who share similar beliefs. Parents from different cultural references are placed at a disadvantage because they must try to relate and adapt to the dominant culture of the school (Feuerstein, 2000).

Schools exclude parents by implementing activities that require majority culturally-based knowledge and behaviors. Parents feel isolated when they cannot participate in school activities without appropriate cultural knowledge (Delgado-Gaitan, 1991). These parents may have limited involvement in schools due to "perceived inability to participate because their socio-cultural values and practices often conflict with those of the school" (Griffith, 1998, p. 73). Teachers do not frequently involve disadvantaged or less educated parents in school activities because they tend to doubt the skills and interests of these parents (Epstein & Dauber, 1991; Griffith, 1998; Pena, 2000). Thus, teacher and school invitations for parental participation are limited. When working class and minority parents are invited to participate in school activities, it tends to be in traditional roles of fundraisers and chaperones (Pena).

Research has found that there is variation in the nature of involvement in less educated and economically disadvantaged parents, particularly when teachers help them become productively involved (Epstein & Dauber, 1991). Marcon (1999) found that single

parent and low income parents were just as involved as two parent and more affluent families when the school emphasized parent empowerment. Variations in parent involvement have also been among cultural and economic groups, and this has been related to the ways in which schools inform and involve families (Eccles & Harold, 1993; Epstein & Dauber). Schools and teachers that invite parents to participate in school activities improve parent-school links with disadvantaged parents (Eccles & Harold, 1993). "Parents who are knowledgeable about the school's expectations and the way in which the school operates are better advocates for their children than parents who lack such skills" (Delgado-Gaitan, 1991, p. 21). Greater school contact with parents has been related to increased parent contact with the school through volunteerism and PTO participation (Feuerstein, 2000).

Research has found that parents of all backgrounds (e.g., economically disadvantaged, less educated) can be involved more productively in their children's schooling when teachers provide them with help (Epstein & Dauber, 1991). Low income parents may focus their energy on the challenges of meeting basic needs for their families rather than on involvement in their children's schools (Lawson, 2003). Lopez et al., (2001) found that parent involvement among migrant parents can be increased when schools acknowledge the families' challenges and help them meet their needs. These schools demonstrated an understanding for the cultural backgrounds of the families and provided the families with services (i.e., psychological, social, and health) to enhance their well-being. This allowed parents to have the opportunity to focus their energies on being involved in their children's education (Lopez et al.). Low income parents may perceive their ability to help their children in school as limited, and attribute greater expertise to teachers than do middle class parents. Thus, partnership between low income parents and teacher is more difficult to establish (Marcon, 1999). It is

especially important for a family school connection to be established in minority and low income communities because parents may feel less efficacious about being involved (Gutman & McLoyd, 2000).

Demographic Variables and Role Construction

In addition to school invitations, parent participation may also be affected by the fact the parents are mostly Thai. International schools have become very popular, but these opportunities were not readily available in the past, therefore the parents may have lower levels of self-efficacy to help their children in school, as well as the belief that their role is not significant in their children's education. "School staff's attitude and practices may lead socio-economically disadvantaged parents to develop belief that they lack the abilities to help their children or that the school does no expect their involvement in their children's education" (Griffith, 1998, p. 73). Teachers and schools that make efforts to improve parent involvement facilitate the parent's role in the school (Eccles & Harold, 1993).

Role theory suggests that roles are socially constructed. Roles are grounded in expectations for behavior held by one's own group and other group members. These expectations guide an individual's behavior in various situations. Roles are learned through social experience, and include information about the ways in which others expect the individual to behave. Schools influence the process of parental role construction (Hoover-Dempsey & Jones, 2002). "School actions and inactions, practices inviting and discouraging involvement, all enter the social process that create parents' role ideas and activities" (Hoover-Dempsey & Jones, 2002, p. 21). Parents from various ethnic groups may feel uncomfortable communicating with teachers and attending school activities because the schools are not sensitive to their language or

culture. The behavior of the school influences the beliefs parents develop about their roles in education.

Although teacher practices can help to increase parent involvement, schools must be aware that parents who feel stressed or have differing values and attitudes from the school may not understand the teacher's message for involvement. In order to increase parent involvement, cultural factors, such as parents' ideas about children's learning, must also be considered (Grolnick et al., 1997), For instance, Mexican American parents have been found to view their children's academic development to be a function of the school, and that the role of the home and school should not interfere with each other. Mexican American parents have been reported to respect the roles of the teachers and do not want to interfere in the teacher's professional duties. Latino parents have been found to be more deferential and less comfortable with teacher than are African American and Caucasian parents (Pena, 2000).

While role theory suggests that role expectations are based on social experiences and personal beliefs (Biddle, 1986), other researchers (e.g., Delgato-Gaitan, 1992; Lareau, 1989) have suggested that parent socioeconomic status may be the basis of parents' expectations for their responsibilities and roles in their children's education. In other words, it has been argued that parents' socioeconomic status may be the basis for the role expectations they develop. However, "role theory suggests that role expectations are based on social experiences and personal beliefs, which are not necessarily constrained by socioeconomic status" (Hoover-Dempsey & Jones, 2002, p. 19). The groups to which parents belong hold expectations about appropriate parental behaviors (Lawson, 2003). Hoover-Dempsey and Jones (2002) studied the association between parental role construction and family socioeconomic status and they found that

parents' occupation and marital status were not significantly related to parents' role constructions.

Demographic Variables and Self-Efficacy

Culturally and economically diverse parents are more likely to become involved when teachers' practices make them feel welcome and they believe that they play an important role in their children's education. However, parents' involvement is also related to the belief that they have the ability to help their children in school. Parents who experience economic stress tend to develop a sense of helplessness, which has been found to undermine their beliefs that they have control over their children's development (Brody et al., 1999). Stressful circumstances draw more heavily on parental resources, such as self-efficacy (Coleman & Karraker, 1997). Brody et al. found that reports of financial adequacy were significantly related to feelings of efficacy in African American single mothers. Mothers who reported greater levels of economic stress were less likely to believe that their parenting would be effective. Maternal self-efficacy has been found to be a mediator between demographic variables and maternal competence (Coleman & Karraker). Stressful life circumstances can also be related to lower level of parent self-efficacy with regard to participation in children's schools. Many economically disadvantaged parents have limited education and lack of fluency in English, which impedes their ability to help with homework (Pena, 2000). "The difference in languages between teachers and parents and lack of bilingual staff also make parents feel powerless" (Pena, p. 45). In addition, when parents encounter barriers, such as differences in language and cultural values, with the school they may not feel confident that they have an impact on the school by participating (Eccles & Harold, 1993). Parents with limited education may be less likely to view their role as teachers and feel less comfortable communicating with

teachers and helping their children with school work. Less educated parents may feel less able to be actively involved in their children's schools and that they do not have the necessary skills to help their children (Kohl et al., 2000). For example, Mexican American parents who had not received schooling in America and were unfamiliar with its expectations, felt less confident helping their children with homework assignments than providing their children with emotionally supportive home learning environments (Delgado-Gaitan, 1992). This means that Thai parents may not be comfortable with the western curriculum and therefore they may feel less comfortable communicating with teachers and helping their children with school work

In summary, involvement among culturally and economically disadvantaged parents can be associated with their perceptions of teacher invitations, their parental role constructions, and their feelings of self-efficacy. A significant relationship between teacher invitations and school involvement among culturally and economically disadvantaged parents has been found in research studies. Lareau (1987) argued that schools tend to embody the social and cultural practices of parents from dominant cultures and middle to upper classes. The culture of the school often differs from that of the home of ethnically and linguistically diverse families (Delgado-Gaitan, 1991). As a result, parents may feel excluded and have limited involvement in their children's school. When teachers and schools invite parents to participate in school activities, parent involvement improves among disadvantaged parents (Eccles & Harold, 1993; Epstein & Dauber, 1991).

When teachers and schools make an effort to improve parent involvement they facilitate the parent's role in the school (Eccles & Harold, 1993). In other words, parents are more likely to believe they play a role in their children's education when

teachers and schools encourage their participation. Parents from culturally diverse backgrounds may feel uncomfortable communication with teachers and attending school activities when schools are not sensitive to their language or culture. The behavior of schools can influence the beliefs parents develop about their roles in their children's education. Parents' beliefs about their children's schooling must be considered in order to increase parent involvement (Grolnick et al., 997). For instance, many Mexican American parents view the school as primarily responsible for their children's education, and they believe that they should not interfere with the school (Pena, 2000).

Finally, parents who experience stressful life circumstances may have lower levels of parent self-efficacy with regard to their involvement in their children's education. Economically disadvantaged parents who have limited education and lack fluency in English may not feel confident about participating in their children's schools (Eccles & Harold, 1993; Pena, 2000). They may not feel comfortable communicating with teachers and helping their children with school work (Delgado-Gaitan, 1992; Kohl et al., 2000).

Chapter 3
Methodology

Participants

Participants included 300 parents (i.e., the primary caregiver) of elementary school-aged children (ages 5 through 13) from international schools in Bangkok area. The type of sampling that was used is Convenient Sampling. Only one survey packet was completed by each family. The sample was large enough to provide *at least* 15 subjects per level of each predictor variable, which is a necessary prerequisite to carry out a reliable regression equation (Mertler & Vannatta, 2002; Stevens, 1996). In addition, to perform a path analysis most models require at lease 200 cases depending on the number of variable and the complexity of the model (Klem, 1997). An elementary school sample was selected because the form and levels of parental involvement change in the middle and high school years. It may have been more difficult to involve parents of older students in learning activities because the abilities and needs of children in upper grades are more diversified and the academic content is more complex (Epstein, 1986.). Questionnaire packets were given to primary caregivers recruited from neutral activities not likely to be confounded with parent involvement in schools (e.g., gyms, departmental stores, etc.). The parents who chose to complete the questionnaires anonymously returned the packet to the researcher. In addition, parents were offered a small incentive for participating in the study. Upon completion of the surveys, parents were given an opportunity to win a 2,000 Baht certificate to *Café Buongiorno Italian Restaurant* by entering a raffle to compensate them for their time and effort.

Instrumentation

Demographics

Primary caregivers were asked to complete a form soliciting demographic information, such as socioeconomic level, ethnicity, marital status, and level of education (Appendix A). Parents were asked how many children they had, and to list their ages. In addition, while keeping one elementary school-aged child in mind parents were asked how often during the current school year they participate in activities at their child's school, what kinds of activities they participate in, and how often school personnel invite them to participate in their child's education. This demographic information was requested from the respondents because research has indicated that these characteristics and variables may be associated with parent involvement (Connors & Epstein, 1995; Dauber & Epstein, 1993; Epstein, 1996; Gutman & McLoyd, 2000; Iverson et al., 1981; Marcon, 1999).

Parent Self-Efficacy

Parental self-efficacy was measured using the Hoover-Dempsey et al. (1992) Parent Efficacy for Helping Children Succeed in School Scale/Thinking about Helping My child (Appendix B). The 12-item scale was developed on the basis of teaching efficacy and parenting literature. The development of the parent Efficacy Scale was grounded in literature on the construct of self-efficacy, and the belief that one can carry out tasks that will produce desired outcomes (Bandura, 1977; Coleman & Karraker, 1997). Parents' sense of efficacy for helping their children in school is the belief that their participation will be associated positively with children's school performance. Thus, parents with higher self-efficacy would be more likely to participate in their children's education (Hoover-Dempsey & Sandler, 1995, 1997). Items on the Parent Efficacy Scale ask parents to indicate their level of confidence in helping their children with various learning activities. Reed et al. (2001) found that parent self-efficacy, as measured by the Parent

Efficacy Scale, was one variable related to parental involvement, thus supporting the validity of this scale as a measure of parenting self-efficacy.

Parents rated their sense of efficacy on a 5-point Likert scale, ranging from *strongly agree* to *strongly disagree*. There were six items stated in negative terms and final scoring was reversed on those items. Negatively worded items were reversed for scoring and analysis purposes. A score of 5 on items stated in positive terms reflected the highest level of parent efficacy, and a score of 1 reflected the lowest level of parent efficacy. On items stated in negative terms, a score of 1 reflected higher efficacy, while a score of 5 reflected lower efficacy. The total possible score for the full parent efficacy scale ranged from 12 to 60 with higher scores reflecting higher parent efficacy. Items focused on the assessment of parents' general and specific abilities to influence their children's school outcomes. Examples of items included "I don't know how to help my child make good grades in school" and "I make a significant difference in my child's school performance."

The measure was administered to 390 parents from four public elementary schools, and an alpha reliability of .81 was found for the scale with this sample (Hoover-Dempsey et al., 1992). Reed et al. (2001) conducted inter-item correlations between the various scale items on the Parent Efficacy for helping Children Succeed in School Scale/Thinking about Helping My Child and the Parent Role Construction questionnaire to ensure that no two items found in separate scales measured the same construct. One item from the Parent Efficacy Scale was eliminated due to a possible overlap with other variables being assessed.

A modified version of the scale was used in a study conducted by Reed, Jones, Walker, and Hoover-Dempsey (2000) which included a 6-point Likert scale and 11 of the original

items. The scale was administered to 250 parents of children in preschool through sixth grade. An alpha reliability of .80 was found. In the present study, parent efficacy will be measured using the 12-item scale originally developed.

Parent Role Construction

Primary caregivers completed questionnaires measuring the constructs associated with parental role construction using three scales developed by Hoover-Dempsey and Jones (1997; Appendix B). The Parent Role Construction questionnaire was developed based upon role theory literature, which states that roles are composed of beliefs about what one should do and the behaviors through which those beliefs are enacted. Items on this questionnaire asked parents to identify their involvement in activities or roles they view as important in their children's education. Parental role construction was found to consist of three major categories: parent-focused, school-focused, and partnership-focused. Hoover-Dempsey and Jones (1997) developed scales to assess parental role construction by focusing on a parent interview database regarding parents' involvement in their elementary children's schooling. The measure was constructed from a random sample of 20 interviews from the data set. Two trained coders reviewed all statements, which were clustered into emerging content areas. Three role categories (i.e., parent-focused, school-focused, and partnership-focused) were created from emerging dominant themes. The items for the Parent Role Construction questionnaire were developed from the interview statements within each role category.

The three scales were used in a study conducted by Reed et al. (2001) investigating the relationship between role construction and parent school involvement. The scales were adapted based on recommendations made by school personnel. Reed et al. (2001) found

that parents' role constructions were strong predictors of parent involvement, indicating that the questionnaire was a valid measure of the parental role construct.

The parent-focused role construction scale was designed to assess the extent to which parents believe that they are primarily responsible for their children's educational outcomes. Parents responded to each item using a 6-point scale ranging from never to always; disagree very strongly to agree very strongly; or never to more than once a week (Reed et al., 2001). Examples of items from the parent-focused subscale are presented in Table 1.

The school-focused role construction scale measured the extent to which parents believe that school is ultimately and primarily responsible for their children's education. The scale ranged from never to always; disagree very strongly to agree very strongly; or never to more than once a week on a 6-point scale (Reed et al., 2001). Examples of items from the school-focused subscale are presented in Table 1.

The partnership-focused role construction scale measured the extent to which parents believe that the parent and teacher working together are primarily responsible for their children's education. The scale ranged from never to always; disagree very strongly to agree very strongly; or never to more than once a week on a 6-point scale (Reed et al., 2001). Examples of items from the partnership-focused subscale are presented in Table 1.

Table 1

Survey Items Defining the Three Major categories of Parental Role Construction

Variables	Items
Parent-focused	
	1. I sit down with my child when he or she does homework.
	2. I check over my child's homework.
	3. I read with my child
	4. I make sure that my child's homework gets done.
	5. I help my child study for tests and quizzes.
	6. It's my job to explain tough assignments to my child.
	7. I keep an eye on my child's progress
	8. It's my job to make sure my child understands his/her assignments.
	9. I make it my business to stay on top of things in school.
School-focused	
	1. My child does his/her homework at school.
	2. I assume my child is doing alright when I don't hear anything from the school.
	3. If my child has a problem, I tell him/her to go to the teacher.
	4. I get most of my information about my child's progress from report cards.
	5. There are no limits to what I can do to help my child.
	6. The teacher has to let me know about a problem before I can do something about it.

Variables	Items
School-focused (continued)	
	7. My child's learning is up to the teacher and my child.
Partnership-focused	
	1. My child's teacher and I exchange notes.
	2. I get advice from the teacher.
	3. I contact the teacher if I have questions about schoolwork.
	4. It's important that I let the teacher know about things that concern my child.
	5. Conferences with the teacher are helpful to me.
	6. I know what's going on at school.
	7. I like to spend time at my child's school when I can.
	8. I find it helpful to talk with the teacher.
	9. My child's teacher knows me.

The initial scale contained 72 items (24 parent-focused, 24 school-focused, 24 partnership-focused) which were administered to a pilot group of 39 parents of elementary school children. Parents were asked to respond to items on a 6-point Likert scale. Items measuring the three categories of parent role construction were randomly distributed throughout the questionnaire. The alpha reliabilities of the parent-focused, school-focused, and partnership-focused subscales were .90, .70, and .86 respectively. In addition, correlations were computed between the subscales. Parent-focused and partnership-focused role construction were found to have a significant and positive relationship, $r = .64$, $p.< .01$. However, no significant relationships were found between school-focused and parent-focused role construction, or between school-focused and partnership-focused role construction (Hoover-Dempsey & Jones, 1997).

Based upon feedback from participants in the pilot study conducted by Hoover-Dempsey and Jones (1997) a shorter version was developed in which the parent-focused subscale contained nine items, the school-focused subscale contained seven items, and the partnership-focused contained nine items (Appendix B.) In the Hoover-Dempsey and Jones (1997) study the three scales were found to have alpha reliabilities of .86, .70, and .82, respectively. Correlations were again computed between the subscales. Parent-focused and partnership-focused role construction were found to have a significant and positive relation, $r = .64$, $p < .01$. However, no significant relationships were found between school-focused and parent-focused role construction, or between school-focused and partnership-focused role construction (Hoover-Dempsey & Jones, 1997). The shorter versions were utilized in this investigation. Items measuring parent-focused, school-focused and partnership-focused role construction were totaled separately. Thus, three scores were obtained for parent role construction.

Parent Involvement and Teacher Invitations

The constructs of parent involvement, teacher invitations, and academic difficulties were defined and depicted in the vignettes based on research literature and measures of these areas (Appendix C). In the sections that follow the rationale for using vignettes and how they were developed are reviewed. First, the development of the vignettes and how they were selected for the present study are discussed. Second, how parent involvement was measured through the vignettes is presented. Finally, this is followed by a discussion of how teacher invitations were presented to the participants of the study.

Vignettes and Academic Difficulties

Brief vignettes were used to elicit parents' reactions to various common school situations in which a child is at risk of academic difficulties (Appendix C). The vignettes used in this study have been developed using the guidelines presented by Brophy and Rohrkemper (1981) for designing vignettes. Vignettes did not include specific references to facilities, equipment, or individuals familiar to some parents but not others, allowing parents to visualize the event depicted. In addition, specific status characteristics, such as age and ethnicity, were mentioned in order for parents to imagine that they are reading events about their own children. Parents were asked to read each vignette and respond as if the academic difficulty had occurred with their own children. The selected scenarios were based on the literature and measures of academic competence. Academic achievement in this study was depicted as progress made in subject areas (e.g., reading, math), participation in class and difficulties completing homework and coursework. The vignettes will be developed based upon the criteria in the Academic Competence Evaluation Scales (DiPerna & Elliott, 1999).

The Academic Competence Evaluation Scales consist of 60 items created by DiPerna and Elliott (1999) to assess skills, attitudes, and behaviors of students that contribute to teachers' judgments of academic performance. The purpose of the measure is to identify behaviors related to learning. Teachers provide two ratings for each item according to frequency (1 = never and 5 = almost always) and importance (1 = not important and 5 = very important). For academic skill items, teachers provide ratings of quality (1 = far grade – level expectations and 5 = far above grade-level expectations) instead of frequency ratings. Factor analyses resulted in five factors which were labeled as Academic Skills, Study Skills, Academic Motivation, Interpersonal Skills, and Participation. The five-factor model accounted for 72% of the variance of the total scale.

The Academic skill scale consists of 22 items, which reflect a student's performance in variety of academic domains (e.g., math, reading, critical thinking/problem solving skills). The Study Skills scale consists of 10 items and measures behaviors related to processing new information, such work preparation, work completion, and work review. The third scale, Academic Motivation, consists of 10 items. It measures behaviors and skills that reflect responsibility, initiative, preference for challenging tasks, and gold-directed behavior. The Interpersonal Skills scale consists of 10 items and measures behaviors in three areas: social interaction, work interaction, and responsive behavior. Finally, the Participation scale includes eight items that reflect qualities of active participation, such as asking questions, volunteering answers, or assuming leadership in group situations. Internal consistency coefficients for each of the five scales ranged form .92 to .98, and test – retest stability coefficients ranged from .70 to .92 in which the two administrations were 6 week apart (DiPerna & Elliott, 1999).

The five scales of the Academic Competence Evaluation Scales were used as a reference to create vignettes depicting children with mild academic difficulties. For four of the five scales (i.e., Study Skill, Motivation, Interpersonal Skills, and Participation) two vignettes were developed. Four vignettes were developed for the Academic Skills scale because it contained items regarding performance in both reading and mathematics. Thus, a total of 12 vignettes were created with the purpose of measuring parents' choices in level of involvement. The vignettes were randomly distributed throughout the questionnaire. Following each vignette were three questions asking parents the likelihood (i.e., definitely would not, probably would not, possibly, probably would, and definitely would) they would participate in activities related to their children's education in order to resolve the problem. There were two versions of the survey created: one only stated the difficulty, and the other included the presented difficulty as well as an invitation from the teacher to help in managing this problem.

In order to provide vignettes that best represented mild academic difficulties exhibited by students in the classroom, a pilot study was completed. These behaviors focused upon observable, student-initiated behaviors (e.g., difficulty in reading, mathematics, etc.) that elicit resolution from the parent, and were based closely on the descriptors in the Academic Competence Evaluation Scales as well as actual examples of comments made by teachers on report cards. The sample included 30 economically and culturally diverse parents of school-aged children recruited from neutral activities (e.g., various classes at the gym, department stores, and hospitals) not likely to be confounded with parent involvement in schools. Fifteen parents responded to vignettes which consist of only a progress report, while another fifteen parents responded to vignettes which include a teacher's invitation for parent involvement. The vignettes were presented in a random order and participants were asked to rate the likelihood they would participate in school and home-related

activities to resolve the problem according to a Likert scale (1 = definitely would not to 5 = definitely would).

Involvement

After reading vignettes, parents were asked to keep in mind one of their children while rating the likelihood of their involvement when handling each scenario. Estimates of parent level of involvement have varied across research studies (Brody et al., 1999; Epstein, 1986; Epstein, 1992; Grolnick et al., 1997; Grolnick & Slowiaczek, 1994). In the present study, parents indicated how likely it would be that they would participate in three dimensions of parent involvement that were developed from a measure of involvement and the research literature (Fantuzzo et al., 2000; Swap, 1993; Waller, 1932)

The parent involvement responses to the vignettes were developed based on a scale of parent involvement, the Family Involvement Questionnaire (Fantuzzo et al., 2000). The Family Involvement Questionnaire was developed based on the multiple dimensions of involvement represented by Epstein (1987). The questionnaire asked parents to indicate the nature and extent of their involvement in their children's education. It was developed with help from parents and teachers in a large urban school district in the northeastern United States. The items were field tested with several groups of parents in order to support cultural validity. The construct validity was determined through factor analyses. Three factors were revealed and defined as: School-Based Involvement, Home-Based Involvement, and Home-School Conferencing. Each construct was found to be highly reliable with alphas of .85, .85, and .81, respectively. The School-Based factor is defined as activities and behaviors that parents engage in at school with their children (e.g., volunteering in the classroom, going on class trips, and meeting with other parents to plan events and fundraisers). The Home-Based Involvement factor is defined as behaviors that

include active promotion of a learning environment at home (e.g., a place in the home for learning materials, actively initiating participation in learning activities at home, and creating learning experiences for children in the community). Home-School Conferencing is described as parents and school personnel communicating about children's educational experiences and progress (e.g., talking with the teacher about a child's difficulties at school, the child's learning behavior, the child's accomplishments, and work to practice at home). Thus, Fantuzzo et al. identified three factors describing types of parent involvement from their measure, the Family Involvement Questionnaire.

The items measuring parent involvement on the vignettes that were used in the present study were based on the three factors identified by Fantuzzo et al. (2000). After reading vignettes, parents were asked to indicate the likelihood that they would participate in their children's education when managing the problems presented in each scenario. Parents were asked to indicate the frequency of their involvement in the three dimensions discussed by Fantuzzo et al. Following each vignette parents were asked to respond to three items regarding their involvement in their children's education. More specifically, parents rated their frequency of participation in school-based involvement, home-based involvement, or parent-school collaboration; each of which were defined as they were by Fantuzzo et al. Parents responded to each item using a 5-point scale ranging from 1 (definitely would not) to 5 (definitely would). A score of 5 indicates the highest frequency of involvement while a score of 1 indicates the lowest frequency of parental involvement. The total possible score for the full parent involvement scale ranged from 42 to 90. Higher scores reflect higher parent involvement. Parents were presented with the choice to not become involved in these activities. Under this dimension the parents chose not to become involved possibly because they believe that it is the school's responsibility to educate the child and handle the problem, or because they feel unable or unwilling to do

so due to limited time, resources, and so forth (Delgado-Gaitan, 1991; Pena, 2000; Swap, 1993; Waller, 1932).

Parent involvement was measured by totaling the three subscales individually and also by obtaining an overall parent involvement score by totaling all of the items. In other words, four scores were obtained: home-based involvement, school-based involvement, collaboration with the teacher, and overall parent involvement. Levels of overall parent involvement were investigated in the present study to maintain consistency with Hoover-Dempsey and Sandler's (1995. 1997) proposed model of the parental involvement process. Although they focused on parents' motivations for involvement, the dimensions of parent involvement were not specified in their model. Rather than identify participation in different aspects of children's education, Hoover-Dempsey and Sandler (1995, 1997) referred to only parents' general decisions to become involved. Although Hoover-Dempsey and Sandler (1995, 1997) discussed the variety of forms of parent involvement (e.g., help with homework, phone calls to teachers, etc.), they did not present these dimensions in their model. Parent involvement is a construct that includes a number of behaviors and involvement activities. Accordingly, Reed et al. (2001) investigated Hoover- Dempsey and Sandler's (1995, 1997) model by studying specific factors influencing parent involvement practices. Parents were asked to report their level of involvement in a number of specified activities including helping with homework and visiting the child's classroom. However, these specific activities were then combined to investigate parents' overall involvement practices instead of being examined separately.

Teacher Invitations

Based upon research literature on teacher and school invitations (Connors & Epstein, 1995; Epstein, 1987; Epstein & Dauber, 91; Fuqua et al., 1985; Grolnick et al.,

1997; Reid, 1984) the present study describes school invitations in the vignettes as teacher's attempts to inform parents of the child's progress while also establishing ways to involve the parents in the child's education in school and at home. Parent involvement has been found to increase when schools make greater contact with parents. However, all forms of school contact do not equally influence parent involvement (Feuerstein, 2000). The vignettes included one of two scenarios of teacher invitations in which the teachers contact families by report cards. Report cards were the method of communication that was presented as teacher invitations to parents. Epstein's (1987) model of parent involvement presented six major types of practices and programs that schools could implement to develop more comprehensive school and family partnerships. This study investigated two types of school communication discussed by Epstein (1987). The first type is what Epstein (1987) referred to as the "basic obligation" schools have to inform parents of children's progress through notices, report cards, conferences, and so forth. The second type of communication that was examined in this study includes the requests and guidance from teachers for parents to help their children in learning activities. In this study teachers either provided only a report of the student's progress or they requested parental assistance by inviting parents to help (Ysseldyke & Christenson, 1993). Parents read vignettes including one of two different scenarios: one that simply reported student progress or one that asked for the parent to speak with the teacher about the student's progress.

Procedures

The researcher asked primary caregivers to complete the questionnaires from public settings not likely to be confounded with parent involvement in schools (e.g., gyms, department store, etc.). Parents were approached in these public settings and invited to participate in the study. They were given an explanation of the purpose of the study and of their participation. If parents had more than one elementary school-aged child they were

asked to complete the surveys with only one child in mind. Participants were offered an incentive upon completion of the surveys to compensate them for their time and effort.

Upon completion of the surveys, parents were given an opportunity to win a 2,000 Baht certificate to *Café Buongiorno* by entering a raffle to compensate them for their time and effort. Participants completed a separate form with their name and address. To ensure confidentiality, the researcher separated the anonymous surveys from the form with the name and address so that there was no way to identify the primary caregiver who completed the surveys.

Primary caregivers were given a packet that contained all the materials needed to complete the survey. The first page stated the purpose of the study (a) to identify parental role construction and parents' sense of efficacy and (b) to identify parents' choices of involvement (Appendix E). Subsequent pages contained the demographic survey, the two questionnaires (i.e., *Parent Role Construction and Parent Efficacy for Helping Children Succeed in School Scale / Thinking about Helping My Child*) and the vignettes, which measured parental level of involvement. Two versions of the vignettes were distributed: one was simply a report of the child's progress in school, while the second version included the child's progress as well as an invitation in the form of a request from the teacher for the parents to help their children in learning activities. The packets were randomly distributed to primary caregivers. One hundred and fifty primary caregivers responded to vignettes which involved only the progress report, while another hundred and fifty primary caregivers responded to vignettes that will included the teacher's invitation for parent involvement.

Statistical Analysis

Once the data were collected, descriptive and Correlational analyses were ran, Correlational procedures were conducted in order to evaluate the relative contributions of factors hypothesized to affect parent involvement. Multiple regression analysis, following Hoover-Dempsey and Sandler's (1997) hierarchical order, were employed to assess the utility of the variables (i.e., parental role construction, self-efficacy, and teacher invitations) hypothesized to predict parents' involvement decisions.

Path analysis was conducted to test for direct and indirect effects of parental role construction, parental efficacy, and teacher invitations on overall parental involvement (Figure 2). The purpose of the study was to investigate the causal relationships between parental role construction, self-efficacy, and teacher invitations on overall parental involvement.

Chapter IV
Results

The results of the study are presented in four sections. First, descriptive statistics and preliminary analyses are presented. Second, the correlations between the predictor variables (*parent-focused role construction*, *school-focused role construction*, *partnership-focused role construction*, *parent self-efficacy*, and *teacher invitations* to involve parents in educational activities) and the criterion variables (*parent involvement in school activities*, *parent-teacher collaboration*, *parent involvement in home activities*, and *overall parent involvement*) are discussed. Third, the results from multiple regression analyses used to assess the independent contribution of the predictor variables to the criterion variables are presented. Finally, results of path analyses, conducted to further evaluate the causal relationships hypothesized by the Hoover-Dempsey and Sandler model (1995, 1997) are presented.

Descriptive Statistics

Demographics

The demographic variables for the total primary caregiver sample are presented in Table 2. A description of the family demographics is provided in Appendix F. The sample included 300 primary caregivers of elementary school-aged children. More mothers (94%) than fathers (5.3%) participated in this study. Primary caregivers ranged in age from 27 to 59, with a median age of 41 years. The majority of participants lived in a two parent household (95%), with the remaining participants living in a single parent household (5%). A large percentage of respondents were Thai (70.3%), while 29.6% of the respondents were of other ethnic groups. In addition, the primary language spoken in the households was English (72.6%).

Table 2

Demographic Characteristics of the Primary Caregiver Sample (N = 300)

Variable	Category	Frequency	Percentage
Relationship	Mother	282	94.0
	Father	16	5.3
	Other	1	0.3
Household status	Single parent	15	5
	Two parent / guardian	285	95
Education	Some high school	1	0.3
	High school grad	40	13.3
	Some college	30	10
	College grad	186	62
	Graduate degree	42	14
	Missing	1	0.3
Race	Thai	211	70.3
	Caucasian	32	10.6
	Asian Pacific Islander	11	3.6
	European	9	3
	Asian (other than Thai)	31	10.3
	Other	6	2
Language	English	218	72.6
	Thai	64	21.3
	Other	18	6
Occupation	No paid employment	80	26.6
	Employed full-time	154	51.3
	Employed part-time	62	20.6
	Retired	0	
	In school full-time	4	1.3
	In school part-time	0	
	Other	0	

Table 2

Variable	Category	Frequency	Percentage
Child's place	Only	42	14
	Oldest	55	18.3
	Middle	19	6.3
	Youngest	180	60
	Twins	4	1.3

Variable	Mean	*SD*	Range
Age of primary caregiver	40.65	5.12	27-59
Number of children	2.16	0.83	1-5
Age of child	8.18	1.84	5-12

Almost two-thirds of the primary caregivers responded that they had earned at least a college degree. Nearly half of the participants responded that they were not employed full-time, with 26.6% reporting no paid employment and 20.6% reporting part-time employment.

The number of children primary caregivers reported having ranged from 1 to 5, with a median of 2 children in the household. Primary caregivers were asked to think of one of their children while responding to questions on the surveys. The range in ages of the children was from 5 year to 12 years, with a median age of 8 years old. More than half of the primary caregivers reported that they were thinking of their youngest child while responding to the surveys.

In addition, while keeping one elementary school-aged child in mind parents were asked how often they have participated in their child's school, what kinds of activities they have participated in, and how often school personnel have invited them to participate in the child's education (Table 3). This demographic information was requested from the respondents because research has indicated that these

characteristics and variables may be associated with parent involvement (Connors & Epstein, 1995; Dauber & Epstein, 1993; Epstein, 1996; Gutman & McLoyd, 2000; Iverson et al., 1981; Marcon, 1999). When primary caregivers were asked how often they attended conferences with their child's teacher during the school year, 38% of respondents stated that they had a conference once during the year, and 49.6% reported that they had a conference once each semester, Primary caregivers' participation in school events, such as PTA meetings, ranged from never (3.3%) to one or more times each week (19.6%), with respondents typically reporting that they participated at least once this year. Participants were also asked to indicate how often their child's teacher contacted them during the school year. More than half of the primary caregivers reported that the teacher contacted them less than once a month.

Table 3

Frequency of Conferences, Participation in School Events, and Frequency of Teacher Invitations (N =300)

Variable	Category	Frequency	Percentage
Conference	Never	9	3
	Once this year	114	38
	Once each semester	149	49.6
	Once a month	21	7
	Once every 1-2 weeks	3	1
	1+times each week	4	1.3
School events	Never	10	3.3
	Once this year	24	8
	Once each semester	101	33.6

Table 3

Variable	Category	Frequency	Percentage
	Once a month	87	29
	Once every 1-2 weeks	19	6.3
	1+times each week	59	19.6
Teacher contact	Never	142	47.3
	Once this year	59	19.6
	Once each semester	64	21.3
	Once a month	22	7.3
	Once every 1-2 weeks	9	3
	1+times each week	4	1.3

Preliminary Analyses

Preliminary analyses were conducted to determine the reliabilities of the measures used in the present study with this sample. The 300 primary caregivers participating in this study were administered the Parent Efficacy for Helping Children Succeed in School Scale/Thinking about Helping my Child. An alpha reliability coefficient of .88 was found for the scale with this sample (Appendix G).

Next, the parent-focused, school-focused, and partnership-focused subscales of the Parent Role Construction questionnaire were administered to the participants and alpha reliability coefficients were found to be .74, .52, and .80, respectively (Appendix G). The low reliability of the school-focused subscale found with the sample should be noted while interpreting the results in the present study. A low reliability means that there may not be internal consistency in scores obtained on this subscale (Pagano, 1994). However, if large samples are used then a measure of low reliability may still be expected to discriminate differences adequately (Borg & Gall, 1989). One possible explanation for the low reliability of the school-focused subscale may be that it has

seven items while the parent-focused and partnership-focused subscales contain nine items each. The reliability of the school-focused subscale was further analyzed by looking at whether or not the reliability improved with the removal of any items. However, there were no significant changes to the reliability found with removal of any one item in particular (Appendix G). Furthermore, a split-half test of reliability was used with the school-focused subscale to estimate changes in the reliability when items were added or deleted. The equal length Spearman Brown test resulted in a reliability coefficient of .50 (Appendix G).

Finally, parent involvement was measured using the vignettes developed for the present study. Primary caregivers obtained four scores from the parent involvement scale (i.e., school-based involvement, collaboration with the teacher, home-based involvement, and overall parent involvement). Overall parent involvement was investigated in the present study to maintain consistency with the theoretical model proposed by Hoover-Dempsey and Sandler (1995, 1997) and with previous research of the model (Reed et al., 2001). Alpha reliabilities of the three subscales and the total scale score were obtained. School-based involvement, school-home collaboration, home-based involvement, and overall involvement were found to have alpha reliabilities of .98, .91, .92 and .93, respectively, with this sample (Appendix G). In addition correlations were computed between each of the subscales and the total score yielding significant positive correlations of .88, .65, and .67, respectively (Appendix G).

Research variables

The means, standard deviations, and ranges are presented for each variable measured in this study in Table 4. Means on the three subscales of the Parent Role Construction questionnaire were first computed. On the parent-focused subscale participants believed that they were primarily responsible for their children's

educational outcomes with a mean of 46.35. The total scores for the parent-focused subscale ranged from 25 to 54 with this sample. Higher scores were indicative of greater beliefs that they had primary responsibility for their children's education. The school-focused role construction subscale had a mean of 24.64. The total scores for the school-focused subscale ranged from 12 to 39 with this sample. Higher scores were indicative of greater beliefs that the school should be primarily responsible for their children's education. A mean of 39.08 was found for the partnership-focused subscale, which measured primary caregivers' beliefs that they should work collaboratively with teachers. The total scores for the partnership-focused subscale ranged from 16 to 54 with this sample, with higher scores indicating that parents were more likely to hold beliefs that parents and teachers should work together. Next, a mean of 48.35 was found for total self-efficacy on the Parent Efficacy Scale. Scores on the Parent Efficacy Scale ranged from 16 to 60 with this sample. Higher scores were indicative of greater feelings of efficacy. Finally, the means for the parent involvement scale were computed. Primary caregivers' beliefs that they were responsible for their children's education were also evident in the means on the subscales of the vignettes. Participants in this study reported the lowest frequency in school-based involvement (M=18.51). Participants who earned higher scores on the school-based subscale reported greater involvement at school. The means for collaboration with the teacher and home-based involvement with their children were 28.25 and 28.40, respectively. In addition, the total mean for parent involvement in children's education was 75.15. Higher scores on the parent involvement subscales were indicative of greater involvement.

Table 4

Means, Standard Deviations, and Ranges for the Research Variables (N = 300)

Variable	Mean	SD	Range
Role construction			
Parent	46.35	6.04	24-54
School	24.64	5.29	12-39
Partnership	39.08	6.55	16-54
Self-efficacy			
STotal	48.35	7.49	16-60
Parent involvement			
School-based	18.51	7.8	6-30
Collaboration	28.25	3.57	6-30
Home-based	28.4	3.46	6-30
Total	75.15	11.53	42-90

Note. Parent = parent-focused; School = school-focused; Partnership = partnership-focused; STotal = self-efficacy total; School-based = school participation; Collaboration = collaboration with teacher; Home-based = home participation; Total = total parent involvement practices.

Half of the primary caregivers received vignettes including a teacher invitation for their participation, while another 150 participants were administered vignettes that did not include a teacher invitation. An analysis was computed to determine if the means of the ratings of involvement were significantly different between these two groups (Table 5). Overall involvement was significantly higher when a teacher invitation was presented (t = -4.38, df = 198, p < .01). Primary caregivers were significantly more involved at school when a teacher invitation was presented (t = -3.14, df = 198, p < .01). Primary caregivers were also more likely to contact the teacher and work collaboratively with the teacher when an invitation was given (t = -

5.77, $df = 198$, $p < .01$). Thus, when teacher invitations were presented primary caregivers were more likely to participate at school and contact their child's teacher to work together collaboratively. However, invitations were not found to be related to parent involvement in their child's education at home.

Table 5
Summary of t-Test Analyzes Comparing Parent Involvement With and Without a Teacher Invitation

Variable	Invitation			No invitation			*t*
	M	*SD*	*n*	*M*	*SD*	*n*	
School-based	20.21	7.45	150	16.82	7.81	150	-3.14*
Collaboration	29.6	1.34	150	26.9	4.9	150	-5.77*
Home-based	28.79	3.51	150	28.01	3.38	150	-1.60*
Total	78.57	9.77	150	71.73	12.16	150	-4.38*

Note. School - based = school participation; Collaboration = collaboration with teacher; Home - based = home participation; Total = total parent involvement practices.

*$p < .01$, one-tailed

Correlational Analysis

The Pearson product-moment correlations between the variables are presented in Table 6. Correlations were computed in order to determine if there were any relationships between the variables.

School-focused role construction was found to correlate significantly and negatively with primary caregivers' home-based involvement ($r = -.23$, $p < .01$), self – efficacy ($r = -.03$, $p < .01$), and with total parent participation ($r = -.14$, $p < .05$). Primary caregivers who viewed the school as ultimately responsible for their children's education were less likely to participate at home with their children and to report overall parent involvement practices. Primary caregivers who were more confident in

their ability to help their children succeed in school were less likely to view the school as primarily responsible.

Table 6

Inter-correlations Between the research Variables. (N = 300)

Variable	1	2	3	4	5	6	7	8	9
Role construction									
1. School	--	-0.03	-0.08	-0.03**	-0.09	-0.1	-0.02	-0.23**	-0.14*
2. Partnership		--	0.53**	0.22**	0.14**	0.27**	0.24**	-0.03	0.25**
3. Parent			--	0.21**	0.13*	0.15*	0.13*	0.10	0.17**
Self-efficacy									
4. Stotal				--	0.09	0.11	0.13*	0.12*	0.15*
Parent involvement									
5. Teacher invitation					--	0.22**	0.38**	0.11	0.30**
6. School-based						--	0.33**	0.36**	0.88**
7. Collaboration							--	0.41**	0.65**
8. Home-based								--	0.67**
9. Total									--

Note. School = school-focused; Partnership = partnership - focused; Parent = parent - focused; STotal = self-efficacy total; Teacher invitation = no invitation or invitation present; School-based = school partnership; Collaboration = collaboration with teacher; Home-based = home participation; Total = total parent involvement practices.

*$p < .05$, one-tailed. **$p < .01$, one-tailed.

Partnership-focused role construction was significantly and positively correlated with primary caregivers' feelings of self-efficacy about helping their children in school ($r = .22$, $p < .01$), with parent-focused role construction ($r = .53$, $p < .01$), with perceptions of teacher invitations ($r = .14$, $p < .05$), with school-based involvement ($r = .27$, $p < .01$), with collaboration with teachers about their children' s schooling ($r = .24$, $p < .01$), and with total parent participation ($r = .25$, $p < .01$).

Primary caregivers were more likely to believe that the parent and teacher working together were primarily responsible for their children's education when they felt more confident in their ability to help their children. Primary caregivers who viewed working with the teacher collaboratively as important were also more likely to view parents as playing an important role in their children's education. Primary caregivers' beliefs about working collaboratively with teachers were related to whether or not teachers invited them to participate. In addition, primary caregivers who believed that it was important for the parent and teacher to work together were more likely to participate in their children's schools, contact the teachers to discuss any problems their children were having in school, and report overall participation.

Parent-focused role construction was correlated positively and significantly with parents' feelings of self-efficacy (r = .21, p < .01), perceptions of teacher invitations (r = 13, p < .05), school-based involvement (r = 15, p < .05), collaboration with teachers (r = 13, p < .05), and with total parent participation (r = 17, p < .01). Parents who felt confident in their ability to help their children were more likely to believe that they play an important role in their children's education. They viewed themselves as primarily responsible when they were invited to participate by their children's teachers. In addition, primary caregivers were more likely to participate at their children's schools, work collaboratively with teachers, and report greater parent involvement practices when they believed that parents were primarily responsible for their children's educational outcomes.

Primary caregivers' feelings of self-efficacy were positively and significantly associated with collaboration with teachers (r = 13, p < .05), home-based involvement (r = 12, p < .05), and total parent participation (r = 15, p < .05). In other words, primary caregivers were more likely to work together with the teacher, participate at

home, and be involved in their children's overall education when they felt confident in their ability to help their children succeed.

Perceptions of teacher invitations for participation were positively and significantly related to primary caregivers' school-based involvement ($r = 22$, $p < .01$), collaboration with teachers ($r = 38$, $p < .01$), and overall parent involvement ($r = 30$, $p < .01$). Primary caregivers were more likely to become involved at children's schools, to contact teachers when there was a problem and to report overall parent participation when they perceived a teacher invitation for their involvement.

Participation at school was positively and significantly related to total parent participation ($r = 88$, $p < .01$), to collaboration with teachers ($r = 33$, $p < .01$), and to home-based involvement ($r = 36$, $p < .01$). Primary caregivers who were likely to participate at school were also likely to participate at home, to contact their children's teachers, and to be involved in their children's overall education

Primary caregivers' collaboration with teachers was positively and significantly correlated with involvement at home ($r = 41$, $p < .01$), and with total parent participation ($r = 65$, $p < .01$). Primary caregivers who tended to work together with their children's teachers were more likely to report overall participation in education and participate at home with their children.

Finally, primary caregivers' participation at home was significantly and positively correlated with total parent involvement ($r = 67$, $p < .01$). Primary caregivers who were more likely to participate at home with school-related activities were more likely to report overall parent involvement practices.

The inter-correlations between the predictor variables (i.e., school-focused, partnership-focused, and parent-focused role construction, self-efficacy, and teacher invitations) to be used in the regression analysis were examined for multi-collinearity. In order to identify multi-collinearity, the correlation matrix was examined from

moderate to high correlations between the predictor variables. Correlation coefficients ranging from .20 to .35 indicate a low relationship and are of limited value in prediction analysis, while correlation coefficients ranging from .65 to .85 are more likely to make accurate predictions (Borg & Gall, 1980). When two predictor variables are highly correlated they are essentially measuring the same construct and little information can be gained from adding them into the regression analysis (Mertler & Vannatta, 2002). Predictor variables should be highly correlated with only the criterion variable (i.e., overall parent involvement and the three dimensions of parent involvement). Examination of the inter-correlations indicated low relationships between the predictor variables, thus, multi-collinearity was not a problem. More specifically, correlations between the predictor variables ranged from -.03 to .53.

Regression Analyses

Prior to conducting path analyses to evaluate the complete hypothesized model, regression analyses were run to investigate relationships between predictor variables and each of the three subscales or dimensions of parent involvement (i.e., school-based, collaboration and home-based). Predictor variables were included in the regression equations based on a predetermined order of entry related to theoretical and logical considerations (Stevens, 1996). The hierarchical order followed Hoover Dempsey and Sandler's (1997) hypothesis about the probable relative importance of each variable to parents' involvement decisions. Given that self-efficacy was hypothesized to be directly related to parent involvement, but also indirectly related to parent involvement through parental role construction, it was entered at the first step of the regression equation. Parent-focused, school-focused, and partnership-focused role construction were entered into the equation at the second step because they were

hypothesized to have direct relationships with parent involvement, and to be mediators between self-efficacy and parent involvement. Teacher invitations were entered into the regression analyses at the final step because they were hypothesized to be directly related to parent involvement. Although Hoover-Dempsey and Sandler (1997) proposed that teacher invitations would be both directly and indirectly related to parent involvement through parental construction, the present study did not investigate this indirect relationship. The variable teacher invitation was manipulated through the analog in the study. It cannot be hypothesized that teacher invitations influenced parental role construction because the participants were not presented with vignettes that did or did not include an invitation until after the participants indicated their beliefs about their parental role.

The results of the first regression model are presented in Table 7. Each table, from left to right, includes the independent variables in the order of entry, the un-standardized *B* weight, the standard error, and the standardized beta (ß). A standardized change in the independent variables and significance for the increase in variance accounted for by each variable at each step are also reported in the tables. Hierarchical regression was used as the method of analysis because there was a theoretical path model being tested, and because the order of entry of the variables into the equation was based on causal priority. In other words, a predictor variable entered into the equation later should not be a predictor of a variable entered earlier (Mertler & Vannatta, 2002; Stevens, 1996). The order entry of the predictors into the equations was controlled. Given that the order of the predictor variables were entered into the equation was based on the path model and previous research (Reed et al., 2001), it was necessary to force the variables into the equation in the order.

Table 7

Summary of Hierarchical Regression Analysis of Variables Predicting Parent Involvement at School (N = 300)

Variable		*B*	*SE B*	ß	*t*
Step 1					
	STotal	.11	.07	.11	1.54
Step 2					
	STotal	.03	.08	.03	.35
	Parent	-.01	.11	-.01	-.09
	School	-.12	.11	-.08	-1.18
	Partnership	.32	.10	.27	3.26*
Step 3					
	STotal	.01	.08	.01	.11
	Parent	-.03	.10	-.02	-.26
	School	-.16	.11	-.11	-1.52
	Partnership	.30	.10	.25	3.09*
	Teacher Invitation	3.01	1.07	.19	2.81*

Note. R^2 = .01 for Step 1 ; ΔR^2 = .07* for Step 2; ΔR^2 = .07* for Step 3
*p < .01, one-tailed.

The first regression model examined the accuracy of the independent variables (i.e., self-efficacy, parent-focused role construction, school-focused role construction, partnership-focused role construction, perceptions of teacher invitations) predicting school-based involvement (Table 7). On the first step, self-efficacy was entered into the equation. Self-efficacy was not found to be a significant predictor of school-based involvement. On the second step, parent-focused, school-focused, and partnership-focused role constructions were entered into the equation. Partnership-focused role construction was found to be a significant predictor of school-based involvement (t =

3.26, $p < .01$). The test of variance accounted for by partnership focused role construction was significant, $F(4, 195) = 4.38$, $p < .01$. Teacher invitation was entered on the third step and found to be significant predictor of school-based involvement ($t = 2.81$, $p < .01$). In addition, partnership-focused role construction remained a significant predictor of school-based involvement ($t = 3.09$, $p < .01$). In other words, parents were more likely to become involved at children's schools when they viewed their role as working together with the teacher, and when teachers invited them to participate at school. Self-efficacy and parent-focused and school-focused role construction were not found to be significant predictors of school-based involvement.

The model accounted for 12% of the variance in school-based involvement, $F(5, 194) = 5.22$, $p < .01$. The change in R^2 (ΔR^2) was significant at the second and third steps suggesting that the variables, parent-focused, school-focused, and partnership-focused role construction and teacher invitations improved the prediction of school-based involvement.

The second regression model examined the accuracy of the independent variables (i.e., self-efficacy, parent-focused role construction, school-focused role construction, partnership – focused role construction, perceptions of teacher invitations) predicting home-based involvement (Table 8). On the first step, self-efficacy was entered into the equation. Self-efficacy was found to be a significant predictor of home-based involvement ($t = 1.69$, $p < .05$). On the second step, parent-focused, school-focused, and partnership-focused role constructions were entered into the equation. Parent-focused role construction was found to be a significant predictor of home-based involvement ($t = 1.70$, $p < .05$). School-focused role construction was also found to be a significant predictor of home-based involvement ($t = -2.88$, $p < .01$). School-focused

role construction reported a negative change in the overall home-based involvement. Teacher invitation was entered on the third step and found to be s significant predictor of home-based involvement (t = 1.88, p < .05). In addition, school-focused role construction remained a significant predictor of home-based involvement (t = -3.10, p < .01). While partnership-focused role construction also reported a significant home-based involvement in the third step of the analysis (t = -.163, p < .05). In other words, parents who reported beliefs of school- focused and partnership-focused role construction reported lower home-based involvement. Parents who viewed the school as ultimately responsible for their children's education and believed in working collaboratively with teachers were less likely to participate in home-based activities with their children.

Table 8

Summary of Hierarchical Regression Analysis of Variables Predicting Parent Involvement at home (N = 300)

Variable	*B*	*SE B*	ß	*t*
Step 1				
STotal	.06	.03	.12	1.69*
Step 2				
STotal	.03	.03	.06	.74
Parent	.08	.05	.14	1.70*
School	-.14	.05	-.21	-2.88**
Partnership	-.06	.04	-.12	-1.48
Step 3				
STotal	.02	.03	.04	.58
Parent	.07	.05	.13	1.60
School	-.15	.05	-.22	-3.10**
Partnership	-.07	.04	-.13	-1.63*

Teacher invitation	.91	.48	.13	1.88*

Note. R^2 = .01 for Step 1; ΔR^2 = .06** for Step 2; ΔR^2 = .02** for Step 3
*p < .01, one-tailed. **p < .01, one-tailed.

The model accounted for 9% of the variance in participation at home, $F(5, 194) = 3.80$, $p < .01$. The ΔR^2 was significant at the first, second, and third steps suggesting that each variable improved the prediction of home-based involvement. Examination of the ΔR^2 found the self-efficacy accounted for 1% of the variance and that the variables parent-focused, school-focused, and partnership-focused role construction accounted for an additional 6% of the variance. Teacher invitations accounted for the final 2%.

The results of the third regression model are presented in Table 9. The regression model examined the accuracy of the independent variables (i.e., self-efficacy, parent-focused role construction, school-focused role construction, partnership-focused role construction, perceptions of teacher invitations) predicting collaboration with the teacher. On the first step, self-efficacy was entered into the equation. Self-efficacy was found to be a significant predictor of collaboration ($t = 1.80$, $p < .05$). The test of significance for variance accounted for by self-efficacy was significant, $F(1, 198) = 3.22$, $p < .05$. On the second step, parent-focused, school-focused, and partnership-focused role constructions were entered into the equation. Partnership-focused role construction was found to be a significant predictor of collaboration ($t = 2.82$, $p < .01$). The test of variance accounted for by partnership-focused role construction was significant, $F94, 195) = 3.39$, $p < .01$. Teacher invitations were entered on the third step, and teacher invitations and partnership-focused role construction were found to be significant predictors of collaboration ($t = 5.34$, $p < .01$, and $t = 2.59$, $p < .01$, respectively). In other words, parents were more likely to work collaboratively with

their child's teacher when they viewed their role as working together with the teacher, and when teachers invited them to participate at school. Self-efficacy and parent-focused and school-focused role construction were not found to be significant predictors of collaboration on the final step.

Table 9

Summary of Hierarchical Regression Analysis of Variables Predicting Collaboration (N = 300)

Variable		*B*	*SE B*	ß	*t*
Step 1					
	STotal	.06	.03	.13	1.80*
Step 2					
	STotal	.04	.04	.08	1.11
	Parent	-.01	.05	-.01	-.18
	School	.01	.05	.02	.21
	Partnership	.13	.05	.23	2.82**
Step 3					
	STotal	.02	.03	.05	.72
	Parent	-.02	.05	-.04	-.51
	School	-.02	.05	-.03	-.42
	Partnership	.11	.04	.20	2.59**
	Teacher Invitation	2.52	.47	.35	5.34**

Note. R^2 = .02* for Step 1; ΔR^2 = .05** for Step 2; ΔR^2 = .11** for Step 3
*p < .05, one-tailed. **p < .01, one-tailed.

The model accounted for 18% of the variance in collaboration, $F95, 194) = 8.81$, $p <$ .01. The ΔR^2 was significant at the second and third steps suggesting that the variables, parent-focused, school-focused, and partnership-focused role construction and teacher invitations improved the prediction of collaboration. Examination of the ΔR^2 found that self-efficacy accounted for 2 % of the variance and that the variables

parent-focused, school-focused, and partnership-focused role construction accounted for an additional 5% of the variance. Teacher invitations accounted for the final 11%

The results of the final regression model are presented in Table 10. The regression model examined the accuracy of the independent variables (i.e., self-efficacy, parent-focused role construction, school-focused role construction, partnership-focused role construction, perceptions of teacher invitations) predicting overall parent involvement. Overall parent involvement was examined in order to test the hypothesized model of

Table 10
Summary of Hierarchical Regression Analysis of Variables Predicting Overall Parent Involvement Process (N = 300)

Variable		*B*	*SE B*	ß	*t*
Step 1					
	STotal	.24	.11	.15	2.19**
Step 2					
	STotal	.10	.11	.07	.88
	Parent	.06	.16	.03	.38
	School	-.25	.17	.11	-1.60
	Partnership	.38	.14	.22	2.65**
Step 3					
	STotal	.06	.11	.04	.56
	Parent	.02	.15	.01	.15
	School	-.33	.15	-.15	-2.15*
	Partnership	.34	.14	.20	2.43**
	Teacher Invitation	6.40	1.54	.28	4.14**

Note. R^2 = .02 for Step 1 ; ΔR^2 = .07** for Step 2; ΔR^2 = .078** for Step 3
*p < .05, one-tailed. **p < .01, one-tailed.

parent involvement process proposed by Hoover Dempsey and Sandler (1995, 1997). Self-efficacy was forced into the equation first, followed by parent-focused, school-

focused, and partnership-focused role construction, and finally teacher invitations. Self-efficacy was found to be a significant predictor of overall parent involvement on the first step ($t = 2.19$, $p < .01$). The test of variance accounted for by self-efficacy was significant, $F(1.198) = 4.79$, $p < .01$. On the second step, partnership-focused role construction was found to be a significant predictor of overall parent involvement ($t = 2.65$, $p < .01$). The test of variance accounted for by partnership-focused role construction was significant, $F(4,195) = 4.59$, $p < .01$. Self-efficacy no longer significantly accounted for the variance in overall parent involvement. On the third step, teacher invitations were entered into the equation. Teacher invitations and school-focused and partnership-focused role construction were found to be significant predictors of overall parent involvement ($t = 4.14$, $p < .01$, $t = -2.15$, $p < .05$, and $t = 2.43$, $p < .01$, respectively). Partnership-focused role construction and teacher invitations resulted in a positive change in overall parent involvement, while school-focused role construction resulted in a negative change in overall parent involvement. Parents were more likely to participate in overall parent involvement activities when they viewed their role as working together with the teacher, and when teachers invited them to participate at school. However, parents who viewed the school as ultimately responsible for their children's education were less likely to participate in overall involvement activities. Self-efficacy and parent-focused role construction were not found to be significant predictors of overall parent involvement.

The model accounted for 16% of the variance in participation, $F(5, 194) = 7.40$, $p < .01$. The ΔR^2 was significant at all the steps suggesting that each variable improved the prediction of overall parent involvement. Examination of the ΔR^2 found that self-efficacy accounted for 2% of the variance. An additional 7% of the variance in parent involvement was accounted for by parent-focused, school-focused, and partnership-

focused role construction. Teacher invitations accounted for a final 7% of the variance.

Path Analysis

Path analysis was used to test the research hypotheses, and to examine the direct and indirect effects between the dependent and independent variables. Path analysis is used to test theories about hypothesized causal links between variables, and is a more powerful method of examining the relationships between variables than are product-moment correlations (Borg & Gall, 1989). For this study, path analysis was conducted to examine the effects of parent self-efficacy on parental role construction and overall parent involvement practices, parental role construction effects on overall parent involvement practices, and finally teacher invitations on overall parent involvement practices. The hypothesized path model was depicted in Figure 2 (Chapter 1). Although a causal relationship from teacher invitations to parental role construction was hypothesized by Hoover-Dempsey and Sandler (1995, 1997), the present study did not investigate that relationship. Teacher invitations were manipulated in this study through two versions of the vignettes. It cannot be hypothesized that parental role construction was caused by teacher invitations because participants entered the study with previously established levels of parent role construction. Thus, the present study only investigated the causal link from teacher invitations on overall parent involvement. Overall parent involvement (as opposed to the three subscales) was used in the path analysis in order to maintain consistency with Hoover-Dempsey and Sandler's (1995, 1997) hypothesized model of the parent involvement process. In addition, the three subscales on the parent involvement vignettes were significantly correlated with total involvement.

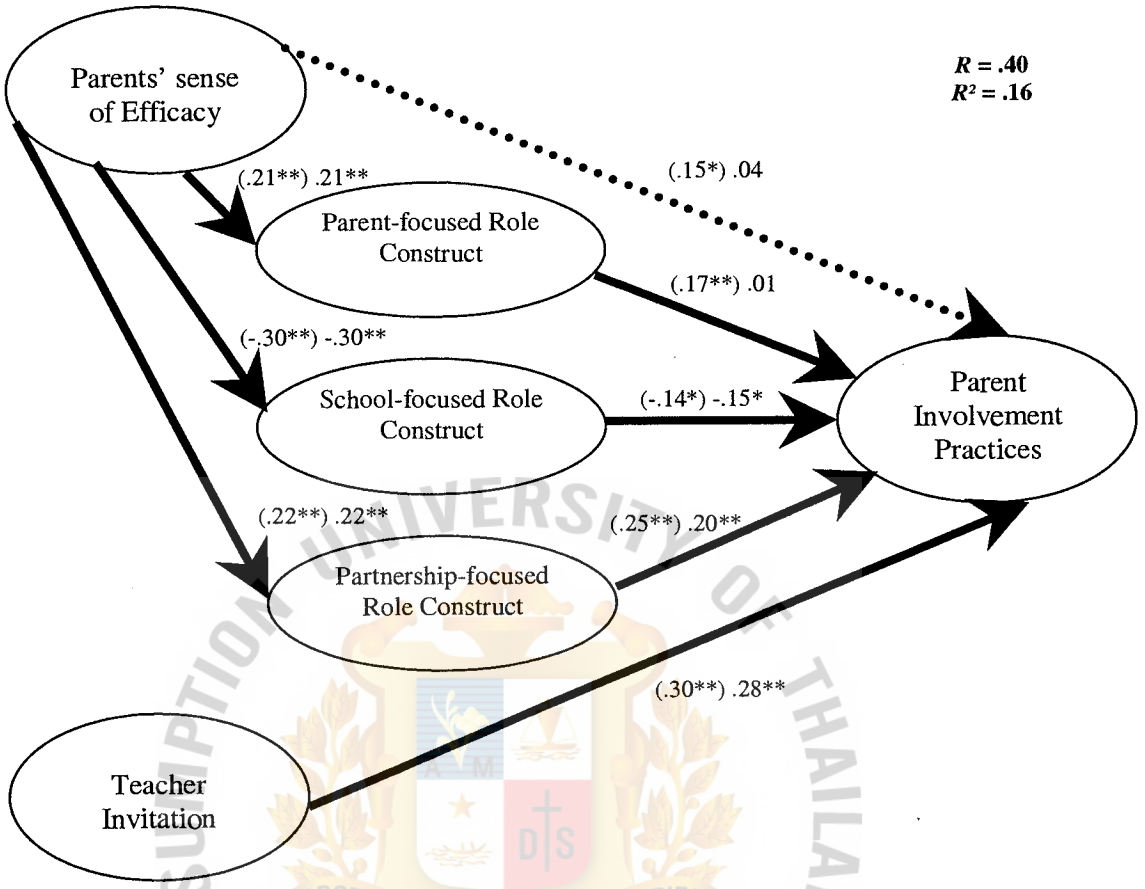
The path analysis was based on a recursive model, which considers unidirectional causal relationships between the variables (Borg & Gall, 1989). Parent

self-efficacy served as a predictor variable of parental role construction and overall parent involvement. The three categories of parental role construction (i.e., parent-focused, school-focused, and partnership-focused) served as both the dependent variables affected by parents' sense of efficacy and the predictor variables relative to overall parent involvement practices. Teacher invitation served as a predictor variable of overall parent involvement. Parent involvement practices served as a criterion variable, whereby it was hypothesized to have no influence on any variable in the path model.

The results of the path model are presented in Figure3, and the decomposition table for the analysis is reported in Table 11. The decomposition table includes correlation coefficients decomposed into direct effects, indirect effects, unanalyzed components due to correlated causes, and spurious components due to common causes. The sum of direct and indirect effects is referred to as the total effect, while the sum of spurious and unanalyzed components is referred to as the non-causal aspect of the correlation coefficient (Pedhazur, 1982)

Figure 3

Path Coefficients between Parents' Sense of Efficacy, Teacher Invitations, Parental Role Construction and Parent Involvement Practices



Note. School = school-focused; Partnership = partnership-focused; Parent = parent-focused; STotal = self-efficacy total; Teacher invitation = no invitation or invitation present; Total = total parent involvement practices.
The Pearson product-moment correlation coefficients appear inside the parentheses,
R = multiple correlation, $R2^{=}$ coefficient of determination.
*p < .05, one – tailed. **p < .01, one-tailed.

In the path model, the path coefficients appear outside the parentheses and the Pearson product-moment bivariate correlation coefficients are placed within the parentheses. Thé path coefficient is a standardized regression coefficient (ß) that indicates the direct effect of one variable on another (Borg & Gall, 1989; Mertler & Vannatta, 2002). Self-efficacy served as an exogenous variable predicting three categories of parental role construction (i.e., parent-focused, school-focused, partnership-focused) and

overall parent involvement. Parent-focused, school-focused, and partnership-focused role constructions served as endogenous variables, mediating between self-efficacy and the outcome variable, overall parent involvement practices. Teacher invitation served as an exogenous variable predicting overall parent involvement.

Table 11

Decomposition Table for the Path Model

Measure			Casual			Spurious/Unanalyzed
X	Y	*r*	Direct	Indirect	Total	
1	6 (via 3)	.15	.04	.00	.04	.11
1	6 (via 4)	.15	.04	.05	.09	.06
1	6(via 5)	.15	.04	.04	.08	.07
1	6	.15	.04	.09	.13	.02
2	6	.30	.28	.00	.28	.02
3	6	.17	.01	.00	.01	.16
4	6	-.14	-.15	.00	-.15	.01
5	6	.25	.20	.00	.20	.05
1	3	.21	.21	.00	.21	.00
1	4	-.30	-.30	.00	-.30	.00
1	5	.22	.22	.00	.22	.00

Note. 1 = self-efficacy total; 2 = teacher invitation; 3 = parent=focused; 4 = School-focused; 5 = partnership-focused; 6 = total parent involvement practices.

Self-efficacy had a significant direct effect on parent-focused role construction (ß = .21, $p < .01$), on school-focused role construction (ß = -.30, $p < .01$), and on partnership-focused role construction (ß = .22, $p < .01$). In other words, parents with

higher feelings of self-efficacy were more likely to view themselves as playing a role in their children's education, and believed that working with the teacher was an important role. However, parents with higher self-efficacy were less likely to believe that the school was ultimately responsible for their children's education. There was no significant direct effect of self-efficacy on overall parent involvement practices. The indirect effects of self-efficacy through school-focused and partnership-focused role construction on overall parent involvement practices were present. However, self-efficacy did not have a significant indirect effect on overall parent involvement through parent-focused role construction. Teacher invitations had a significant direct effect on overall parent involvement (ß = .28, $p < .01$). More specifically, parents were more likely to be involved in their children's education when they were presented with an invitation for participation from the teacher. School-focused and partnership-focused role construction were found to have significant direct effects on overall parent involvement practices (ß = -.15, $p < .05$. and ß = .20, $p < .01$, respectively), while parent-focused role construction had no direct effect on overall parent involvement. Parents who viewed the school as ultimately responsible for their children's education were less likely to be involved in their children's schools, while parents who viewed working together with the teacher as part of their role reported more overall involvement. Examining the total effects of the predictor variables on overall parent involvement, it was concluded that teacher invitations had the largest effect on parent involvement, followed by partnership-focused and school-focused role construction, and self-efficacy's indirect effect (Pedhazur, 1982).

Reproduced correlations were compared to the empirical correlations to test the fit of the model (Table 12). "The reproduced correlations are the bivariate correlations that would be produced if the causal model were correctly specified" (Mertler & Vannatta,

2002, p. 203). The model is assumed to be consistent with the empirical data if the observed and reproduced correlations do not exceed a difference of .05 (Mertler & Vannatta). Because teacher invitations were manipulated in the study, they were not included in the test of the model fit. Computation of reproduced correlations for the path model indicated consistency with the empirical correlations because there were only two reproduced correlations that exceeded a difference of .05. The difference between the reproduced and empirical correlations for parent-focused role construction and overall parent involvement was .06, which was small difference.

Table 12
Observed and Reproduced Correlations for the Path Model

Variable	1	2	3	4	5
			Observed Correlations		
1. School	--	-.03	-.08	-.30	-.14
2. Partnership		--	.53	.22	.25
3. Parent			--	.21	.17
4. Stotal				--	.15
5. Total					--
			Reproduced Correlations		
1. School	--	-.07	-.06	-.30	-.12
2. Partnership		--	.05*	.22	.26
3. Parent			--	.21	.11*
4. Stotal				--	.13
5. Total					--

Note. School = school-focused; Partnership = partnership – focused; Parent = parent-focused; STotal = self-efficacy total; Teacher invitation = no invitation or invitation present; Total = total parent involvement practices.
*Difference between reproduced and observed is greater than .05.

Tests of the Hypotheses

The following section examines whether the results of the Pearson product-moment correlations, regression analyses, and the path analysis supported the hypotheses and answered the research questions.

Research Question 1

To what extent did parent role construction predict level of overall parental involvement? Was parent role construction directly associated with level of overall parental involvement? The hypothesis for this question stated that there would be a significant direct effect between parental role construction and overall parent involvement practices. The parental role construction variable was measured according to three dimensions: parent-focused role construction, school-focused role construction, and partnership-focused role construction. Partial support for this hypothesis was found when the results were examined for each of these dimensions separately. Although the Pearson correlation coefficient revealed a statistically significant relationship between parent-focused role construction and overall parent involvement, further analyses found that parent-focused role construction did not have a significant direct effect on overall parent involvement in the path model.

Parent-focused role construction did not predict level of overall parent involvement. Parents who reported that they viewed themselves as primarily responsible for their children's education were less likely to report higher levels of overall parent involvement.

The path coefficient between school-focused role construction and overall parent involvement was found to be significant in a negative direction; therefore, the hypothesis was partially supported. Parents who viewed the school as primarily responsible for their children's education reported lower levels in overall parent

involvement. In addition, the path coefficient between partnership-focused role construction and overall parent involvement was found to be significant; thus, supporting the hypothesis. Parents' beliefs that the parent and teacher are both responsible for the child's education were liked to increased reports of overall parent involvement. More specifically, regression analyses found that partnership-focused role construction positively predicted school-based involvement and parent-teacher collaboration, and negatively predicted home-based involvement and parent-teacher collaboration, and negatively predicted home-based involvement. Parents' beliefs that the parent and teacher are both responsible for the child's education predicted parent involvement at schools and parent collaboration with teachers. Parents who reported higher levels of involvement at home were less likely to believe that parents and teachers hold equal responsibility. School-focused role construction was found to negatively predict home-based involvement. Parents reported lower levels of involvement at home when they believed the school was responsible for their children's education.

Research Question 2

To what extent did parental self-efficacy predict level of overall parental involvement? Was parental self-efficacy directly associated with level of overall parental involvement? The hypothesis for this question posited that there would be a significant direct effect between parents' sense of efficacy and overall parent involvement practices. This hypothesis was not supported. There was no direct effect found from self-efficacy on overall parent involvement practices. Parents' feelings of self-efficacy were not found to predict their level of overall involvement. Regression analyses also found no significant relationships between self-efficacy and school-based involvement, collaboration, and home-based involvement.

Research Question 3

Was parents' sense of parenting efficacy related to parental role construction and their overall involvement in educational activities? This hypothesis stated that there would be a significant indirect effect between parents' sense of efficacy and overall parent involvement practices through parental role construction. The indirect effect between parents' sense of efficacy on overall parent involvement was examined through the three dimensions of parental role construction. This hypothesis was partially supported. Path coefficients revealed significant relationships between self-efficacy and parent-focused, school-focused, and partnership-focused role construction. There was a significant indirect effect from self-efficacy on overall parent involvement through school-focused and partnership-focused role construction. School-focused role construction mediated an indirect effect in the negative direction between self – efficacy and parent involvement practices, indicating that parents with higher feelings of self-efficacy were less likely to view the school as primarily responsible for the education of their children, and ultimately resulted in increased overall parent involvement. Partnership-focused role construction mediated an indirect effect in the positive direction between self-efficacy and parent involvement practices, indicating that parents with higher feelings of self-efficacy were more likely to believe that parents and teachers should work together, which ultimately resulted in increased overall parent involvement.

Research Question 4

To what extent did teacher and school invitations predict level of overall parental involvement? Were invitations directly associated with overall parent involvement? The hypothesis stipulated that there would be a significant direct effect between teacher invitations and overall parent involvement practices. The hypothesis was supported because the path coefficient between teacher invitations and overall

parent involvement was found to be significant, accounting for 7% of the variance in total involvement. Teacher invitations were directly linked to increased reports in overall parent involvement. In addition, regression analyses found that teacher invitations predicted school-based involvement, parent-teacher collaboration, and home-based involvement. When teacher invitations were present parents were more likely to participate at their children's schools, work collaboratively with the teacher, and help their children with schoolwork at home.

Research Question 5

Did parental role construction, self-efficacy, and school invitations predict level of overall parental involvement in attempts to prevent academic difficulties (e.g., reading difficulties) in their children? Were they indirectly associated with level of overall parent involvement when their children were at risk of academic difficulties? Although self-efficacy, teacher invitations, and parent-focused, school-focused, and partnership-focused role construction were found to have significant bivariate Pearson correlations with overall parent involvement, the relationship were clarified by the subsequent analyses. In the path model, school-focused and partnership-focused role construction had direct effects on overall parent involvement, while self-efficacy had an indirect effect. Parent-focused role construction did not have a direct effect on overall parent involvement. Teacher invitations had a direct effect on overall parent involvement practices. More specifically, parents with higher feelings of self-efficacy were less likely to view the school as primarily responsible for the education of their children and thus, role construction was ultimately associated with increased overall parent involvement. In addition, parents with higher feelings of self-efficacy were more likely to believe that parents and teachers should work together, and thus, partnership-focused role construction was ultimately associated with increased overall parent involvement. Lower parent self-efficacy was associated with a belief that the

school held greater responsibility for children's' education and this role construction was associated with lower parental involvement in schooling. Finally, when teacher invitations were present parents were more likely to report increased overall parent involvement. The model accounted for 16% of the variance and the reproduced correlations for the path model indicated consistency with the empirical correlations. Thus, the hypothesized model fit the data.

Chapter V
Summary and Discussion of Findings, Conclusions, and Recommendations

A discussion of the results of the present study is provided in this chapter. A summary of the study and findings, implications of the findings, and recommendations for future research are included.

Summary

Intervention programs for parents to be more involved should be included when school reforms are discussed. In western countries, schools recognize that parent involvement is beneficial to the children and to the schools standards and therefore school reform initiatives often include parent involvement. This is possible because there is an emerging consensus that the relationship between the school and home plays an integral role in students' success (Lawson, 2003; Mattingly et al., 2002). Parent involvement has been found to be correlated with higher academic achievement and more positive student behavior (Epstein, 2001; Jimerson et al., 1999; Smith et al., 2001). In addition, parent involvement has been associated with beneficial outcomes for schools, teacher, and parents (Hoover-Dempsey et al., in press; Pena, 2000). Although research has supported the importance of developing parent participation programs, most of these programs do not identify a theoretical basis for the design of the intervention (Mattingly et al.) Mattingly and others conducted a meta-analysis of studies evaluating 41 parent involvement programs. Only eleven of the studies reported that the programs were developed based upon an underlying theory, such as social cognitive theory. Mattingly et al. also found that these programs tend to focus on changing parent behavior, particularly at home, rather than on changing teacher practices or school structures.

The purpose of this study was to gain an understanding of why parents become involved in their children's education. Specifically, the study examined Hoover-Dempsey and Sandler's (1995, 1997) theoretical predictions that parental sense of efficacy for helping their children learn, parental role construction, and parental perceptions of teacher invitations influence parents' levels of overall involvement in their children's education.

Three hundred primary caregivers of elementary school-aged children completed Parent Role construction and Parent Efficacy for Helping Children Succeed in School Scale/Thinking about Helping My Child questionnaires, vignettes measuring dimensions of parent involvement and perceptions of teacher invitations, and a demographic survey. Two versions of the vignettes were randomly distributed: one included a progress report with a teacher invitation for parent involvement, and one included only a progress report without a teacher invitation. One hundred and fifty primary caregivers responded to the vignettes with the invitation, and the other 150 participants completed vignettes without the invitation.

Correlational analyses, hierarchical regression, and path analyses were conducted. A path model was used to test theoretical model. More specifically, the effects of parent self-efficacy, parental role construction (i.e., parent-focused, school-focused, and partnership-focused), and perceptions of teacher invitations on overall parent involvement practices were examined.

Overall parent involvement, including school-based involvement, collaboration, and home-based involvement, was examined to maintain consistency with Hoover-Dempsey and Sandler's (1995, 1997) proposed model of the parent involvement

process. Hoover-Dempsey and Sandler (1995, 1997) recognized that a number of activities fall under parent involvement. However, they did not include specific dimensions of parent involvement in their model. Parent involvement was presented as a general construct that included a variety of behaviors. The present study supported the combination of the three dimensions of parent involvement (i.e., school-based involvement, collaboration, and home-based involvement) into overall parent involvement because the three subscales on the vignettes were found to be significantly related to total parent involvement.

Results from the path analysis found that self-efficacy did not have a significant direct effect on overall parent involvement practices. There was a significant direct effect from self-efficacy on parent-focused, school-focused, and partnership-focused role construction. In turn, school-focused and partnership-focused role constructions had direct effects on overall parent involvement accounting for 7% of the variance, while parent-focused role construction did not have a significant direct effect. School-focused role construction had a negative direct effect on overall parent involvement. Thus, self-efficacy had a negative indirect effect through school-focused role construction and a positive indirect effect through partnership-focused role construction on overall parent involvement practices. Parent-focused role construction was not found to be a mediator of the effect of self-efficacy on overall parent involvement practices.

Teacher invitations had a direct effect on overall parent involvement practices. The current study supported previous research findings that teacher invitations increase parent involvement in their children's education (Connors & Epstein, 1995; Epstein, 1986; Grolnick et al.. 1997; Reed et al., 2001). Parents who feel welcome at their children's school and who believe that school personnel want to work with them in

order to help their children succeed are more likely to become involved in their children's education. Teacher invitations were manipulated in the present study through two versions of the vignettes. Half of the participants received vignettes including a teacher invitation while the other half did not. A causal link between teacher invitations and overall parent involvement was fond. Teacher invitations accounted for 7% of the variance in total parent involvement.

Parental Role Construction and Parent Involvement Practices

Referring to Research Question One: Hoover-Dempsey and Sandler (1995, 1997) proposed that parents tend to become involved in their children's education because they believe that this should be an aspect of their parental role. The results of the study found that parent-focused role construction did not have a significant direct effect on overall parent involvement practices. However, there was a significant correlation between parent-focused role construction and overall parent involvement practices, indicating that a relationship exists. While this result did not confirm the hypothesis, it may reflect that although parents may view themselves as primarily responsible for their children's education they may not become involved with the school and the teachers to solve academic difficulties with their children. These parents may choose to seek outside services, such as tutoring, when difficulties arise. At times, participants of this study spontaneously responded to vignettes that they would hire a tutor to help their children with the academic difficulties presented. Another factor that may influence parents' decisions to involve the school when handling difficulties with their children may be whether the child is a low or high achiever. For instance, Gutman and McLoyd (2000) found that parents of low achievers did not want the school to intervene when problems arose with their children.

However, they became involved with the school when requests were made by the teachers.

On the other hand, school-focused and partnership-focused role constructions had direct effects on overall parent involvement. School-focused role construction had a direct effect in the negative direction on overall parent involvement practices. This finding revealed that parents who viewed the school as primarily responsible for their children's education were less inclined to participate in their children's schooling. Partnership-focused role construction had a direct effect on overall parent involvement practices. The present study found that parents who held the belief that it was important to work together with the teachers to help educate their children were more likely to participate in their children's education. Furthermore, the relationship of parental role on construction with the three dimensions of parent involvement (i.e., school-based, collaboration, and home-based) was investigated through regression analyses. Partnership-focused role construction was found to predict school-based involvement and parent-teacher collaboration in the positive direction, and home-based involvement in the negative direction. School-focused role construction was found to predict home-based involvement in the negative direction. Parents who held the belief that parents and teachers should work together were more likely to participate at school and contact the teacher to work collaboratively. Parents who held beliefs that parents and teachers should work collaboratively, and that the school is ultimately responsible for their children's education were less likely to participate at home with their children on educational activities.

The findings of the present study were somewhat consistent with the research literature on parent role construction. Role theory states that roles include beliefs about one's own responsibilities and obligations that guide one's behavior (Biddle, 1986). Parental role construction is defined as parental beliefs about what they should

do as parents in relation to their children's education (Hoover-Dempsey & Sandler, 1997). "It functions as a motivator of parental involvement because it enables the parent to imagine, anticipate, plan, and behave in relation to a host of activities potentially relevant to the child's educational success" (Hoover-Dempsey & Jones, 2002, p.5) Parents' decisions to become involved in their children 's education are associated with their construction of the parental role. Reed et al. (2001) found that parent-focused and partnership-focused role constructions were directly related to parent involvement practices. Further, parents who saw themselves as playing an active role in their children's homework also reported involvement in helping their children with homework (Hoover-Dempsey et al., 1995). In contrast, the present study found that school-focused role construction had a direct effect on overall parent involvement practices, while parent-focused role construction did not. The findings of the Reed et al. (2001) study may have been limited by the low reliability of the school-focused construction subscale, which was computed as .55 with their sample. By comparison, the present study found that partnership focused role construction had a direct effect on parent involvement, which is consistent with Reed et al. (2001). Internal consistency for the partnership-focused subscale was found to be high with the sample of the present study (.80), and the sample in Reed et al's (2001) study (.84).

Furthermore, the findings of the present study may not be consistent with results from previous research because there has been little consistency across studies on how parent involvement should be defined and measured. For instance, parent involvement has been studied and discussed as a general term that includes a variety of activities related to children's education (Hoover-Dempsey & Sandler, 1995, 1997; Reed et al., 2001) Other studies have examined specific forms of parent involvement, such as participation in homework (Epstein, 1992; Hoover-Dempsey et al., 992, 1995, 2001).

Researchers have also measured parent involvement according to a multidimensional perspective. For instance, Grolnick et al. (1997) investigated the predictors of three dimensions of involvement in children's schooling. These dimensions included participation in activities at school and home, exposing their children to intellectually stimulating activities, and keeping informed of what is going on with their children in school. In addition, Kohl et al. (2000) studied three forms of parent involvement which were parent and teacher contact, parent involvement in school activities, and parent involvement with their children at home

Self-Efficacy and Parent Involvement Practices

Referring to Research Question Two: When parents believe that they have the skills and opportunities necessary for involvement they are more likely to become involved (Hoover-Dempsey & Sandler, 1995). Findings of this study revealed that self-efficacy had a limited direct effect on overall parent involvement. On the other hand, parental role construction mediated the influence of self-efficacy on overall parental involvement. Self-efficacy had an indirect effect on overall parent involvement in the negative direction through school-focused role construction. Thus, parents with higher self-efficacy were less likely to view the school as responsible for education their children and were more likely to become involved in their children's education. Self-efficacy also had and indirect effect on overall parent involvement in the positive direction through partnership-focused role construction. In other words, parent who felt competent in their ability to help their children were more likely to view their role as working collaboratively with their children's teachers, and ultimately acted on those beliefs by participating in their children's education. There was no indirect effect of self-efficacy on overall parent involvement through parent-focused role construction. Parents who had high self efficacy and viewed themselves as able,

when it comes to helping their children succeed in school may have viewed themselves as primarily responsible for education their children, and ultimately attempted to find their own resources outside of school to help their children when difficulties arise.

The results of the present study were somewhat consistent with previous findings discussed in the research literature linking efficacy to parent involvement decisions. Reed et al. (2001) found that self-efficacy was a distal variable influencing parent involvement decisions, and role construction mediated the influence of efficacy on involvement. Specifically, the relationship between efficacy and parent involvement was mediated by parent-focused and partnership-focused role construction (Reed et al., 2001). Grolnick al. (1997) found that parents who felt had high self efficacy viewed their role as teachers of their children and were more likely to become involved in their children's education. Differences between the results of the present study prior findings by Reed et al. (2001) may be limited by the low reliability found in the school-focused subscale (i.e., .55) with the sample in their study. In addition, there were a number of differences (e.g., socioeconomic status, single versus two parent families, ethnicity) between the participants in the present study and in Reed et al.'s (2001) study making generalization difficult. The parents in Reed et al.'s (2001) study were primarily single parents, African American, and from lower socioeconomic backgrounds, while the parents in the present study were primarily married, Thais, and from middle to upper class socioeconomic backgrounds (this can be assumed as participants were recruited from International Schools, where the academic fees are high). The parents in the present study may have had more resources available for handling academic difficulties in their children (e.g., tutors) and do not ask the school for help if they believe that they are primarily responsible for their children's education. Future research should investigate the differences in parental role

construction between the two groups of parents that have different demographic background.

The participants in the present study who held the belief that they alone must ensure their children's success were not more likely to participate in their children's schooling. Instead, participants recognizing that their children's academic success would be better served by an active partnership with the school reported higher levels of involvement.

Self-Efficacy and Parental Role Construction

Referring to Research Question Three: One of the findings of this study revealed that parental self-efficacy had a direct effect on the three categories of parental role construction (i.e., parent-focused, school-focused, and partnership-focused). Primary caregivers who felt confident in their ability to help their children succeed on school were more likely to believe that they play a role in their children's education. More specifically, self-efficacy predicted parent-focused role construction. If parents felt confident in their own abilities, they held the belief that they were primarily responsible for their children's educational outcomes. The direct effect of self-efficacy on school-focused role construction was in the negative directing that parents who felt efficacious in helping their children in school were less likely to view the school as ultimately efficacy predicted parents' beliefs that they should work together with teachers to help their children succeed in school. Efficacious parents may feel more competent about working with teachers and as a result maintain relationships with their children's teachers. Parents who feel competent that they can effectively help their children believe that their involvement will be positively associated with

children's school performances, and ultimately they hold the belief that they play a role in their children's education (Hoover-Dempsey & Sandler, 1995, 1997).

While there has been little investigation on the relationships between parent self-efficacy and parental role construction, similar results were found in study conducted by Reed et al. (2001) in which self-efficacy was found to have a significant relationship with parental role construction, particularly with parent-focused and partnership-focused role construction. Whether parents hold role beliefs of becoming involved in their children's education depends on how effectual they feel and whether they believe that their behavior can make a difference (Reed et al., 2001). Similarly, Hoover-Dempsey and Jones (2002) found that self-efficacy was negatively related to school-focused role construction, but positively related with parent-focused role construction. In their study, however, self-efficacy was not related to partnership-focused role construction. Grolnick et at. (1997) also found that parents who saw themselves as efficacious were more likely to view their role as that of teacher of their children.

The differences between the findings of the present study and those from previous studies using similar self-efficacy and role construction measures (Hoover- Dempsey & Jones, 2002; Reed et al., 2001) might be explained by examining the differences in the samples used as well as how the participants responded to the questionnaires in these studies. The results found by Hoover-Dempsey and Jones (2002) may lack generalization because the sample of participants was limited. Participants were 74 parents of children in second through fifth grades. Hoover-Dempsey and Jones (2002) compared the differences between the parents who chose to participate and those who did not. They found that the participants were rated higher than non-participants in

parent effectiveness by the teachers. By comparison, the present study recruited 300 parents. The majority of participants in both studies were mothers, but in the current study 46% of the participants reported that they were not employed full-time, while in Hoover-Dempsey and Jones' (2002) study only 14.9% reported that they were not employed out of the home. While the present study found that self-efficacy was positively related to partnership-focused role construction, Hoover-Dempsey and Jones (2002) found that there was no relationship. The parents in Hoover-Dempsey and Jones' (2002) study may not have had time availability to meet with teachers and work collaboratively due to their employment. Participants in the present study may have had more time available to initiate contact with their children's teachers, and thus, viewed a collaborative relationship as part of their parental role.

Another possible difference in the results may be the difference in the way role construction was measured. Hoover-Dempsey and Jones (2002) examined role construction by conducting interviews, whereas the present study used the questionnaire developed from those interviews. Both studies measured self-efficacy with the Parent Efficacy Scale, and there were no significant differences between the responses of the participants in the present study (M = 48.35) and those of the participants in Hoover- Dempsey and Jones' (2002) study (M = 46.31).

While Reed et al. (2001) found self-efficacy to have a significant relationship with parent-focused and partnership-focused role construction, the present study found self-efficacy to have a positive relationship with parent-focused and partnership-focused role construction and a negative relationship with school-focused role construction. Again, there were differences between the participants of both studies. Reed et al. (2001) conducted their study with 250 parents of pre-kindergarten to sixth grade

children in two public schools in States. The participants of this study were 300 parents of children in kindergarten through fifth grade, recruited from International schools in Bangkok. The participants in the study conducted by Reed et al. (2001) may have been more likely to participate in the study because they had higher involvement in their children's education than non-participant, limiting the generalization of the results. The public schools participating in Reed et al.'s (2001) study served families living in a large public housing project, many single parent families, and more than half were African American. By comparison, 70% of the participants in this study were Thai, with 95% of the primary caregivers living in two parent households and evidently from higher socio-economical level. The differences between the two populations also may have led to differences in the way the participants responded to the Parent Efficacy Scale and the Parent Role Construction Questionnaire, thus, potentially explaining differences in the results. In the present study, parent-focused, school-focused, and partnership-focused role construction had means of 46.35, 24.64, and 39.08, respectively (Table 4). In contrast, the means of parent-focused, school-focused, and partnership-focused role construction in the Reed et al. (2001) study were fund to be 18.79, 18.05, and 25.22, respectively. Parents in the present study reported higher role construction beliefs than the participants in the Reed et al. (2001) study.

Teacher Invitations and Parent Involvement Practices

Referring to Research Question Four: Parents are more involved and feel better about their abilities to help their children when teachers make parent involvement in school activities part of their daily teaching practice (Grolnick et al., 1997). Findings from the present study demonstrated that teacher invitations had a direct effect on overall parent involvement practices. Teacher invitations appeared to be a powerful predictor of overall parent involvement. Parents were more likely to become involved

in their children's education when a teacher invitation was given. Regression analyses were computed to further investigate relationships between teacher invitations and the three dimensions of parent involvement. It was found that teacher invitations predicted school-based involvement, parent-teacher collaboration, and home-based involvement. Similar results have been discussed in previous research studies. Reed et al. (2001) found that teacher invitations had a significant direct effect on parent involvement. Parents were more likely to become involved and initiate contact with the school when they felt the school personnel wanted to work with them (Gutman & McLoyd, 2000; Griffith, 2000). Feuerstein (2000) found that when teachers attempted to contact parents, parents were more likely to become involved in the school by volunteering and participating in the PTO.

Implications of Research ~Conclusion

The purpose of this study was to contribute to the research literature on factors related to parents' behaviors with respect to their involvement in their children's education. The intention of this study was to identify those characteristics of parents that are associated with limited school involvement. Such information is useful to ultimately develop effective interventions for improving the relationship between parents and schools. Although the research literature has predominantly focused on the relationships between demographic variables, such as income, marital status, educations level, and parent involvement (Grolnick et al., 1997; Kohl et al., 2000), there has been little understanding of the motivational bases for parents' decisions to become involved. It is also important to understand the dynamic aspects of the parent-school relationship. Mattingly et al.'s (2002) evaluation of parent involvement programs found that the majority of programs focused on changing parent behavior

rather than teacher and school practices. However, parent behavior should not be considered in isolation from the school's role in encouraging participation.

The present study sought to understand why parents become involved by investigating the effects of parental self-efficacy, parental role constructions, and perceptions of teacher invitations on overall parent involvement. The findings of this study revealed that school-focused and partnership-focused role constructions were directly related to overall parent involvement, while self-efficacy was indirectly related through parental role construction. Also, when teacher invitations were presented to parents they were powerful predictors of parent involvement and directly related to overall parent involvement practices. While it appears that parents' feelings of competence about effectively helping their children succeed in school and their beliefs about their role in their children's education were important in understanding their level of involvement, it was particularly important for parents to feel wanted and welcomed by the school. This finding would be important when developing parent participation programs. It is necessary to develop interventions to change the behavior of both parents and schools.

School personnel's understanding of ways to increase parent involvement in schools might be accomplished through an orientation for new school staff. If the school culture supports parent involvement then it would be necessary to teach and invite parents to work collaboratively to help their children. It is critical that recently hired and old school staff, understand the importance of family-school partnership, and that they be trained to develop practices for effectively encouraging parent participation. Such training can occur at schools during staff development activities, workshops, and so forth.

In addition to change at the school level, school personnel need to understand and be sensitive to risk factors that may be preventing parent participation. Parents with low self-efficacy and who do not view themselves as playing a role in their children's education, both independently and in collaboration with teachers, may limit their participation in their children's schooling. Parents may not feel competent to help their children or collaborate with their teachers. Parents who view the school as primarily responsible for educating their children should be encouraged to participate in their children's education. Parents who do not believe that their attempts to help their children with schooling will be effective must be given opportunities to learn how they can be successful in helping their children. It is important for school personnel to keep in mind that stressful circumstances (e.g., economic stress) can undermine parents' feelings of self-efficacy (Brody et al., 1999; Coleman & Karraker, 1997). Some parents may not feel comfortable helping their children with homework if they do not understand it themselves. School personnel could provide parents with information on how they can be more successful in helping their children, and thus, give parents opportunities to feel successful and build their confidence. When parents are encouraged to participate in their children's schools they can learn skills to help their children succeed in school (Miedel & Reynolds, 2000).

A school environment that invites and encourages parent involvement conveys the belief that helping children with their schooling is part of their parental role (Hoover-Dempsey & Sandler, 1997). Parents need to be shown how they can play an important role in their children's schooling. School personnel, such as teachers, guidance counselors, school psychologists, and administrators, should inform parents how children benefit from increased parental participation. School staff can discuss strategies parents can use at home with their children to improve student performance.

Parents who believe that they are ultimately responsible for their children's success in school may not turn to the school when a difficulty occurs. These parents must also be shown the importance of working together with the school, and in turn the school staff needs to help parents feel welcome. It is critical for schools to determine the reasons why parents may or may not become involved so that they can respond accordingly.

Recommendations for Future Research

The present study provided some understanding about the motivations behind parents' decisions to become involved in their children's education. However, additional research in this area is necessary to provide further insight into why parents become involved. Much of the research literature on parent involvement has focused on its relationship with status variables (e.g., parent ethnicity, income, education, etc.). Demographic variables have been found to be related to parent involvement. Mothers have been primarily studied in the area of parent involvement (Brody & Flor, 1998), yet studies comparing mother and father participation in education have found differences. For instance, Nord et al. (1997) found that mothers were more involved in at-school activities than fathers. In addition, mothers have also been reported to be more involved than fathers in all areas of parent involvement (Grolnick & Slowiaczek, 1994).

Primary caregivers participating in the present study were primarily Thai, mothers, married, and from middle to upper class households, thus, limiting the generalization of the results. Previous research has emphasized the relationships between demographic characteristics and parent involvement. For instance, lower income, less educated, and single parents have been found to be less involved in children's schooling than higher income, more educated, and married parents (Hoover-Dempsey

et al., 1987; Marcon, 1999; Pena, 2000). Griffith (1998) found that low socioeconomic status was associated with lower parent participation in school activities. Additional barriers to parents' involvement identified in the research literature include cultural background and differences in language between parents and teachers (Delgado-Gaitan, 1991; Pena). Future studies should recruit primary caregivers from more diverse backgrounds and investigate barriers to involvement for these groups.

Given that a small number of participants were included in these comparisons, results should be interpreted with caution and this study should be replicated with a more diverse sample of participants. Future research might include demographic variables as direct and indirect predictors of parent involvement in the path model.

In addition, relationships between demographic characteristics and the predictor variables in this study (i.e., self-efficacy, teacher invitations, and school-focused, parent-focused, and partnership-focused role construction) have been identified in the research literature. Although research regarding the relationships between status variables and self-efficacy and parental role construction is limited, it has been found that parents from socio-economically disadvantaged and culturally diverse backgrounds may have lower levels of self-efficacy and feel that their role in their children's education is not significant (Griffith, 1998). Hoover-Dempsey and Jones (2002) found that marital status was not significantly related to parents' role constructions. Brody et al. (1999) found that financial status among African American single mother was associated with feelings of self-efficacy. Parents who have limited education and lack fluency in English may not feel competent to effectively help their children with homework or participate at school (Eccles & Harold, 1993; Pena, 2000). Thus, future research should also include demographic variables as direct and indirect

predictors of self-efficacy, teacher invitations, and parental role construction is the path model.

The present study used vignettes to measure parent involvement. However, a limitation in the use to vignettes is whether or not the respondents consider the vignettes to be realistic and respond accordingly (Huebner, 1991). Future research should investigate parents' actual participation level in their children's schooling. The findings regarding self-efficacy and parental role construction were measured through self-report instruments, which can limit the reliability and validity of the results (Anastasi, 1992). It is also recommended that future studies use objective measurements, such as direct observation and standardized data collection tools. However, primary caregivers were asked in the demographic survey to indicate how often they participate in school events. Correlational analyses were conducted to investigate whether actual parent participation at school was related to parent participation reported through the vignettes. Actual parent participation was found to be significantly related to primary caregivers' school-based involvement ($r = .17$, $p < .05$), teacher collaboration ($r = .17$, $p < .05$), and overall parent involvement ($r = .16$, $p < .05$) as measured by the vignettes (Appendix H). There was no significant relationship between actual parent participation and home-based involvement reported on the vignettes.

The present research may even by extended by then looking at the relationship between actual participation levels and student performance. For instance, parent involvement and parent attitudes should be studied while comparing low versus high achievers. Self-efficacy, parental role construction, and perceptions of teacher invitations of

parents of low and high achievers should be investigated in relation to levels of parent involvement.

An elementary school sample was selected for the present study because parent involvement ha been reported to change in the middle and high school years (Epstein, 1986). Parents are more likely to help their children with homework in elementary school than middle school (Dauber & Epstein, 1993). High school students' achievement has been reported to be related to parent involvement at home by nurturing educational aspirations and providing support for autonomy (Bryan et al., 2001). As students move through elementary schools into middle and high schools the partnership between parents and schools declines (Connors & Epstein, 1995). Future research should be conducted to investigate factors influencing parent involvement at the middle and high school levels and what types of parent involvement benefit school performance among middle and high school students.

Future research may also investigate how birth order influences parents' choices about becoming involved. The present study asked parents to think of only one of their children while completing the surveys. Research might extend the findings of the current study by examining whether parents' involvement choices are different according to the placement of the child in their family. For example, do parents report higher levels of involvement with their first born versus their youngest child? It would also be interesting to compare parents' actual levels of participation across the children in their family.

Finally, the purpose of this study was to identify factors influencing parent involvement in order for this information to be ultimately used in the development of

effective interventions for improving family-school partnerships. In addition, the present study provided theoretically sound evidence for why parents choose to become involved in their children's education. Future research should develop, implement, and evaluate interventions and parent participation programs based upon the finding of the present study. This would allow for the development of future parent participation program to be theoretically based. Programs should focus on both parent and teacher behaviors when attempting to increase parent involvement in school activities. Given that there were limitations to the present study and there continues to be questions left unanswered, additional research is needed to understand why parents become involved in their children's education.

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Appendix A

Demographics Fact Sheet

Survey of Primary Caregivers

This booklet should be answered by the PRIMARY CAREGIVER of an elementary school-aged child.
If you have more than one child, please answer the following questions while thinking of one child in your family:

A. Who is filling in the booklet? PLEASE CHECK IF YOU ARE.....
_____ (1) mother
_____ (2) father
_____ (3) other (describe relationship to child) _____

B. Household Status (PLEASE CHECK IF YOU ARE.....)
_____ (1) Single parent household _____ (2) Two parent/guardian household

C. Age
1. Date of Birth of Female Head of Household _____
2. Date of Birth of Male Head of Household _____

D. Education
1. Female Head of Household's highest level of education completed_____
2. Male Head of Household's highest level of education completed _____

E. Race/Ethnicity (PLEASE CHECK IF YOU ARE.....)
1. Female Head of Household's race/ethnicity :
____ (1) Thai ____ (4) European
____ (2) Caucasian ____ (5) Asian (describe) _____
____ (3) Asian Pacific Islander ____ (6) other (describe) _____

2. Male Head of Household's race/ethnicity :
____ (1) Thai ____ (4) European
____ (2) Caucasian ____ (5) Asian (describe) _____
____ (3) Asian Pacific Islander ____ (6) other (describe) _____

3. Primary Language spoken in Household_____

F. Occupational Status (PLEASE CHECK IF YOU ARE.....)
1. Female Head of Household's occupational status :
_____ (1) No paid Employment at this time
_____ (2) Employed: Full-Time Part-Time
_____ (3) Retired
_____ (4) In School: Full-Time Part-Time
_____ (5) other (describe) _____

2. Male Head of Household's occupational status :
_____ (1) No paid Employment at this time
_____ (2) Employed: Full-Time Part-Time
_____ (3) Retired
_____ (4) In School: Full-Time Part-Time
_____ (5) other (describe) _____

H. NUMBER of SCHOOL-AGED (3 – 18 years old) CHILDREN_____

I. List their AGES_____

J. AGE of elementary school CHILD IMAGINING while completing survey _____

Please indicate HOW OFTER you have done the following things during the current school year:

K. Participated in school events and activities (e.g., PTA meetings). (Check one).

____Never ____Once this year ____Once each semester ____Once a month

____Once every 1-2 weeks ____1+ time(s) each week

L. Had a conference with my child's teacher.

____Never ____Once this year ____Once each semester ____Once a month

____Once every 1-2 weeks ____1+ time(s) each week

M. HOW OFTEN does your child's TEACHER CONTACT you to discuss his/her progress in school other than through report cards (e.g., phone calls, letters)? (Check one).

____Never ____Once this year ____Once each semester ____Once a month

____Once every 1-2 weeks ____1+ time(s) each week

Thank you for your time and cooperation!

Appendix B

Primary Caregiver Surveys

Section A. Please indicate HOW OFTEN for you the following things have occurred during the current school year:

	Never 1	Seldom 2	Occasionally 3	Sometimes 4	Frequently 5	Always 6
1. I sit down with my child when he or she does homework	1	2	3	4	5	6
2. My child's teacher and I exchange notes.	1	2	3	4	5	6
3. I check over my child's homework	1	2	3	4	5	6
4. I read with my child	1	2	3	4	5	6
5. I get advice from the teacher	1	2	3	4	5	6
6. I make sure that my child's homework gets done	1	2	3	4	5	6
7. My child does his or her homework at school	1	2	3	4	5	6

	Never 1	Once this year 2	Once each semester 3	Once a month 4	Once every 1-2 weeks 5	1+ time (s) each week 6
8. I contact the teacher if I have questions about schoolwork	1	2	3	4	5	6
9. I help my child study for tests or quizzes.	1	2	3	4	5	6

Section B. Please indicate HOW MUCH YOU AGREE OR DISAGREE with each of the following statements. Please consider the current school year.

	Strongly disagree 1	Disagree 2	Disagree just a little 3	Agree just a little 4	Agree 5	Strongly agree 6
1. I assume my child is doing alright when I don't hear anything from the school I don't hear anything from the school	1	2	3	4	5	6
2. It's important that I let the teacher know about things that concerns my child	1	2	3	4	5	6
3. Conferences with the teacher are helpful to me	1	2	3	4	5	6
4. If my child has a problem, I tell him or her to go to the teacher	1	2	3	4	5	6
5. I know what's going on at school	1	2	3	4	5	6
6. I like to spend time at my child's school when I can	1	2	3	4	5	6
7. I keep an eye on my child's progress	1	2	3	4	5	6
8. It's my job to make sure my child understand his or her assignments	1	2	3	4	5	6
9. I get most of my information about my child's progress from report cards	1	2	3	4	5	6
10. It's my job to explain tough	1	2	3	4	5	6

assignments to my child						
11.There are limits to what I can do to help my child	**1**	**2**	**3**	**4**	**5**	**6**
12. The teacher has to let me know about a problem before I can do something about it	**1**	**2**	**3**	**4**	**5**	**6**
13. I find it helpful to talk with the teacher.	**1**	**2**	**3**	**4**	**5**	**6**
14. I make it my business to stay on top of things at school	**1**	**2**	**3**	**4**	**5**	**6**
15. My child's learning is up to the teacher and my child	**1**	**2**	**3**	**4**	**5**	**6**
16. My child's teacher knows me.	**1**	**2**	**3**	**4**	**5**	**6**

<u>Section C.</u> I would like you to think about your child, _____, in Ms. / Mr. _____'s class. PLEASE CIRCLE THE NUMBER that most closely matches your response to each question. (There are no 'right' or 'wrong' answers here; I just want to know what you think.)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
	1	**2**	**3**	**4**	**5**
1. I know how to help my child do well in school	**1**	**2**	**3**	**4**	**5**
2. My child is so complex I never know if I'm getting through to him/her	**1**	**2**	**3**	**4**	**5**
3. I don't know how to help my child make good grades in school	**1**	**2**	**3**	**4**	**5**

4. A student's motivation to do well in school depend on the parents	**1**	**2**	**3**	**4**	**5**
5. I feel successful about my efforts to help my child learn	**1**	**2**	**3**	**4**	**5**
6. Other children have more influence on my child's grades than I do	**1**	**2**	**3**	**4**	**5**
7. Most of a student's success in school depends on classroom teacher, so I have only limited influence	**1**	**2**	**3**	**4**	**5**
8. I don't know how to help my child learn.	**1**	**2**	**3**	**4**	**5**
9. It I try hard, I can get through to my child even when he or she has difficulties understanding something	**1**	**2**	**3**	**4**	**5**
10. I make a significant difference in my child's school performance	**1**	**2**	**3**	**4**	**5**
11. Other children have more influence on my child's motivation to do well in school than I do	**1**	**2**	**3**	**4**	**5**
12. My efforts to help my child learn are successful	**1**	**2**	**3**	**4**	**5**

Appendix C

Primary Caregiver Involvement Survey

I am doing a study to determine how primary caregivers typically respond to problem comments made by teachers about their children.

What I would like you to do is to answer the questions in a way that indicates how you personally might handle the situation if it was your child. Please keep in mind there are no right or wrong answers to the questions and this survey is anonymous. I am simply looking for how you would respond.

The following pages contain 6 separate comments that are typically made on report cards by teachers about elementary school-aged children. Imagine that your child's teacher wrote each of these comments on his/her recent report card.

After each question, please indicate how frequently you would do each of the three responses by circling your answer.

1) Your child would benefit from extra work on math skills. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

2) Your child does not ask for help when challenging concepts are introduced in class. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

3) Your child needs to stay on task when completing class-work. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

4) Your child understands concepts in class, but he/she does not read fluently. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

5) Your child needs to remember check over his/her work for mistakes made. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

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6) Your child seems to have some difficulty following more than one direction and following the class instruction. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

I am doing a study to determine how primary caregivers typically respond to problem comments made by teachers about their children.

What I would like you to do is to answer the questions in a way that indicates how you personally might handle the situation if it was your child. Please keep in mind there are no right or wrong answers to the questions and this survey is anonymous. I am simply looking for how you would respond.

The following pages contain 6 separate comments that are typically made on report cards by teachers about elementary school-aged children. Imagine that your child's teacher wrote each of these comments on his/her recent report card.

After each question, please indicate how frequently you would do each of the three responses by circling your answer.

1) Your child would benefit from extra work on math skills.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

2) Your child does not ask for help when challenging concepts are introduced in class.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

3) Your child needs to stay on task when completing class-work.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

4) Your child understands concepts in class, but he/she does not read fluently.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

5) Your child needs to remember check over his/her work for mistakes made.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

6) Your child seems to have some difficulty following more than one direction and following the class instruction.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

Appendix D

Pilot Methodology and Results

Pilot methodology

Subjects

The participants for this pilot study included 30 economically and culturally diverse parents (i.e., mothers and fathers) recruited from neutral settings (i.e., classes at gyms, stores, doctors' offices, etc.) not likely to be confounded by parent involvement in schools. Mothers and fathers participating in this study were Caucasian and Thai. Although the economic level of participants varied, they were predominantly middle class. Parents were either employed full time or they were home full time. Only one parent per family completed the questionnaire.

Instrumentation

For the pilot study, vignettes were developed for each of the five scales of the Academic Competence Evaluation Scales

- Academic Skills
- Study Skills
- Motivation
- Interpersonal Skills
- Participation scales

Two vignettes were created for each of the scales with the exception of the Academic Skills scale in which four vignettes were developed. The Academic Skills scale reflects a student's performance in a variety of academic domains, including reading and math. For this study two vignettes were developed for both reading and math. Technical properties of the Academic Competence Evaluation Scales were discussed earlier (Chapter 3)

The vignettes were hypothetical situations depicting comments typically made by teachers on report cards describing children exhibiting mild academic difficulties in the classroom. These vignettes were created to elicit parent resolution and to determine how frequently parents would participate in their children's education in response to these difficulties. The purpose of the vignettes was to measure parents' participation in three dimensions of parent school involvement, including school-based involvement, collaborating with their children's teachers, and home-based involvement. The 12 vignettes were developed by following the guidelines for writing vignettes provided by Brophy and Rohrkemper (1981), as well as referring to actual teacher comments made on report cards of school-aged children.

Procedures

Six-page packets containing 12 vignettes were distributed to 30 parents in neutral settings. Parents were informed that participation in the study was voluntary and confidentiality would be maintained. It was explained that the purpose of the study was to understand how parents would react to various difficulties children were having in school. The packets were collected by the researcher that same day.

All vignettes were composed of a brief description of a mild academic problem exhibited by a student in the classroom followed by a question asking parents how often they would participate in three dimensions of school involvement when responding to the particular comment. Two versions of the vignettes were developed: one was simply a report of the child's progress in school, while the second version included the child's progress as well as an invitation or request from the teacher for the parents to help their children in learning activities. The vignettes developed for the

pilot study are presented in Tables D1 and D2. For the pilot study, 15 parents responded to vignettes which involved only the progress report, while another 15 parents responded to vignettes which included the teacher's invitation for Parent involvement. Parents' frequency of involvement was measured by asking them to circle a number on a Likert scale (1 = never and 5 = always) for each dimension (i. e., volunteering at school, helping at home with learning activities, working with teachers). The higher the number parents selected, the more often they were willing to engage in that activity of school involvement. At the end of each questionnaire participants were asked to express any suggestions or comments that they had about the vignettes.

Table D1
Pilot Vignettes without Teacher Invitations

1) Your child would benefit from extra work on math skills.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

2) Your Child correctly solves math problems but he/she continues to rely on concrete aids to do so.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

3) Your child understands concepts in class, but he/she does not read fluently.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

4) Your child does not use the skills and strategies that he/she is learning in reading.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

5) Your child rushes through his/her work, interfering with the quality of the work.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

6) Your child needs to remember check over his/her work for mistakes made.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

7) Your child needs to stay on task when completing class work.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

8) Your child comes to class without necessary materials (e.g., books) and does not turn in assignments on time.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

9) Your child has difficulty tolerating and handling challenges.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

10) Your child seems to have some difficulty following more than one direction and following the class instruction.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

11) Your child does not ask for help when challenging concepts are introduced in class.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

12) Your child does not always participate in class discussions.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

Table D2
Pilot Vignettes with Teacher Invitations

1) Your child would benefit from extra work on math skills. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

2) Your Child correctly solves math problems but he/she continues to rely on concrete aids to do so. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

3) Your child understands concepts in class, but he/she does not read fluently. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

4) Your child does not use the skills and strategies that he/she is learning in reading. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

5) Your child rushes through his/her work, interfering with the quality of the work. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

6) Your child needs to remember check over his/her work for mistakes made. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

7) Your child needs to stay on task when completing class work. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

8) Your child comes to class without necessary materials (e.g., books) and does not turn in assignments on time. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

9) Your child has difficulty tolerating and handling challenges. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

10) Your child seems to have some difficulty following more than one direction and following the class instruction. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

11) Your child does not ask for help when challenging concepts are introduced in class. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

12) Your child does not always participate in class discussions. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

Results

Thirty participants read and responded to the 12 vignettes. Descriptive and reliability analyses were run in order to determine which vignettes contained the most variability and which would be used for the dissertation. In addition, each of the questions measuring parent involvement was analyzed to determine which produced greater variability. The responses for each individual dimension of parent involvement (i.e., volunteering, home activities, and teacher collaboration were analyzed to determine how consistently they were acting across the vignettes and on the two versions of the survey (Tables D3 through D5). In general, parents chose to become more involved in each of the three dimensions of parent involvement when the comments included an invitation from the teacher. Parents also chose to collaborate with the teacher most frequently when presented with an invitation. When comparing both versions of the survey, parents were less likely to volunteer when responding to academic difficulties in their children than they were to work with their children at home or to contact the teacher. In other words, parents chose to participate in home activities and teacher collaboration more frequently than volunteer at the child's school when responding to the teacher comments.

Two vignettes for each scale on the Academic Competence Evaluation Scales were developed for the pilot study. The descriptive statistics and reliabilities were analyzed comparing the two vignettes developed from each area of the Academic Competence Evaluation Scales (i.e., Academic Skills, Motivation, etc.) to determine which ones were creating the greatest variability in responses as well as the most the reliable measure. For example, vignette 1 and vignette 2 both reflect a student's academic performance in mathematics. The data were compared to determine which vignette elicited greater differences in responses from participants and which vignette yielded

the higher reliability coefficient. This analysis was completed for each of the vignettes. As a result, six of the vignettes created for the pilot study, one from each area of academic competence, were deleted.

Based upon analysis of the results of the pilot study, 6 of the 12 vignettes were chosen for the Parent Involvement Survey which will be used in the dissertation study. The results of the pilot study indicated that the survey was an effective measure of identifying differences in the frequency of parent involvement when teacher invitations were or were not provided. The resulting two instruments of vignettes both with and without the teacher invitation selected for the dissertation yielded a Cronbach's alpha coefficient of .82 and .88, respectively, and are presented in Tables D6 and D7. The Parent Involvement Survey measures parents' frequency of involvement in learning at home and school and in working collaboratively with teachers in response to difficulties in six areas of academic competence.

Table D3

Means and Standard Deviations for Volunteering (school-based) (N = 30)

Vignette	Mean	*SD*
Academic skills (Math a)		
With teacher invitation	2.30	1.06
Without teacher invitation	2.10	1.10
Academic skills (Math b)		
With teacher invitation	2.60	1.43
Without teacher invitation	1.90	1.10
Academic skills (Reading a)		
With teacher invitation	2.20	.92
Without teacher invitation	2.10	.99
Academic skills (Reading b)		
With teacher invitation	2.50	1.43
Without teacher invitation	1.60	.70
Interpersonal skills (a)		
With teacher invitation	2.40	1.43
Without teacher invitation	2.00	.94
Interpersonal skills (b)		
With teacher invitation	2.50	1.27
Without teacher invitation	2.00	1.15
Motivation (a)		
With teacher invitation	2.40	1.26
Without teacher invitation	2.00	.82
Motivation (b)		
With teacher invitation	2.70	1.26
Without teacher invitation	1.50	.82

Table D3

Vignette	Mean	*SD*
Participation (a)		
With teacher invitation	2.20	1.40
Without teacher invitation	2.00	.94
Participation (b)		
With teacher invitation	2.10	1.20
Without teacher invitation	1.80	.92
Study skill (a)		
With teacher invitation	2.10	1.29
Without teacher invitation	1.80	1.14
Study skill (b)		
With teacher invitation	2.30	1.34
Without teacher invitation	1.60	.84

Table D4

Means and Standard Deviations for Home Activities (home-based) (N = 30)

Vignette	Mean	*SD*
Academic skills (Math a)		
With teacher invitation	4.30	.67
Without teacher invitation	3.50	1.35
Academic skills (Math b)		
With teacher invitation	4.60	.52
Without teacher invitation	4.30	1.25
Academic skills (Reading a)		
With teacher invitation	4.30	.67
Without teacher invitation	3.80	1.23
Academic skills (Reading b)		
With teacher invitation	4.60	.52
Without teacher invitation	3.60	1.26
Interpersonal skills (a)		
With teacher invitation	4.20	.92
Without teacher invitation	4.00	1.25
Interpersonal skills (b)		
With teacher invitation	4.40	.70
Without teacher invitation	3.90	1.29
Motivation (a)		
With teacher invitation	4.20	.63
Without teacher invitation	3.50	1.51
Motivation (b)		
With teacher invitation	4.40	.70
Without teacher invitation	3.80	1.32

Table D4

Vignette	Mean	*SD*
Participation (a)		
With teacher invitation	3.70	1.16
Without teacher invitation	3.40	1.65
Participation (b)		
With teacher invitation	4.30	.82
Without teacher invitation	3.70	1.25
Study skill (a)		
With teacher invitation	2.30	1.34
Without teacher invitation	1.60	.84
Study skill (b)		
With teacher invitation	4.50	.71
Without teacher invitation	3.60	1.08

Table D5

Means and Standard Deviations for Teacher Collaboration (home-school collaboration) (N = 30)

Vignette	Mean	*SD*
Academic skills (Math a)		
With teacher invitation	4.70	.48
Without teacher invitation	3.70	1.06
Academic skills (Math b)		
With teacher invitation	4.70	.48
Without teacher invitation	4.80	.42
Academic skills (Reading a)		
With teacher invitation	4.70	.48
Without teacher invitation	4.10	.57
Academic skills (Reading b)		
With teacher invitation	4.70	.67
Without teacher invitation	3.90	1.37
Interpersonal skills (a)		
With teacher invitation	4.70	.67
Without teacher invitation	4.70	.48
Interpersonal skills (b)		
With teacher invitation	4.70	.67
Without teacher invitation	4.60	.52
Motivation (a)		
With teacher invitation	4.60	.70
Without teacher invitation	4.10	1.20
Motivation (b)		
With teacher invitation	4.70	.67
Without teacher invitation	4.00	1.25

Table D5

Vignette	Mean	*SD*
Participation (a)		
With teacher invitation	3.70	1.16
Without teacher invitation	3.40	1.65
Participation (b)		
With teacher invitation	4.70	.67
Without teacher invitation	4.20	.79
Study skill (a)		
With teacher invitation	4.30	1.25
Without teacher invitation	3.90	1.20
Study skill (b)		
With teacher invitation	4.60	.70
Without teacher invitation	3.50	1.43

D6. Selected Vignettes with Teacher Invitation

1) Your child would benefit from extra work on math skills. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

11) Your child does not ask for help when challenging concepts are introduced in class. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

7) Your child needs to stay on task when completing class-work. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

3) Your child understands concepts in class, but he/she does not read fluently. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

6) Your child needs to remember check over his/her work for mistakes made. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

10) Your child seems to have some difficulty following more than one direction and following the class instruction. I plan to continue working with your child on strategies to improve his/her performance. We should discuss these strategies.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

D7. Selected Vignettes without Teacher Invitation

1) Your child would benefit from extra work on math skills.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

11) Your child does not ask for help when challenging concepts are introduced in class.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

7) Your child needs to stay on task when completing class-work.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

3) Your child understands concepts in class, but he/she does not read fluently.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

6) Your child needs to remember check over his/her work for mistakes made.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

---

10) Your child seems to have some difficulty following more than one direction and following the class instruction.

In response to this comment appearing on my child's report card I……..

	Definitely would not 1	Probably would not 2	Possibly would 3	Probably would 4	Definitely would 5
1. Participate in activities that occur at the school, such as volunteer in classroom, and attend Parent-Teacher meetings	1	2	3	4	5
2. Work with my child on learning activities at home	1	2	3	4	5
3. Contact the teacher to work together on my child's progress in school	1	2	3	4	5

Appendix E

Primary Caregiver Cover Letter

Dear Primary Caregiver,

I am conducting educational research as part of the requirements for my Master Degree in the Graduate School of Psychology in Assumption University (ABAC), and your help would be greatly appreciated. The purposes of my research are to investigate primary caregivers' thoughts about participating in their children's education, and the intervention techniques they think would be most suitable for handling the typical kinds of mild academic difficulties experienced by elementary school-aged children.

Primary caregivers of elementary school-aged children are being asked to voluntarily complete the enclosed packer which contains two questionnaires and a few brief background questions. By completing the survey, you are agreeing to participate and may withdraw at any time. It might take 20 minutes for you to complete all parts of this packer. Please do not sign any of the answer sheets. Simply follow the directions as requested. Please keep in mind there are no "right" or "wrong" answers and you should not spend too much time on any one item.

The information you provide in this survey is confidential. Your right to privacy and confidentiality will be safeguarded by not collecting any names or identifying you in any way. Your answer will be combined with those of others in order to develop a composite profile.

I appreciate the valuable answers you will give to the many questions listed. Your responses will contribute to the validity of this study. If you have any comments or questions about this study, please call me at +66-1-837-8280.

Thank you in advance for completing the enclosed packet.

Sincerely,

Sheetal Dahuja
Graduate School of Psychology (ABAC)

Appendix F

Family Demographics

Results

Descriptive statistics

Participants included 300 primary caregivers of elementary school-aged children. Primary caregivers were asked to complete a demographic survey, including items about their family composition. A description of the family characteristics for the sample is presented in Table F1. More mothers (94%) than fathers (5.3%) participated in this study. Female guardians ranged in age from 27 to53, with the mean age of 41 year, and male guardians ranged in age from 27 to 62, with the mean age of 43 years. The majority of participants lived in a two parent household (95%), with the remaining participants living in a single parent household (5%). Although participants were not asked if either the male or female guardians were deceased, participants indicated this information independently. The majority of female guardians were Thai and male guardians were Caucasian (72.3% and 55%, respectively). In addition, the primary language spoken in the majority of households was English (72.6%).

Many of the female and male guardians earned at least a college degree (43% and 33% respectively).

Forty three percent of the female guardians reported being employed full-time. The majority of male guardians were employed full-time (84.6%).

The number of children primary caregivers reported having ranged from 1 to 5, with a mean of 2.16 children in the household. Primary caregivers were asked to think of one their children while responding to questions on the survey. The range in ages of the children was from 5 years to 12 years, with the mean age of 8.18 years old. The majority of the children were the youngest in the family (60%).

Table F1

Demographic Characteristics of the Primary Caregiver sample (N = 300)

Variable	Category	Frequency	Percentage
Relationship	Mother	282	94.0
	Father	16	5.3
	Other	1	0.3
Household status	Single parent	15	5
	Two parent / guardian	285	95
Education			
Female guardian	Some high school	3	1
	High school grad	62	20.6
	Some college	43	14.3
	College grad	129	43
	Graduate degree	61	20.3
	Missing	2	0.6
Male guardian	Some high school	2	0.6
	High school grad	88	29.3
	Some college	34	11.3
	College grad	99	33
	Graduate degree	53	17.6
	Missing	24	8.0
Race			
Female guardian	Thai	217	72.3
	Caucasian	9	3
	Asian Pacific Islander	11	3.6
	European	11	3.6
	Asian (not Thai)	41	13.6
	Other	10	3.3
	Missing	1	0.3
Male guardian	Thai	45	15
	Caucasian	165	55
	Asian Pacific Islander	16	5.3

Table F1

Variable	Category	Frequency	Percentage
	European	6	2
	Asian (not Thai)	48	16
	Other	9	3
	Missing	11	3.6
Language	English	218	72.6
	Thai	64	21.3
	Other	18	6
Occupation			
Female guardian	No paid employment	78	26
	Employed full-time	129	43
	Employed part-time	85	28.3
	Retired	0	
	In school full-time	7	2.3
	In school part-time	0	
	Other	0	
	Missing	1	0.3
Male guardian	No paid employment	6	2
	Employed full-time	254	84.6
	Employed part-time	8	2.6
	Retired	4	1.3
	In school full-time	15	5
	In school part-time	0	
	Other	2	0.6
	Missing	11	3.6
Child's place	Only	42	14
	Oldest	5	18.3
	Middle	19	6.3
	Youngest	180	60
	Twins	4	1.3

Table F1

Variable	Mean	SD	Range
Age of female guardian 1	40.54	4.92	27-53
Age of male guardian 2	43.9	6.03	27-62
Number of children	2.16	0.83	1-5
Age of child	8.18	1.84	5-12

Note
n 1 = 296
n 2 = 279

Appendix G

Preliminary Analysis

Table G1

Reliabilities of Research Measures With Participants of Study (N = 300)

Instrument	Alpha coefficient	Spearman-Brown coefficient
Parent efficacy scale	0.88	
Parent role construction scale		
Parent-focused	0.74	
School-focused	0.52	0.5
Partnership-focused	0.8	
Involvement survey		
School-based	0.98	
Collaboration	0.91	
Home-based	0.92	
Overall	0.93	

Table G2

Changes in the Reliability of the School-Focused Subscale When Items were Deleted

Instrument and item deleted	Alpha coefficient
School-focused subscale	
7a	0.55
1b	0.49
4b	0.52
9b	0.46
11b	0.47
12b	0.41
15b	0.47

Table G3

Inter-correlations Between Subscale Scores and Total Score on the Primary Caregiver Involvement Survey

Variable				
Parent involvement	1	2	3	4
1. School-based	- -	.33*	.36*	.88*
2. Collaboration		- -	.41*	.65*
3. Home-based			- -	.67*
4. Total				- -

Note. School-based = school participation; Collaboration = collaboration with teacher; Home-based = home participation; Total = total parent involvement practices.
'*p < .01, two-tailed

Appendix H

Actual versus Reported Participation

Table H1

Inter-correlations Between Actual and Reported Participation

Variable	1	2	3	4	5
Parent involvement					
1. School-based	- -	.33**	.36**	.88**	.17*
2. Collaboration		- -	.41**	.65**	.17*
3. Home-based			- -	.67**	-.02*
4. Total				- -	.16*
5. Actual					- -

Note. School-based = school participation; Collaboration = collaboration with teacher; Home-based = home participation; Total = total parent involvement practices.
'*p < .01, two-tailed.