The Relationship Between Parental Involvement and Student Achievement in Three Working Class Elementary Schools

Laurie Zickler-Bandlow

Seton Hall University

Follow this and additional works at: http://scholarship.shu.edu/dissertations

Part of the Educational Sociology Commons, and the Elementary Education and Teaching Commons

Recommended Citation
Zickler-Bandlow, Laurie, "The Relationship Between Parental Involvement and Student Achievement in Three Working Class Elementary Schools" (2009). Seton Hall University Dissertations and Theses (ETDs). 1655.
http://scholarship.shu.edu/dissertations/1655
THE RELATIONSHIP BETWEEN PARENTAL INVOLVEMENT AND STUDENT ACHIEVEMENT IN THREE WORKING-CLASS ELEMENTARY SCHOOLS

BY

LAURIE ZICKLER BANDLOW

Dissertation Committee

Daniel Gutmore, Ph.D., Mentor
Charles Achilles, Ed.D.
Enid Golden, Ed.D.
Paul Winkler, Ed.D.

Submitted in Partial Fulfillment of the Requirements for the Degree Doctor of Education
Seton Hall University

2009
ABSTRACT

THE RELATIONSHIP BETWEEN PARENTAL INVOLVEMENT AND STUDENT ACHIEVEMENT IN THREE WORKING-CLASS ELEMENTARY SCHOOLS

In working-class schools, parental involvement predicts student achievement. In a quantitative, non-experimental study using a descriptive correlational research design with multiple linear regression analysis, a model for parental involvement predicting academic achievement was found to be significant for both language arts and mathematics. Parental efficacy stood out as significantly contributing to the model. The relationship was such that for every one-point increase in parental efficacy, language arts achievement increased by 0.70 points and math achievement increased by 0.99 points.

The study population was comprised of parents of 4th-, 5th-, and 6th-grade students in 3 elementary schools in a working-class school district categorized as District Factor Group CD by the New Jersey Department of Education. Of respondent parents, 91.6% were minorities, 56.8% said their children were eligible for federal lunch subsidy, and 35.1% reported speaking a language other than English at home.

The researcher administered an instrument developed by Sheldon and Epstein (2007) in English and Spanish to parents at “back to school” nights held in September 2008. Of parents eligible to participate in the study, 247 completed the survey. The overall response rate was 52.4%.

Analysis revealed significant relationships between parenting skills and parental efficacy and student achievement in both language arts and mathematics. As parenting
skills and parental efficacy increased, the level of student achievement in both subject areas also increased.

Analysis of achievement levels and parental involvement scales by ethnicity revealed differences in parenting skills and parental efficacy. The group comprised of ethnicities other than Black/African American scored significantly higher than the group comprised of Black/African American parents.

In both parenting skills and parental efficacy, the group comprised of participants speaking a language other than English scored significantly higher than the group comprised of English speakers. However, in regards to social networking, English speakers scored significantly higher than those speaking a language other than English at home.

On the scale representing social networking, those not eligible for free or reduced price lunch scored significantly higher than those eligible for federal lunch subsidy.
ACKNOWLEDGEMENTS

This doctoral dissertation would not have been possible without ongoing support and encouragement from family, friends, and colleagues from Howell Township Public Schools and beyond. To all who pushed gently but routinely, or checked in with phone calls, e-mails, or notes, or gave me space when I needed it, I thank you. To my husband Raymond John Bandlow, I thank you for your support, guidance, and strength. Only you could help me believe that completing this dissertation was possible. Thank you for everything!

To the Hillside Public Schools teachers, parents, and administrators who participated in or assisted with this study, without your willingness to share information and your perspectives, this study would not have been possible. I am grateful for your involvement. A special thank you is due to the Seton Hall University executive Ed.D. faculty and the members of Cohort XI. The experience was, and continues to be, a true testament to "the power of the cohort."

A special acknowledgement goes to my advisor Dr. Daniel Gutmore, who provided guidance and unwavering patience at critical times during the various stages of the study. I am deeply grateful to Dr. Charles Achilles, Superintendent of Howell Township Public Schools Enid Golden, and Paul Winkler, executive director of the New Jersey Commission on Holocaust Education. While serving on my dissertation committee, they gave me much needed direction, suggestions, and encouragement. Their diverse perspectives helped broaden my intellectual curiosity, not only in regard to this project, but also in terms of future approaches to improving public education.
Furthermore, I wish to acknowledge and extend my deep appreciation to the members of the Howell Township Board of Education and Superintendent Golden for their generosity and support in granting me a sabbatical and making it possible for me to focus my undivided attention on this study in the final months of the Ed.D. program.

Finally, I would like to thank my parents for always believing in me. Because of them, I learned at a very early age that belief in a person is perhaps the most influential gift one can receive. I will continue to do my best to pass the gift on to others.
DEDICATION

This dissertation is dedicated to my husband
Raymond John Bandlow,
who is my endless inspiration and the love of my life,
and to my son Christopher Harold Bandlow
for his patience, understanding, and unconditional love.
# TABLE OF CONTENTS

LIST OF TABLES .................................................................................................................. vii

LIST OF FIGURES ............................................................................................................... ix

I INTRODUCTION ............................................................................................................... 1

- Background ...................................................................................................................... 1
- Nonschool Factors Related to Academic Achievement ............................................. 2
- Parental Involvement ...................................................................................................... 7
- Statement of the Problem ............................................................................................... 9
- Purpose of the Study ......................................................................................................... 10
- Research Guiding Questions ........................................................................................... 10
- Significance of the Study ................................................................................................. 11
- Delimitations .................................................................................................................. 12
- Limitations ..................................................................................................................... 13
- Definitions ....................................................................................................................... 14
- Organization of the Study ............................................................................................... 15

II REVIEW OF PERTINENT RESEARCH, THEORY, AND LITERATURE ........ 17

- A Broad Base of Research on Parental Involvement, SES, and Success in School ........ 18
- Epstein’s Typology of Parental Involvement ............................................................... 21
  - Parenting .................................................................................................................... 21
  - Parental efficacy ......................................................................................................... 21
  - Communicating .......................................................................................................... 21
  - Constructing an encouraging school climate ............................................................. 22
  - Volunteering .............................................................................................................. 22
  - Learning at home ...................................................................................................... 23
  - Decision making ........................................................................................................ 24
  - Collaborating with the community ............................................................................. 24
  - Social networking ....................................................................................................... 25
- Parenting Styles and Skills ............................................................................................ 26
- The Relationship Between Interactions With Adults and Language Development .... 31
- Parental Efficacy .......................................................................................................... 34
- Communicating and Constructing an Encouraging School Climate ....................... 35
- Volunteering ................................................................................................................. 37
- Learning at Home ........................................................................................................ 39
Decision Making ......................................................... 42
Social Networking ..................................................... 43
Collaborating with the Community ................................. 46
Parental Involvement Not Specifically Related to Student
   Achievement ......................................................... 49
   Summary ........................................................... 51

III DESIGN, METHODOLOGY, AND PROCEDURES ................. 55
   Introduction ......................................................... 55
   Research Guiding Questions .................................... 56
   Null Hypotheses .................................................. 57
   Research Design .................................................. 57
   Selection of Schools and Population ......................... 58
   Confidentiality ..................................................... 59
   Data Collection .................................................... 59
      Instrumentation ............................................... 59
      Scales and reliability coefficients ......................... 60
      Reading levels and translations ............................ 62
      Procedure ..................................................... 62
   Data Analysis ..................................................... 63
   Summary ........................................................... 66

IV PRESENTATION AND ANALYSIS OF DATA ....................... 68
   Introduction ......................................................... 68
   Response Rate ..................................................... 69
   Demographic Characteristics .................................. 70
   Reliability Estimates of the Instrument Scales ............ 73
   Research Guiding Questions ................................... 75
   Results of Statistical Analyses ............................... 76
   Summary ........................................................... 85

V OVERVIEW, CONCLUSIONS, RECOMMENDATIONS .................. 89
   Introduction ......................................................... 89
   Overview .......................................................... 89
   Summary of Findings and Conclusions ....................... 93
   Discussion of Findings and Related Research ............... 97
      Findings regarding the parental involvement model ...... 97
      Findings regarding parenting ................................ 98
      Findings regarding parental efficacy ..................... 100
      Findings regarding social networking .................... 101
   Recommendations for Policy, Practice, and Further Research 103
      Policy and practice ......................................... 103
      Further research ............................................ 107
   Closing Statement .............................................. 109
References.............................................................................................................. 111
Appendixes............................................................................................................. 121
LIST OF TABLES

Table 1. Response Rate by School ................................................................. 70
Table 2. Frequency and Percentage of Responses by Grade Level .................... 71
Table 3. Frequency and Percentage of Demographic Characteristics ................ 72
Table 4. Cronbach’s Alpha Reliability Coefficients for the Nine Parental Involvement Scales ............................................................................ 74
Table 5. Pearson Correlation Coefficients on Nine Parental Involvement Scales, Language Arts Achievement, and Math Achievement .................................... 77
Table 6. Chi-Square Analyses on School of Enrollment (A, B, C) by Categories (Language Arts and Math Achievement) ................................................. 78
Table 7. Independent Samples t-Tests on Language Arts and Math Achievement and Nine Parental Involvement Scales by Ethnicity (Other vs. Black/African American) ........................................................................ 79
Table 8. Independent Samples t-Tests on Language Arts and Math Achievement and Nine Parental Involvement Scales by Language (Other vs. English) ................................................................. 81
Table 9. Independent Samples t-Tests on Language Arts and Math Achievement and Nine Parental Involvement Scales by SES (Free or Reduced-Price Lunch vs. No Free or Reduced-Price Lunch) ........................................................................ 83
Table 10. Multiple Linear Regression on Language Arts Achievement Predicted by Nine Aspects of Parental Involvement ................................................. 84
Table 11. Multiple Linear Regression on Math Achievement Predicted by Nine Aspects of Parental Involvement

Table 12. Summary of Tables 5–11: Number and Percentage of Tests Showing Statistical Significance
LIST OF FIGURES

Figure 1. Parent/community variables that may be associated with academic achievement.................................................................................................................................................. 53
CHAPTER I

Introduction

Background

Not all parents see their role in their child’s development and schooling through the same lens. Parents who consistently support and encourage their children, are actively engaged in their child’s social, cultural, and academic development, and believe they can positively influence the education of their child may view their role as parent differently from those who do not engage in those behaviors.

Certainly parents play a crucial role in the lives of individuals ... But this role is not one of active instruction, of teaching children skills ... Rather, it is support and encouragement parents give children and the intellectual climate that they create in the home which seem to be the critical factors.

(Elkind, 1987, p. 21)

Many factors influence how parents see their roles and frame their interactions with their children, both positively and negatively. Socioeconomic status (SES), parents’ educational achievement, family structure and stability, ethnicity, language spoken at home, and personal experience are among the factors that influence beliefs about parenting. These factors influence home atmosphere, parent–child interactions, parents’ preparation of children for success in school, and parental involvement in all aspects of a child’s learning experiences.
Norton (1990) opined, "We need to understand the tapestry of the early natural experience of children, the forces that shape their world view and reality, if we are to develop relevant, acceptable, and effective services" (p. 2). Studies that analyze the impact of parenting practices may help parents, educational practitioners, and policy makers to better understand the intricacies of that complex tapestry.

Parents’ active engagement in their children’s lives determines their children’s cognitive abilities and ultimately their academic success. Clark (2002) stated

Human agents make the difference in the academic performance of students over the K-12 life cycle. Parents, teachers, mentors, and others take actions that influence how much opportunity a student will have to learn skills needed for successful performance on standardized school tests in reading and math.” (p. 156)

Nonschool Factors Related to Academic Achievement

Nonschool factors related to academic achievement were presented in “Equality of Educational Opportunity” (Coleman et al., 1966), known popularly as the Coleman Report, perhaps the most important educational study of the 20th century. Using data from over 600,000 students and teachers from across the United States, researchers found that academic achievement was less related to the quality of the school and more related to the student’s family background, the social composition of the school, the student’s sense of control over his or her environment and future, and the verbal skills of teachers.

Miller (1970) concluded that SES was of interest to researchers to the extent that variables that favor academic achievement tend to be found in middle to higher occupational levels, while those that are negatively correlated with academic
achievement tend to be found in lower occupational levels. However, a middle-class family may have characteristics that are negatively associated with achievement, while a working-class family may exhibit characteristics that are positively associated with achievement.

The relationship between family income and academic achievement is well documented. A recent report from the New Jersey Department of Education (NJDOE; 2001) on student achievement as measured by the Grade Eight Proficiency Assessment showed that as the affluence of the school district's District Factor Group (DFG) increased, test scores increased. Appendix A demonstrates how DFG is related to state test scores: As DFG increases, test scores increase.

While patterns of parenting behavior linked to SES have been found in numerous studies, some researchers noted substantial variation in parents' views of their roles within the same social class. In a study of low-income mothers, Holloway, Fuller, Rambaud, and Eggers-Pierola (1997) found that the mothers had uniform expectations about preschool but varied greatly in their perceptions of their roles in preparing children for school. Some saw developing academic skills as their responsibility, while others viewed academic activities as the sole responsibility of educators. Mothers in the latter category also seemed to lack confidence in their ability to teach their children. Parents held specific beliefs and perceptions of their own efficacy that led them to become more involved or less involved in their children's education, both prior to school entry and throughout their children's schooling.

Jimerson, Egeland, and Teo (1999) found that parental expectations for children's success helped to predict their success in school. Feinstein and Symons (1999) concluded
that among the nonschool factors of school achievement—SES, parents' level of education, family structure and stability, ethnicity, and parental involvement—parental involvement was most related to academic achievement.

Just as culture is passed from generation to generation, the parenting practices followed by one's parents may contribute significantly to one's beliefs, practices, and disposition toward parenting. Shonkoff and Phillips (2000) concluded that parents' environment when they were children greatly affects how they parent.

Parent involvement, unless further defined, is an ambiguous term. Recent research suggests that parental expectations of and aspirations for their children's achievements have a strong influence on success in school, while the effect of checking to make sure a child completes homework is only marginally influential (Fan, 2001). Possibly, the relationship between family income and academic achievement has been unclear in some studies because the same factors that cause parents to have low incomes, such as mental health issues, limited abilities, and negative attitudes, also have an impact on their children's life chances (Yeung, Linver, & Brooks-Gunn, 2002).

To what extent, if any, is the achievement gap between children of middle-income and working-class families related to differences in parenting beliefs, practices, and disposition toward playing an active role in children's learning? It has been noted that middle-class parents confer great advantages on their children through their parenting styles and daily interactions beginning in infancy and continue to reinforce these advantages throughout their children's school careers, which suggests that the SES achievement gap may be related to such parenting (Hart & Risley, 2003).
Horvat, Weininger, and Lareau (2003) described middle-class parenting style as "concerted cultivation," characterized by practices like speaking to children frequently and positively; engaging them in conversations as equals; treating them like apprentice adults; encouraging them to ask questions, challenge assumptions, and negotiate rules; and planning and scheduling them in many activities to enhance their development.

Horvat et al. differentiated middle-class parenting style from working-class parenting style, or "accomplishment of natural growth," which is characterized by practices such as speaking to children less frequently but with increased disapproval and discouragement and allowing children increased freedom to fill their evenings and weekends as they choose but with less freedom to talk back, question authority, or haggle over rules. Children raised with an "accomplishment of natural growth" style of parenting are expected to defer to adults and treat them with respect.

While much research has been focused on the impact of poverty on academic achievement, studies of parenting styles suggest that the disadvantages that poverty imposes on a child are less about material goods and more about interactions and disposition. Advantages matter. Every poor child would benefit from having more books and more educational experiences. But advantages that middle-class children have in learning may be due to more complex processes, such as the language that middle-class parents use and their disposition toward schooling and life (Bernstein, 1990; Hart & Risley, 2003).

Desforges and Abouchar (2003) described effective parental involvement as the provision of a safe and stable environment, intellectual stimulation in the home, parent-child discussion, role models who exhibit constructive social and educational values,
examples of exhibiting good citizenship, holding aspirations for personal fulfillment, and participating in the work of the school and school governance.

The importance of parents' educational attitudes and behaviors on children's academic achievement has also been well documented in the literature of developmental psychology. Evidence shows that different elements of parents' attitudes and behaviors related to schooling, such as providing a cognitively stimulating home environment, have been identified as having a significant effect on children's levels of educational achievement (Feinstein & Sabates, 2006).

Parental involvement, as it relates to academic achievement, is the focus of this study. The belief that parental involvement has a positive effect on academic achievement is both intuitive and welcomed by policy makers, teachers, and parents alike. With a firm foundation in the literature of school improvement, there exists a growing body of empirical evidence that shows parental involvement to be one of the key factors in raising student achievement and sustaining school performance (Harris & Chrispeels, 2006).

Quite simply, involving parents in their children's schooling leads to more engagement in the teaching and learning processes. The research evidence is consistent in demonstrating that families have a major influence on their children's achievement in school and throughout life. When educators, families, and community leaders work together to support learning, children tend to do better in school, stay in school longer, and like school more.
Parental Involvement

Epstein, Coates, Salinas, Sanders, and Simon (1997) proposed a framework of six types of parental involvement as follows:

1. Parenting—efforts to assist parents with child-rearing skills and establishing home environments that support children as students.

2. Communicating—school-to-home and home-to-school communication about school programs and children's progress.

3. Volunteering—recruiting and training families as volunteers and audiences at the school or other locations to support students and school programs.

4. Learning at home—involving parents in home-based learning, including the provision of information and ideas to families about how to help their children at home with homework and other curriculum-related activities, decisions, and planning.

5. Decision making—including parents as participants in school decision-making, governance, and advocacy through parent–teacher organizations, school councils, committees, and other parent organizations.

6. Collaborating with the community—involving parents in school–community collaborations to strengthen school programs, family practices, and student learning and development.

The framework and typology of Epstein et al. (1997) are useful to researchers by providing definition and consistency in language to describe the various aspects of parental involvement.
In a later study, Sheldon and Epstein (2007) expanded the definition of parental involvement to include the following:

1. School climate—conveying a welcoming disposition toward parents that tends to make parents feel encouraged to participate in school activities and the life of the school.

2. Social networking—interactions among and between parents related to their children's experience at school.

3. Parental efficacy—the belief of parents that they can positively influence the educational outcomes of their children.

This expanded typology is not inconsistent with recent research by others. According to the Ford, Wright, Harris, and John (1998), "Newer studies include variables that describe what families actually do in the family environment to account for variability in student achievements ... These studies have begun to address the shortcomings of previous studies, many of which concentrated only on family status variables" (p. 362).

For example, Fan (2001) defined parental involvement as having aspirations for their children's academic achievement, communicating with children about education and school matters, participating in school activities, communicating with teachers about their children, and supervising schoolwork at home. Using data from the National Educational Longitudinal Study (NELS: 88), Fan studied the relationship between aspects of parental involvement and academic achievement. Factors examined included rules for watching television, participation in parent-teacher organizations, and family rules for homework and household chores.
Statement of the Problem

While education policy makers have long recognized the need to address deficiencies in background of experience and language development for impoverished children through programs like Head Start, less attention has been paid to the influence of parenting beliefs, practices, disposition, and involvement on the academic achievement of children in working-class schools. Yet, parental involvement looms large in determining the background of experience children bring to school and to life and contributes greatly to children’s language development, disposition, attitudes, and expectations in schooling.

Within any given working-class community classroom or school, significant differences in achievement may be evident. These differences may be related to ethnicity or language spoken at home, as well as SES. But earlier research suggesting that differences in parental involvement may have as strong a relationship with academic achievement as any previously noted variable, is of particular interest to educational practitioners and policy makers alike.

Policy makers and practitioners may benefit from knowing how differences in parental involvement affect academic achievement, especially in language arts and mathematics, and what manifestations or elements of parental involvement are most strongly associated with academic achievement. As policy makers and practitioners devise strategies for improving academic achievement and encouraging (or requiring) parental involvement, their strategies should be informed by a deeper understanding of what elements of parental involvement are associated with higher achievement.
Purpose of the Study

The purpose of this study is to determine the relationship between the elements of parental involvement and academic achievement in language arts and math, as well as the extent to which elements of parental involvement predict language arts and math achievement among elementary school students.

Gaining insights into the nature of the correlation between parental involvement and academic achievement and its impact on a child’s inquisitiveness, disposition toward learning, development in language and numeracy, and expectations in life might assist policy makers and practitioners in encouraging parental involvement that correlates with higher student achievement. Understanding to what extent elements of parental involvement help predict student achievement in language arts and math may be of value to policy makers and practitioners in devising strategies to overcome deficiencies resulting from parenting practices and dispositions that are less effective in predisposing children for success in schooling and beyond.

The researcher intends for this study to join the growing body of research on parental involvement that redefines parental involvement as less about engaging school personnel and more about the nature of interactions between adults and children and parenting practices that support student learning.

Research Guiding Questions

Research Question 1a. In three working-class schools, what relationships exist between two measures of student achievement (language arts and math) and nine aspects of parental involvement?
Research Question 1b. What differences exist among the three working-class schools for the relationships between two measures of student achievement (language arts and math) and nine parental involvement scales?

Research Question 2a. What differences exist according to student ethnicity (Black, Hispanic, White, or other) among 18 achievement—involvement relationships (2 measures of student achievement—language arts and math—by 9 parental involvement scales)?

Research Question 2b. What differences exist according to language spoken at home (English, Spanish, or other) among 18 achievement—involvement relationships (2 measures of student achievement by 9 parental involvement scales)?

Research Question 2c. What differences exist according to SES (lunch subsidy or no lunch subsidy) among 18 achievement—involvement relationships (2 measures of student achievement by 9 parental involvement scales)?

Research Question 3. In the three schools, how do nine aspects of parental involvement scales predict each of two student achievement scale scores (language arts and math)?

Significance of the Study

While there exists a considerable body of research about the relationships among various components of home atmosphere, parenting practices, parental efficacy, and academic achievement, the field continues to be of high interest to researchers. Studies that consider various populations of students and elements of parental involvement continue to provide new insights and point toward developing strategies for increasing parental involvement and raising academic achievement.
Parental involvement speaks directly to long-standing concerns about how parents prepare their children for success in school and how school personnel and parents work together to help students achieve. When young children begin their formal education, they come to school with vast differences in language development, background of experience, and disposition toward the culture of schooling. Children who are raised by parents who are not confident in their ability to contribute to their children’s success in school and who tend to not play an active role in their child’s learning, may be at a serious disadvantage, which grows more profound with each interaction between parent and child. Such children may benefit from school-based or community-based programs that emphasize involvement, practices, and dispositions associated with success in school.

Early childhood programs are driven by research suggesting that focused interventions can alter the trajectory of development of cognitive and social skills (Brooks-Gunn, 2004). Policy makers and practitioners need to know how parental involvement might enhance success in school in order to devise strategies for such intervention programs. Focusing on what enhances or diminishes the influence of parents on their children’s academic achievement may provide some direction to initiatives aimed at helping parents become more effective in fostering success in school.

Delimitations

The researcher compared parental involvement in three working-class elementary schools in an urban New Jersey school district and sought to determine how parental involvement was related to academic achievement. Participants in the study were the parents of fourth-, fifth-, and sixth-grade students in the selected schools.
Limitations

The researcher surveyed parents in three elementary schools located in a working-class New Jersey school district. The school district was selected because it was classified CD by the NJDOE, ranking near the 30th percentile in community wealth. Appendix B shows the number of school districts classified in each DFG. All three schools in the district were characterized by a population that was relatively diverse in ethnicity and language, though the demographics of each school varied (see Appendixes C and D).

One limitation of the study was that the results garnered from the parents might be atypical because of unknown factors. Another limitation was the use of a survey instrument to capture parental beliefs, dispositions, and practices associated with parental involvement. Not all parents in the sample group completed the survey instrument, though the researcher selected an event that traditionally drew more parents to the school than any other in the course of the school year. Furthermore, not all respondents answered every question.

The survey was administered to parents who attended one of the three schools’ back-to-school nights held in September 2008. The population of subjects selected was comprised of parents whose children were enrolled in the fourth, fifth, or sixth grade and attended the same school during the previous school year.

The event was chosen because the schools’ annual back-to-school nights historically drew more parents to their children’s schools than any other school event. Therefore, the researcher concluded that administering a survey of parents at the event would likely yield a relatively high response rate. A limitation of surveying parents who participated in their children’s back-to-school night was that the population of parents
surveyed was skewed toward those who might practice a greater measure of involvement in their children’s schooling than parents who did not show up for the event. Furthermore, any instrument selected for data collection might fail to assess all aspects of parenting styles and consistencies in their practice. Self-reported data may inherently contain inaccuracies.

Regarding limitations in the statistical analysis, it was not possible to determine effect size because the study did not have an experimental group and a control group.

Definitions

District Factor Group (DFG). “District Factor Groups have been used in New Jersey since 1975 for the purpose of comparing students’ performance on statewide assessments across demographically similar school districts” (NJDOE, n.d.). DFGs incorporate six variables closely related to SES. Those variables are

1. Percentage of adults with no high school diploma
2. Percentage of adults with some college education
3. Occupational status
4. Unemployment rates
5. Percentage of individuals in poverty
6. Median family income

Parent. The term “parent,” the central figure of this study, is defined in the broad sense as a person who, singularly or in concert with another person or other people, has the primary responsibility of raising a child. This broad definition includes biological parents, foster parents, adoptive parents, guardians, grandparents, other relatives, and any party who assumes responsibility for a child’s life.
Parental involvement. Parental involvement was defined by Fan (2001) as "parental aspiration for their children's academic achievement, parents' communication with their children about education and school matters, parents' participation in school activities, parents' communication with teachers about their children, and parental supervision at home" (p. 2). Parental involvement may also be viewed as formal and informal ways in which parents and other family members participate in the education of their children at home, in the community, or at school. Nine elements of parental involvement contained in a typology developed by Sheldon and Epstein (2007) were assessed in the population of parents surveyed.

Working-class schools. For this study, working-class schools are defined as schools in relatively homogeneous school districts that are labeled district factor group AB or CD by the NJDOE. School districts in this category are not “poor” enough to be granted the extraordinary state resources of “special needs” school districts in the past decade of school funding in the State of New Jersey, but are not affluent enough to have the resources of middle-class school districts. All three schools in the study were considered “working-class schools” and were similar in demographics. Nearly all working-class school districts that were not designated as special needs districts spent less per pupil than the state average.

Organization of the Study

This study is organized into five chapters. Chapter 1 provides background information, including variables related to student achievement with special focus on parental involvement, the purpose of the study and questions guiding the research, the significance of the study, research delimitations and limitations, a typology of parental
involvement, key definitions, an overview of the research design, and a brief outline of the organization of the study.

Chapter 2 examines the research and literature on SES and academic achievement, family and home atmosphere, parent beliefs and efficacy, child development and social networks, interventions in foster parent and child development, and other aspects of parental involvement.

Chapter 3 provides a comprehensive description of the research approach used for the study. The chapter includes research-guiding questions, null hypotheses, research design, selection of schools and population, confidentiality, data collection, and data analysis.

Chapter 4 is a compilation of data gathered from a parent involvement survey administered to participants in the selected population. A parental involvement survey developed by Sheldon and Epstein (2007) was used with the authors' permission.

Chapter 5 presents the researcher's reflections on the results in the form of a summary of the research findings, responses to key research questions presented in chapter 1, and recommendations for policy, practice, and further research.
CHAPTER II

Review of Pertinent Research, Theory, and Literature

The research, theory, and literature of education, sociology, anthropology, and child psychology contribute to a developing theory regarding the relation between parental involvement and success in school. While SES underlies and influences parenting styles and parental involvement, researchers have filtered out aspects of parental involvement that are positively related to student achievement and those that are not. Those aspects of parental involvement include specific practices such as book reading to very young children, and they include broad categories such as parenting skills, parental efficacy, and social networking among parents. These aspects of parental involvement are noted in the study of Harris and Goodall (2002), who stated that “parental engagement is not about engaging with the school but with the learning of the child” (p. 21).

The researcher differentiated between characteristics that are extremely difficult or impossible to alter, such as SES, ethnicity, and the primary language spoken at home, and factors that are behavioral in nature, such as parenting styles and practices related to parental involvement in their child’s learning. Behavioral factors may be manifestations of inalterable characteristics and may be nearly inseparable, as noted by Finn (1993) in his study of educational risk. Finn concluded that individual risk behaviors “cluster” and “track” over time. Multiple risk behaviors are often observed together, and such behaviors generally evolve from early manifestations to fully developed forms.
Manifestations of parental involvement may also track and cluster. Aspects of parental involvement, such as parenting, interactions with adults, and communication between parents and educators, may also be found to co-occur and to be related to academic success in sets as well as separately. In this chapter, a typology of frameworks for parental involvement (Epstein, 1996; Epstein et al., 1997, 2002; Epstein & Sheldon, 2006; Sheldon, 2002, 2003; Sheldon & Epstein, 2007) was employed as the organizing structure for the discussion of research theory related to parental involvement and academic achievement.

A Broad Base of Research on Parental Involvement, SES, and Success in School

A strong conclusion has emerged from several studies that parental involvement in child and adolescent education generally benefits children's learning and success in school (Chavkin, 1993; Eccles & Harold, 1993: Epstein, 1989, 1991, 1994; Hess & Holloway, 1984; Hobbs et al., 1984; U.S. Department of Education, 1994). Researchers have noted that parents decide to become involved based on their own experiences and environmental demands and the opportunities presented to them.

Hoover-Dempsey and Sandler (1995) concluded that a parent who does not perceive his or her role as including school involvement, or who has a low sense of efficacy for helping children succeed in school, chooses not to become involved. Parental involvement can take the form of modeling when parents regularly practice appropriate school-related behaviors. A second form of involvement in schooling is reinforcement of school-related behaviors and expectations. Involved parents may give their children interest, attention, praise, and rewards related to behaviors needed to be successful in school. Their third form of involvement is instruction, either open-ended or factual in
nature. Open-ended instruction includes questions that promote a high level of thinking. This study concluded that these three forms of involvement create an enabling variable with respect to children’s positive academic achievement.

Hoover-Dempsey and Sandler (1997) noted that parents at the first level of involvement will construct a parental role and sense of efficacy for helping their child and be influenced by invitations to become involved. While the researchers cautioned that predispositions grounded in social status do not always result in easily predictable outcomes, the construction of the parental role and what parents believe they are supposed to do in relation to their child’s education may be an important determinant of student outcomes.

Zellman and Waterman (1998) concluded that parental involvement in children’s education appears to be associated with a wide range of desirable outcomes among elementary children, including fewer behavior problems. Desimone (1999) stated that, Research supports the hypothesis that at-home parenting practices and involvement with the school explain much of the variation in school performance on the basis of group-level distinctions, such as race-ethnicity, income, and parent education. However, little is known about the extent of across-group variation in the relationship between types of parent involvement and children’s learning and achievement. (p. 1)

Though Singh et al. (1995) suggested that the influence of parental involvement might be greater at the elementary than at the high school level, Hill (2001) noted that parenting practices, parental involvement in education, and parental expectations have been found to raise student performance among older children and adolescents, too.
Parental involvement has a multitude of definitions. Fan (2001) focused on parents' aspirations for their children's academic success, communication with their children about school, participation in school activities, communication with teachers about their children, and supervision of children at home.

Jeynes (2003) found that parental involvement was positively related to the academic achievement of children regardless of race, while Desforges and Abouchar (2003) described effective involvement initiatives as the provision of a safe and stable environment, intellectual stimulation in the home, parent-child discussion, the significant presence of good role models that exhibit constructive social and educational values, an example of good citizenship and holding aspirations for personal fulfillment, and a model of participation in the work of the school and school governance.

For purposes of this review of research, theory, and literature, the typology of Sheldon and Epstein (2007) for the aspects of parental involvement and the definitions of those aspects, are used as an organizing framework. Building upon two decades of research that shows a strong link between student success and various forms of school, community, and family partnerships, Sheldon and Epstein (2007) developed a typology of nine components of family, school, and community cooperation in the learning process. The nine components are parenting styles, fostering parental efficacy, communicating, constructing an encouraging school climate, volunteering, learning at home, social networking, decision-making, and collaborating with the community. Each framework may be used as a stand-alone approach or it may be used in concert with other frameworks.
Epstein et al. (1997) also provided examples of practices to be considered by school and community decision makers, challenges to and redefinitions of successful design and implementation, and expected results for students, parents, and teachers. Excerpts from the typology follow, below.

**Epstein’s Typology of Parental Involvement**

**Parenting.** Parenting involves helping families establish home environments to support children as students. Challenges to parenting include

1. Providing information to all families who want it or who need it, not just the few who can attend workshops at the school building

2. Enabling families to share information with schools about culture, background, and children’s talents and needs

3. Making sure that all information for and from families is clear, usable, and linked to children’s success in school

Strategies redefined to support parenting include workshops, redefined to mean more than a meeting about a topic held at the school building at a particular time. Workshopping may also include making information about a topic available in a variety of forms that can be viewed, heard, or read anywhere, any time. Parenting styles are closely related to parental efficacy.

**Parental efficacy.** Parental efficacy is the extent to which parents feel that their involvement can make a difference in their child’s education.

**Communicating.** Communicating includes designing effective forms of school-to-home and home-to-school communications about school programs and children’s progress. Challenges to communicating include
1. Reviewing the readability, clarity, form, and frequency of all memos, notices, and other print and nonprint communications
2. Considering parents who do not speak English well, do not read well, or need large type
3. Reviewing the quality of major communications (newsletters, report cards, conference schedules, etc.)
4. Establishing clear two-way channels for communication from home to school and from school to home

Redefinitions of communicating include expanding the definition of communications about school programs and student progress to include two-way, three-way, and multi-way channels of communication that connect schools, families, students, and the community. Communicating is closely related to constructing an encouraging school climate.

**Constructing an encouraging school climate.** Constructing an encouraging school climate involves considering how parents rate the extent to which they believe their child attends a good school that welcomes and cares for parents and children.

**Volunteering.** Volunteering includes recruiting and organizing parent help and support. Challenges to volunteering include

1. Widely recruiting volunteers so that all families know that their time and talents are welcome
2. Making flexible schedules for volunteers, assemblies, and events to enable parents who work to participate
3. Organizing volunteer work; providing training; matching time and talent with school, teacher, and student needs; and recognizing efforts so that participants are productive.

Redefinitions of volunteering include expanding the term “volunteer” to mean anyone who supports school goals and children’s learning or development in any way, at any place, and at any time—not just those who share the school day and help out at the school building.

**Learning at home.** Promoting learning at home includes providing information and ideas to families about how to help students at home with homework and other curriculum-related activities, decisions, and planning. Challenges to learning at home include:

1. Designing and organizing a regular schedule of interactive homework (e.g., weekly or bimonthly) that gives students responsibility for discussing important topics they are learning about and helps families stay aware of the content of their children’s class work.

2. Coordinating family-linked homework activities, if students have several teachers.

3. Involving families and their children in all-important curriculum-related decisions.

Redefinitions of learning at home include expanding:

1. “Homework” to mean not only work done alone, but also interactive activities shared with others at home or in the community in order to link school work to real life.
2. “Help” at home to mean encouraging, listening, reacting, praising, guiding, monitoring, and discussing—not just “teaching” school subjects.

**Decision-making.** Decision-making involves including parents in school decisions and developing parent leaders and representatives. Challenges to decision making include:

1. Involving parent leaders from all racial, ethnic, socioeconomic, and other groups at the school.

2. Offering training to enable leaders to serve as representatives of other families, with input from and return of information to all parents.

3. Including students and parents in decision-making groups.

Redefinitions of decision making include redefining:

1. “Decision making” to mean a process of partnership, of shared views and actions toward shared goals, not just a power struggle between conflicting ideas.

2. “Parent leader” to mean a real representative, with opportunities and support to hear from and communicate with other families.

**Collaborating with the community.** Collaborating with the community involves identifying and integrating resources and services from the community to strengthen school programs, family practices, and student learning and development. Challenges to collaborating with the community include:

1. Solving turf problems, including responsibilities, funds, staff, and location for collaborative activities.

2. Informing families of community programs for students, such as mentoring, tutoring, business partnerships.
3. Assuring equity of opportunities for students and families to participate in community programs or to obtain services

4. Matching community contributions with school goals and integrating child and family services with education

Redefinitions of collaborating with the community include redefining

1. "Community" to mean not only the neighborhoods where students’ homes and schools are located, but also any neighborhoods that influence their learning and development

2. "Community" as a concept characterized not only by its low or high social or economic qualities, but by its strengths and talents in supporting students, families, and schools

3. "Community" to mean all who are interested in and affected by the quality of education, not just those with children in school

4. "Collaborating with the community" as a concept closely related to social networking

**Social networking**. Social networking involves the size and frequency of interactions of parents with other parents of children in the same school. Beliefs and research suggesting that parental involvement has a positive effect on academic achievement are intuitive and welcomed by policy makers, teachers, and parents alike. With a firm foundation in the literature of school improvement, there exists a growing body of empirical evidence that shows parental involvement to be one of the key factors in raising student achievement and sustaining school performance (Harris & Chrispeels, 2006).
The following pages contain a review of the research, theory, and literature addressing the relationship between parental involvement and success in school at it relates to Sheldon and Epstein’s (2007) typology, which further refines Epstein’s (1996) framework by expanding the consideration of parental efficacy, constructing a school climate that encourages parental involvement, and social networking.

Parenting Styles and Skills

"Parental involvement has been shown to play a part in fostering children’s cognitive growth and academic success. Direct involvement in children’s learning and availability of learning resources at home all [sic] appear to influence academic success and cognitive growth" (Anderson, 2000, p. 6). To what extent, if any, is the achievement gap between middle-class students and working-class students and/or the achievement gap between students of different ethnicities related to differences in parenting beliefs, practices, and disposition toward playing an active role in a child’s learning?

Many studies of parental engagement have originated in the fields of psychology and sociology and have been published in journals of those disciplines. Much early research emphasized the relationship between SES and student achievement. But Miller (1970) concluded that SES alone, despite its persistent influence, is insufficient for explaining differences in either home environment or school performance. Miller found that factors derived from parental interest, home relationships, and goal aspiration suggested explanations for social class differences in academic achievement. Furthermore, those factors proved to be stronger in association with achievement than did social class.
Similarly, Marjoribanks (1972) found that environmental measures accounted for a large percentage of the variance in the academic performance of the 11-year-old males in his study. The correlation was especially strong in verbal subjects, numeracy, and total ability scores and was moderately correlated with reasoning ability scores. Like other researchers cited, Marjoribanks found that environmental measures accounted for more of the variance in measures of ability than did a set of social status indicators and family structure variables. Environmental characteristics included expectations for achievement, intellectuality, freedom and encouragement, and language use and reinforcement.

Bernstein (1973a, 1973b, 1977, 1990) concluded that there were social class differences in the communication codes of working-class and middle-class children, differences that reflected the class and power relationships in society and schools. Through empirical research, Bernstein distinguished between the restricted code of the working class and the elaborated code of the middle class and found that these distinctions were fostered in schools. Because of these distinctions, working-class children are disadvantaged by the prevailing codes of schools.

Parents affect their children’s achievement through communications, both verbal and nonverbal (Slaughter & Epps, 1987). “Parents are, in effect, the child’s earliest teachers” (p. 6). The influence of parents is so paramount because, through their lifestyles, priorities, and expectations, they do much to determine the course of their child’s cognitive development and disposition toward schooling.

Dornbusch, Ritter, Leiderman, Roberts, and Fraleigh (1987) suggested that parenting with high levels of warmth is related to achievement, while Steinberg (1996) examined four styles of parenting and found that the authoritative style, in which set rules
and individual responsibility co-exist and complement each other, helped children consistently perform better in school than styles of parenting described as authoritarian, permissive, and not involved.

Anderson (2000) found that what a parent does in the home is a more reliable predictor of children's attitudes toward literacy and motivation for schooling than family income. Even characteristics of parenting that are not directly school-related may influence a child's predisposition toward learning.

Ferguson (2001) noted that differences in home environment might influence readiness for school among children in kindergarten. Among the differences cited are how much time families spend with children; differences in daycare and preschool experiences; differences in home learning resources, including toys, computers, books; and differences in routines such as reading and watching television.

Rothstein (2002) concluded that parents of different social classes often exhibit different styles of child rearing, different ways of disciplining their children, different ways of communicating their expectations to their children, and even different ways of reading to their children. Yeung et al. (2002) examined how family income and characteristics of parenting associated with family income affected child development. Two sets of mediating factors were used to reflect two dominant views from the literature. The first was called "parental investment," which held that income enables families to purchase materials, experiences, and services to foster the development of their children. These goods and services include schools, childcare, housing, stimulating learning materials, activities, and medical care. The second was referred to as the "family processes perspective." This approach focused on family stress as a function of low
income, which may include a diminishing ability to provide warm, responsive, encouraging parenting. The authors noted that much of the association between achievement and family income was mediated by the family’s ability to provide a stimulating learning environment.

Similarly, Hart and Risley (2003) noted that middle-class parents conferred great advantages on their children through their parenting styles and in daily interactions beginning in infancy and continued to reinforce these advantages throughout their children’s school careers, suggesting that the SES achievement gap may be related to such parenting. This line of reasoning appears to follow that of Bernstein (1973a, 1973b, 1977, 1990).

Brooks-Gunn and Markman (2005) found that differences in parenting were associated with gender, ethnic, and racial achievement gaps. They focused on seven dimensions of parenting styles and practices:

1. **Nurturance.** Nurturing behavior involves ways of expressing love, affection, and care. High nurturing behaviors include expressing warmth, being responsive to a child’s needs, and being sensitive to changes in a child’s behavior. Low nurturing behaviors include detachment, intrusiveness, and negative regard.

2. **Discipline.** Discipline involves parents’ responses to child behaviors that they consider appropriate or inappropriate, depending on the child’s age and on parental beliefs.

3. **Teaching.** Teaching typically includes didactic strategies for conveying information or skills to the child.
4. **Language.** Researchers have extensively studied language use between parents and young children, sometimes transcribing hundreds of hours of mother–child conversation.

5. **Materials.** "Materials" refers to the cognitively and linguistically stimulating materials provided to the child at home.

6. **Monitoring.** Monitoring might also be called "keeping track." With young children, "monitoring" refers to parental watchfulness.

7. **Management.** Management encompasses scheduling events, completing scheduled events, and the rhythm of the household.

Brooks-Gunn and Markman (2005) noted that parents who talk a lot to their children, ask questions, use a large vocabulary, and discuss events are also more likely to be highly educated, to have high incomes, and to have few children. It is not surprising that their children tend to have large vocabularies too. Brooks-Gunn and Markman also noted ethnic and racial differences in parenting of infants and young children. In five of seven parenting dimensions (nurturing, discipline, teaching, language, and materials), African American mothers had lower scores on parenting measures than did Caucasian mothers. Similar differences were found between Hispanic and Caucasian mothers as well, though the research base for this comparison was much smaller.

Edmondson (2005) found ethnic and racial differences in parenting. Affirming that parental involvement combined with small class size was associated with student achievement, he noted that African American parents' involvement in most areas of their children's lives was comparable to those of Caucasian parents. African American parents had even higher expectations for their children than did Caucasian parents and reported
that their children read more outside of school. However, African American children did less well on academic measures. He concluded that this difference diminished when certain variables of parental involvement were present.

Haskins and Rouse (2005) noted that as much as half of the gap in school readiness might be attributed to differences in parenting. Responsive verbal communication between parent and child, reading to children, and having educational materials in the home were found to be important dimensions of parenting that contributed to child development, especially language development. But strikingly, African American and Hispanic parents were less likely than Caucasian parents to talk responsively and read to their infants and young children and to have fewer books and other educational materials in their homes.

The Relationship Between Interactions With Adults and Language Development

An extensive research base has noted the relationship between interactions with adults, language development, and success in school. Milner (1951), for example, studied the relationship between reading readiness in first grade and patterns of parent-child interactions. Noting that a significant relationship was found between low scores and low social status and high scores and high social status, Milner examined children’s perceptions of their family interactions. High-scoring children were surrounded by much richer verbal family environments than were low scoring children. Students with high scores were read to more often by a significant adult, had more emotional and positive interactions with their parents, and were taken to stimulating places more often. High scorers were also found to have had more extensive opportunities to interact verbally with adults, while low scorers seemed to have limited imaginative ability or were unable
to express what imagination they possessed. Mealtimes were noted to be especially important for high scorers, particularly the first meal of the day, which served as a focus for family interaction that seemed to be positive, permissive, and verbal. High scoring children were talked to in mature speech patterns and engaged in conversations. The relationship between SES and parenting styles was evident.

In a longitudinal study, Hart and Risley (1995) concluded that children whose parents were least engaged with them between the ages of 10 and 36 months were behind in academic achievement compared to those whose parents were more engaged with them during that critical period in child development. In a study of preschool children, Hart and Risley (2003) found that families differed greatly in the amount of experience with language and interaction they regularly provided their children and that differences in children’s experience were strongly linked to language development. SES seemed to influence differences in language development. The 3-year-old children from welfare families not only had a much smaller vocabularies than did children from professional families, but they also added words more slowly. Observing children in 42 homes, researchers noted that the average child on welfare had half as much language experience as the average working-class child, and less than one-third of that of the average child in a professional family. Furthermore, the children’s language experiences did not differ just in terms of the number and quality of words heard. The average child in a professional family heard 32 affirmative or encouraging words and 5 prohibitions per hour, compared to a working-class child who heard 12 affirmatives and 7 prohibitions per hour. The welfare family child heard only 5 affirmatives and 11 prohibitions, more than twice as many negative interactions as positive ones.
Children learn parenting styles from their parents. Hart and Risley’s (2003) longitudinal study suggested that even patterns of parenting were already observable among the subject children. When they listened to children, they seemed to hear their parents speaking.

In a study involving a major hospital and healthcare group, Quinn (2006) noted the same phenomenon among low-income mothers. He found that mothers participating in the study reported that they were parenting their children differently than their parents had parented them, but the researcher’s observations, questionnaire responses, and program intake forms suggested that their patterns of parenting mirrored those they had experienced as children.

Reading books with children is a key component in a broader pattern of rich verbal interactions with children that is characteristic of mothers with strong verbal skills and high levels of educational attainment (Raikes et al., 2006). Findings from the study conducted by Raikes et al. emphasized the importance of maternal book reading with children during the critical period of early language development from 14 to 36 months. They suggested that child language development and maternal book reading together might form the impetus for subsequent book reading experiences and development. The researchers noted that while the same conclusions were not drawn for a population of Spanish-speaking Hispanics, owing to smaller sample size, positive associations between book reading and cognitive development were apparent around 36 months of age. The study underscored the importance of targeting preliteracy interventions for low-income English-speaking children at a much earlier age than previous research had suggested.
While many researchers have noted the relationship between the mother’s verbal interactions and the child’s language development, Pancsofar and Vernon-Feagans (2006) concluded that fathers’ vocabulary usage to children of 24 months of age made unique contributions to later language development. For two-parent dual-earner families, fathers may make important contributions to children’s early language skills and should be included in all efforts to improve language development and school readiness.

Recent research on interactions between parents and children has suggested not all parental involvement is related to school success. Pomerantz, Moorman, and Litwack (2007) offered a nuanced conclusion as they found that how parents become involved determines in large part the success of their involvement, and parental involvement may matter more for some children than for others.

**Parental Efficacy**

Though not directly framed as social class, studies of “hard-to-reach” parents are related to parental efficacy, the belief that they can or cannot positively influence the educational outcome of their child. Bandura (1977, 1984, 1986) found that parents higher in efficacy were more likely to engage in goal-oriented behaviors and were more persistent in the face of obstacles than persons with a lower sense of efficacy.

Hoover-Dempsey, Bassler, and Brisse (1992) noted variations in efficacy by parental status characteristics. This finding suggested that gender, marital status, and family income were not related to efficacy. When parent–child interaction is limited and comprised of many parent-to-child critical messages, little sense of academic efficacy is conveyed to the child and the child is less likely to want to please the parent by doing well (Hart & Risley, 1995).
The relationship between efficacy and parental involvement in their child’s education has been the subject of considerable research. Bandura (1995) found efficacy to be changeable. Harris and Goodall (2002) noted the significance of parental efficacy. They reported that educators faced daunting barriers in communicating effectively with parents, especially those parents considered “hard to engage” (p. 52). Barriers to effective engagement include considerations such as lack of time, language barriers, child-care issues, and literacy. “Hard-to-engage” parents may have feelings of inadequacy due to their limited educational attainment and may complain of what they perceive as negative or hostile teacher attitudes.

Researchers at the University of Warwick’s Institute of Education explored the relationship between different forms of parental engagement and student achievement (Harris & Goodall, 2002). The research team scrutinized qualitative and quantitative data, particularly data associated with parents considered “hard to reach” and schools in what they described as “challenging circumstances” (p. 9). The data showed that there was a positive relationship between increased parental involvement and learning outcomes, particularly in the case of “hard to reach” parents.

Communicating and Constructing an Encouraging School Climate

Communicating, in this context, includes all forms of communication between a parent and a teacher, school administrator, or other school personnel, and between a parent and child regarding school matters. Pianta and Walsh (1996) found that school failure might be attributed more to troubled relationships between families and school systems than to problems in a family or school. Finn (1998) concluded that discussions of school matters between parent and child were associated with student outcomes.
Similarly, Thorkildsen and Scott-Stein (1998) reported statistically significant correlations between home-based reinforcements provided by parents and children’s academic performance. Caring what happens in class and keeping track of school progress were among the factors found to have a significant correlation. In Desimone’s (1999) study of parenting practices associated with student outcomes, parent–teacher communications figured prominently. Discussion between parents and teachers predicted positive gains in mathematics and reading for Caucasian, African American, and Hispanic children.

Based on their study, Harris and Goodall (2002) developed a list of implications for educators regarding communicating with and engaging parents. The following ideas offer insights for school administrators and education policy-makers.

1. Parental engagement must be a priority in schools; it cannot be a bolt on extra. It must be embedded in teaching and learning policies, and school improvement policies, so that parents are seen as an integral part of the student learning process.

2. Educators must be clear about the aims of all communications with parents. Is communication in any given case meant to be open or closed? What response, if any, is required from parents, and how will it impact on the school and the learning of the child?

3. Educators should support the engagement of parents who are already involved in the learning of their children as well as reach out to those parents who are less engaged.
4. Educators should consider training for staff members who work most closely with parents. These staff members need not be teachers.

5. Educators need to be prepared to be flexible in dealing with parents, in terms of barriers to meeting (e.g., shift work, child care issues) and location, if possible.

6. Educators should carefully consider the uses of new technologies, be clear what they aim to achieve with such technologies, and consider how any given technology will help them achieve that aim.

7. Educators must make the shift from seeing parental engagement as engagement with the school to engagement in the learning of the student.

Volunteering

Volunteering as an aspect of parental involvement is characterized by family and community members supporting schools and children. Such support may be in the form of mentoring students, serving as a teaching assistant, chaperoning school events, organizing special events or productions, or participating in various school-related committees.

Publications such as “10 Essential Elements of a True Middle School” (National Middle School Association, 1982) have long stressed the importance of parental involvement. The authors suggested that through volunteering, parents and teachers might build constructive relationships and enhance school programs and initiatives. Volunteering activities open the doors of the school to all members of the community, so that the individual and collective talents, strengths, and expertise of community members are shared with and on behalf of school children (Epstein, 1996).
Volunteering also provides opportunities for parents to expand their social networks and social capital. Lareau and Shumar (1996) noted that parents of elementary school students who maintained ties with teachers and other parents regularly gained access to and exchanged information about the school and schooling. Desimone (1999) concluded that volunteering or participation in school events and activities was associated with student outcomes. However, the incidence of parental involvement through volunteering and cooperative planning with their child’s school has experienced a decline in the past two decades, despite its recognized value.

Like many aspects of parental involvement, volunteering is related to SES. Volunteering may also be influenced by parents’ level of education, race, and ethnicity (U.S. Department of Education, 2006). More educated parents are twice as likely to volunteer in their child’s school than less educated parents, and volunteering is less common among Hispanic parents (28% in 2003) and among African American parents (32% in 2003) than among their Caucasian counterparts (48% in 2003).

Epstein (2001) cited two reasons why family members do not choose to become involved in their middle-grade child’s school activities or programs. First, middle school educators reported that they do not seek parent volunteers because they believe that students do not want their parents at school. Second, parents reported that they do not volunteer in part because of conflicts with work during the school day and in part because they are not invited to volunteer.

Volunteering may also be associated with student outcomes because it provides opportunities for the development and nurturing of personal social networks among parents. Sheldon (2002) found that parents without a social network of other parents at a
school might be at a disadvantage in helping their children. These parents are forced to rely upon their own devices and their own educational experience. How parents’ friendships or social networks play a role in a child’s education is still not well understood, but research, theory, and literature offer some possible insights.

**Learning at Home**

Educators, parents, and educational policy makers appear to be in broad agreement about the value of parental involvement in the learning process. Review of research, theory, and literature reinforces the belief that such engagement must be centered on the learning of the student, not the school.

Research also suggests that early childhood interventions may make a difference in the area of parental expectations, parent-initiated involvement, and student cognitive development. Preschool programs have been found to have long-term positive effects on student achievement, as noted in an early study (Yonally, 1972), which suggested a positive association between participation in preschool programs and children’s test scores. High-risk children were found to have made greater gains in preschool than low-risk children (Meyerhoff, 1986).

Reynolds and Temple (1998) concluded that early childhood interventions must be of a longer duration, as much as five years, from preschool to third grade, to promote longer and more lasting changes in academic and social outcomes. By giving children and their parents the opportunity to enroll in such programs for five years, the resultant stability in school learning may enhance school performance and social competence.

Finn (1998) found that actively organizing and monitoring a child’s time and helping with homework were associated with student outcomes. Longitudinal studies,
such as the one conducted by Sylva, Melhuish, Sammons, Siraj-Blatchford, and Taggart (1999), have provided additional research evidence about parental involvement. The researchers noted that parental involvement in learning activities in the home was related to higher academic achievement, particularly in the early years.

With respect to the nature of effective intervention programs, Yeung et al. (2002) concluded that academic performance might be improved through early intervention programs like stimulating learning materials, increasing family literacy, and encouraging parents to read to their children, rather than through programs focusing solely on parenting skills. However, these stimulating experiences may not be effective in reducing behavior problems. Strategies to improve parents' mental health and parenting behaviors, they suggested, may be more effective in reducing behavior problems among children than providing them with stimulating experiences.

Skill differences among children at the time of school entry are wide. They are a function of home environment, language quality and frequency, affirmation, and the totality of experiences in the early years when a child is especially malleable and completely dependent upon family. Hart and Risley (2003) concluded that a significant intervention must address not just a lack of knowledge or skill, but a comprehensive approach to experience as well. Similarly, Desforges and Abouchaar (2003) found that studies using contemporary techniques of data analysis and large data sets have established that parental involvement in the form of interest in the child, manifested in the home as parent–child discussions, had a positive effect on children's behavior and achievement.
Berliner (2005) analyzed the role of poverty in school reform. He noted that poverty, particularly among urban minorities, is associated with low academic performance and restricts the expression of genetic talent. He also found the environment of impoverished neighborhoods, including severe medical problems that affect impoverished youth, limits opportunities for success in school and life. Translating the link between poverty and school performance into a call for change in policy, Berliner concluded that small reductions in family poverty lead to increases in positive school behavior and higher academic performance. School administrators and educational policy makers are unable to influence variables such as parent income, family structure, and parents' formal education attainment, but home learning was found to mediate the relationship between SES and emergent literacy (Foster, Lambert, Abbott-Shim, McCarty, & Franze, 2005).

Love et al. (2005) studied whether or not developmental trajectories could be altered and by how much, for which children, under what circumstances, and at what ages. They examined the results of Head Start programs to see if the programs were associated with significant differences in child and parent outcomes. Researchers visited 17 Head Start sites and noted that parent-child relationships were emphasized. They also sought to determine if strict adherence to Head Start Program Performance Standards mattered. They found that Head Start programs tended to produce positive results for parent-child interactions and that programs with a mixed approach of home-based and center-based services tailored to match family needs were most successful in meeting Head Start performance criteria. These interventions, while particularly helpful to
children in poverty, may also prove to be of value for families in working-class and middle-class settings.

Petrie and Holloway (2006) examined mothers’ representations of the role of parents and preschools in promoting child development. The purpose of their qualitative study was to gain a better understanding of how working-class and middle-class mothers of preschool-aged children defined their role in their children’s education relative to the role of the school. Sixteen in-depth interviews were conducted to explore mothers’ self-efficacy and their views of their parenting style. A self-efficacy scale was also utilized. Their analysis suggested that there might be formative periods in the development and maintenance of maternal efficacy.

Decision-Making

Research on parental involvement in school decision-making as it relates to student achievement is rather sparse. Involvement in school decision making has to do with including parents in school decisions and developing parents as leaders and representatives of others (Epstein et al., 1997). This element of involvement encourages family and community members to participate in school-based and district-wide advocacy efforts, such as parent–teacher organizations, school site councils, content area advisory committees, school boards, advisory boards, and district-level committees. These activities provide opportunities for parents to address the educational needs of their children and the children of others through shared expertise and collective action.

Educators need to plan and implement partnership programs to increase the nature of and extent of parental involvement. According to Hoover-Dempsey and Sandler (1995), parents’ decisions to become involved in their children’s education are based on
three factors: the belief that they should be involved, the belief that their involvement will affect their children’s efficacy, and their perception of the existence of opportunities for involvement. Kreider (2000) concluded that parental involvement is most effective when it is fully integrated into a school’s development plan and when an “action team” of parents, teachers, and community members is responsible for the delivery of the plan.

Researchers have differentiated between involvement and engagement. Engagement refers to the role of parents in their child’s learning, while involvement refers to participation in the governance of schools. Harris and Goodall (2002) suggested that raising student achievement requires parents to be both engaged in their child’s learning and involved in their child’s school. In describing schools that succeed in involving families from very diverse backgrounds, they noted the importance of building trusting relationships among teachers, families, and community members through participation in decision making. Strategies to involve parents in decision making include the following:

1. Participation of parents in site-based and district-based strategic planning
2. Strategic planning that embeds parental involvement schemes in school development planning and school improvement strategies
3. Sustained support, resources, and training for parental involvement
4. Community involvement at all levels of management.

Social Networking

Cochran and Brassard (1979) observed the experiences of children raised in home care, family day care, and day care centers and noted substantial differences. Children in home care and family day care were more often observed exploring their surroundings and interacting with adults than children in day care centers. They found that a parent’s
social network influences a child in three different manifestations. The first provides children with emotional and material assistance in a supportive social environment. In the second manifestation, members of the parent’s social network may directly influence child-rearing practices through reinforcement or sanctions. Conversely, isolated parents have more freedom to practice their parenting as they wish because they do not face the criticism found in more extended contexts. The third manifestation noted in the study was the availability of role models. Parents may develop their view of their role as a consequence of viewing the practices of others who act as role models, either positive or negative. A social network’s influence on a child results from cognitive and social stimulation, direct support, presence of role models, and opportunities for active participation.

A discussion of the importance of social networking among parents of school children may be informed by research on social capital. Coleman (1994) embraced social capital theory as a way to illuminate the processes and experiences of non-elite groups. He argued that persons low in SES could benefit by accruing social capital much like those of high SES. Like other social investigators, he highlighted the role of the family, kinship networks, and churches in the creation of social capital. Coleman’s theory of social capital predicted that students whose parents know and interact with the parents of their children’s friends would have higher academic achievement than students with lower levels of such interaction. Coleman predicted that social capital was linked to academic achievement through shared parental norms and values, knowledge about school-related matters, and social control.
Putnam (2000) wrote from the perspective of political science and argued for the significance of social capital and the quality of civic life in the cultivation of democracy. Putnam believed that "a society of many virtues by isolated individuals is not necessarily rich in social capital" (p. 19). To him, social capital improves our lives by widening our awareness of the many ways our lives are linked to others'. People who have active and trusting connections to others, whether family members, friends, or fellow travelers in any endeavor, tend to develop or maintain character traits that are good for society. Joiners are more tolerant, less cynical, and more empathetic to the misfortunes of others. When people lack connection to others, they are unable to test the veracity of their own views and more likely to be swayed by their own worse impulses.

Field's (2003) notion of social capital is that relationships matter. To Field, social networks are valuable assets because interaction enables people to build communities, to commit themselves to each other, and to "knit the social fabric" (p. 2). The notion of social capital applies directly to parental involvement. Differences between working-class networks and middle-class networks may account for differences in the way parents handle problems with school personnel (Horvat, Weininger, & Lareau, 2003). Working-class and poor parents tend to undertake individual responses and do not receive much concrete support from their social networks. By contrast, middle-class parents sometimes react collectively, and even when they respond individually, they maintain the possibility of collective involvement in reserve. In addition, middle-class parents draw on ties to individuals who can provide the information, expertise, or authority necessary to compel school personnel to follow a preferred course of action.
Collaborating with the Community

Collaborating with the community requires providing opportunities to identify and integrate resources and services from the community to strengthen and support school programs and student learning (Epstein et al., 1997). This element of parental involvement includes both service to the community by students, families, and school personnel, and service to the school by community groups, business associations, human service professionals, and community office holders. Opening the school to the community results in a very different kind of school.

Raffaele and Knoff (1999) called for an approach to parental involvement that included community-based strategies. They suggested that unless a whole community approach is taken to parental involvement clearly linked to a teaching and learning strategy within the school, the return on investment is likely to be minimal.

Sanders and Hertig (2000) surveyed and interviewed African American adolescents to investigate the relationship between gender, school, family, and community support, and student outcomes. They concluded that collaborative efforts designed to include school, family, and church partners positively influenced students' academic achievement, self-concept, and school behavior.

Turk (2002) provided a definition of collaboration with the community that stressed the interactive nature of such collaboration:

Community participation refers to interactive partnerships with local stakeholders that encourage all parties to share information and resources as a means to develop learning environments rooted in shared goals, shared contributions, and shared accountability. Local stakeholders may
include but are not limited to private citizens, organizations, businesses, political leaders, agencies, and universities. (p. 27)

Epstein and Sheldon (2006) presented seven components that they derived from the research and fieldwork with over 1000 schools and 125 school districts and other state and national partners in the National Network of Partnership Schools (NNPS) at Johns Hopkins University. These components are intended to assist researchers to frame better questions and apply more rigorous methods to study school partnerships. They are also intended to help educators, parents, and community leaders to work together more effectively to support student success. The seven principles are as follows:

1. “School, family, and community partnerships” is a better term than “parental involvement” to recognize that parents, educators, and others in the community share responsibility for students’ learning and development. The theory of “overlapping spheres of influence” (Epstein, 2001) improves our depiction of how home, school, and community affect children’s education and development.

2. The notion of school, family, and community partnerships is a multidimensional concept. A framework of six types of involvement guides the development of comprehensive partnership programs (Epstein, 2001; Epstein et al., 2002). Each type of involvement raises key challenges that must be solved to reach all families and produce positive results. This requires focused and subject-specific measures of partnership practices and not overly general or superficial measures of parental involvement.
3. A program of school, family, and community partnerships is an essential component of school and classroom organization. Studies need to include measures of schools’ actions to implement partnership programs and activities that reach out to involve all parents, not only parents’ self-initiated actions. In policy and practice, partnerships link family and community involvement directly to the school improvement planning process.

4. Programs of school, family, and community partnerships require multilevel leadership. Districts and states have leadership roles to play in guiding schools to strengthen and sustain programs of family and community involvement (Sheldon & Epstein, 2005). Researchers can use methods of multilevel analyses, for example, to study the independent contributions and connections of district leaders’ support and schools’ actions to develop their partnership programs.

5. Programs of school, family, and community partnerships must include a focus on increasing student learning and development. When plans for partnerships are linked to school goals for student success, family and community involvement can measurably affect students’ learning and development (Epstein, 2001; Sheldon, 2003). This requires measures that assess the quality of program implementation, interim outcomes (e.g., parents’ responses), and ultimate outcomes of student achievement, attendance, behavior, health, and other indicators of success. Educators want students to develop academically, socially, emotionally, and physically at each age and grade level; families and communities can help students attain these healthy outcomes.
6. All programs of school, family, and community partnerships are about equity and equal opportunity.

7. Methods of research on school, family, and community partnerships must continue to improve. Improvements may include longitudinal data that account for schools and students' "starting points," matching samples for comparative analyses, path analyses, and multilevel analyses to understand influences on more equitable outreach and involvement. Researchers need to attack particularly challenging measurement issues, such as isolating the effects of partnerships on student outcomes from other simultaneously occurring school improvements and explaining initially negative associations between some kinds of parental involvement and low student achievement and poor behavior. Research must give direction and guidance to policy makers and practitioners alike.

**Parental Involvement Not Specifically Related to Student Achievement**

Research reveals that parental engagement at home and engagement at school are not equally important to children's learning (Finn, 1998). Catsambis (1998), Desimone (1999), Fan and Chen (1999), and Lee and Bowen (2006) found that parental involvement with homework and parent-initiated contacts with school personnel were negatively related to academic achievement. Parental involvement that results from perceived problems, such as low grades or behavior issues, tends to show a negative relationship with student achievement.

Ho and Williams (1996) studied the relationship of parental involvement to eighth-grade student achievement in both reading and math, using data from the National
Educational Longitudinal Study (NELS). While they found that the discussion of school-related activities at home had the strongest relationship with academic success, parental participation at school had only a moderate relationship with reading achievement and a negligible relationship with math achievement.

Catsambis (1998) studied 13,500 families whose children completed the 12th grade. Using Epstein's typology of parental involvement, she found that parents who reported contacting school personnel expressed a belief that high school graduation was important but higher education was not, and parents who frequently supervised student behavior were associated with lower student achievement.

Fan and Chen (1999) also found a negative relationship between academic achievement and parents who are involved with school personnel as a result of their children not doing well in school or experiencing behavioral problems. Desimone (1999) found that some elements of parental involvement had stronger relationships with student achievement in some racial or ethnic subgroups than others. She found that school-level volunteering was stronger in relation to achievement for White and middle-income students than for Asian, Black, Hispanic, and low-income students. Parent-teacher organization involvement, however, was stronger in relation to student achievement for the latter group of students than it was for White and middle-income students. She also found that discussion among students and parents about school matters was more strongly related to achievement for White and middle-income students than for Black, Asian, Hispanic, or low-income students. Desimone also found that parental help with homework was associated negatively with all measures of achievement for students of all
races and income levels. Lee and Bowen (2006) came to the same conclusion in a study of elementary school children.

The findings of the studies reviewed in this section are not contradictory to the considerable body of research, theory, and literature of parental involvement. Rather, studies that show weak links or negative links between certain elements of parental involvement and certain populations help researchers to refine their conclusions about parental involvement, reveal weaker and stronger tendencies, and underscore the need for further research. Such studies are also of value to educational policy makers and practitioners who embrace parental involvement to advance school improvement.

Summary

The body of research, theory, and literature that exists in the study of parental involvement and student achievement exposes a complex interplay between student achievement and the elements of parental involvement—parenting that supports children as students, parental efficacy, communication between parent and school, constructing a school climate that encourages parental involvement, volunteering that supports student learning, helping students to learn at home, parental participation in school decision making, and collaborating with the community (Epstein, 1996; Sheldon & Epstein, 2007). Epstein and Sheldon (2006) took the framework of parental involvement further through a set of principles intended to assist both researchers and educators.

Also of critical importance to this study is the growing body of research on parental involvement that redefines parental involvement as less about engaging school personnel and more about the nature of and frequency of interactions between adults and children and parenting practices that support student learning, especially in the vital area
of language development (Brooks-Gunn & Markman, 2005; Harris & Goodall, 2002; Hart & Risley, 2003; Raikes et al., 2006). Perhaps the current wave of immigration and the growing number of children entering school from non-English speaking households require a greater emphasis on language development and strategies for parental involvement that address the needs of non-English speaking parents.

Assessing the relationship between academic achievement and each type of parental involvement in an era of changing demographics raises key challenges (Pomerantz et al., 2007). A review of the research, theory, and literature provided the researcher with direction and a research base for considering how parental involvement may be related to academic achievement for working-class elementary school children, including those from homes where a language other than English is spoken. Applying Sheldon and Epstein’s (2007) parental involvement survey instrument to a population of working class parents, many of whom have diverse language backgrounds, might uncover differences that suggest strategies for strengthening the development of language and mathematical skills in all children in each of the three schools.

Figure 1 is a theoretical model that seeks to portray how nonschool factors influence student achievement. SES, ethnicity, and language spoken at home underlie and influence parenting styles, parenting practices, and beliefs about parenting, which in turn influence the nature of and extent of parental involvement in a child’s learning. Parental involvement is not external to school processes; it may be influenced by interventions that foster child and parent development and by educators’ strategies and dispositions that encourage and promote parental involvement.
Figure 1: Parent/community variables associated with academic achievement.
The researcher was especially interested in learning what parental involvement strategies employed by school personnel helped families to support their children’s learning and seeing if the achievement gap had closed for working-class parents who engaged in activities to support their children’s learning. It is clearly established that social class matters for student success; it may be of value to practitioners and policy makers to know what dispositions, strategies, and practices assist all families—regardless of social class or English-speaking proficiency—to help their children move forward and succeed in school.
CHAPTER III

Design, Methodology, and Procedures

Introduction

The purpose of this study is to determine relationships between the elements of parental involvement and academic achievement in language arts and math, as well as the extent to which elements of parental involvement predict language arts and math achievement among working-class elementary school students.

The researcher investigated the extent to which elements of parental involvement as assessed using a survey based upon Sheldon and Epstein's (2007) typology of parental involvement were related to academic achievement in language arts and mathematics among students in three working-class elementary schools in New Jersey (Epstein et al., 1997). The population of subjects selected was comprised of parents with children in fourth, fifth, and sixth grade enrolled in the same school during the previous school year.

Aspects of parental involvement, such as parenting, interactions with adults, and communication between parents and educators, may be found to co-occur and to be related to academic success in sets as well as separately. Epstein (1996) suggested that manifestations of parental involvement may also track and cluster (Finn, 1993), even if some aspects of parental involvement do not appear to be related to student achievement when viewed as individual elements. To test that suggestion, the relationship between student achievement and parental involvement was analyzed as a model and as separate elements.
In chapter 3, the researcher describes the design, methods, and procedures that were used for conducting the study. Included are the research guiding questions, null hypotheses, research design, schools and population, confidentiality, data collection, and data analysis.

**Research Guiding Questions**

**Research Question 1a.** In three working-class schools, what relationships exist between two measures of student achievement (language arts and math) and nine aspects of parental involvement?

**Research Question 1b.** What differences exist among the three working-class schools in the relationships between two measures of student achievement (language arts and math) and nine parental involvement scales?

**Research Question 2a.** What differences exist according to student ethnicity (Black, Hispanic, White, or other) among 18 achievement–involvement relationships (2 measures of student achievement—language arts and math—by 9 parental involvement scales)?

**Research Question 2b.** What differences exist according to language spoken at home (English, Spanish, or other) among 18 achievement–involvement relationships (2 measures of student achievement by 9 parental involvement scales)?

**Research Question 2c.** What differences exist according to SES (lunch subsidy or no lunch subsidy) among 18 achievement–involvement relationships (2 measures of student achievement by 9 parental involvement scales)?
Research Question 3. In the three schools, how do nine aspects of parental involvement scales predict each of two student achievement scale scores (language arts and math)?

Null Hypotheses

$H_{0.1a}$. There are no statistically significant relationships between two measures of student achievement (language arts and math) and nine aspects of parental involvement.

$H_{0.1b}$. There are no statistically significant differences between the three working-class schools on the relationships between two measures of student achievement (language arts and math) and nine parental involvement scales.

$H_{0.2a}$. There are no statistically significant differences by ethnicity (Black, Hispanic, White, other) on 18 achievement–involvement relationships (2 measures of student achievement by the 9 parental involvement scales).

$H_{0.2b}$. There are no statistically significant differences by language spoken at home (English, Spanish, or other) on 18 achievement–involvement relationships (2 measures of student achievement by 9 parental involvement scales).

$H_{0.2c}$. There are no statistically significant differences by SES on 18 achievement–involvement relationships (2 measures of student achievement by 9 parental involvement scales).

$H_{0.3}$. In the three schools, the nine aspects of parental involvement do not predict each of two student achievement scale scores (language arts and math).

Research Design

The researcher used a quantitative, nonexperimental design with multiple linear regression analysis to determine the predictive power of the elements of Sheldon and
Epstein's (2007) typology of parental involvement for academic achievement as measured by parent-reported grades in language arts and mathematics. Descriptive research is appropriate for this study because all data are examined and analyzed as they exist without researcher control. Correlational research is appropriate for this study because the primary intent is to explain the nature of relationships found in the data, not to determine cause and effect. Lastly, multiple linear regression is appropriate for the study because regression analysis provides a means for expressing essential components of statistical relationships. The combined use of this set of statistical techniques allowed the researcher to assess the relationship between the study's stated independent variables—SES, school of enrollment, ethnicity, language spoken at home, and Sheldon and Epstein's (2007) nine types of parental involvement—as they relate to the dependent variables of academic achievement in language arts and mathematics.

Selection of Schools and Population

The sample population consisted of the parents of fourth-, fifth-, and sixth-grade students in three elementary schools that enroll students in Grades 3-6 in a working-class New Jersey school district. The population of subjects selected is comprised of parents whose children are enrolled in the fourth, fifth, and sixth grade and who were enrolled in the same school during the previous school year.

The school district studied was selected because it was classified CD the NJDOE, ranking near the 30th percentile in community wealth. It was characterized by a population relatively diverse in ethnicity and language. More than 85% of the students who attended the three elementary schools were minorities, but the demographics of each
school varied somewhat. Each elementary school enrolled some 40–60 students in each
grade, totaling approximately 623 students in the three selected grades.

Confidentiality

Principals of all three schools were informed in writing that the confidentiality
and anonymity of students and respondent parents would be protected. Neither names of
parents or students nor identifying numbers appeared on completed surveys. Parents were
informed that the data would be kept confidential and that results would be provided as
aggregates only, not as individual responses.

Data Collection

Instrumentation. An instrument developed by Sheldon and Epstein (2007) at
Johns Hopkins University was administered to parents of fourth-, fifth-, and sixth-grade
students in the selected schools. The script utilized by facilitators to introduce parents to
the study and to invite them to participate by completing a survey is found in
Appendix E.

The survey instrument, "Parent Survey on Family and Community Involvement in
the Elementary and Middle Grades," was developed to assess parents' beliefs about
parental involvement, their own involvement behaviors, social network size and
exchanges, perceptions of the schools' efforts to inform and involve them in their
children's education, views on school climate, and demographic information. The seven-
page survey for parents includes 82 items on these topics. Respondent parents were also
asked about language spoken at home, their ethnicity, whether their children qualify for
federal lunch subsidy, and what grades their children received most of the time in
language arts and math in the previous school year.
Sheldon and Epstein (2007) noted that scales formed with items from the survey for the study sample were tested for internal reliability. They reported that the reliabilities of specific scales did not differ noticeably for parents of students in the elementary and middle grades. Some scale items were adapted or updated from questionnaires used in previous studies, as indicated by references provided.

Research using data collected with this instrument includes the following:


Scales and reliability coefficients. Question 1 asked parents to rate how well their child’s school and teachers communicate with them and construct a school climate that encourages parental involvement. The items under Question 1 were based on the parent survey developed by Sheldon and Epstein (2007). The measure included subscales assessing the schools’ implementation of activities for the nine types of involvement (Epstein et al., 2002).

Subscales were derived through factor analyses and tested for reliability. The scales outlined included parents’ reports of how well their schools invited parents to be involved at school (including volunteering), communicated about children’s progress, encouraged parent–child interactions on homework, encouraged parental involvement in school decision making, and strengthened connections with the community.
Question 2 addressed the extent to which a school climate that encourages parents involvement exists and asked parents to rate the extent to which they believe their child attends a good school that welcomes and cares for parents and children. The scale was based on a few items from a longer school climate measure in the survey of elementary and middle grades parents developed by Sheldon and Epstein (2007).

Measures in Question 3 asked parents to report the frequency with which they engaged in their child’s schooling in various ways. The items addressed involvement at school, combining actions representing volunteering, and the extent to which parents monitored and worked with their child on school-related activities at home (learning at home).

Question 4 measured the extent to which parents monitored and worked with their children on school-related activities at home. The items focused on parenting in general and on parents’ engagement with children in reading and language arts and mathematics homework.

Question 5 addressed parental efficacy through an eight-item scale that measured the extent to which parents felt that their involvement could make a difference in their child’s education. The scale was adapted from a measure developed by Hoover-Dempsey et al. (1992), updated by Walker et al. (2005), and used in a study by Sheldon (2002) on parental beliefs and social networks.

Questions 6 and 7 measured parents’ social networks. Question 6 provided information about the size and frequency of interactions with other parents of children at the same school. Question 7 gave information about the size of parents’ social networks with other adults who may not have children at the same school. This question also
collected information about the frequency of interactions with these individuals and about the composition of parents' contacts with other adults. The social network questions in this survey were developed to represent interactions relevant to social capital theory (Coleman, 1994; Lin, 2001; Lin, Burt, & Cook, 2001) and to learn how parents' social networks might influence parental involvement.

Question 8 addressed topics of conversation with other parents, social networks, and collaboration with the community. This scale measured the extent to which parents talk with other parents about the school, teachers at the school, and other topics relevant to their children’s education.

A complete listing of survey items associated with each of the research guiding questions in this study is found in Appendix F.

**Reading levels and translations.** The parent survey was written at a relatively low reading level to ensure that most parents were able to understand and complete it. It was administered in both English and Spanish in accordance with research protocols because a significant number of parents of students enrolled in the sample schools spoke Spanish as their primary language. The instruments used for data collection are found in Appendixes G and H.

**Procedure.** The survey administration took place at “back-to-school” nights held at all three schools in September 2008. These events were chosen because they historically drew more parents to their children’s schools than any other school event. Therefore, using these events as the occasion for administering a survey of parents was thought to be likely to yield a relatively high response rate. But a limitation of surveying parents who participated in their children’s “back-to-school” night was that the
population of parents surveyed was skewed toward those who may have practiced a greater measure of involvement in their children’s schooling than parents who did not show up for the event.

Parents were informed that teachers, administrators, and parents were working to improve the ways that educators and families help each other to support children’s learning and success in school and that the results of this study may be used to help improve programs and practices in the school. Facilitators asked the parent who is most involved with the school in their child’s education to answer the questions in this survey. Parents who had more than one child at this school were asked to answer the survey questions about the child or children in the class in which the survey administration took place. Parents were informed that this survey was voluntary and confidential, had no right or wrong answers, was not part of their children’s schoolwork, and would not influence their children’s learning or grades in any way.

Surveys were distributed to parents by their child’s classroom teachers, who served as survey facilitators. Two versions of the survey were given to each parent, English and Spanish language versions. Parents were asked to complete the survey in the language version with which they were most comfortable. A letter of solicitation that constitutes informed consent served as the cover page.

Data Analysis

Descriptive statistics (e.g., means, standard deviations, frequencies and percentages) were conducted on the demographic data and research variables. Descriptive statistics included frequency and percentages for nominal (categorical/dichotomous) data and means/standard deviations for continuous (interval/ratio) data. Standard deviation
measures statistical dispersion, or the spread of values in a data set. If the data points are all close to the mean, then the standard deviation is close to zero. The arithmetic mean is defined as the sum of scores divided by the number of scores.

Cronbach alpha reliabilities were calculated for each of the nine parental involvement scales. Pearson r correlations were conducted to assess if relationships existed between variables. Correlation is an appropriate statistical measure when the research purposes “are concerned primarily with finding out whether a relationship exists and with determining its magnitude and relationship,” (Pagano, 1990, p. 117). Pearson r correlation (product–moment correlation) is a bivariate measure of association (strength) of the relationship between two variables. Pearson r “is the slope of the least-squares linear regression line when the scores are plotted as z scores … and measures the extent to which paired scores occupy the same or opposite positions within their own distributions” (pp. 119-120). Given that all variables are continuous (interval/ratio data), the hypotheses seek to assess the relationships, and how the distribution of the z scores vary, Pearson r correlations are the appropriate bivariate statistics.

Correlation coefficients, r, vary from 0 (no relationship) to +1 (perfect positive linear relationship) or to -1 (perfect negative linear relationship). Positive coefficients indicate a direct positive relationship, where as one variable increases, the other variable also increases. Negative correlations coefficients indicate an indirect relationship, where as one variable increases, the other variable decreases.

Independent samples t-tests were conducted to assess if differences existed on a dependent variable by a grouping (independent) variable. An independent samples t-test is the appropriate statistical test when the purpose of research is to assess if differences
exist on a continuous (interval/ratio) dependent variable by a dichotomous (two-group) independent variable (Pagano, 1990).

The assumption of normality and homogeneity of variance was assessed. Homogeneity of variance means that both groups have equal error variances; it was assessed using Levene's test. If Levene's test was significant for the degrees of freedom, unequal error variances were assumed. The t-test was two tailed, with alpha levels—the probability of rejecting the null hypothesis when it is true—set at \( p < 0.05 \). This ensured a 95% certainty that the relationships did not occur by chance.

A Pearson chi-square (Pagano, 1990) was conducted to assess if differences existed between variables. Row and column percentages were interpreted for each question (sample size was sufficient for a minimal theoretical boundary of five observations per cell). Chi-square is an appropriate statistic to test relationships between two discrete variables (nominal/ordinal).

To examine Research Question 1a, 20 Pearson correlations were conducted between the two measures of student achievement (language arts and math) and nine aspects of parental involvement. Pearson correlation is an appropriate statistic when examining relationships between two continuous variables (interval or ratio data).

To examine Research Question 1b, a Pearson chi-square was conducted on each of the two measures of student achievement (language arts and math) by school of enrollment (school 1 vs. school 2 vs. school 3). Chi-square is the appropriate statistic when examining the relationship between two categorical/ordinal-level variables.

To examine Research Question 2a—whether differences exist by ethnicity (Black vs. Hispanic vs. White vs. other) and 18 achievement–involvement measures—t-test
statistics were conducted for each of the 18 relationships, comparing all combinations of the four ethnic groups. Levene’s Test of Equality of Variance was used for the independent samples t-test. As noted, Levene’s test is an inferential statistic that assesses the equality of variance in different samples. It tests the null hypothesis that the population variances are equal.

To examine Research Question 2b—whether differences exist by language spoken at home (English vs. Spanish vs. other) and 18 achievement-involvement measures—t-test statistics were conducted for each of the 18 relationships to compare all combinations of the three language groups. Levene’s Test of Equality of Variance was used for the independent samples t-test.

To examine Research Question 2c—whether differences exist by SES (free or reduced-price lunch vs. no free or reduced-price lunch) and the nine achievement-involvement measures—18 t-test statistics were conducted. Levene’s Test of Equality of Variance was used for the independent samples t-test.

To examine Research Question 3, a multiple linear regression was conducted with nine scores on parental involvement scales as predictors and the two measures of student achievement (language arts and math) as the criterion variables. The individual predictors were compared to each other to assess the best predictor. Multiple linear regression is the appropriate statistic when the criterion variable (the dependent variable) is at least ordinal-level and there are two or more predictor variables.

Summary

Academic achievement data in both language arts and mathematics were matched to independent variables of SES, school of enrollment, ethnicity, and language spoken at
home as they related to nine types of parental involvement. Student achievement data as reported by parents and results of a parental involvement survey, including ethnicity, SES, and language spoken at home, were utilized to investigate the extent to which elements of parental involvement were related to academic achievement among fourth-, fifth-, and sixth-grade students in three New Jersey elementary schools that served a largely working-class population.

The statistical analyses described in the preceding text allowed the researcher to determine the predictive power of elements of parental involvement, as separate elements or in sets, among populations by SES, school of enrollment, ethnicity, and language spoken at home as they related to academic achievement in language arts and mathematics.

Chapter 4 presents a presentation and analysis of data.
CHAPTER IV

Presentation and Analysis of Data

Introduction

The purpose of this study is to determine relationships between the elements of parental involvement and academic achievement in language arts and math, as well as the extent to which elements of parental involvement predict language arts and math achievement among working-class elementary school students in three New Jersey schools.

The researcher investigated the extent to which elements of parental involvement as assessed by a survey based upon Sheldon and Epstein’s (2007) typology of parental involvement were related to academic achievement among fourth-, fifth-, and sixth-grade students in three working-class elementary schools in New Jersey. The population of subjects selected was comprised of parents whose children were enrolled in the fourth, fifth, and sixth grade and were enrolled in the same school during the previous school year. Academic achievement in both language arts and mathematics was considered.

Descriptive research was appropriate for this study, because all data were examined and analyzed as they existed without researcher control. Correlational research was appropriate because the primary intent was to explain the nature of relationships found in the data, not to determine cause and effect. Multiple linear regression was appropriate for the study because regression analysis provided a means for expressing essential components of statistical relationships. The combined use of this set of
statistical techniques allowed the researcher to assess the relationships among the study’s stated independent variables—SES, school of enrollment, ethnicity, language spoken at home, and Sheldon and Epstein’s (2007) nine types of parental involvement—as they related to the dependent variables of academic achievement in language arts and mathematics.

Chapter 4 provides a presentation of data collected from parents of fourth, fifth, and sixth grade students in three working-class New Jersey elementary schools. The chapter is organized into six sections: introduction, response rate, demographic characteristics, reliability of the instrument, results of statistical analyses, and summary.

Response Rate

In September 2008, parents of fourth-, fifth-, and sixth-grade students in three elementary schools were invited to participate in a study of parental involvement by completing a survey during their school’s “back-to-school” night. The survey was distributed in both English and Spanish language versions in each teacher’s homeroom by a facilitator. Parents were invited to complete the survey and informed that they may choose to complete the language version of their preference. They were also informed that the survey was to be completed only by parents whose child was enrolled in the same school during the previous school year.

Of parents eligible to participate in the study, 247 completed the survey. Of the 623 students enrolled in the three grades of the selected schools at the time of the survey, parents of only 471 of those students were eligible to participate in the survey by virtue of their child being enrolled in the same school during the previous school year (Hillside Public Schools, 2008).
The overall response rate was 52.4%, though only 45.6% of those eligible responded to the item identifying school of enrollment. Among those who identified their school of enrollment, the response rate ranged from 50.8% at School C to 41.6% at School B. Parents of students enrolled in School C provided 98 responses, the largest number of any school.

Table 1 shows how responses that included an identification of school of enrollment were distributed among the three schools.

Table 1

<table>
<thead>
<tr>
<th>School</th>
<th>Eligible</th>
<th>n</th>
<th>Response %</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A</td>
<td>124</td>
<td>53</td>
<td>42.7%</td>
</tr>
<tr>
<td>School B</td>
<td>154</td>
<td>64</td>
<td>41.6%</td>
</tr>
<tr>
<td>School C</td>
<td>193</td>
<td>98</td>
<td>50.8%</td>
</tr>
<tr>
<td>Total</td>
<td>471</td>
<td>215</td>
<td>45.6%</td>
</tr>
</tbody>
</table>

Demographic Characteristics

Participation in the study by parents of fourth-grade students was higher than that of the other grades. Table 2 details the response rate by grade of those who responded to the grade of enrollment question.
Table 2

Frequency and Percentage of Responses by Grade Level

<table>
<thead>
<tr>
<th>Grade</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>94</td>
<td>53.4%</td>
</tr>
<tr>
<td>5</td>
<td>68</td>
<td>48.2%</td>
</tr>
<tr>
<td>6</td>
<td>70</td>
<td>45.5%</td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td></td>
</tr>
</tbody>
</table>

An overwhelming majority of students whose parents responded were Black/African American (70.48%). The Black/African American population of the three elementary schools included children whose families had lived in the U.S. for generations and the children of first generation immigrants from Africa, Haiti, and other Caribbean islands and nations. Because the proportion of Black/African Americans was so high, responses were dichotomized for statistical analysis into Black/African American and others (Hispanic, White, and other).

Similarly, an overwhelming majority of respondents (64.9%) reported that English was the primary language spoken at home. The next largest linguistic groups were Spanish (18.7%) and Portuguese (10.2%). As in the case of the ethnicity variable, responses to language spoken at home were dichotomized into English and others (Spanish, Portuguese, and other).

The SES variable was determined by yes–no responses to eligibility for free or reduced-price lunch. A majority of parents responding (56.8%) reported that their children were eligible for free or reduced-price lunch, as one might predict in a school district classified as district factor group CD.
The descriptive statistics are summarized in Table 3.

Table 3

**Frequency and Percentage of Demographic Characteristics**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>35</td>
<td>15.4%</td>
</tr>
<tr>
<td>Black/Afr. Am.</td>
<td>160</td>
<td>70.5%</td>
</tr>
<tr>
<td>White</td>
<td>19</td>
<td>8.4%</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>5.7%</td>
</tr>
<tr>
<td>Total</td>
<td>227</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish</td>
<td>42</td>
<td>18.7%</td>
</tr>
<tr>
<td>English</td>
<td>146</td>
<td>64.9%</td>
</tr>
<tr>
<td>Portuguese</td>
<td>23</td>
<td>10.2%</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>6.2%</td>
</tr>
<tr>
<td>Total</td>
<td>225</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Free or reduced-price lunch</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>129</td>
<td>56.8%</td>
</tr>
<tr>
<td>No</td>
<td>98</td>
<td>43.2%</td>
</tr>
<tr>
<td>Total</td>
<td>227</td>
<td></td>
</tr>
</tbody>
</table>
Reliability Estimates of the Instrument Scales

Cronbach’s alpha test for the internal reliability estimate of the survey responses was conducted on the 72-item parental involvement scale. The Cronbach’s alpha test measures the ability of the composite subscale to measure the variable of interest. George and Mallery (2007) suggested the following rules of thumb for evaluating alpha coefficients: > 0.9 – excellent, > 0.8 – good, > 0.7 – acceptable, > 0.6 – questionable, > 0.5 – poor, < 0.5 – unacceptable.

Cronbach’s alpha coefficient for the composite of the 10 items of the subscale parenting skills was 0.86, making this a good measure.

Cronbach’s alpha coefficient for the composite of the 10 items of the communicating subscale was 0.89, making this a good measure.

Cronbach’s alpha coefficient for the composite of the 6 items of the volunteering subscale was 0.66, making this a questionable measure.

Cronbach’s alpha coefficient for the composite of the 13 items of the learning at home subscale was 0.90, making this an excellent measure.

Cronbach’s alpha coefficient for the composite of the 2 items of the subscale decision making was 0.66, making this a questionable measure.

Cronbach’s alpha coefficient for the composite of the 4 items of the collaborating with the community subscale was 0.71, making this an acceptable measure.

Cronbach’s alpha coefficient for the composite of the 4 items of the school climate subscale was 0.88, making this a good measure.

Cronbach’s alpha coefficient for the composite of the 15 items of the social networking subscale was 0.98, making this an excellent measure.
Cronbach's alpha coefficient for the composite of the 8 items of the parental

efficacy subscale was 0.74, making this an acceptable measure. The results are

summarized in Table 4.

| Table 4 |

**Cronbach’s Alpha Reliability Coefficients for the Nine Parental Involvement Scales**

<table>
<thead>
<tr>
<th>Cronbach's alpha</th>
<th>coefficient</th>
<th>n items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parenting skills</td>
<td>0.86</td>
<td>10</td>
</tr>
<tr>
<td>Communicating</td>
<td>0.89</td>
<td>10</td>
</tr>
<tr>
<td>Volunteering</td>
<td>0.66</td>
<td>6</td>
</tr>
<tr>
<td>Learning at home</td>
<td>0.90</td>
<td>13</td>
</tr>
<tr>
<td>Decision making</td>
<td>0.66</td>
<td>2</td>
</tr>
<tr>
<td>Collaborating with the community</td>
<td>0.71</td>
<td>4</td>
</tr>
<tr>
<td>School climate</td>
<td>0.88</td>
<td>4</td>
</tr>
<tr>
<td>Social networking</td>
<td>0.98</td>
<td>15</td>
</tr>
<tr>
<td>Parental efficacy</td>
<td>0.74</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>72</td>
</tr>
</tbody>
</table>
Research Guiding Questions

The following research guiding questions were considered in statistical analyses of the data generated in the study.

Research Question 1a. In three working-class schools, what relationships exist between two measures of student achievement (language arts and math) and nine aspects of parental involvement?

Research Question 1b. What differences exist among the three working-class schools for the relationships between two measures of student achievement (language arts and math) and nine parental involvement scales?

Research Question 2a. What differences exist according to student ethnicity (Black, Hispanic, White, or other) among 18 achievement–involvement relationships (2 measures of student achievement—language arts and math—by 9 parental involvement scales)?

Research Question 2b. What differences exist according to language spoken at home (English, Spanish, or other) among 18 achievement–involvement relationships (2 measures of student achievement by 9 parental involvement scales)?

Research Question 2c. What differences exist according to SES (lunch subsidy or no lunch subsidy) among 18 achievement–involvement relationships (2 measures of student achievement by 9 parental involvement scales)?

Research Question 3. In the three schools, how do nine aspects of parental involvement scales predict each of two student achievement scale scores (language arts and math)?
Results of Statistical Analyses

To examine Research Question 1a, 20 Pearson correlations were conducted between two measures of student achievement (language arts and math) and the nine aspects of parental involvement: parenting skills, communicating, volunteering, learning at home, decision making, collaborating with the community, school climate, social networking, and parental efficiency. The analyses revealed significant relationships between parenting skills and both measures of achievement: math, $r (221) = 0.17$, $p < 0.05$, and language arts, $r (224) = 0.19$, $p < 0.01$. As parenting skills increased, the level of student achievement in both math and language arts also increased.

There was also a significant relationship between parental efficacy and both measures of achievement: math, $r (221) = 0.43$, $p < 0.01$, and language arts, $r (224) = 0.34$, $p < 0.01$. As parental efficacy increased, the level of student achievement in both math and language arts also increased. The results are summarized in Table 5.

To examine Research Question 1b, two Pearson chi-squares were conducted on the two measures of student achievement (language arts and math) and school of enrollment. The Pearson chi-square on language arts achievement was not significant, $\chi^2 (4) = 3.79$, $p = 0.44$, indicating that no significant pattern of relationship was found between school of enrollment and language arts achievement. The Pearson chi-square on math achievement was also not significant, $\chi^2 (4) = 5.98$, $p = 0.20$, indicating that no significant pattern of relationship was found between school of enrollment and math achievement. The results are summarized in Table 6.
<table>
<thead>
<tr>
<th></th>
<th>Language arts achievement (r)</th>
<th>Sig.</th>
<th>Math achievement (r)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>School enrollment</td>
<td>0.03</td>
<td>.681</td>
<td>-0.04</td>
<td>.599</td>
</tr>
<tr>
<td>Parenting skills</td>
<td>0.19**</td>
<td>.005</td>
<td>0.17*</td>
<td>.011</td>
</tr>
<tr>
<td>Communicating</td>
<td>0.08</td>
<td>.261</td>
<td>0.09</td>
<td>.174</td>
</tr>
<tr>
<td>Volunteering</td>
<td>0.05</td>
<td>.480</td>
<td>0.05</td>
<td>.488</td>
</tr>
<tr>
<td>Learning at home</td>
<td>0.09</td>
<td>.184</td>
<td>0.05</td>
<td>.504</td>
</tr>
<tr>
<td>Decision making</td>
<td>0.01</td>
<td>.893</td>
<td>0.06</td>
<td>.411</td>
</tr>
<tr>
<td>Collaborating with the</td>
<td>0.07</td>
<td>.268</td>
<td>-0.01</td>
<td>.902</td>
</tr>
<tr>
<td>community</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School climate</td>
<td>0.02</td>
<td>.742</td>
<td>-0.01</td>
<td>.902</td>
</tr>
<tr>
<td>Social networking</td>
<td>0.02</td>
<td>.776</td>
<td>0.00</td>
<td>.965</td>
</tr>
<tr>
<td>Parental efficacy</td>
<td>0.34**</td>
<td>.001</td>
<td>0.43**</td>
<td>.001</td>
</tr>
</tbody>
</table>

* p < 0.05. ** p < 0.01.
Table 6
Chi-Square Analyses on School of Enrollment (A, B, C) by Categories (Language Arts and Math Achievement)

<table>
<thead>
<tr>
<th>Students</th>
<th>Language arts achievement</th>
<th>Math achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n)</td>
<td>(n)</td>
</tr>
<tr>
<td></td>
<td>90-100%</td>
<td>80-89%</td>
</tr>
<tr>
<td>School A</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>School B</td>
<td>13</td>
<td>29</td>
</tr>
<tr>
<td>School C</td>
<td>29</td>
<td>40</td>
</tr>
</tbody>
</table>

*Note.* Language arts, $\chi^2 (4) = 3.79, p = 0.44$. Math, $\chi^2 (4) = 5.98, p = 0.20$.

To examine Research Question 2a, independent samples $t$-tests were conducted between ethnicity and the two measures of student achievement (language arts and math) and parental involvement skills. The respondents in the survey were overwhelmingly Black/African American, and as a result, the ethnicity variable was dichotomized into two groups: Black/African American and other.

The assumption of homogeneity of variance was violated for the parenting skills scale, as indicated by the significant result of Levene's Test for Equality of Variance. Values associated with equal variances not assumed were used for the independent samples $t$-test.

The analyses revealed no significant differences in the achievement levels or parental involvement scales by ethnicity, except in the areas of parenting skills, $t (95.91) = 2.34, p < 0.05$, and parental efficacy, $t (225) = 2.40, p < 0.05$. With regard to parenting
skills, the group comprising all ethnicities other than Black/African American (M = 1.22, SD = 0.31) scored significantly higher than did the group comprised only of Black/African American (M = 1.12, SD = 0.22). On parental efficacy, the group comprising all ethnicities other than Black/African American (M = 1.71, SD = 0.39) scored significantly higher than did the group comprising only Black/American (M = 1.57, SD = 0.39). The results are summarized in Table 7.

Table 7

Independent Samples t-Tests on Language Arts and Math Achievement and Nine Parental Involvement Scales by Ethnicity (Other vs. Black/African American)

| Scale                        | t     | df   | Sig. | M   | SD  |  | M   | SD  |
|------------------------------|-------|------|------|-----|-----| | | | |
| Language arts achievement    | 0.89  | 218.00 | 0.38 | 2.10 | 0.87 | | 1.99 | 0.79 |
| Math achievement             | -0.32 | 215.00 | 0.75 | 2.00 | 0.89 | | 2.04 | 0.93 |
| Parenting skills             | 2.34  | 95.91 | 0.02* | 1.22 | 0.31 | | 1.12 | 0.22 |
| Communicating                | -1.16 | 223.00 | 0.25 | 1.41 | 0.47 | | 1.49 | 0.48 |
| Volunteering                 | -0.77 | 225.00 | 0.44 | 2.25 | 0.53 | | 2.32 | 0.59 |
| Learning at home             | 0.88  | 225.00 | 0.38 | 1.47 | 0.50 | | 1.42 | 0.42 |
| Decision making              | -1.15 | 219.00 | 0.25 | 1.66 | 0.68 | | 1.79 | 0.80 |
| Collaborating w/ community   | -0.58 | 225.00 | 0.56 | 1.94 | 0.75 | | 2.00 | 0.75 |
| School climate               | -1.19 | 224.00 | 0.23 | 1.34 | 0.42 | | 1.41 | 0.44 |
| Social networking            | -1.52 | 213.00 | 0.13 | 2.11 | 0.93 | | 2.34 | 1.05 |
| Parental efficacy            | 2.40  | 225.00 | 0.02* | 1.71 | 0.39 | | 1.57 | 0.39 |

* p < 0.05
To examine Research Question 2b, independent samples t-tests were conducted between primary language spoken at home and the two measures of student achievement (language arts and math) and the parental involvement skills. The respondents in the survey overwhelmingly spoke English at home as their primary language, and as a result, the variable language was dichotomized into two groups, English and other.

The assumption of homogeneity of variance was violated for the scales representing parental skills, involvement in school decision making, and social networking, as indicated by the significant results of Levene’s Test for Equality of Variance. Values associated with equal variances not assumed were used for the independent samples t-test.

The analyses revealed no significant differences across achievement levels and parental involvement scales by language spoken at home except in the areas of parenting skills, $t (126.44) = 2.52, p < 0.05$; social networking, $t (168.76) = -2.23, p < 0.05$; and parental efficacy, $t (223.0) = 3.19, p < 0.01$. The group comprised of participants speaking a language other than English ($M = 1.22$, $SD = 0.30$) scored significantly higher for parenting skills than the group comprised of participants speaking English ($M = 1.12$, $SD = 0.23$). In regard to the scale representing social networking, English-speaking participants ($M = 2.37$, $SD = 1.04$) scored significantly higher than did participants speaking a language other than English ($M = 2.06$, $SD = 0.94$). The significance of the independent samples $t$-test on parental efficacy indicated that the group comprised of participants speaking a language other than English ($M = 1.73$, $SD = 0.40$) scored significantly higher than the group comprised of English-speaking participants ($M = 1.55$, $SD = 0.39$). The results are summarized in Table 8.
Table 8

Independent Samples t-Tests on Language Arts and Math Achievement and Nine Parental Involvement Scales by Language (Other vs. English)

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig.</th>
<th>All others</th>
<th>Black/Afr. Am.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language arts achievement</td>
<td>0.53</td>
<td>214.00</td>
<td>0.60</td>
<td>2.04</td>
<td>1.98</td>
</tr>
<tr>
<td>Math achievement</td>
<td>0.05</td>
<td>211.00</td>
<td>0.96</td>
<td>2.03</td>
<td>2.02</td>
</tr>
<tr>
<td>Parenting skills</td>
<td>2.52</td>
<td>126.44</td>
<td>0.01*</td>
<td>1.22</td>
<td>1.12</td>
</tr>
<tr>
<td>Communicating</td>
<td>-1.08</td>
<td>221.00</td>
<td>0.28</td>
<td>1.43</td>
<td>1.50</td>
</tr>
<tr>
<td>Volunteering</td>
<td>-1.80</td>
<td>223.00</td>
<td>0.07</td>
<td>2.21</td>
<td>2.35</td>
</tr>
<tr>
<td>Learning at home</td>
<td>0.74</td>
<td>223.00</td>
<td>0.46</td>
<td>1.47</td>
<td>1.42</td>
</tr>
<tr>
<td>Decision making</td>
<td>-1.58</td>
<td>180.44</td>
<td>0.12</td>
<td>1.65</td>
<td>1.82</td>
</tr>
<tr>
<td>Collaborating with the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>community</td>
<td>-1.02</td>
<td>223.00</td>
<td>0.31</td>
<td>1.91</td>
<td>2.02</td>
</tr>
<tr>
<td>School climate</td>
<td>-1.27</td>
<td>221.00</td>
<td>0.21</td>
<td>1.34</td>
<td>1.42</td>
</tr>
<tr>
<td>Social networking</td>
<td>-2.23</td>
<td>168.76</td>
<td>0.03**</td>
<td>2.06</td>
<td>2.37</td>
</tr>
<tr>
<td>Parental efficacy</td>
<td>3.19</td>
<td>223.00</td>
<td>0.01*</td>
<td>1.73</td>
<td>1.55</td>
</tr>
</tbody>
</table>

*p < 0.01. **p < 0.05.
To examine Research Question 2c, independent samples t-tests were conducted between SES (free and reduced-price lunch and no free lunch) by the two measures of student achievement (language arts and math) and parental involvement skills. The assumption of homogeneity of variance was violated for the scales representing language arts achievement and school climate, as indicated by the significant results of Levene’s Test for Equality of Variance. Values associated with equal variances not assumed were used for those independent samples t-test.

The analyses revealed no significant differences across the achievement levels and parental involvement scales by SES, except in the area of social networking, \( t (212) = -2.15, p < 0.05 \). On the scale representing social networking, the group not eligible for free or reduced-price lunch (\( M = 2.45, SD = 1.01 \)), scored significantly higher than the group eligible for free or reduced lunch (\( M = 2.15, SD = 1.01 \)). The results are summarized in Table 9.

To examine Research Question 3, two multiple linear regressions were conducted using the nine parental involvement scales as predictors of the two measures of student achievement (language arts and math). The model predicting language arts achievement was significant, \( F (11, 193) = 3.11, p < 0.01 \), and accounted for 10.2% of variance in language arts achievement. This means that 10.2% of the variability in language arts achievement can be predicted by the linear combination of the nine parental involvement scales. The school of enrollment did not significantly contribute to the model predicting student achievement in language arts.
Table 9

Independent Samples t-Tests on Language Arts and Math Achievement and Nine Parental Involvement Scales by SES (Free or Reduced-Price Lunch vs. No Free or Reduced-Price Lunch)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>No</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>df</td>
<td>Sig.</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Language arts achievement</td>
<td>1.53</td>
<td>216.62</td>
<td>0.13</td>
<td>2.08</td>
<td>0.89</td>
<td>1.92</td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td>Math achievement</td>
<td>1.80</td>
<td>214.00</td>
<td>0.07</td>
<td>2.12</td>
<td>0.89</td>
<td>1.89</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>Parenting skills</td>
<td>0.48</td>
<td>225.00</td>
<td>0.63</td>
<td>1.16</td>
<td>0.27</td>
<td>1.14</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td>Communicating</td>
<td>-0.77</td>
<td>223.00</td>
<td>0.44</td>
<td>1.46</td>
<td>0.46</td>
<td>1.51</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>Volunteering</td>
<td>1.23</td>
<td>225.00</td>
<td>0.22</td>
<td>2.34</td>
<td>0.60</td>
<td>2.24</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>Learning at home</td>
<td>1.09</td>
<td>225.00</td>
<td>0.28</td>
<td>1.46</td>
<td>0.46</td>
<td>1.40</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td>Decision making</td>
<td>0.35</td>
<td>219.00</td>
<td>0.73</td>
<td>1.78</td>
<td>0.77</td>
<td>1.74</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>Collaborating with the</td>
<td>-0.76</td>
<td>225.00</td>
<td>0.45</td>
<td>1.97</td>
<td>0.75</td>
<td>2.05</td>
<td>0.73</td>
<td></td>
</tr>
<tr>
<td>community</td>
<td>-0.93</td>
<td>200.40</td>
<td>0.35</td>
<td>1.38</td>
<td>0.42</td>
<td>1.43</td>
<td>0.46</td>
<td></td>
</tr>
<tr>
<td>School climate</td>
<td>-2.15</td>
<td>212.00</td>
<td>0.03*</td>
<td>2.15</td>
<td>1.01</td>
<td>2.45</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Social networking</td>
<td>0.70</td>
<td>225.00</td>
<td>0.49</td>
<td>1.63</td>
<td>0.39</td>
<td>1.59</td>
<td>0.41</td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.05
Table 10

Multiple Linear Regression on Language Arts Achievement Predicted by Nine Aspects of Parental Involvement

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>(\beta)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.53</td>
<td>0.39</td>
<td></td>
</tr>
<tr>
<td>School enrollment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School A (ref. cat.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School B</td>
<td>0.26</td>
<td>0.15</td>
<td>0.14</td>
</tr>
<tr>
<td>School C</td>
<td>0.03</td>
<td>0.13</td>
<td>0.02</td>
</tr>
<tr>
<td>Parenting skills</td>
<td>0.14</td>
<td>0.26</td>
<td>0.04</td>
</tr>
<tr>
<td>Communicating</td>
<td>0.14</td>
<td>0.17</td>
<td>0.08</td>
</tr>
<tr>
<td>Volunteering</td>
<td>0.05</td>
<td>0.14</td>
<td>0.03</td>
</tr>
<tr>
<td>Learning at home</td>
<td>-0.01</td>
<td>0.15</td>
<td>-0.01</td>
</tr>
<tr>
<td>Decision making</td>
<td>-0.13</td>
<td>0.10</td>
<td>-0.12</td>
</tr>
<tr>
<td>Collaborating with the community</td>
<td>0.17</td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td>School climate</td>
<td>-0.09</td>
<td>0.15</td>
<td>-0.05</td>
</tr>
<tr>
<td>Social networking</td>
<td>-0.07</td>
<td>0.09</td>
<td>-0.08</td>
</tr>
<tr>
<td>Parental efficacy</td>
<td>0.70*</td>
<td>0.15</td>
<td>0.34</td>
</tr>
</tbody>
</table>

* \(p < 0.01\)
The results were summarized and beta coefficients are presented in Table 10, where only parental efficacy significantly contributed to the model predicting language arts achievement. The relationship was such that for every 1-point increase in parental efficacy, language arts achievement increased by 0.70 points.

The model predicting math achievement was also significant, $F(11, 191) = 6.01$, $p < 0.01$, and accounted for 21.4% of variance in math achievement. This means that 21.4% of the variability in math achievement can be predicted by the linear combination of the nine parental involvement scales. The school of enrollment did not significantly contribute to the model predicting math achievement.

The results were summarized and beta coefficients are presented in Table 11, where only parental efficacy significantly contributed to the model predicting math achievement. Though only one element of parental involvement, parental efficacy, was found to significantly contribute to the model predicting math achievement, that contribution was notable. The relationship was such that for every 1-point increase in parental efficacy, math achievement increased by 0.99 points.

Summary

Of the 63 tests (17%) performed, 11 revealed significant relationships, and of those, only parenting skills and parental efficacy were consistently found to be significantly related to academic success. The analyses revealed significant relationships between parenting skills and parental efficacy and student achievement in both language arts and mathematics. In the three schools, as parenting skills increased, the level of student achievement in both subject areas also increased. Similarly, as parental efficacy increased, the level of student achievement in both math and language arts also increased.
Table 11

Multiple Linear Regression on Math Achievement Predicted by Nine Aspects of Parental Involvement

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.05</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>School Enrollment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School A (Ref. Cat.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School B</td>
<td>0.27</td>
<td>0.15</td>
<td>0.13</td>
</tr>
<tr>
<td>School C</td>
<td>-0.12</td>
<td>0.14</td>
<td>-0.07</td>
</tr>
<tr>
<td>Parenting skills</td>
<td>0.28</td>
<td>0.26</td>
<td>0.08</td>
</tr>
<tr>
<td>Communicating</td>
<td>0.22</td>
<td>0.18</td>
<td>0.11</td>
</tr>
<tr>
<td>Volunteering</td>
<td>0.17</td>
<td>0.14</td>
<td>0.10</td>
</tr>
<tr>
<td>Learning at home</td>
<td>-0.16</td>
<td>0.16</td>
<td>-0.08</td>
</tr>
<tr>
<td>Decision making</td>
<td>-0.04</td>
<td>0.10</td>
<td>-0.04</td>
</tr>
<tr>
<td>Collaborating with the community</td>
<td>-0.11</td>
<td>0.16</td>
<td>-0.09</td>
</tr>
<tr>
<td>School climate</td>
<td>-0.23</td>
<td>0.15</td>
<td>-0.11</td>
</tr>
<tr>
<td>Social networking</td>
<td>0.07</td>
<td>0.10</td>
<td>0.07</td>
</tr>
<tr>
<td>Parental efficacy</td>
<td>1.02*</td>
<td>0.16</td>
<td>0.46</td>
</tr>
</tbody>
</table>

* p < 0.01
An analysis of the two measures of student achievement (language arts and math) and school of enrollment did not reveal any pattern of relationship. An analysis of the relationship between achievement levels and parental involvement scales by ethnicity revealed no differences except in the areas of parenting skills and parental efficacy. In regard to both parenting skills and parental efficacy, the group comprised of all ethnicities other than Black/African American scored significantly higher than did the group comprised of Black/African Americans only.

An analysis of the relationship between achievement levels and parental involvement scales by primary language spoken at home revealed no differences except in the areas of parenting skills, social networking, and parental efficacy. The group comprised of participants speaking a language other than English scored significantly higher on both parenting skills and parental efficacy than the group comprised of English speakers. However, in regard to social networking, the group comprised of English speakers scored significantly higher than did the group comprised of participants speaking a language other than English.

An analysis of the relationship between achievement levels and parental involvement scales by SES (free and reduced-price lunch) revealed no significant differences except in the area of social networking. On the scale representing social networking, the group not eligible for free or reduced-price lunch scored significantly higher than did those eligible for lunch subsidy.

The model for parental involvement predicting achievement was found to be significant for both language arts and math. Within the model, the scale associated with parental efficacy stood out as significantly contributing to the model predicting
achievement in both math and language arts. The school of enrollment did not significantly contribute to the model predicting student achievement in either language arts or math.

Summary statements responding to the six guiding research questions posed at the outset of the study, findings and conclusions, discussion, and recommendations for policy, practice, and further research are presented in chapter 5.
CHAPTER V

Overview, Conclusions, Recommendations

Introduction

Chapter 5 is comprised of five sections. The first section provides an overview of the study in summary form. The second section summarizes findings and suggests conclusions as they relate to the purpose of the study and the six research guiding questions. The third section offers a discussion of the researcher’s findings in light of current research. The fourth section consists of recommendations for policy, practice, and further research suggested by the study’s findings. And finally, the chapter concludes with a closing statement.

Overview

The purpose of this study was to determine the relationship between elements of parental involvement and academic achievement in language arts and math, as well as the extent to which elements of parental involvement predict language arts and math achievement among elementary school students. To accomplish the purpose of the study, the following research guiding questions were posed.

Research Question 1a. In three working-class schools, what relationships exist between two measures of student achievement (language arts and math) and nine aspects of parental involvement?
Research Question 1b. What differences exist among the three working-class schools for the relationships between two measures of student achievement (language arts and math) and nine parental involvement scales?

Research Question 2a. What differences exist according to student ethnicity (Black, Hispanic, White, or other) among 18 achievement–involvement relationships (2 measures of student achievement—language arts and math—by 9 parental involvement scales)?

Research Question 2b. What differences exist according to language spoken at home (English, Spanish, or other) among 18 achievement–involvement relationships (2 measures of student achievement by 9 parental involvement scales)?

Research Question 2c. What differences exist according to SES (lunch subsidy or no lunch subsidy) among 18 achievement–involvement relationships (2 measures of student achievement by 9 parental involvement scales)?

Research Question 3. In the three schools, how do nine aspects of parental involvement scales predict each of two student achievement scale scores (language arts and math)?

Gaining insights into the nature of correlations between parental involvement and achievement in language arts and math and how their influence on a child’s questioning nature, disposition toward learning, development in language and numeracy, and expectations in life might assist educational policy makers and practitioners in encouraging parental involvement that correlates with higher student achievement. Understanding to what extent elements of parental involvement may predict student achievement in language arts and math may be of value to policy makers and
practitioners in devising strategies to overcome deficiencies resulting from parenting practices and dispositions that are less effective in predisposing children for success in schooling and beyond.

In a quantitative, nonexperimental study, the researcher used descriptive correlational research with multiple linear regression analysis to determine the predictive power of the elements of Sheldon and Epstein's (2007) typology of parental involvement for academic achievement as assessed by parent-reported grades in language arts and mathematics.

The population studied was comprised of parents of fourth-, fifth-, and sixth-grade students in three elementary schools that enrolled students in Grades 3–6 in a working-class New Jersey school district. The study was delimited to parents whose children were enrolled in the same school during the previous school year.

The school district, categorized as district factor group CD by the NJDOE, was characterized by a population that was relatively diverse in ethnicity and language and relatively high in the percentage of students eligible for federal lunch subsidy. Of respondent parents, 91.6% identified themselves as minorities, 56.8% said their children were eligible for federal lunch subsidy, and 35.1% reported that they spoke a language other than English at home.

A survey instrument developed by Sheldon and Epstein (2007) at Johns Hopkins University was administered to parents of fourth-, fifth-, and sixth-grade students in the selected schools. The “Parent Survey on Family and Community Involvement in the Elementary and Middle Grades,” a seven-page survey for parents, included 82 items on these topics. Respondent parents were also asked about language spoken at home, their
ethnicity, whether their children qualified for federal lunch subsidy, and what grades their children received on average in language arts and math in the previous year. The survey was administered in both English and Spanish language versions at "back-to-school" nights held at all three schools in September 2008.

Of parents eligible to participate in the study, 247 completed the survey. The overall response rate was 52.4% (n = 471).

In Tables 5–11, 67 statistical tests were performed. Of those tests, 12 (17.9%) revealed statistically significant differences, as shown in Table 12.

Table 12

Summary of Tables 5–11: Number and Percentage of Tests Showing Statistical Significance

<table>
<thead>
<tr>
<th>Table</th>
<th>Tests</th>
<th>n significant</th>
<th>% significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>18</td>
<td>4</td>
<td>22.2%</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
<td>2</td>
<td>22.2%</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>3</td>
<td>33.3%</td>
</tr>
<tr>
<td>9</td>
<td>11</td>
<td>1</td>
<td>9.1%</td>
</tr>
<tr>
<td>10</td>
<td>9</td>
<td>1</td>
<td>9.1%</td>
</tr>
<tr>
<td>11</td>
<td>9</td>
<td>1</td>
<td>9.1%</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>12</td>
<td>17.9%</td>
</tr>
</tbody>
</table>
Summary of Findings and Conclusions

Regression analysis was employed to determine the relationship between the elements of parental involvement and academic achievement in language arts and math, as well as the extent to which elements of parental involvement predict language arts and math achievement among elementary school students.

To examine Research Question 1a, 20 Pearson correlations were conducted between two measures of student achievement (language arts and math) and the nine elements of parental involvement. The analyses revealed significant relationships between parenting skills and both measures of achievement, math, $r (221) = 0.17$, $p < 0.05$, and language arts, $r (224) = 0.19$, $p < 0.01$. As parenting skills increased, the level of student achievement in both math and language arts also increased. There was also a significant relationship between parental efficacy and both measures of achievement, math, $r (221) = 0.43$, $p < 0.01$, and language, $r (224) = 0.34$, $p < 0.01$. As parental efficacy increased, the level of student achievement in both math and language arts also increased. Of the 20 separate correlations, 4 (20%) provided statistical significance.

In regard to parenting skills and parental efficacy, Null Hypothesis 1a was rejected. With regard to the other seven elements of parental involvement, Null Hypothesis 1a was not rejected.

To examine Research Question 1b, two Pearson chi-squares were conducted on the two measures of student achievement (language arts and math) and school of enrollment. The Pearson chi-square on language arts achievement was not significant, $\chi^2 (4) = 3.79$, $p = 0.44$, indicating that no significant pattern of relationship was found
between school of enrollment and language arts achievement. The Pearson chi-square on
math achievement was also not significant, $\chi^2 (4) = 5.98, p = 0.20$, indicating that no
significant pattern or relationship was found between school of enrollment and math
achievement.

In regard to Research Question 1b, the null hypothesis was not rejected.

To examine Research Question 2a, independent samples $t$-tests were conducted
between ethnicity and the two measures of student achievement (language arts and math)
and nine elements of parental involvement. The assumption of homogeneity of variance
was violated for the parenting skills scale, as indicated by the significant result of
Levene’s Test for Equality of Variance. Values associated with equal variances not
assumed were used for that independent samples $t$-test.

The analyses revealed no significant differences in the achievement levels or
parental involvement scales by ethnicity, except in the areas of parenting skills, $t (95.91)
= 2.34, p < 0.05$, and parental efficacy, $t (225) = 2.40, p < 0.05$. In regard to parenting
skills, the group comprised of all ethnicities other than Black/African American ($M =
1.22, SD = 0.31$) scored significantly higher than the group comprised only of
Black/African American parents ($M = 1.12, SD = 0.22$). With respect to parental
efficacy, the group comprised of all ethnicities other than Black/African American ($M =
1.71, SD = 0.39$) scored significantly higher than the group comprised only of
Black/African American ($M = 1.57, SD = 0.39$).

In regard to parenting skills and parental efficacy, Null Hypothesis 2a was
rejected. With respect to the other seven elements of parental involvement, Null
Hypothesis 2a was not rejected.
To examine Research Question 2b, independent samples t-tests were conducted between primary language spoken at home and the two measures of student achievement (language arts and math) and nine elements of parental involvement. The assumption of homogeneity of variance was violated for the scales representing parental skills, involvement in school decision making, and social networking, as indicated by the significant results of Levene's Test for Equality of Variance. Values associated with equal variances not assumed were used for the independent samples t-test.

The analyses revealed no significant differences across achievement levels and parental involvement scales by language spoken at home except in the areas of parenting skills, t (126.44) = 2.52, p < 0.05; social networking, t (168.76) = -2.23, p < 0.05; and parental efficacy, t (223.0) = 3.19, p < 0.01. The group comprised of participants primarily speaking a language other than English (M = 1.22, SD = 0.30) scored significantly higher on parenting skills than the group comprised of participants speaking primarily English (M = 1.12, SD = 0.23). In regard to the scale representing social networking, the group comprised of participants speaking primarily English (M = 2.37, SD = 1.04) scored significantly higher than the group comprised of participants primarily speaking a language other than English (M = 2.06, SD = 0.94). The independent samples t-test on parental efficacy indicated that the group comprised of participants primarily speaking a language other than English (M = 1.73, SD = 0.40) scored significantly higher than the group comprised of participants primarily speaking English (M = 1.55, SD = 0.39).
In regard to parenting skills, social networking, and parental efficacy, Null Hypothesis 2b was rejected. With respect to the other six elements of parental involvement, Null Hypothesis 2b was not rejected.

To examine Research Question 2c, independent samples t-tests were conducted between SES (free and reduced-price lunch) and two measures of student achievement (language arts and math) and nine elements of parental involvement. The assumption of homogeneity of variance was violated for the scales representing language arts achievement and school climate, as indicated by the significant results of Levene's Test for Equality of Variance. Values associated with equal variances not assumed were used for the independent samples t-test.

The analyses revealed no significant differences across achievement levels and parental involvement scales by SES, except in the area of social networking, $t (212) = -2.15, p < 0.05$. On the scale representing social networking, the group not eligible for free or reduced-price lunch ($M = 2.45, SD = 1.01$), scored significantly higher than the group eligible for free or reduced lunch ($M = 2.15, SD = 1.01$).

In regard to social networking, Null Hypothesis 2c was rejected. With respect to the other eight elements of parental involvement, Null Hypothesis 2c was not rejected.

To examine Research Question 3, two multiple linear regressions were conducted using the nine parental involvement scales as predictors of the two measures of student achievement (language arts and math). The model predicting language arts achievement was significant, $F (11, 193) = 3.11, p < 0.01$, and accounted for 10.2% of variance in language arts achievement. This means that 10.2% of the variability in language arts
achievement can be predicted by the linear combination of the nine parental involvement scales.

In regard to achievement in language arts, Null Hypothesis 3 was rejected.

The school of enrollment did not significantly contribute to the model predicting student achievement in language arts. Only parental efficacy was significantly contributing to the model predicting language arts achievement. The relationship was such that for every 1-point increase in parental efficacy, language arts achievement increased by 0.70 points.

The model predicting math achievement was also significant, $F(11, 191) = 6.01$, $p < 0.01$, and accounted for 21.4% of variance in math achievement, which means that 21.4% of the variability in math achievement can be predicted by the linear combination of the nine parental involvement scales.

In regard to achievement in math, Null Hypothesis 3 was rejected.

The school of enrollment did not significantly contribute to the model predicting student achievement in math. Only parental efficacy significantly contributed to the model predicting math achievement.

Though only one element of parental involvement, parental efficacy, was found to significantly contribute to the model predicting math achievement, that contribution was strong. The relationship was such that for every 1-point increase in parental efficacy, math achievement increased by 0.99 points.

Discussion of Findings and Related Research

Findings regarding the parental involvement model. It has been noted in recent research that aspects of parental involvement, such as parenting, interactions with adults,
and communication between parents and educators, may be found to co-occur and to be related to academic success in sets as well as separately. Epstein (1996) suggested that manifestations of parental involvement may also track and cluster, even if some aspects of parental involvement do not appear to be related to student achievement when viewed as individual elements. To test that suggestion, the relationship between student achievement and parental involvement was analyzed as a model as well as in separate elements.

A model for parental involvement predicting student achievement (Epstein, 1996; Epstein et al., 1997, 2002; Epstein & Sheldon, 2006; Sheldon, 2002, 2003; Sheldon & Epstein, 2007) was employed as the organizing structure of the study. The model, which included a broad range of aspects of parental involvement, was found to be significant for both language arts and math.

Speaking to differences among parents by characteristics like SES, Harris and Goodall (2002) concluded that there was a positive relationship between learning outcomes and increased parental involvement, particularly among parents who are disaffected or who live in challenging circumstances. In the present study, 57% of respondent parents reported that their children were eligible for free or reduced-price lunch, certainly meeting the criteria of living in challenging circumstances.

**Findings regarding parenting.** The analyses revealed significant relationships between parenting skills and student achievement in both language arts and mathematics. In the three schools, as parenting skills increased, the level of student achievement in both subject areas also increased.
An analysis of the relationship between achievement levels and parental involvement scales by ethnicity revealed differences in the area of parenting skills. In regard to parenting skills, the group comprised of all ethnicities other than Black/African American scored significantly higher than the group comprised of Black/African American parents only. As parenting skills increased, the level of student achievement in both math and language arts also increased.

An analysis of the relationship between achievement levels and parental involvement scales revealed differences in the areas of parenting skills by primary language spoken at home. The group comprised of participants primarily speaking a language other than English scored significantly higher on parenting skills than the group comprised of English speakers.

These findings are consistent with the research of Haskins and Rouse (2005), who noted that as much as half the gap in school readiness might be attributed to differences in parenting. Responsive verbal communication between parent and child, reading to children, and having educational materials in the home were found to be important dimensions of parenting that contributed to children’s development, especially language development. Haskins and Rouse (2005) also concluded that African American and Hispanic parents were less likely than Caucasian parents to talk responsively and to read to their infants and young children and to have fewer books and other educational materials in their homes.

The researcher did not attempt to sort out which aspects of parenting skills bore stronger or weaker relationships to academic achievement, but the work of Raikes et al. (2006) may be instructive in this matter. The researchers concluded that book reading
with children is a key component in a broader pattern of rich verbal interactions with children characteristic of mothers with strong verbal skills and high levels of educational attainment.

**Findings regarding parental efficacy.** Parenting styles are closely related to parental efficacy. In analyzing the relationship between achievement levels and parental involvement scales by ethnicity and language spoken at home, the researcher found differences in the area of parental efficacy. With regards to parental efficacy, the group comprised of all ethnicities other than Black/African American scored significantly higher than the group comprised of Black/African Americans only, whereas the group comprised of participants primarily speaking a language other than English scored significantly higher than the group comprised of parents primarily speaking English.

Within the model for parental involvement, only the scale associated with parental efficacy stood out as significantly contributing to the model predicting achievement in both math and language arts. Furthermore, analyses revealed significant relationships between parental efficacy and both measures of student achievement (language arts and mathematics). As parental efficacy increased, the level of student achievement in both math and language arts also increased.

Hoover-Dempsey and Sandler (1997) noted the importance of parental efficacy. They concluded that parents at the first level of involvement constructed a parental role with a sense of efficacy for helping their child and were influenced by invitations to become involved. While the researchers cautioned that predispositions grounded in social status do not always result in easily predictable outcomes, they asserted that construction of the parental role and what parents believe they are supposed to do in regard to their
child's education may be important determinants of student outcomes. They further asserted that children who are raised by parents who are not confident of their ability to contribute to their child's success in school and who tend to not play an active role in their child's learning, may be at a serious disadvantage that grows more profound with each interaction between parent and child.

Findings regarding social networking. In the study, differences in social networking were found by ethnicity and SES. The group comprised of parents who spoke primarily English at home scored significantly higher in social networking than did the group comprised of participants primarily speaking a language other than English at home. Social networking may be more difficult for parents whose primary language is not English unless their language or cultural group is sufficient in number to allow substantial networking as a subgroup.

On the scale representing social networking, the group not eligible for free or reduced-price lunch scored significantly higher than those eligible for lunch subsidy. Thus, SES may have been a barrier to social networking and may have contributed to the isolation of low-income parents.

Cochran and Brassard (1979) found that a parent's social network influences a child in three different manifestations. The first provides children with emotional and material assistance in a supportive social environment. In the second manifestation, members of the parent's social network directly influence child-rearing practices through reinforcement or sanctions. Conversely, isolated parents have more freedom to practice their parenting as they wish because they do not face the criticism found in more extended contexts. The third manifestation is the availability of role models. Parents may
develop their view of their role as a consequence of viewing the practices of others, positive or negative. A social network's influence on a child results from cognitive and social stimulation, direct support, the presence of role models, and opportunities for active participation.

A discussion of the importance of social networking among parents of school children may be informed by research on social capital. Coleman (1994) embraced social capital theory as a way to illuminate the processes and experiences of non-elite groups. He argued that persons low in SES could benefit by accruing social capital much like those of high SES. Like other social investigators, he highlighted the role of the family, kinship networks, and churches in the creation of social capital. Coleman’s theory of social capital predicted that students whose parents know and interact with the parents of their children’s friends would have higher academic achievement than would students with lower levels of such interaction. Coleman predicted that social capital was linked to academic achievement through shared parental norms and values, knowledge about school-related matters, and social control.

The notion of social capital applies directly to parental involvement. Sheldon (2002) found that parents without a social network of other parents at a school might be at a disadvantage in helping their children. These parents are forced to rely upon their own devices and their own educational experience.

Social networking is related to SES as found in this study and as noted in the research of others. Differences between working-class networks and middle-class networks may account for differences in the way parents handle problems with school personnel (Horvat et al., 2003). Working-class and poor parents tend to undertake
individual responses and do not receive much concrete support from their social networks. By contrast, middle-class parents sometimes react collectively, and even when they respond individually, they maintain the possibility of collective involvement in reserve. In addition, middle-class parents draw on ties to individuals who can provide the information, expertise, or authority necessary to compel school personnel to follow a preferred course of action.

Social networking, as rooted in social capital theory as well as parental involvement theory, may be an important factor in academic achievement. Understanding differences in social networking related to ethnicity and SES, as found in this study, may be of value to practitioners and educational policy makers in determining strategies and initiatives for different populations of parents to encourage and strengthen the development of social networking and to cultivate its benefits.

**Recommendations for Policy, Practice, and Further Research**

**Policy and practice.** Results of this study underscore the importance of parenting skills and parental efficacy as they relate to students’ success in school. Of critical importance is the growing body of research on parental involvement that redefines parental involvement as less about engaging school personnel and more about the nature and frequency of interactions between adults and children and parenting practices that support student learning (Brooks-Gunn & Markman, 2005; Harris & Goodall, 2002; Hart & Risley, 2003; Raikes et al., 2006).

In this study, the researcher found that parenting skills and parental efficacy were related to ethnicity and language spoken at home but not to parental involvement and SES. Respondents who spoke a language other than English at home scored significantly
higher in parenting skills and parental efficacy than those who spoke English at home, much as respondents of ethnicities other than Black/African American did when compared to Black/African American parents. In developing strategies for increasing parental involvement, policy makers and practitioners must take into account the unique ethnic and language composition of a school’s population of students and parents.

The current waves of immigration that draw growing numbers of children to U.S. schools from South and Central America, the Caribbean islands, Africa, and Asia pose a mounting challenge to policy makers and practitioners who would increase parental involvement and boost the chances of the children of immigration finding success in school. Just as important is the achievement gap between Blacks/African Americans and other ethnicities, sometimes viewed as a cultural alienation (Ferguson, 2007), which requires policy makers and practitioners to advance parental involvement strategies that close the gap between home and school.

The results of this study suggest that policy makers and practitioners must accept a deeper level of responsibility for increasing parental involvement and helping parents to develop both their parenting skills and sense of parental efficacy. It is recommended that

1. Policy makers at the state and national levels should embrace parental involvement as a predictor of student achievement. The importance of parental involvement, like small class size, is supported by too much research to be ignored or trivialized.

2. Policy makers at the state and national levels should identify schools and school districts with model parenting and parental involvement programs that might be replicated elsewhere.
3. School districts should adopt policies that make the shift from seeing parental engagement as engaging with the school to engaging with the learning of the student.

4. School districts should organize “parenting academies” to engage parents in partnerships with school personnel and foster parenting practices associated with success in school.

5. Parental engagement must be a priority in schools: It cannot be an add-on or an afterthought. It must be embedded in teaching and learning policies and in school improvement policies that view parents as integral to students’ learning process.

6. Educators must support the engagement of parents who are already involved in the learning of their children as well as reach those parents who are less engaged.

7. Educators need to be prepared to be flexible in dealing with parents in terms of accessibility for meetings that respects parental limitations (e.g., shift work and child care) and in terms of locations for meetings, if possible.

8. Educators should carefully consider the uses of new technologies, be clear what they aim to achieve by using such technologies, and consider how any given technology will help them achieve that aim.

The results of this study also underscore the importance of targeting preliteracy interventions for all children. While much research has noted the importance of preschool and preliteracy interventions for targeted populations such as low-SES families or families speaking a language other than English at home, preliteracy intervention may be
of value to all children. Yeung et al. (2002) concluded that academic performance might be raised through early intervention programs that include stimulating learning materials, increasing family literacy, and encouraging parents to read to their children.

The results of this study suggest that particular attention be paid to the findings of Love et al. (2005) and their research on what practices that may alter developmental trajectories and by how much, for which children, under what circumstances, and at what ages. In an analysis of the results of Head Start programs that sought to determine if the programs were associated with significant differences in child and parent outcomes, the researchers found that the programs tended to produce positive results for parent–child interactions. Head Start programs with a mixed approach of home-based and center-based services tailored to match family needs were most successful. These interventions, while particularly helpful to children in poverty, may also prove to be of value for families in working- and middle-class settings.

Preschool intervention and preliteracy programs tend to be targeted only to low-SES families. But how and when should schools engage parents of children who may not have participated in preliteracy programs, regardless of SES, and toward what purposes? This study may have implications for parent education programs offered by urban as well as suburban schools and school districts.

To ensure a thorough and consistent approach to parent education, school districts should adopt policies that encourage the development of parenting skills and provide ongoing and structured opportunities for parents to build their social networks with other parents who have children in the same class, the same grade, or the same school. Such policies should foster the development of parental efficacy by creating continuous
communication between parent and teacher, communication that is rich in dialogue, not one sided. Policies should prominently include expectations that it is the responsibility of school personnel to make parents feel welcome in the school. Furthermore, policies should advance strategies to increase parental involvement and to honor the unique position parents have as their children’s first advocate and as the people who knows their children better than any other. The parent is the child’s first teacher and the child’s most important teacher. By recognizing and respecting the unique contribution that the parent makes in a child’s development and disposition, school personnel can reinforce expectations of efficacy.

Further research. The literature on parental involvement is substantial and continues to grow. However, methods of research on school, family, and community partnerships must continue to improve. Needed are longitudinal data that account for schools and students’ “starting points,” matching samples for comparative analyses, path analyses, and multilevel analyses to understand influences on more equitable outreach and involvement. It is vitally important that new studies attack particularly challenging measurement issues, such as isolating the effects of parental involvement strategies or initiatives on student outcomes from other simultaneously occurring school improvements.

Accordingly, the following recommendations for further research are suggested:

1. It is recommended that this study be replicated in a middle-class school district and a different urban school district to provide comparisons, affirmations, or differences in findings.
2. This study was quantitative. It is recommended that a qualitative study be conducted to ascertain parenting skills and parental efficacy through observations, interviews, or other methods.

3. It is recommended that a longitudinal study be conducted to track students over time to determine if differences in parenting skills or parental efficacy continue to predict success in school.

4. This study was conducted with a single measurement of academic achievement: grades in math and language arts. It is recommended that a study be conducted with consideration given to other academic achievement variables, such as standardized test scores, attendance rates, dropout rates, homework completion, retention rates, or authentic assessments.

5. It is recommended that a study be conducted to consider student perceptions of parental involvement programs and practices.

6. It is recommended that a study be conducted to consider the perceptions of family members regarding parental involvement programs and practices.

7. It is recommended that a study be conducted to consider the changing role of parents and changes in who is filling the parental role—grandparents, aunts, or other extended family members—and how societal changes may change the nature of school–family relationships.

8. It is recommended that a study be conducted to consider the differences in academic outcomes of schools that emphasize parental involvement practices and strategies compared to schools that do not.
9. It is recommended that a study be conducted to consider differences in parental involvement practices and strategies between schools classified by the NJDOE as "in need of improvement" and schools not classified as such.

Closing Statement

The aim of this study was to determine the relationship between the elements of parental involvement and academic achievement in language arts and math, as well as the extent to which elements of parental involvement predict language arts and math achievement among elementary school students. In a quantitative, nonexperimental study using a descriptive correlational research design with multiple linear regression analysis, Sheldon and Epstein's (2007) model for parental involvement predicting academic achievement was found to be significant for both language arts and mathematics. Within the model, only the scale associated with parental efficacy stood out as significantly contributing to the model predicting achievement in both math and language arts.

The population studied was comprised of the parents of students in three elementary schools in a working-class New Jersey school district, a district diverse in ethnicity and language and low in SES. An instrument developed by Sheldon and Epstein (2007) at Johns Hopkins University was administered to parents of fourth-, fifth-, and sixth-grade students in the selected schools. Of eligible participants, 247 parents participated in the study, yielding a response rate of 52.4%.

The analyses revealed significant relationships between two aspects of parental involvement, parenting skills, and parental efficacy, and student achievement in both language arts and mathematics. In the three schools, as parenting skills and parental efficacy increased, the level of student achievement in both subject areas also increased.
Fine (1993, p. 682) concluded that "It is not enough for families to become more like schools; schools and districts must also become more like families." In that spirit, it is the conclusion of the researcher that education policy makers and practitioners must embrace a new definition of parental involvement. This study joins the growing body of research on parental involvement that redefines parental involvement as less about engaging school personnel and more about the nature and frequency of interactions between adults and children and parenting practices that support student learning.
References


Feinstein, L., & Sabates, R. (2006). Does education have an impact on mothers' educational attitudes and behaviours? (Research brief RCB01-06). DfES.


<table>
<thead>
<tr>
<th></th>
<th>ESPA&lt;sup&gt;a&lt;/sup&gt;</th>
<th></th>
<th>GEPA&lt;sup&gt;b&lt;/sup&gt;</th>
<th></th>
<th>HSPA&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lang. arts</td>
<td>Math</td>
<td>Lang. arts</td>
<td>Math</td>
<td>Science</td>
</tr>
<tr>
<td>A</td>
<td>208.9</td>
<td>199.4</td>
<td>201.0</td>
<td>191.3</td>
<td>201.4</td>
</tr>
<tr>
<td>B</td>
<td>214.1</td>
<td>210.3</td>
<td>213.4</td>
<td>206.4</td>
<td>217.4</td>
</tr>
<tr>
<td>CD</td>
<td>218.3</td>
<td>219.0</td>
<td>217.2</td>
<td>208.7</td>
<td>224.0</td>
</tr>
<tr>
<td>DE</td>
<td>221.8</td>
<td>224.8</td>
<td>221.9</td>
<td>214.6</td>
<td>228.6</td>
</tr>
<tr>
<td>FG</td>
<td>224.1</td>
<td>229.3</td>
<td>224.9</td>
<td>220.5</td>
<td>232.3</td>
</tr>
<tr>
<td>GH</td>
<td>226.1</td>
<td>233.4</td>
<td>227.8</td>
<td>225.7</td>
<td>235.2</td>
</tr>
<tr>
<td>I</td>
<td>230.6</td>
<td>240.4</td>
<td>233.4</td>
<td>231.8</td>
<td>240.1</td>
</tr>
<tr>
<td>J</td>
<td>233.8</td>
<td>247.1</td>
<td>238.5</td>
<td>238.6</td>
<td>244.0</td>
</tr>
</tbody>
</table>

Note. All assessments administered during the 2001–02 school year. Without exception, the average student performance increases as one progresses through the District Factor Group classes.

<sup>a</sup> Grade 4 Elementary School Proficiency Assessment
<sup>b</sup> Grade 8 Proficiency Assessment
<sup>c</sup> High School Proficiency Assessment.
<table>
<thead>
<tr>
<th>District Factor Group</th>
<th>Number of school districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>39</td>
</tr>
<tr>
<td>B</td>
<td>67</td>
</tr>
<tr>
<td>C</td>
<td>67</td>
</tr>
<tr>
<td>DE</td>
<td>83</td>
</tr>
<tr>
<td>FG</td>
<td>89</td>
</tr>
<tr>
<td>GH</td>
<td>76</td>
</tr>
<tr>
<td>I</td>
<td>103</td>
</tr>
<tr>
<td>J</td>
<td>25</td>
</tr>
</tbody>
</table>
APPENDIX C
Percentage of Students Eligible for Free or Reduced-Price Lunch by School

<table>
<thead>
<tr>
<th>Elementary school</th>
<th>% eligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A</td>
<td>45</td>
</tr>
<tr>
<td>School B</td>
<td>51</td>
</tr>
<tr>
<td>School C</td>
<td>68</td>
</tr>
</tbody>
</table>

Note. From “Application for State School Aid (ASSA) and Fall Survey,” by Hillside Public Schools, 2008. Unpublished report submitted to New Jersey Department of Education by Hillside Public Schools Board of Education. Hillside, NJ.
Student Ethnicity by Grade of Enrollment

<table>
<thead>
<tr>
<th>Grade</th>
<th>White (non-Hisp.)</th>
<th>Black (non-Hisp.)</th>
<th>As. Pac. Hispanic</th>
<th>Am. Nat. (non-Hisp.)</th>
<th>Haw. Nat. (non-Hisp.)</th>
<th>Pac. Isl, Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>19</td>
<td>159</td>
<td>52</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>27</td>
<td>120</td>
<td>38</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>21</td>
<td>148</td>
<td>32</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>427</td>
<td>122</td>
<td>5</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Note. From "Application for State School Aid (ASSA) and Fall Survey," by Hillside Public Schools, 2008. Unpublished report submitted to New Jersey Department of Education by Hillside Public Schools Board of Education. Hillside, NJ.
Script for Administration of Survey

[Survey administrator/classroom teacher speaking to parents of children in his or class at “back-to-school” night]

Good evening. As you know, I am ______ (name) ______, your child’s classroom teacher. In addition to talking with you about what your children are learning this year, I am inviting you to participate in a research study about parent involvement by completing a brief survey tonight.

This research study is being conducted by a graduate student enrolled in an Ed.D. program at the College of Education and Human Services, Department of Education, Leadership Management, and Policy at Seton Hall University.

The purpose of the survey is to determine how parental involvement is related to student achievement. Gaining a better understanding of the relationship between parental involvement and student achievement may help educators to encourage parental involvement and to help children to be successful in school and beyond.

It will take about 20 to 30 minutes to complete the survey. As a parent or guardian of a student at this school, you are asked to complete a survey entitled “Parent Survey of Family and Community Involvement in the Elementary and Middle Grades,” by Stephen B. Sheldon and Joyce L. Epstein (2007), from the Center on School, Family, and Community Partnerships, Johns Hopkins University. Please note that this survey -

1.  Is voluntary. We hope that you answer every question, but you may skip any questions you feel are too personal.

2.  Is anonymous and confidential. Please do not write your name anywhere on the survey.
3. Has no right or wrong answers.

4. Is not part of your child’s schoolwork.

5. Will not influence your child’s learning or grades in any way.

To preserve your confidentiality and anonymity, surveys are not numbered or coded in any way that could allow you or your child to be identified.

To further maintain confidentiality, no data from this survey will be kept on a computer hard drive. All data will be stored electronically on a USB memory key, and will be kept in a locked file in a secure school office.

In front of you, you have two versions of the survey. The survey is written in two languages, English and Spanish. Please select the language version that you are most comfortable with.

If you are willing to participate in the study, please complete the survey. If there is more than one parent or guardian present, the survey should be completed by the one who is most involved in the child’s education. Also, if you have more than one child in this school, please answer the questions about the child or children in this class.

After you have completed the survey, please return it to me.

Thank you very much!
APPENDIX F
Survey Items Associated With Each Research Guiding Question

Research Question 1a

School of enrollment = 9a
Language arts achievement = 9g
Math achievement = 9f
Parenting skills = mean of 4a to 4j
Communicating = mean of 1a, 1b, 1d, 1e, 1f (3 items), 1i, 1j, 1l
Volunteering = mean of 1c, 1k, 3b, 3f, 3i, 3p
Learning at home = mean of 3a, 3c, 3d, 3e, 3g, 3h, 3j, 3k, 3l, 3m, 3n, 3o, 3q
Decision making = mean of 1h and 1m
Collaborating with the community = mean of 1g, 1n, 8h, 8j
School climate = mean of 2a, 2b, 2c, 2d
Social networking = mean of 8a to 8g, 8i, 8k to 8o
Parental efficacy = mean of 5a, 5b r, 5c, 5d, 5e, 5f r, 5g, 5h

Research Question 1b

School of enrollment = 9a
Language arts achievement = 9g
Math achievement = 9f
Parenting skills = mean of 4a to 4j
Communicating = mean of 1a, 1b, 1d, 1e, 1f (3 items), 1i, 1j, 1l
Volunteering = mean of 1c, 1k, 3b, 3f, 3i, 3p
Learning at home = mean of 3a, 3c, 3d, 3e, 3g, 3h, 3j, 3k, 3l, 3m, 3n, 3o, 3q
Decision making = mean of 1h and 1m
Collaborating with the community = mean of 1g, 1n, 8h, 8j

School climate = mean of 2a, 2b, 2c, 2d

Social networking = mean of 8a to 8g, 8i, 8k to 8o

Parental efficacy = mean of 5a, 5b, 5c, 5d, 5e, 5f, 5g, 5h

**Research Question 2a**

Ethnicity = 9c

Language arts achievement = 9g

Math achievement = 9f

Parenting skills = mean of 4a to 4j

Communicating = mean of 1a, 1b, 1d, 1c, 1f (3 items), 1i, 1j, 1l

Volunteering = mean of 1c, 1k, 3b, 3f, 3i, 3p

Learning at home = mean of 3a, 3c, 3d, 3e, 3f, 3g, 3h, 3j, 3k, 3l, 3m, 3n, 3o, 3q

Decision making = mean of 1h and 1m

Collaborating with the community = mean of 1g, 1n, 8h, 8j

School climate = mean of 2a, 2b, 2c, 2d

Social networking = mean of 8a to 8g, 8i, 8k to 8o

Parental efficacy = mean of 5a, 5b, 5c, 5d, 5e, 5f, 5g, 5h

**Research Question 2b**

Language spoken at home = 9d

Language arts achievement = 9g

Math achievement = 9f

Parenting skills = mean of 4a to 4j

Communicating = mean of 1a, 1b, 1d, 1e, 1f (3 items), 1i, 1j, 1l
Volunteering = mean of 1c, 1k, 3b, 3f, 3i, 3p
Learning at home = mean of 3a, 3c, 3d, 3e, 3g, 3h, 3j, 3k, 3l, 3m, 3n, 3o, 3q
Decision making = mean of 1h and 1m
Collaborating with the community = mean of 1g, 1n, 8h, 8j
School climate = mean of 2a, 2b, 2c, 2d
Social networking = mean of 8a to 8g, 8i, 8k to 8o
Parental efficacy = mean of 5a, 5b (r), 5c, 5d, 5f (r), 5g, 5h

Research Question 2c

SES = 9e
Language arts achievement = 9g
Math achievement = 9f
Parenting skills = mean of 4a to 4j
Communicating = mean of 1a, 1b, 1d, 1e, 1f (3 items), 1i, 1j, 1l
Volunteering = mean of 1c, 1k, 3b, 3f, 3i, 3p
Learning at home = mean of 3a, 3c, 3d, 3e, 3g, 3h, 3j, 3k, 3l, 3m, 3n, 3o, 3q
Decision making = mean of 1h and 1m
Collaborating with the community = mean of 1g, 1n, 8h, 8j
School climate = mean of 2a, 2b, 2c, 2d
Social networking = mean of 8a to 8g, 8i, 8k to 8o
Parental efficacy = mean of 5a, 5b r, 5c, 5d, 5e, 5f r, 5g, 5h

Research Question 3

School of enrollment = 9a
Language arts achievement = 9g
Math achievement = 9f

Parenting skills = mean of 4a to 4j

Communicating = mean of 1a, 1b, 1d, 1e, 1f (3 items), 1i, 1j, 1l

Volunteering = mean of 1c, 1k, 3b, 3f, 3i, 3p

Learning at home = mean of 3a, 3c, 3d, 3e, 3g, 3h, 3j, 3k, 3l, 3m, 3n, 3o, 3q

Decision making = mean of 1h and 1m

Collaborating with the community = mean of 1g, 1n, 8h, 8j

School climate = mean of 2a, 2b, 2c, 2d

Social networking = mean of 8a to 8g, 8i, 8k to 8o

Parental efficacy = mean of 5a, 5b r, 5c, 5d, 5e, 5f r, 5g, 5h
Survey Instrument: English Language Version

A. The School’s Contact With You

1. How well has your child’s teacher or someone at school done the following IN THE PAST YEAR? Circle ONE answer on each line to tell if the school does this: Well (1), Okay (2), Poorly (3), or Never (4).

<table>
<thead>
<tr>
<th>My child’s teacher or someone at the school ...</th>
<th>Does this ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Helps me understand my child’s stage of development.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>b. Tells me how my child is doing in school.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>c. Asks me to volunteer at the school.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>d. Explains how to check my child’s homework.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>e. Sends home news about things happening at school.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>f. Tells me what skills my child needs to learn in:</td>
<td></td>
</tr>
<tr>
<td>math.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>reading/language arts.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>science.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>g. Provides information on community services that I may want to use with my family.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>h. Invites me to PTA/PTO meetings.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>i. Assigns homework that requires my child to talk with me about things learned in class.</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>
j. Invites me to a program at the school. 1 2 3 4
k. Asks me to help with fund-raising. 1 2 3 4
l. Has a parent-teacher conference with me. 1 2 3 4
m. Includes parents on school committees, such as curriculum, budget, or improvement committees. 1 2 3 4
n. Provides information on community events that I may want to attend with my child. 1 2 3 4

2. How much do you agree or disagree with the following statements about your child’s school and teachers? Circle ONE answer on each line to tell if you Strongly agree (1), Agree (2), Disagree (3), or Strongly disagree (4).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. This is a very good school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. I feel welcome at the school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. I get along well with my child’s teacher(s).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. The teachers at this school care about my child.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

B. Your Involvement

3. Families are involved in different ways at school and at home. How often do YOU do the following activities? Circle ONE answer on each line to tell if this happens:

   Every day or most days (1), Once a week (2), Once in a while (3), or Never (4).
<table>
<thead>
<tr>
<th>How often do you …</th>
<th>Every day/Once a week in a while Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Read with your child?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>b. Volunteer in the classroom or at the school?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>c. Work with your child on science homework?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>d. Review and discuss the schoolwork your child brings home?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>e. Help your child with math?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>f. Visit your child’s school?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>g. Go over spelling or vocabulary with your child?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>h. Ask your child about what he/she is learning in science?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>i. Talk to your child’s teacher?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>j. Ask your child about what he/she is learning in math?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>k. Help your child with reading/language arts homework?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>l. Help your child understand what he/she is learning in science?</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>
m. Help your child prepare for math tests?  
1  2  3  4

n. Ask your child how well he/she is doing in school?  
1  2  3  4

o. Ask your child to read something he/she wrote?  
1  2  3  4

p. Go to a school event (e.g., sports, music, drama) or meeting?  
1  2  3  4

q. Check to see if your child finished his/her homework?  
1  2  3  4

C. Your Ideas

4. How much do you agree or disagree with the following statements about what parents should do? Circle ONE answer on each line to tell if you Strongly agree (1), Agree (2), Disagree (3), or Strongly disagree (4).

<table>
<thead>
<tr>
<th>It is a parent’s responsibility to ...</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>
a. Make sure that their child learns at school. | 1  2  3  4 |
b. Teach their child to value schoolwork. | 1  2  3  4 |
c. Show their child how to use things like a dictionary or encyclopedia. | 1  2  3  4 |
d. Contact the teacher as soon as academic problems arise. | 1  2  3  4 |
e. Test their child on subjects taught in school. | 1  2  3  4 |
f. Keep track of their child’s progress in school. 1 2 3 4

g. Contact the teacher if they think their child is struggling in school. 1 2 3 4

h. Show an interest in their child’s schoolwork. 1 2 3 4

i. Help their child understand homework. 1 2 3 4

j. Know if their child is having trouble in school. 1 2 3 4

5. How much do you agree or disagree with the following statements? Circle ONE answer on each line to tell if you Strongly agree (1), Agree (2), Disagree (3), or Strongly disagree (4).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I know how to help my child do well in school.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. I never know if I’m getting through to my child.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. I know how to help my child make good grades in school.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. I can motivate my child to do well in school.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. I feel good about my efforts to help my child learn.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
f. I don’t know how to help my child on schoolwork.
   1  2  3  4

g. My efforts to help my child learn are successful.
   1  2  3  4

h. I make a difference in my child’s school performance.
   1  2  3  4

---

D. Connections With Other Parents

6. Sometimes parents talk with other parents about their children’s education. Please think of up to five parents who have children in your child’s school. Circle the number that best describes how often you talk with each parent. Refer to one person on each line. If you do not speak with any other parents at your child’s school, check this box □. (Skip to Q7, below.)

   How often do you talk?

<table>
<thead>
<tr>
<th>Give the first name of each parent only</th>
<th>Twice</th>
<th>A few</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Once a day</td>
<td>Once a week</td>
</tr>
<tr>
<td>School parent 1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>School parent 2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>School parent 3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>School parent 4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>School parent 5</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
7. Please think of up to five other adults (who do not have children in your child’s school) with whom you talk about your child and his/her education. Refer to one person on each line. If you do not speak with any other adults about your child’s education, check this box □. (Skip to Q8 on the next page.)

<table>
<thead>
<tr>
<th>Adult 1</th>
<th>Do you speak</th>
<th>Is this person a relative?</th>
<th>Does this person have a child at a different school?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adult 2</th>
<th>Do you speak</th>
<th>Is this person a relative?</th>
<th>Does this person have a child at a different school?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adult 3</th>
<th>Do you speak</th>
<th>Is this person a relative?</th>
<th>Does this person have a child at a different school?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adult 4</th>
<th>Do you speak</th>
<th>Is this person a relative?</th>
<th>Does this person have a child at a different school?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adult 5</th>
<th>Do you speak</th>
<th>Is this person a relative?</th>
<th>Does this person have a child at a different school?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

8. How often do you talk with parents who have children at your child’s school about the topics listed below? Circle ONE answer on each line to tell if this happens:

Very often (1), Once in a while (2), A few times a year (3), or Never (4).

<table>
<thead>
<tr>
<th>How often do you and parents at your child’s school . . .</th>
<th>Once</th>
<th>A few</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very in a times often while a year Never</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>a. Talk about activities at your children’s school?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Talk about your children’s teacher(s)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>c. Provide each other advice about parenting?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
d. Share helpful information about your child’s:

   reading/language arts?  
   1  2  3  4

   math?  
   1  2  3  4

   science?  
   1  2  3  4

e. Share books or book titles to read with your children?  
   1  2  3  4

f. Talk about your children’s behavior or misbehavior?  
   1  2  3  4

g. Talk about where to send your children to school?  
   1  2  3  4

h. Share information about community events (e.g., museum exhibits, library readings, children’s theater)?  
   1  2  3  4

i. Talk about the school’s policies and rules?  
   1  2  3  4

j. Share information about extra-curricular activities (e.g., music teachers, arts and crafts, sports clubs/leagues)?  
   1  2  3  4

k. Talk about how to become involved at the school?  
   1  2  3  4

l. Share games, or the names of games, to play with your children?  
   1  2  3  4
m. Talk about how your children are changing
   (e.g., growth spurts, boyfriends/girlfriends,
   social or emotional changes)?

n. Provide each other with advice about helping
   your child with homework?

o. Talk about your children’s accomplishments in
   school?

E. Your Family And Your Child

9. The following questions may help us plan programs and activities to meet your
   family’s needs. Please mark one answer for each item.

a. In what school was your child enrolled last year?
   ______ [School A]
   ______ [School B]
   ______ [School C]

b. In what grade is your child enrolled this year?
   ______ 4th grade
   ______ 5th grade
   ______ 6th grade
c. How do you describe yourself?

  ____ Hispanic or Latino(a)
  ____ Black or African American
  ____ White or Caucasian
  ____ Other (describe) __________________________


d. What language do you speak at home most of the time?

  ____ English
  ____ Spanish
  ____ Portuguese
  ____ Other (describe) __________________________


e. Is your child eligible for free or reduced price school lunch?

  ____ yes
  ____ no

f. In the past year, what grade did your child receive in math most of the time?

  ____ 90-100%
  ____ 80-89%
  ____ 70-79%
  ____ 60-69%
  ____ Below 60%
g. In the past year, what grade did your child receive in language arts most of the time?

____ 90-100%
____ 80-89%
____ 70-79%
____ 60-69%
____ Below 60%

THANK YOU FOR YOUR HELP!

APPENDIX H
### A. El Contacto De La Escuela Con Usted


<table>
<thead>
<tr>
<th>Does this...</th>
<th>Bien</th>
<th>Bueno</th>
<th>Mal</th>
<th>Nunca</th>
</tr>
</thead>
<tbody>
<tr>
<td>La maestra de mi niño o alguien en la escuela ...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Me ayuda a entender el estado de desarrollo de mi hijo/a.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. Me avisa si mi hijo/a tiene problemas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. Me pide hacer trabajo voluntario en la escuela.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. Me explica como debo revisar las áreas escolares de mi hijo/a.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. Me manda noticias sobre lo que está pasando en la escuela</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>f. Me dice qué habilidades necesita mi niño aprender en:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matemática.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>lectura/language arts.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>ciencia.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>g. Me da información sobre los servicios de la comunidad que podría utilizar.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>h. Asistir a las reuniones de PTA/PTO.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
1. Pone tareas escolares que requieren que mi hijo/a hable conmigo sobre lo que aprendió en la clase.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
</table>

2. Me invita a los programes en la escuela.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
</table>

3. Me pide ayude a levantar fondos para la escuela.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
</table>

4. Me invita a una conferencia con los/as maestros/as.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
</table>

5. Incluye a los padres en los comités de la escuela, p. ej., los comités de currículo, de presupuestos, y de mejoras en la escuela.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
</table>

6. Me da información sobre eventos de la comunidad que podría asistir con me hijo/a.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
</table>

2. Cuanto usted está de acuerdo con lo siguiente sobre la escuela de sus hijos y los maestros? Circule una respuesta encada línea: Creo Fuertemente (1), Estoy de Acuerdo (2), No Estoy de Acuerdo e (3), No Creo Fuertemente (4).

<table>
<thead>
<tr>
<th>Creo Fuerte</th>
<th>Estoy de Acuerdo</th>
<th>No Estoy de Acuerdo</th>
<th>No Creo Fuertemente</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>a. Esta escuela es muy buena.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Me siento bienvenido en la escuela.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c. Me siento bien con las maestras de mi hijo/a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>d. Las maestras se preocupan por mi hijo/a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
</tbody>
</table>
### B. Su Participación

3. Las familias están envueltas en la escuela y la casa. Cuantas veces ustedes hacen las actividades? Circule una respuesta encada línea: Todos los días o Casi todos los días (1), Una vez a la Semana (2), De vez en cuando (3), o Nunca (4).

<table>
<thead>
<tr>
<th>Cuantas veces le …</th>
<th>Todos los días</th>
<th>Una vez</th>
<th>De vez</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o Casi</td>
<td>a la</td>
<td>en</td>
</tr>
<tr>
<td></td>
<td>todos los</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Leo a mi hijo/a?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. Hago trabajo voluntario en la escuela o en salón de mi hijo/a?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c. Trabajo con mi niño en la preparación de ciencias?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d. Repasa y discute los trabajos de escuela que su niño trae el hogar?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e. Ayudo a mi hijo/a con las matemáticas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f. Visito el salón de mi hijo/a?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g. Paso el delectreo o el vocabulario con mi niño?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h. Pregunta a su niño acerca de lo que está aprendiendo el/ella en ciencia?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i. Va a la escuela a hablar con la maestra de mi hijo/a?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>j.</strong> Pregunta a su niño acerca de lo que está aprendiendo el/ella en matemáticas?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>k.</strong> Ayuda a su hijo con tareas de lectura/lenguaje?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>l.</strong> Ayuda a su niño a entender lo que está aprendiendo el/ella en ciencia?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>m.</strong> Ayuda a su niño a prepararse para las pruebas de la matemáticas?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>n.</strong> Pregunta a su niño como el/ella está haciendo en la escuela?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>o.</strong> Pide a su niño lea algo que el/ella escribió?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>p.</strong> Va a un acontecimiento de la escuela (e.g., deportes, música, drama) o a una reunión.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>q.</strong> Comprueba que su hijo/a ha hecho sus tareas escolares?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
C. Sus Ideas

4. Cuánto ustedes están de acuerdo o no con las siguientes líneas de lo que deben hacer los padres? Circule una respuesta encima línea: Creo Fuertemente (1), Estoy de Acuerdo (2), No Estoy de Acuerdo (3), No Creo Fuertemente (4).

<table>
<thead>
<tr>
<th>Es la responsabilidad de un padre a…</th>
<th>Creo Fuertemente</th>
<th>No Creo Fuertemente</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Cerciórarse de que su niño aprenda en la escuela.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>b. Decirle al hijo/a cuán importante son las tareas.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>c. Demostrar a su niño cómo utilizar cosas como un diccionario o una enciclopedia.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>d. Entre en contacto con la maestra tan pronto como se presenten los problemas académicos.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>e. Pruebe a su niño en los temas enseñados en escuela.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>f. No pierda de vista el progreso de su niño en la escuela.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>g. Entre en contacto con la maestra si piensan que su niño está luchando en escuela.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
</tbody>
</table>
h. Demuestre un interés en las tareas de su niño.

i. Ayúde a su niño a entender la preparación.

j. Sepa si su niño está teniendo apuro en la escuela.

5. Cuánto ustedes están de acuerdo o no con las siguientes líneas de lo que deben hacer los padres? Circule una respuesta encada línea: Creo Fuertemente (1), Estoy de Acuerdo (2), No Estoy de Acuerdo (3), No Creo Fuertemente (4).

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Creo Fuerte</th>
<th>No Estoy Fuertemente</th>
<th>Creo Fuertemente</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Se ayuda al niño a hacer bien en la escuela.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Nunca sé si estoy consiguiendo ayudar a mi niño.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Sé ayuda al niño a tener buenas notas en escuela</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Puedo motivar a mi niño para hacer bien en escuela</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Me siento bien sobre mis esfuerzos de ayudar a mi niño a aprender.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
f. No sé ayudar a mi niño en las tareas de la escuela.


g. Mis esfuerzos de ayudar a mi niño a aprender son acertados.


h. Yo hago diferencia en como mi hijo hace en la escuela.


D. Conexiones Con Otros Padres

6. A veces los padres hablen con otros padres acerca de la educación de sus hijos.

Piense en Cinco padres que tienen hijos en su escuela. Circule el número que describe mejor cuando usted habla con cada padre. Refiérase a una persona en cada línea.

Si usted no habla con ningún padre en la escuela de su hijo chequéee esta casilla □.

(Salte al #7 debajo)

Cada cuanto tiempo ustedes hablen?

<table>
<thead>
<tr>
<th>De el primer nombre de cada padre solamente</th>
<th>Una vez</th>
<th>Una vez</th>
<th>Dos veces</th>
<th>Una vez</th>
<th>Una vez</th>
<th>Una vez</th>
</tr>
</thead>
<tbody>
<tr>
<td>nobre de cada vez al día</td>
<td>a la semana</td>
<td>mes</td>
<td>mes</td>
<td>veces al mes</td>
<td>años</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Padre de escuela 1</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Padre de escuela 2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Padre de escuela 3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Padre de escuela 4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Padre de escuela 5</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
7. Por favor piense en 5 adultos (quienes no tienen hijos en la escuela de su hijo) con quienes ustedes hablan acerca de la educación de sus hijos. Refiérase a una persona en cada línea. Si usted no habla con ningún adulto acerca de la educación de sus hijos chequee esta casilla. ☐. (Salte al #8 en la próxima página.)

<table>
<thead>
<tr>
<th>De el primer nombre de cada padre solamente</th>
<th>Usted habla con esta persona a menudo?</th>
<th>Es esta persona un pariente?</th>
<th>Esta persona tiene un niño en una diversa escuela?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adulto 1</td>
<td>si no</td>
<td>si no</td>
<td>si no</td>
</tr>
<tr>
<td>Adulto 2</td>
<td>si no</td>
<td>si no</td>
<td>si no</td>
</tr>
<tr>
<td>Adulto 3</td>
<td>si no</td>
<td>si no</td>
<td>si no</td>
</tr>
<tr>
<td>Adulto 4</td>
<td>si no</td>
<td>si no</td>
<td>si no</td>
</tr>
<tr>
<td>Adulto 5</td>
<td>si no</td>
<td>si no</td>
<td>si no</td>
</tr>
</tbody>
</table>

8. Cada cuanto tiempo usted habla con padres que tienen niños en la escuela de su hijo acerca de los topicos que están debajo? Circule una respuesta en cada línea para reporter si esto pasa: Muy a menudo (1), de vez en cuando (2), unas cuantas veces al año (3), o Nunca (4).

<table>
<thead>
<tr>
<th>Unas cuantas frecuencias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cada cuanto tiempo usted y los padres en la escuela de su hijo hablan de las actividades de sus niños?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b. Hable del profesor(es) de sus niños?</strong></td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c. Se provee consejos acerca de ser padres</strong></td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>d. Comparten información acerca de</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>la lectura/lenguaje?</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>matemáticas?</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ciencias?</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>e. Comparten los libros o los títulos del libro</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>para leer con sus niños?</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>f. Hablan acerca del comportamiento de sus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hijos</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>g. Hable de donde enviar a sus niños a la</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>escuela?</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>h. Parte información sobre los acontecimientos</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>de la comunidad (e.g., objetos expuestos</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>del museo, lecturas de la biblioteca, teatro</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>de los niños)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>i. Hable de las políticas y de las reglas de la</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>escuela?</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>j. Comparten información de actividades</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(maestros de música, artes, deportes, clubs)</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>k. Hable de cómo llegar a estar implicado en la</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>escuela?</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. Comparten los juegos, o los nombres de juegos, para jugar con sus niños?

m. Explique sobre cómo sus hijos están cambiando (crecimiento, noviasgos, cambios sociales y emocionales)

n. Se proponen consejos acerca de ayudas de tareas para sus hijos

o. Hablan acerca de los logros de sus hijos en la escuela

E. Su Familia Y Su Niño

9. Estas últimas preguntas nos ayudarán a planear nuevos programas que le podrán ayudar a su familia. Favor de marcar la respuesta que corresponda:

a. ¿En qué escuela estaba su niño alistado el año pasado?

   _____ [Escuela Uno]
   _____ [Escuela Dos]
   _____ [Escuela Tres]

b. ¿En qué grado está su niño alistado este año?

   _____ El cuarto grado
   _____ El quinto grado
   _____ El sexto grado
c. ¿Cómo se describe usted?

____ Hispano o Latino (a)
____ Negro o Afro-Americano
____ Blanco o Caucasio
____ Otro (describa) ________________________

d. Que lengua usted habla en el casa la mayor parte del tiempo?

____ Ingles
____ Español
____ Portugués
____ Otro (describa) ________________________

e. Es su hijo/a elegible para el almuerzo de escuela gratis o reducido de precio?

____ si
____ no

f. En el último año, qué nota recibió su hijo/a en matemáticas la mayor parte del tiempo?

____ 90-100%
____ 80-89%
____ 70-79%
____ 60-69%
____ Por debajo 60%
g. En el último año, qué nota recibió su hijo/a en lenguaje la mayor parte del tiempo?

____ 90-100%
____ 80-89%
____ 70-79%
____ 60-69%
____ Por debajo 60%

GRACIAS POR SU AYUDA!