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Parent involvement: Differences between African Americans and European Americans in one Florida school district

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Parent Involvement: Differences Between African Americans and European Americans
in One Florida School District

by

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A dissertation submitted in partial fulfillment
of the requirements for the degree of
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multiple regression

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DEDICATION

This dissertation is dedicated to my incredibly patient husband, Santos, for pushing me to finish when I was on the verge of giving up on this paper. ¡Gracias, mi amor!

To my parents, Smitty and Vera, for pushing me to do my very best in all my endeavors while growing up. Their unconditional love and support is the reason I am who I am today. ¡Les amo mucho!

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ABSTRACT

The purpose of this research study was to (a) analyze perceptions of parent involvement across raters (i.e., seventh grade students versus their parents) and across ethnicity (i.e., African American versus European American), and (b) examine how perceptions of parent involvement are related to academic achievement. A subsample of archival survey data collected in one central Florida school district was analyzed for the current study. Findings revealed a positive but weak relationship between students' and parents' perceptions of parent involvement regardless of ethnicity. Significant differences were found in the perceived levels of involvement by ethnicity, even when controlling for SES. In general, there was a positive but weak relationship between perceptions of parent involvement and student academic achievement regardless of ethnicity and while controlling for SES. It is suggested that the weak relationships between parent involvement and student achievement found in this study may be due to the types of items used in the surveys, which focused on limited aspects of parent involvement (e.g., PTA membership and help with homework). Further research exploring how the construct of home-school collaboration is best operationalized among diverse groups of families is needed.

CHAPTER I INTRODUCTION

For many years, a rather large discrepancy has existed between the academic achievement levels of European American students versus minority students in the United States (Edwards, 1990; Osborne, 1997; President's Advisory Commission on Educational Excellence for Hispanic Americans [PACEEHA], 1996; Steinberg, Dornbusch, & Brown, 1992; U.S. Department of Education [U.S. DOE], 2005). Most often, when the research is specific, it defines achievement in terms of standardized achievement test scores, grade point averages (GPAs), and high school completion rates, using European American student achievement levels as the norm (Casas, Furlong, Solberg, & Carranza, 1990; Muller, 1993; Osborne; Steinberg et al.). Specifically, the U.S. DOE (2005) reported that on the 2003 National Assessment of Educational Progress (NAEP), White fourth grade students had an average reading scale score of 229 whereas Black and Hispanic fourth graders had average reading scale scores of 198 and 200, respectively (U.S. DOE). In that same year, the eighth grade students had similarly discrepant average reading scale scores (Whites = 272, Blacks = 244, Hispanics = 245; U.S. DOE). With regard to writing, the U.S. DOE reported average scale scores across fourth, eighth, and twelfth grades on the 2002 NAEP. The score discrepancies between European American and minority students were evident across the three grades, with White students ($M_s = 161, 161, \text{ and } 154$, respectively) consistently scoring higher than Black ($M_s = 140, 135, \text{ and } 130$, respectively) and Hispanic ($M_s = 141, 137, \text{ and } 136$, respectively) students (U.S. DOE, 2005). On the 2003 NAEP, similar patterns of performance were found in mathematics, with both Black and Hispanic fourth and eighth graders average math scores ($M_s = 216 \text{ and } 252$ for Blacks; $222 \text{ and } 259$ for Hispanics) significantly lower than White fourth and eighth graders, respectively ($M_s = 243, 288$; U.S. DOE). Finally, there was a difference in status high school dropout rates of 16- to

24-year-olds by race/ethnicity in the 2002 Current Population Survey, with whites dropping-out at a rate of 6.5%, blacks at a rate of 11.3%, and Hispanics at a rate of 25.7% (U.S. DOE). Regardless of the size of the gap, the fact remains that differences continue to exist in the academic performance and progress between European Americans and minority students and one must question as to why the differences continue to exist.

Much of the literature that examines lower levels of minority achievement does so in relation to a variety of variables, including (a) cultural disconnect between home and school, (b) socioeconomic status (SES), (c) racism or prejudice, (d) family structure, and (e) parent involvement (Casas, Furlong, Solberg, & Carranza, 1990; Muller, 1993; Osborne, 1997; Raffaele & Knoff, 1999; Reynolds, 1992). This last variable, parent involvement, is particularly notable because it can serve as a resiliency factor for students when the other four variables often are considered risk factors that can negatively affect both parent involvement and student academic achievement (Christenson, Rounds, & Gorney, 1992; Davies, 1993; Muller; Rioux & Berla, 1993; Sénéchal & LeFevre, 2002). Even more importantly, research has shown that parent involvement is a variable that educators truly can impact whereas the other four variables generally are out of a school's control (Becker-Klein, 1999; Dauber & Epstein, 1993; Epstein, 1984). A teacher may not be able to change the SES level of a student, but that teacher's efforts to get the parent from a low SES family involved can greatly increase the level and quality of involvement (Becker-Klein; Dauber & Epstein; Epstein). Since the research base has indicated that parent involvement can play an important role in reversing the historical trend of low minority achievement, then one could argue that understanding the role of parent involvement at a school district level is necessary in order for educators to impact levels of involvement and achievement.

Parent involvement is presented throughout the literature as important in children's educational outcomes (Christenson, Hurley, Sheridan, & Fenstermacher, 1997; Christenson et al., 1992; Griffith, 1996; Muller, 1993; National Association of School Psychologists [NASP], 1999; Reynolds, 1992; Rioux & Berla, 1993; Sénéchal & LeFevre, 2002). Specifically, it has been found that both at-home and at-school involvement are important to improving academic achievement (Christenson et al., 1992;

Muller; Reynolds; Rioux & Berla; Sénéchal & LeFevre). More specifically, family process variables (e.g., what the family does to support learning) have been found to predict up to 60% of the variance in achievement between students (Christenson, 1995). These variables refer to at-home involvement (e.g., the curriculum of the home) and range from simple parent-child conversations to the discipline orientation of the parents. Christenson presented the following family process variables as those having the strongest association with student performance: (a) parental educational expectations, (b) providing learning materials, (c) providing learning opportunities outside of school, and (d) talking about school with students. Kagan (1984) concluded from an extensive literature review that the combination of school and home parent involvement seemed to be the most effective in improving student achievement. Other mediating variables between parent involvement, both at home and at school, and student achievement include (a) clarification of teachers', parents', and students' roles and responsibilities; (b) improved student behavior; (c) increased student self-esteem; and (d) reduced absenteeism (Christenson, 1995; Comer & Haynes, 1991).

Though there is far less research specific to minority families and the issue of parent involvement, the research that does exist also shows that there is a positive relationship between minority parent involvement and children's academic achievement (Reynolds, 1992; Rioux & Berla, 1993). Comer and Haynes (1991) studied the issue of parent involvement among minority populations and reported great gains in minority student academic achievement as a result of parent involvement both at home and at school. In fact, they found that low-income minority student achievement not only improved but also reached levels that are typical for middle-class Anglo students (as cited in Christenson et al., 1997). Nonetheless, minority parent involvement has been found to be lower than that of European American parents (Christenson et al., 1992; Comer & Haynes; Edwards, 1990; Moles, 1993; Muller & Kerbow, 1993; PACEEHA, 1996; U.S. DOE, 2001), while minority student achievement continues to be lower than European American student achievement across the board (Edwards; Osborne, 1997; Steinberg et al., 1992; U.S. DOE, 2005). Since it has been argued that a lack of parent involvement may be related to a student's lower achievement level (Christenson, et al., 1992; Comer &

Haynes; PACEEHA; Steinberg et al.), then one could argue that minority parent involvement at home or at school should be related to higher minority student academic achievement (Christenson et al., 1997; Christenson et al., 1992; NASP, 1999; Rioux & Berla).

Given the proposed link between parent involvement and minority student achievement, it is critical to know to what extent parent involvement is occurring at a given school or school district in order to make changes that benefit children. Parent involvement, however, is a complex concept that is neither easily observed nor easily measured, which make perceptions of involvement a necessary means of measurement (Baker & Soden, 1998). The studies comparing multiple raters' perceptions of levels of parent involvement are few. Historically, studies have looked at parent or at teacher (rarely student) perceptions but seldom have compared these perceptions, relying on only one self-reported perspective that may not always be accurate or reliable (Baker & Soden). Including more than one perspective increases the social validity of the results by establishing confirming evidence, such that the student's report verifies the parent's report and vice versa.

Understanding multiple raters' perceptions is important to determining parent involvement's impact on students' academic achievement and how differences in levels of involvement among ethnic groups impact the degree of academic achievement. If there is a discrepancy between minorities' and European Americans' perceptions of levels of parent involvement, it may help in explaining why there continues to be an academic achievement gap between minority and European American students. Thus, this current study examined the consistency of perceptions of parent involvement across parents and students, differences in perceptions of involvement among African American and European American ethnic groups, the relationship between perceptions of involvement and student academic achievement, and the consistency of this relationship across the two ethnic groups. The data analyzed for this current study were collected as part of a larger longitudinal study that took place in a large Florida school district.

Research Questions and Hypotheses

The research questions and hypotheses listed in this section were drawn from the extensive parent involvement research base. In instances where hypotheses were not developed, there was no empirical research to justify their development. This study investigated the following research questions and hypotheses:

1. To what extent is there consistency among the perceptions of parents and students regarding the level of parent involvement?
2. What is the direction and extent of differences between African American and European American families on perceptions of parent involvement in education?
 - a. What is the direction and extent of differences between African American and European American students on perceptions of parent involvement at home?
 - b. What is the direction and extent of differences between African American and European American parents on perceptions of parent involvement at home and at school?

Hypothesis 1. The perceptions of involvement will be significantly higher among European American parents as compared to African American parents.

3. What is the direction and strength of the relationship between perceptions of parent involvement in education and student academic achievement?
 - a. What is the direction and strength of the relationship between students' perceptions of parent involvement and their achievement?
 - b. What is the direction and strength of the relationship between parents' perceptions of parent involvement and students' achievement?

Hypothesis 2. There will be a moderately positive relationship between parents' perceptions of parent involvement and students' achievement.

4. Is the relationship between perceptions of parent involvement and student achievement consistent across African American and European American families?
 - a. Is this relationship consistent across African American and European American students when they are the raters?

- b. Is this relationship consistent across African American and European American students when parents are the raters?

Hypothesis 3. There will be consistency in this relationship across African American and European American students when parents are the raters.

Importance of Study

The current study is important because it contributes to the parent involvement research using large amounts of student and parent data that provided the opportunity to perform analyses and examine relationships among variables that are difficult to study. Understanding ethnic differences in parent involvement perceptions and how these relate to students' academic achievement is especially important for school districts trying to improve academic achievement across diverse ethnic groups. This study will serve as a tool in this search for understanding and change.

Limitations

First, the parent response rate was a limitation. The parent response rate was only 48% for the students' seventh grade year, which was on the lower end of the spectrum as compared to other years the parents were surveyed by the Omnibus Project. However, this lower rate was not surprising for seventh grade parents given the rates generally followed a downward trend as the students progressed in grades and it was never the exact same group of parents responding each survey year.

Second, the small number of parent involvement survey items that loaded on to each parent involvement variable was a limitation. Essentially, each variable contained only three to nine parent involvement survey items to which the parent or student responded. These limited measures of parents' and students' perceptions of parent involvement negatively affected reliability and restricted interpretation of the results.

Third, using archival data was a limitation in and of itself. By conducting secondary analyses of already existing data sets, this researcher did not have any control over data collection measures or procedures and had to accept the choices that were made by the Omnibus Project's researchers, such as item selection or sampling strategy. Also, this researcher had to trust that the data were collected using the most reliable and valid methods and reported in the most accurate and honest manner. Nonetheless, there is

always a risk that this was not the case. Having access to such a large sample of parents and students, however, provides benefits that outweigh this risk.

Definition of Terms

Academic Achievement. For this study, academic achievement was defined as students' scores on the Comprehensive Test of Basic Skills, Fourth Edition (CTBS-4).

European American. For this study, European American was defined as people of European heritage who were categorized as "White" in the Omnibus Project's study.

African American. For this study, African American was defined as people of African descent who were categorized as "Black" in the Omnibus Project's study. People of Latin American descent were excluded from the current study because only a small number of Hispanics participated in the Omnibus Project's study.

Parent(s). For this study, a parent was whoever may be involved with the caregiving of the student and completed the surveys, including, but not limited to, a mother or a father (biological or adopted), a grandparent, a guardian, or a brother or sister.

Parent involvement. In this study, parent involvement was defined as parents partaking in the educational process at home and at school by providing the appropriate educational tools and through numerous activities, events, or programs (Christenson et al., 1992; Kerbow & Bernhardt, 1993; Rioux & Berla, 1993).

Socioeconomic Status (SES). For this study, the family's SES was defined by whether a student is eligible for free or reduced lunch where being eligible indicates lower SES and not being eligible indicates higher SES.

CHAPTER II

REVIEW OF THE LITERATURE

Much research has been conducted on parent involvement over the past several decades. The research has included studies on the relationship of parent involvement to students' academic achievement (Griffith, 1996; Keith, Reimers, Fehrmann, Pottebaum, & Aubey, 1986; Stevenson & Baker, 1987), the relationship of parent involvement to students' academic achievement specific to minority populations (Comer & Haynes, 1991; Kerbow & Bernhardt, 1993; Simich-Dudgeon, 1993), and the differences in levels of involvement between European American and minority populations (Menacker et al., 1988; Muller & Kerbow, 1993; Wood & Baker, 1999),

This review of the literature communicates the research findings in the broadly defined area of parent involvement. Discussion of the studies was divided into the following sections relating to the current study's research questions: (a) parent involvement and student outcomes, (b) minority parent involvement and minority student outcomes, and (c) differences in parent involvement among ethnic groups. Given that rater source (e.g., parent, student, etc.) was an organizing variable in the statistical analyses for the current study, the studies presented within the aforementioned sections are organized by rater source, starting with studies with one rater source, then moving into studies with multiple rater sources, and finally describing meta-analysis and single-subject studies that do not report or use rater sources.

Parent Involvement and Student Outcomes

There are multiple ways for parents to be involved in their children's education including providing learning materials, discussing school-related matters with their children, communicating with teachers or administrators, participating in school activities, and volunteering at the school. The following studies examined perceptions of parent involvement and their relationship to students' academic achievement. For

instance, Griffith (1996) investigated the relationship of student academic performance to parents' perceptions of parent empowerment and involvement across a school district. The sample included 11,317 parents (15.3% African American, 7.3% Asian American, 9.9% Hispanic, 43.9% White, and 23.6% Other) of students who attended 42 elementary schools (with an average of 33.2% of children enrolled in the free-or-reduced-lunch program across the schools) in a large suburban school district. Parents completed a 41-item (Likert-type) questionnaire to measure their empowerment and involvement (i.e., perceptions of schools' accommodating parent participation, and parents' participation in at-school activities, respectively). Student scores on the state's criterion-referenced test (CRT), a standardized measure of achievement, were used to assess student academic performance. Since the unit of analysis was the school in this study, the researcher aggregated the data. He found that student CRT scores were significantly correlated with the levels of parent empowerment ($r = .41$) and involvement ($r = .67$) in that schools with higher levels of parent empowerment and involvement had higher CRT scores, even after controlling for teacher, socioeconomic, and ethnicity variables. These findings support the assertion that parent empowerment and involvement are important elements in students' academic performance.

Unlike other national longitudinal studies that investigated younger students, Catsambis (2001) studied the effects of parents' perceptions of parent involvement in education on several indicators of twelfth grade achievement. She analyzed 1988 and 1992 survey data from a subsample of the National Education Longitudinal Study of 1988 (NELS:88) consisting of 13,580 students and their parents. Research findings revealed that parent academic and behavioral supervision at home were positively related to students' achievement growth from eighth to twelfth grade. Additionally, parents who actively encouraged students to prepare for college tended to have students with more achievement growth as well as more course credit completion in core academic subjects. Also related to credit completion, she found that students completed more core credits than their comparable classmates when parents monitored closely their children's coursework or actively sought to acquire information regarding postsecondary

opportunities. This study confirmed that even at the high school level, parents' involvement showed a positive relationship to students' achievement.

In a creative practice-based research study looking at parents' perceptions of involvement at the classroom level, Williams and Ferguson (1999) were successful in actively involving parents in a kindergarten classroom. They used multiple methods of data collection (i.e., archives and documents, assessment results, parent interviews and focus groups, observations, and reflections) and then qualitatively analyzed this data through categorization to give meaning to all the information. They grouped the data by themes and wrote summaries for each theme as the results of the study, using quotes from the families to elaborate or support the themes and summaries. These action researchers found that as classroom volunteers, these parents worked directly with the students, resulting in a lower adult to student ratio and more individualized attention through tutoring and other activities. Additionally, through parent-teacher interactions, parents were better informed of student progress and difficulties and of the specific curricula and instructional techniques the teacher was using. Therefore, these parents became directly involved in problem solving and in curriculum development that best suited their children. By the end of the year, family involvement assisted the students in acquiring greater skills in mathematics, reading, writing, and the arts according to the analyses of the triangulated data. The researchers concluded that efforts to better involve parents were successful and that this involvement made a difference in the lives of their children.

The relationship between parent involvement and educational outcomes was examined by Stevenson and Baker (1987) using only teachers' perceptions of parent involvement. They hypothesized that parents who participate more in school activities have children who do better in school than children whose parents participate less. The sample, drawn from 620 households taking part in the omnibus TIME USE Longitudinal Panel Study, consisted of 179 children (58% female, 42% male, aged 5 to 17 years) and their teachers. Using a cross-sectional analysis of teachers' ratings on parent involvement (i.e., participation in school activities) and student performance (based on a Likert-type scale ranging from 1 to 5), results showed that parent involvement was a significant predictor of school performance ($R = .41$). It was such a significant variable

that when it was added to the regression equation, it caused the significant effect of mother's education ($R = .13$; more than 50% of sample had high school or less) on student performance to drop to near zero ($R = .05$). The researchers concluded that parent involvement does affect school performance and, in fact, "parent involvement mediates almost all the influence of mother's education on the child's school performance" (p. 1356).

Keith, Reimers, Fehrmann, Pottebaum, and Aubey (1986) studied the effects of students' perceptions of parent involvement, homework, and television time on the academic achievement of high school students. Their sample included 28,051 seniors taken from the first wave of the National Center for Education Statistics' 1980 High School and Beyond (HSB) longitudinal study. Seniors' responses to survey questions regarding parent involvement (i.e., in their daily lives through supervision and communication), homework time, and TV time were used, along with the demographic and academic achievement (i.e., test scores) variables, to develop a path analysis that determined the direct and indirect effects of these variables on achievement. Results revealed that homework time (path = .141) had the second strongest direct effect on achievement, the first strongest being intellectual ability (path = .597). Although the direct effect of parent involvement on achievement was negligible (path = -.005), it did have a stronger indirect effect since parent involvement had the second strongest path to homework (.158), with intellectual ability again being the strongest path (.224). The researchers, therefore, suggested that "parents may increase the amount of time their children spend on homework and, indirectly, their achievement by becoming more involved in their education and social lives" (p. 376).

In another national longitudinal study, Muller (1993) researched the association between multiple raters' perceptions of parent involvement and academic achievement (i.e., grades and test scores) to discern if there was a pattern using data from the National Education Longitudinal Study of 1988 (NELS:88). This randomized national sample contained 24,599 eighth graders (3,009 African Americans, 1,527 Asian Americans, 3,171 Hispanics, 299 Native Americans, and 16,317 Whites), and their parents, teachers, and principals. To measure parent involvement and student self-reported grades (among

many other variables), students, parents, teachers, and principals completed surveys, which varied according to their roles in the system. As an additional measure of academic performance, the researcher used reading and mathematics achievement test scores compiled by the National Center for Education Statistics (NCES). Data analyses showed that parent involvement in the school (e.g., PTO participation, volunteering at the school, etc.) was positively and strongly associated with students' grades. In addition, results revealed that parent involvement in the home and community (e.g., after school supervision, talking with the child about current school activities, etc.) was positively and strongly associated with students' achievement test scores. Thus, this study revealed that both forms of parent involvement are related to students' academic performance.

A meta-analysis conducted by Fan and Chen (2001) of 25 research studies (rater sources not reported for these studies) considered the relationship of parent involvement and student academic achievement. The 25 empirical research studies included in this meta-analysis contained about 133,577 participants cumulatively and a total of 92 correlation coefficients on which to do the meta-analyses. Based on their statistical analyses of the parent involvement variables (i.e., parent-child communication, educational aspirations for children, and school contact/participation) and overall academic achievement (e.g., test scores and GPA across academic subjects), these researchers found that parental participation in school activities had a statistically significant positive correlation ($r = .32$) with overall student academic achievement. Additionally, Fan and Chen found that parental educational aspirations for their children had a statistically significant positive correlation ($r = .40$) with overall student academic achievement. Lastly, they found that parent to child communication regarding school matters had a somewhat lower but still statistically significant positive correlation ($r = .19$) with overall academic achievement. Therefore, they reported participation in school activities and educational aspirations as medium effect sizes (and parent communication as a small effect size) for the relation between parent participation and student academic achievement overall.

When considering the studies described in this section, the types of parent involvement most often associated with higher academic achievement were parent

involvement in at-school activities (5 out of 7 studies), parent supervision at home (4 out of 7 studies), and parent-child communication regarding education (4 out of 7 studies). In addition, two studies found parents' acquisition of knowledge or participation in decision-making related to academic achievement, and one study each found parent communication with the school and parents' educational aspirations for their children or attitudes toward education related to achievement. Taken together, these studies provide evidence of a strong positive association between parent involvement and student achievement in general, regardless of the rater source. However, most of these studies did not distinguish between minority and non-minority populations in their results, which make it difficult to determine whether differences exist in how minority parents' involvement relate to minority students' achievement. Nonetheless, there are a growing number of studies that do make this distinction and reveal similar outcomes. This next section will present such studies.

Minority Parent Involvement and Minority Student Outcomes

The following studies examined multiple forms of parent involvement and their relationship to students' academic achievement. For example, the following study investigated a parent education program, an important component to parent involvement that often is not studied in relation to its impact on student performance, using parents as the rater source. As part of a program for getting Spanish-speaking parents involved in education, Bermúdez (1993) conducted a three-year formative evaluation of a parent education program and its impact on parents, teachers, and students. The participants in the parent education program included 117 Spanish-speaking Hispanic mothers and fathers at multiple schools from one area of Houston, Texas. Evaluation results demonstrated gains in parents' participation in school activities, attitudes towards school, and their perception of responsibility regarding their students' schooling. Additionally, these parents' children showed significant increases in reading and language arts achievement as compared to those students whose parents did not participate. The researcher concluded that parent involvement is most effective when it is a comprehensive, long-lasting, and systematic plan that focuses on the needs of the parents, teachers, and students.

At the national level, Shumow and Miller (2001) examined parents' perceptions of parent academic involvement and its impact on young adolescents' academic achievement. Drawing from the Longitudinal Study of American Youth (LSAY), the present study used a nationally representative subsample of married parents of seventh graders (11.3% African American, 3.9% Asian American, 67.7% Caucasian, 10.3% Hispanic) from the participating middle schools ($N = 50$). Parents were interviewed by phone (mothers, $n = 1,039$; fathers, $n = 817$) on several indicators of parent involvement (i.e., visits to school, participation in PTO, and attentiveness to local school issues). Students' self-reported grades in each seventh grade subject were used as the academic measure. After statistically controlling for certain personal characteristics (e.g., parent gender, child gender, parent education level), these researchers found a statistically significant positive association between at-school parent involvement and students' academic grade point average regardless of the students' ethnicity. Thus, this study supported the relationship between minority parental involvement and minority students' educational outcomes.

In a longitudinal study of the effects of parents' and students' perceptions of parent involvement on student academic achievement, Hong and Ho (2005) used latent growth modeling across ethnic groups to determine direct and indirect effects. Similar to other studies in this chapter, these researchers drew their data from the academic achievement test scores (across mathematics, reading, and science) and the student and parent surveys completed as part of the NELS' base year (1988) data collection and two follow-up survey years (1990, 1992). However, Hong and Ho's longitudinal analyses were completed on a subsample of 6,000 randomly selected students that included 1,500 participants from four ethnic groups over the three time waves (i.e., 6.4% Asian Americans, 9.8% African Americans, 12.5% Hispanics, and 64% Whites). Based on the data analyses, these researchers found that the parent involvement factors had both direct and indirect (via student mediating variables) effects on the initial and growth achievement scores across ethnic groups. Specifically, Asian American and African American parents' educational aspirations for their children had a direct effect on students' initial academic achievement, whereas Hispanic parents' school-related

communication with their children had direct effects on students' initial achievement. Also, African American parents' supervision of homework had a direct effect on students' achievement growth. Both White parents' school-related communication with and educational aspirations for their children had a direct effect on students' initial and growth academic achievement. Interestingly, parents' school-related communication with and educational aspirations for their children had significant indirect effects on both initial and growth academic achievement across all four ethnic groups when mediated by students' own educational aspirations. Therefore, this study provided powerful support for the importance of minority parent involvement.

In another longitudinal study, Reynolds (1992) examined the correspondence among multiple raters of parent involvement and their effects on academic achievement. Drawing from the data collected on 1,300 children (95% African American, 5% Hispanic) in the Longitudinal Study of Children at Risk, he used a subsample of 481-second grade students (selected based on parent completion of parent survey in 1988—Year 3 of the study) and their parents and teachers. Demographic, achievement, and parent involvement data were collected through 1986 computer records, standardized achievement test scores (Iowa Tests of Basic Skills) from Years 2 and 3 of the study, and student, parent, and teacher surveys completed in Years 2 and 3 of the study. Reynolds reported that teacher ratings of parent involvement had moderately high correlations ($r = .30-.40$) with minority student achievement. Further analyses using standardized regression also revealed that child, parent, and teacher reports were all significant predictors of Year 2 and Year 3 student achievement. Specifically, school involvement (e.g., communication with school, participate in school activities, volunteer in classroom) as measured by parent and teacher report had significant positive influences on achievement. Also, home involvement (e.g., helping with homework, parents ask and talk about school) as measured by child report had significant positive influences on achievement. It was concluded that this study supports the positive impact of parent involvement on minority student academic achievement regardless of the rater source.

The language minority population often is overlooked in the parent involvement research but their involvement is just as important as other parents' involvement. For

example, Simich-Dudgeon (1993) studied (via parent, student, and teacher perceptions) the impact of the Trinity-Arlington project, a parent involvement program focused on training parents with limited English proficiency (LEP) in home tutoring strategies, on high school student educational outcomes. The sample included over 350 LEP students (from Spanish, Vietnamese, Khmer, and Lao language groups) at two high schools and their parents and teachers. All the parents (80% spoke little or no English) were trained in the teacher-developed Vocationally Oriented Bilingual Curriculum (VOBC), which was comprised of 19 home-learning lessons that require parents to discuss with their students topics that increase understanding of “the planning, procedures, and recourses needed to plan for future careers or vocational choices” (p. 197). Pre/post data were collected using the Ivie Self-Concept test, the SOLOM English oral language proficiency subtests, and a test of English proficiency that was locally developed and normed. It was reported that students made significant gains, as revealed by scores on the SOLOM, in English comprehension skills, fluency, grammar knowledge, pronunciation, and vocabulary after implementation of the parent-tutoring program. Significant gains were also made on the Paragraph-writing subtest of the locally normed English proficiency test. According to parent, student, and teacher surveys, a benefit of the in-home tutoring intervention was that the nature and frequency of parent contacts with schools increased along with their knowledge of the school system. Overall, the Trinity-Arlington parent-training program provided evidence of the benefits of LEP parent involvement in the education of LEP children.

Looking again to longitudinal data, Hill et al. (2004) studied the relationship among parent, student and teacher perceptions of parent academic involvement, student academic achievement, and other student variables from seventh grade through eleventh grade. This study’s sample of 463 families (83% European Americans, 16% African Americans, 1% other ethnic groups) was drawn from a larger, multi-site longitudinal study sample in Tennessee and Indiana. The parent academic involvement factor included teacher, parent, and student ratings of parent involvement (i.e., communication with school, communication with child about school, providing educational activities at home, and participation in school activities) during seventh grade. Academic

achievement was measured by student grades and standardized test percentiles in math and language arts during ninth grade. Students' school behavior problems were measured on a teacher checklist during eighth grade. After running structural equation models using these variables, the researchers found a statistically significant indirect relationship between seventh grade parent involvement and ninth grade student achievement via the eighth grade behavior problems such that higher parent involvement related to fewer behavior problems, which related to higher achievement. Based on hierarchical regression analyses, these researchers concluded that these positive results held across ethnic groups; however, the relationship between parent involvement and academic achievement (via student behavior) was somewhat stronger for African Americans than for European Americans. Thus, parent involvement had an indirect effect on student achievement, particularly for African American students.

A meta-analysis conducted by Jeynes (2005) of 41 research studies (rater sources not reported for these studies) considered the relationship of school parent involvement programs (i.e., school initiatives that encourage or require parent participation in children's education), as well as specific components of parent involvement (e.g., parent-child communication, and reading with child), and the academic achievement of urban elementary school students. The 41 quantitative research studies included in this meta-analysis contained more than 20,000 participants combined (study sample size $M = 558.9$), all from urban settings and tending to include high numbers of ethnic minority students. Jeynes used the Hedges' g measure of effect size to provide a more conservative estimate of effect size. He also used statistical procedures to distinguish between those studies that used control variables (e.g., socioeconomic status, race, gender) and those that did not. The researcher found that parent involvement programs generated statistically significant effect sizes with regards to their impact on overall academic achievement (without controls, $.31, p < .05$; with controls, $.19, p < .05$) and, specifically, on standardized tests (without controls, $.40, p < .01$). In addition, Jeynes found that parents' involvement via reading regularly with their children and via parent and child communication about school activities both yielded statistically significant effect sizes regarding the impact on overall academic achievement (without controls, $.42,$

$p < .0001$ and $.24, p < .0001$, respectively) and on standardized tests (without controls, $.42, p < .0001$ and $.21, p < .0001$, respectively). Finally, he found that parents' involvement via high parental expectations of student's achievement revealed statistically significant effect sizes for overall academic achievement (without controls, $.58, p < .05$). Jaynes concluded that parent involvement was effective at improving minority student achievement.

Unlike most of the parent involvement studies described in this chapter, the following study approached this line of research from a single-case design methodology. Specifically, the effects of in-home parent tutoring on children's academic performance at home and at school were investigated by Thurston and Dasta (1990) in two related studies (with a preliminary study – Study 1 – on parent tutoring training not discussed here). Using a single subject reversal research design with one black parent and two white parents of urban elementary school children in Study 2, they trained these parents on how to tutor their children in math facts and then measured differences in performance using tutoring session daily scores and weekly pre/post scores at home, Wide Range Achievement Test (WRAT) pre/post scores and criterion-referenced math test (designed for the study) scores at school, as well as math facts test (given by the teachers every morning) grades. The results showed that baseline (before tutoring began) performance was low across measures for all children. The first tutoring phase showed high levels of performance across measures and children. The reversal phase had similar levels of low performance as compared to the baseline phase, and the second tutoring phase had similar levels of high performance as compared to the first tutoring phase. This study demonstrated that simple parent tutoring procedures were effective in increasing students' acquisition of basic math skills that were generalizable to the classroom setting.

In Study 3, Thurston and Dasta (1990) used a single subject reversal research design with one black parent of a fourth grade child to investigate the effects of in-home spelling tutoring on the child's spelling performance at home and at school. They trained the parent on how to tutor her child in spelling and then measured differences in performance using tutoring session weekly pre/post scores at home, as well as WRAT pre/post scores administered at school and weekly classroom spelling test grades. The

results revealed a very low baseline and reversal phase performance across measures and very high performance during both tutoring phases across measures. Again, this study demonstrated the effectiveness of parent involvement through tutoring on the academic performance of an ethnic minority student.

In another single-case designed study, the effects of parent involvement on kindergarten students' academic performance were investigated by Lopez and Cole (1999). The sample consisted of five Puerto Rican children (4 females, 1 male), who were selected for the study because they knew at least 5 but less than 26 letters of the alphabet, and their parents (only one was not English proficient), who were trained to use the folding-in technique as an intervention. Using a multiple-baseline design across participants, the number of known letters (NKL) and the letter-naming rate (LNR) were measured during baseline, intervention, and follow-up phases to evaluate the effectiveness of the parent-implemented intervention at home. The results indicated a dramatic increasing trend for all five students in NKL from baseline to intervention, with high levels of NKL being maintained in the follow-up phase (e.g., most could identify at least 50 upper- and lower- case letters). Though the results were not so dramatic for LNR, there was a rate increase from baseline to intervention (from 3 to 15 letters per minute up to 17 to 37 letters per minute), with similar rates being maintained in follow-up. The researchers concluded that these parents' involvement in their children's learning at home directly impacted the minority students' academic performance.

When considering the studies described in this section, the types of parent involvement most often associated with higher academic achievement were parent involvement in educational activities in the home, such as tutoring or homework assistance (6 out of 10 studies), parent participation in at-school activities (5 out of 10 studies), parent-child communication regarding education (4 out of 10 studies), and parents' educational aspirations for their children or attitudes toward education (4 out of 10 studies). In addition, three studies found parent communication with the school related to achievement, two studies found parents' acquisition of knowledge or participation in decision-making related to academic achievement, and one study found parent supervision in the home related to student achievement. In sum, the results of

these studies support a strong positive association between minority parent involvement and minority student academic achievement. These studies, therefore, provided evidence that parent involvement is just as important for minority student achievement as it is for majority student achievement. However, it appears that differences exist in the levels of involvement between minority and majority parents. The next section of this review of the literature will describe what is known currently about these differences.

Differences in Parent Involvement Among Ethnic Groups

Regardless of the positive relationship between parent involvement and student outcomes, the levels of involvement seem to be consistently lower for minority parents over years of research. The following studies demonstrate this discrepancy. For instance, Griffith (1996) aggregated parent ratings in order to use the school as the unit of analysis in examining whether differences existed in the levels of parent empowerment and involvement (e.g., perceptions of schools' accommodating parent participation, and parents' participation in at-school activities, respectively) among minority and majority populations. Using an ethnically and socioeconomically diverse sample of 11,317 parents across 42 schools, he found lower levels of parent empowerment and involvement (and CRT achievement test scores) at schools with higher percentages of African American and Hispanic students and students from low-income families. He recommended that future researchers need to take a closer look as to why these differences are occurring and how to remedy them.

Using only parent ratings at a school district level, Wood and Baker (1999) investigated behaviors, beliefs, and preferences regarding school-based parent education events or programs among culturally diverse, low-income parents. The sample consisted of 395 parents from two elementary schools located in a small southeastern city in the United States. This sample was 58% African-American, 33% Caucasian, and 3% Hispanic (with other ethnic groups each making up 1% or less of the remaining 6% of respondents). The educational attainment of these parents was generally low, with 23% having less than a high school education, 58% having a high school education, and 37% having some post-high school education. Parents anonymously completed a 49-item parenting preferences questionnaire developed for this study, which was disseminated

and returned via their children to their respective schools. A 4-point Likert-type response format was used to measure parent behaviors and beliefs. Using a series of three-way ANOVAs, results showed significant race effects in interest in attending and reported attendance, with African-American parents ($M = 2.66$) conveying more interest in attending parent education events than Caucasian parents ($M = 2.20$) but the Caucasian parents ($M = 3.00$) reporting attendance at these events more often than the African-American parents ($M = 2.34$). The results also revealed a similar pattern of low attendance among parents with low education or of low-income. The researchers concluded that there was a clear differentiation in their findings between parent interest and actual participation, which is in line with recent research indicating that low-income, minority parents want to be involved with their children's education but that economic or pragmatic factors hinder their participation in the schools.

Aggregating ratings of administrators – a rater rarely used in the parent involvement research – in order to use the school as the unit of analysis, the U.S. Department of Education's National Center for Education Statistics (U.S. DOE; 1998) reported on a national study examining a variety of issues related to parent involvement, including attendance at school events. A stratified national sample of 900 schools (810 respondents) consisted of elementary schools selected from the NCES Common Core of Data Public School Universe File. Since the unit of analysis was the school, minority status was determined by percent minority enrollment: 1) Less than 5% was 20% of the sample; 2) 5-19% was 18% of the sample; 3) 20-49% was 21% of the sample; and 4) 50% or more was 41% of the sample. Principals or principal designees completed the *Survey on Family and School Partnerships in Public Schools, K-8* on behalf of their schools. The results of this survey revealed that when rating parent attendance at five kinds of school activities (i.e., parent-teacher conferences, open house/back-to-school night, arts events, sports events/field days, and science fairs/academic demonstrations), the schools with high minority enrollment (20% or more) reported much less parent attendance at all activities than schools with low minority enrollment (below 20%). The report recommended that future research should address approaches schools can take to

successfully appeal to parents from minority groups since the schools clearly were seeing less involvement from these groups.

In a study using both student and teacher ratings at the school district level, Menacker, Hurwitz, and Weldon (1988) examined home-school relations of inner-city schools as part of a larger study of discipline that took place in Chicago inner-city schools serving low-income African-American students. They surveyed all middle school teachers at the inner-city schools being studied, as well as sixth and eighth grade African-American students, on their perceptions relevant to issues of home-school cooperation. The results of the teacher survey revealed that only 47% of the faculty supported strong parent involvement in school affairs and policy, with 30% against parents having anything to say about school issues. Sixty one percent of the students surveyed reported that their parents did not get involved in school activities. On the other hand, 86% of the students noted that their parents did help with homework. It was concluded by the researchers that most teachers at these inner-city schools were resistant to having low-income, minority parents involved in school affairs, which led to lower minority parent involvement at the school per student reports.

Teachers' and parents' perceptions of home-school collaboration were examined by Leitch and Tangri (1988) at two Washington, D.C. junior high schools serving a black, low-income population. The researchers interviewed 29 veteran teachers (1 Asian and 28 black) and 60 black families (3 custodial parents, 6 grandmothers, and 51 mothers). Using one questionnaire with structured and open-ended questions for both groups, the teachers were interviewed at school and families at their homes. Questions focused on perceptions of home-school contacts, such as form, frequency, satisfaction and who initiated. Teachers perceived not even moderate involvement of parents at school, with some estimating only 1% of parents initiate contact and only 5% contact the school even following the receipt of failure notices. As a result, teachers stated that they, generally, did not ask parents for help. Yet, many parents in the study reported that they wanted to do more at school but more than a third of them responded that they had never been asked to do anything when questioned as to what their children's schools had asked them to do. Although there was no comparison to European American parents' school

involvement in this study, the teachers' perceptions of only 1% to 5% of parent contact is an extremely low level of minority parent involvement at these schools.

Using the NELS:88 parent and student survey data described in studies in the previous sections, Muller and Kerbow (1993) investigated the differences in parent involvement, including form and level, among a variety of ethnic groups, and the relationship of these differences to student academic performance. As mentioned earlier, this randomized national sample consisted of 24,599 eighth graders (3,009 African Americans, 1,527 Asian Americans, 3,171 Hispanics, 299 Native Americans, and 16,317 Whites), and their parents. The results of the student surveys revealed that white parents discussed current school experiences with their children at a higher rate than did any of the minority parents ($M_s = 1.48$ for whites, 1.38 for African Americans, 1.37 for Asian Americans, and 1.31 for Hispanics with values ranging from 0 = Never to 2 = 3 or more times). A strong positive relationship between grades and rates of talking about school also was found when student grades were controlled in the analyses. However, after controlling for student grades, the differences in rates of talking about school between white and minority parents were found to be even larger than in the initial analysis. They also found that white parents tended to check their children's homework more frequently than African American and Hispanic parents. This study provides evidence that clear differences exist in parent involvement between minority and majority parents.

In summary, these studies show that differences do exist between the levels of involvement of minority parents versus majority parents. Consistently, minority parents showed lower levels of involvement than European American parents regardless of their interest in participating in their children's education or their educational aspirations for their children. These differences pose a serious problem since, as reviewed previously, it has been found repeatedly that parent involvement is associated with better educational outcomes regardless of ethnicity. Thus, it is critical to ascertain the levels of parent involvement among minority and majority parents at a school district level in order to determine if administrators, faculty and staff need to restructure their approaches to getting parents involved that will result in improvements in the educational outcomes of all students but especially minority students.

The Current Study

Given the proposed link between parent involvement and minority student achievement as described in the previous sections, it is critical to know to what extent parent involvement is occurring at a given school or school district in order to determine if changes need to be made to increase levels of involvement. Parent involvement, however, is a complex concept that is neither easily observed nor easily measured, which make perceptions of involvement a necessary means of measurement (Baker & Soden, 1998). Unfortunately, the studies comparing multiple raters' perceptions of levels of parent involvement are few. Historically, studies have looked at parent or at teacher (rarely student) perceptions but seldom compare perceptions, relying on only one self-reported perspective that may not always be accurate or reliable (Baker & Soden). Including more than one perspective increases the social validity of the results by establishing confirming evidence, such that the student's report verifies the parent's report and vice versa.

Understanding multiple raters' perceptions is important to determining parent involvement's relation to students' academic achievement and how differences in levels of involvement among ethnic groups relate to the degree of academic achievement. If there is a discrepancy among the raters' perceptions of levels of parent involvement along ethnic lines, it may help in explaining why there continues to be an academic achievement gap between minority and European American students. Unlike most other parent involvement studies that have neglected the students' view, this study includes the students' perceptions as a key component of the analyses. Thus, this study used multiple raters' (i.e., parent and student) perceptions to analyze levels of parent involvement among African American and European American ethnic groups, the relationship between these perceptions and student academic achievement, and the consistency of perceptions across raters. These results can be utilized by the participating school district personnel to determine if changes need to be made to their strategies to involve parents, especially African American parents, in order to positively impact students' academic outcomes.

The data analyzed for this current study were collected as part of a larger longitudinal study that took place in a large Florida school district from 1989 to 2002. Participants included teachers, parents, and students, but not all participant groups were surveyed every year. The results of the completed parent involvement items were compared by participant groups and along ethnic lines for grade 7. Including the students' perceptions in the analyses added importance to the current study because this perspective is limited in the parent involvement literature. Additionally, this study furthered the parent involvement research by looking at the perceptions of involvement and its relationship to students' achievement across raters.

CHAPTER III

METHOD

This chapter will present the various methodological aspects of the current study. The archival data source was described first, including cohort demographics and original study procedures. Next, the current study's participants and variables were presented. Finally, this study's procedures and data analysis were summarized.

Data Source

The Omnibus Project of Pinellas County Schools in Florida collected information about the 1989-1990 Kindergarten class, which initially included 8,268 students, for the 13 years of their schooling. This longitudinal study monitored trends and changes in the students' families, personal characteristics, and academic progress. The original cohort of 8,268 consisted of 48.5% males and 51.5% females, with 40.8% of all students on free or reduced lunch. The racial/ethnic breakdown was as follows: 78.1% white, 18.7% black, and 3.2% other.

Annually, surveys, which were preprinted with the student's name and identification number on computer-scannable forms, were administered to Omnibus students, their parents, and/or their teachers in late spring. Participants were surveyed using a mixture of measures, scales, and individual items involving a range of academic, behavioral, and family variables. Each year, a committee consisting of academic researchers and school personnel met to identify domains of interest and select specific items to be included on the survey for that year. Committee membership and interest domains changed every year, with these changes reflected in the composition of the survey each year. In addition to Omnibus survey data, data were gathered from the Pinellas County Student Information System (SIS). The SIS is a comprehensive collection of data files containing student performance (e.g., class grades, attendance,

disciplinary actions), demographic (e.g., gender, race, age), and other classification data (e.g., federal program eligibility and participation) on every student in the school system.

The superintendent of the school district enlisted the support of parents, school principals, and teachers before the data collection began. To encourage participation throughout the 13 years of data collection, parents were informed of surveys through school newsletters, principals were informed of surveys at the superintendent's meetings, and students were given small incentives (e.g., bookmarks, magnets) to return parent surveys. Each spring, surveys were distributed to the teachers of the Omnibus cohort by the school-wide mail system. Then, teachers had students complete their questionnaires during school hours. Students took home the parent surveys and had parents complete them. Parents were advised that all information provided was confidential, that reports based on data collected would contain information only about groups of students, and that no individual student information would be reported. Parents returned the questionnaires to the schools or directly to the Omnibus Project office in a pre-addressed envelope. Parent return rates varied from year to year but were much higher during the elementary school years versus the middle school years (about 50% versus about 30%, respectively).

Additionally, students who left Pinellas County Schools but remained in Florida were tracked through the Florida Department of Education information system. After the students' new schools were identified, surveys were sent to the appropriate school district to be distributed to the respective schools. The completed surveys were then returned to the Omnibus Project office in postage-paid, pre-addressed envelopes. For those Omnibus students who left the state and provided a forwarding address, the Omnibus Project mailed surveys to the parents. Parents hand-delivered any teacher surveys to their children's teachers, and when surveys were completed, they were returned to the Omnibus Project office in postage-paid, pre-addressed envelopes.

When surveys were returned, they were first visually inspected for stray marks and to ensure that identifying information had been completed properly on the response sheet. Response sheets were then scanned, and output files were created. The output data files were examined for miscoded responses and duplicate student identification numbers. Original response sheets were examined and the erroneous case was deleted

from the data file in the case of a student appearing more than once. Miscoded responses, such as a value greater than the possible range of values, were recoded (e.g., set to 99) so that they were distinguished from missing data.

Participants

The participants for this study were a subsample of students and parents who participated in the Omnibus Project. In order to have been selected for the current study, participants needed to meet the following inclusion criteria: 1) African American (i.e., categorized as Black in the Omnibus Project’s study) or European American (i.e., categorized as White in the Omnibus Project’s study), and 2) availability of the relevant seventh grade achievement data. A listwise deletion of missing data per variable was employed during the analyses. This meant that the statistical program deleted raters (either students or parents) who had missing data on the particular variable being analyzed, such that sample size varied depending on which variable was being analyzed. The current study’s total final sample included 3562 seventh grade students and their parents (see Table 1 for demographics) who participated in Pinellas County School District’s Omnibus Project study and met the aforementioned criteria.

Table 1
Participant Demographics

| Groups | <i>N</i> | % | Omnibus Initial Kinder. Cohort % |
|----------------------------------|----------|-------|----------------------------------|
| Students (7 th grade) | 3562 | 100.0 | 96.8 |
| Females | 1884 | 52.9 | 51.5 |
| Males | 1678 | 47.1 | 48.5 |
| African American | 666 | 18.7 | 18.7 |
| European American | 2896 | 81.3 | 78.1 |
| Free/Reduced Lunch | 1137 | 31.9 | 31.9 |

Measures

In this study, the key variables were students’ and parents’ perceptions of parent involvement, students’ academic achievement scores, and two demographic variables.

Demographic variables. The demographic variables included were socioeconomic status (SES) and ethnicity. SES was measured by eligibility for free or reduced lunch and was coded dichotomously for each participant (i.e., 0 for eligible and 1 for not eligible). Ethnicity, which was self-reported by the parents on the students' kindergarten registration form, was also coded dichotomously for each participant (i.e., 0 for African American and 1 for European American).

Academic achievement. The Comprehensive Test of Basic Skills, Fourth Edition (CTBS-4; CTBS, 1990) was used as the measure of students' academic achievement. For ease of comparison, the CTBS-4 normal curve equivalent (NCE) scores were used in this study. The CTBS-4 is a group-administered standardized achievement test in reading, language arts, and mathematics for students in kindergarten through twelfth grade. The CTBS-4 was standardized in the Spring and Fall of 1988 based on a nationally representative student population sample during both norming periods (Spring: 156,000 students; Fall: 167,000 students).

The CTBS-4 standardization test scores were reported to have good reliability and validity. The test-retest reliability coefficients across grades ranged from .80 to .94 for the Total Battery. Regarding internal consistency, the Kuder-Richardson Formula 20 (K-R 20) reliability coefficients ranged from .90 to .95 for the Total Battery across all grades. To examine to what degree the three components of the CTBS-4 (i.e., Benchmark, Survey, and Complete Battery) provided comparable scores, a cross-validation study was conducted. The results indicated medium to high correlations (Benchmark versus Survey: $r = .74$ to $.90$; Benchmark versus Complete Battery: $r = .71$ to $.90$) across grade levels and academic subjects when comparing components.

Parent involvement. A principal axis factor analysis (with promax rotation and using Kaiser extraction that retains factors with eigenvalues greater than one) of the seventh grade parent involvement survey items was computed to determine how many factors the items divided into and the factor loading of these particular items. The results of the factor analysis revealed five separate item groupings or factors. Once the factor analysis was completed, the reliabilities of the parent involvement items were computed using Cronbach Alpha to determine if indeed these item groupings could be combined to

create parent involvement variables for the two groups of raters. The factor loadings and alpha coefficients for these factors are listed in Tables 2-3. The reliabilities of these five factors ranged from a low of .57 (Homework Help) to a high of .72 (Student Parent Involvement), indicating moderate reliabilities across the factors. Therefore, these five factors yielded two student rater parent involvement variables and three parent rater parent involvement variables representing their perceptions of the extent to which a parent had been supportive or involved in the student's education (see Tables 2-3 for variable descriptions).

Table 2
Factor Analysis Results for Student Perception Parent Involvement Variables

| Variable Label | Survey Items | Factor Loading | Factor α |
|---------------------------------|--|----------------|-----------------|
| Homework Help (HW_Help) | During this school year, which of the following people have helped you with homework or other school projects? | | .57 |
| | Mother | .50 | |
| | Father | .53 | |
| | Brother/Sister | .30 | |
| | Grandparent | .35 | |
| | Other relative | .39 | |
| | Adult not related to you | .46 | |
| | Teacher | .34 | |
| | Classmate or friend | .44 | |
| Student Parent Involvement(SPI) | My parents/guardians: | | .72 |
| | Help me with my homework. | .62 | |
| | Ask me about my homework. | .54 | |
| | Check my homework. | .65 | |
| | Make sure that I have school materials. | .55 | |
| | Encourage me to work hard in school. | .44 | |
| | Attend school events. | .48 | |
| | Know at least one of my teachers. | .32 | |
| | Attend PTA meetings. | -.85 | |
| | Volunteer at my school. | -.53 | |

Note. Principal axis factor analysis with promax rotation. HW_Help ($N = 3537$) response options: 0=No, 1=Yes. SPI ($N = 3408$) *response options: 1=Always, 2=Sometimes, 3=Never (*Later recoded: 1=Never, 3=Always).

Procedures

This researcher began the current study by obtaining copies of every student, parent, and teacher survey for the 13 years of the Omnibus Project study. The surveys were reviewed, and individual items were selected to create a pool of items that were related to parent involvement. Next, a telephone conversation was arranged with Pinellas County's Omnibus Project Manager to confirm the availability of demographic,

achievement, and survey data. He reported that achievement data were collected in March or April each year of the study and that survey data were collected immediately following this.

Table 3
Factor Analysis Results for Parent Perception Parent Involvement Variables

| Variable Label | Survey Items | Factor Loading | Factor α |
|-------------------------------------|---|----------------|-----------------|
| Parent Involvement at Home(PI_Home) | Choose all that are available for your child's use in the home? | | .58 |
| | Books | .65 | |
| | Magazines | .62 | |
| | Encyclopedia/dictionary | .58 | |
| Parents Doing (P_Doing) | Choose all that you and/or your spouse have done since August 1996: | | .58 |
| | Volunteered at the child's school | .50 | |
| | Attended open house | .30 | |
| | Participated in, or attended a meeting of the PTA/SAC | .71 | |
| Parents Talking (P_Talk) | Choose all that you and/or your spouse have done since August 1996: | | .61 |
| | Spoke to teacher about the child's behavior | .53 | |
| | Spoke to teacher about the child's schoolwork | .74 | |
| | Talked to the school principal or assistant principal about your child's behavior | .89 | |
| | Talked to the school principal or assistant principal about your child's schoolwork | .46 | |

Note. Principal axis factor analysis with promax rotation. PI_Home, P_Doing, P_Talk response option: 0=No, 1=Yes. $N = 2504$ per variable

The IRB application was completed and submitted on April 30, 2004. IRB approval was obtained on May 11, 2004 as an exempted study. Finally, the Omnibus Project Manager developed a subsample database from the full Omnibus Project database that was specific to the current study's data requirements. These data were formatted in SPSS and provided to this researcher on a CD-ROM. Initially, all the parent involvement and demographic data were examined across all the grades (i.e., items sampled each year, raters surveyed each year, return rates). After close examination of these data, it was determined that multiple grade-level comparisons with the parent involvement items were not feasible nor would be meaningful. Neither was it meaningful to include the Hispanic population in the analyses given the minute number of Hispanic participants in the Omnibus Project's study. The teachers' responses also could not be included in the analyses since they only answered one item regarding parent involvement. Based on the

factor and reliability analyses with the fifth and seventh grade data (years that both parents and students responded to parent involvement items), the seventh grade data was chosen for the final analyses given its adequate factor reliabilities.

Data Analysis

Descriptive statistics were computed for students' and parents' responses to each parent involvement survey item. The descriptive statistics included the minimum, maximum, mean, standard deviation, skewness, and kurtosis of each item. These descriptive statistics were needed to make further statistical comparisons.

Then, the following research questions were addressed through correlation (1 and 3), general linear model (2), and multiple regression (3 and 4) analyses: (1) To what extent is there consistency among the perceptions of parents and students regarding the level of parent involvement? (2) What is the direction and extent of differences between African American and European American families on perceptions of parent involvement in education? (3) What is the direction and strength of the relationship between perceptions of parent involvement in education and academic achievement? (4) Is the relationship between perceptions of parent involvement and student achievement consistent across African American and European American families?

CHAPTER IV

RESULTS

This chapter will present the results of the data analyses. In addition, each of the four research questions will be answered, and their corresponding hypotheses will be addressed in terms of whether or not they were supported by the data. The data for this study were analyzed using SPSS Version 14.0 for Windows. An alpha level of .05 was used for all statistical tests.

Treatment of the Data

In order for student and parent responses to be included in the data analyses, students and parents had to have responded to the parent involvement survey items during the students' seventh grade year. For the current study, the student and parent respondents also had to fall into one of two ethnic categories to be included: African American (categorized as Black in the Omnibus Project's study) or European American (categorized as White in the Omnibus Project's study).

Descriptive Statistics

Appendix A shows means and standard deviations for parent and student responses to the parent involvement items during the students' seventh grade school year. For the parent items rated dichotomously (i.e., 0=No, 1=Yes), the mean ratings ranged from .14 (talk to principal about schoolwork) to .97 (books available for child's use in home). For the student items rated dichotomously, the mean ratings ranged from .15 (homework help by other relative) to .80 (homework help by mother). Finally, for the student items rated on a Likert-scale (i.e., 1=Always, 2=Sometimes, 3=Never, later recoded), the mean ratings ranged from 1.20 (parents encourage hard work) to a 2.66 (parents attend PTA meetings).

Table 4
Descriptive Statistics of Study Variables

| Variable | <i>N</i> | Min | Max | <i>M</i> | <i>SD</i> | Skewness | Kurtosis |
|------------|----------|------|-------|----------|-----------|----------|----------|
| HW_Help | 3537 | 0.00 | 8.00 | 3.25 | 1.74 | 0.24 | -0.33 |
| SPI | 3408 | 9.00 | 27.00 | 18.74 | 3.19 | -0.16 | -0.09 |
| PI_Home | 2504 | 0.00 | 3.00 | 2.79 | 0.56 | -3.00 | 9.21 |
| P_Doing | 2504 | 0.00 | 3.00 | 1.18 | 0.98 | 0.43 | -0.83 |
| P_Talk | 2504 | 0.00 | 1.00 | 0.36 | 0.30 | 0.48 | -0.58 |
| Acad. Ach. | 3021 | 1.00 | 99.00 | 60.00 | 21.73 | -0.11 | -0.47 |
| Ethnicity | 3562 | 0.00 | 1.00 | 0.81 | 0.39 | -1.61 | 0.58 |
| SES | 3512 | 0.00 | 1.00 | 0.68 | 0.47 | -0.75 | -1.43 |

Note. Student perception parent involvement variables: HW_Help=Homework Help; SPI=Student Parent Involvement. Parent perception parent involvement variables: PI_Home=Parent Involvement at Home; P_Doing=Parents Doing; P_Talk=Parents Talking.

As previously indicated, the factor analysis produced two student perception (HW_Help and SPI) and three parent perception (PI_Home, P_Doing, and P_Talk) parent involvement variables. Table 4 presents the descriptive statistics for these parent involvement variables, as well as for the academic achievement and demographic variables. Tables 5-6 present the descriptive statistics of these variables by ethnic group. Given that the skewness and kurtosis of the Parent Involvement at Home variable (specifically, for the European American sample but not the African American sample) was outside the acceptable range of statistics (e.g., -1.5 to 1.5), it violated the assumption of normality necessary for correlation, regression, and general linear models. Therefore, numerous transformations were attempted to correct this violation, including logarithm, logarithm 10, logarithm gamma, square root, cube root, square, cube, and to the fourth power. Although the logarithm gamma, cube, and to the fourth power brought the skewness and kurtosis of this variable close to the acceptable range, they were nonetheless still outside the acceptable range such that the Parent Involvement at Home variable continued to violate the assumption of normality. Given that all the study results were statistically significant across the original Parent Involvement at Home variable and its transformations (including the three closest to the acceptable range), this researcher chose to report and interpret (with caution) the statistical analyses using the original variable rather than one of its transformations for the sake of simplicity.

Table 5
Descriptive Statistics of Study Variables for African Americans

| Variable | <i>N</i> | Min | Max | <i>M</i> | <i>SD</i> | Skewness | Kurtosis |
|------------|----------|------|-------|----------|-----------|----------|----------|
| HW_Help | 662 | 0.00 | 8.00 | 2.87 | 1.81 | 0.44 | -0.40 |
| SPI | 622 | 9.00 | 27.00 | 19.14 | 3.10 | -0.18 | 0.10 |
| PI_Home | 403 | 0.00 | 3.00 | 2.47 | 0.83 | -1.43 | 1.07 |
| P_Doing | 403 | 0.00 | 3.00 | 0.67 | 0.92 | 1.19 | 0.35 |
| P_Talk | 403 | 0.00 | 1.00 | 0.44 | 0.30 | 0.22 | -0.78 |
| Acad. Ach. | 538 | 1.00 | 99.00 | 43.61 | 18.93 | 0.16 | -0.23 |
| SES | 661 | 0.00 | 1.00 | 0.29 | 0.45 | 0.94 | -1.12 |

Note. Student perception parent involvement variables: HW_Help=Homework Help; SPI=Student Parent Involvement. Parent perception parent involvement variables: PI_Home=Parent Involvement at Home; P_Doing=Parents Doing; P_Talk=Parents Talking.

Table 6
Descriptive Statistics of Study Variables for European Americans

| Variable | <i>N</i> | Min | Max | <i>M</i> | <i>SD</i> | Skewness | Kurtosis |
|------------|----------|------|-------|----------|-----------|----------|----------|
| HW_Help | 2875 | 0.00 | 8.00 | 3.33 | 1.71 | 0.21 | -0.27 |
| SPI | 2786 | 9.00 | 27.00 | 18.65 | 3.21 | -0.16 | -0.12 |
| PI_Home | 2101 | 0.00 | 3.00 | 2.85 | 0.46 | -3.72 | 15.23 |
| P_Doing | 2101 | 0.00 | 3.00 | 1.28 | 0.97 | 0.34 | -0.83 |
| P_Talk | 2101 | 0.00 | 1.00 | 0.35 | 0.30 | 0.54 | -0.49 |
| Acad. Ach. | 2483 | 1.00 | 99.00 | 63.55 | 20.64 | -0.15 | -0.41 |
| SES | 2851 | 0.00 | 1.00 | 0.77 | 0.42 | -1.26 | -0.41 |

Note. Student perception parent involvement variables: HW_Help=Homework Help; SPI=Student Parent Involvement. Parent perception parent involvement variables: PI_Home=Parent Involvement at Home; P_Doing=Parents Doing; P_Talk=Parents Talking.

Data Analysis

In order to answer the research questions, Multivariate Analysis of Variance, Multivariate Analysis of Covariance, multiple regression, and correlations were computed using the parent involvement variables, the academic achievement data, and the ethnicity and SES demographic variables. This section is a presentation of those results, including a number of tables to assist in the illustration of some of these results. The data analysis is divided into four subsections to answer each of the four research questions and examine the related hypotheses.

Research Question 1 Analyses. To what extent is there consistency among the perceptions of parents and students regarding the level of parent involvement? Pearson correlation was computed to determine the relationship among the parents' and students' perceptions of parent involvement. The Pinellas Omnibus Project reported that the

surveys were completed by each participant individually; therefore, the assumption of independence was met for these data. The assumption of normality was met for all the data except on the Parent Involvement at Home variable. The descriptive statistics revealed that the data for this variable violated the assumption of normality; therefore, the Parent Involvement at Home variable was interpreted with caution. Table 7 presents the correlations of the parent involvement variables (with student perception variables running across the top and parent perception variables running down the side) for the current study's sample overall.

Table 7
Correlations of Parent Involvement Variables

| Parent Variables | Student Variables | |
|----------------------------|-------------------|----------------------------|
| | Homework Help | Student Parent Involvement |
| Parent Involvement at Home | .15** | .09** |
| Parents Doing | .18** | .34** |
| Parent Talking | -.03 | .13** |

Note. Listwise $N = 2396$. ** = $p < .01$ (2-tailed).

As indicated by these correlations, the relationship between the two student perception of parent involvement variables and the three parent perception of parent involvement variables was generally positive but weak. According to Cohen's Table of Effect Size Indexes (Cohen, 1992), Pearson product-moment correlation effect sizes of .10, .30, and .50 are considered to be small, medium, and large, respectively. Thus, when treating Pearson's r as an effect size, these results show a small to medium effect size regarding the relationship between students' and parents' perceptions of parent involvement.

Tables 8-9 present the correlations of the parent involvement variables by ethnic group (again with student perception variables running across the top and parent perception variables running down the side). One notable difference was that there were more statistically significant correlations between the European American students' and parents' perceptions than were between the African American students' and parents' perceptions of parent involvement. This may have been due to differences in sample size between the two ethnic groups. The effect sizes were comparable between the African Americans and European Americans, ranging from small to medium.

Table 8
Correlations of Parent Involvement Variables for African Americans

| Parent Variables | Student Variables | |
|----------------------------|-------------------|----------------------------|
| | Homework Help | Student Parent Involvement |
| Parent Involvement at Home | .12* | .12 |
| Parents Doing | .08 | .34** |
| Parent Talking | .02 | .12* |

Note. Listwise $N = 379$. * = $p < .05$ (2-tailed). ** = $p < .01$ (2-tailed).

Table 9
Correlations of Parent Involvement Variables for European Americans

| Parent Variables | Student Variables | |
|----------------------------|-------------------|----------------------------|
| | Homework Help | Student Parent Involvement |
| Parent Involvement at Home | .13** | .10** |
| Parents Doing | .17** | .36** |
| Parent Talking | -.02 | .13** |

Note. Listwise $N = 2017$. ** = $p < .01$ (2-tailed).

Research Question 2 Analyses. What is the direction and extent of differences between African American and European American students and parents on perceptions of parent involvement in education? General linear models (GLMs) were used to compare perceptions of parent involvement (five variables) by ethnic group. As noted in the prior section, the assumptions of independence and normality were met for these data (except for the violation of normality on the Parent Involvement at Home variable). The additional GLM assumptions of homogeneity of variance and equality of covariance matrices were met for these data when the Parent Involvement at Home variable was excluded from the analyses. However, when this variable was included in the GLM analyses, both these assumptions were violated according to statistically significant results on the Levene's test and Box's M. Therefore, the results that included the parent perception Parent Involvement at Home variable were interpreted with caution.

Results of the Multivariate Analysis of Variance (MANOVA) provided a statistically significant Wilks' Lambda F test that indicated differences in perception by ethnic group, $F(10,4780) = 3549.44$, $p < .05$, partial $\eta^2 = .88$. Given this significant F , pairwise comparisons, using a Bonferroni adjustment procedure for multiple comparisons, and effect sizes were calculated for each parent involvement variable (see Table 10). These results revealed significant mean differences between the two ethnic

groups for students' and parents' perceptions of parent involvement. Specifically, European Americans' means were statistically significantly higher than those of African Americans on one of the two student perception variables (i.e., HW_Help) and two of the three parent perception variables (i.e., PI-Home and P_Doing). The effect sizes ranged from small (.16 for SPI) to medium (-.68 for PI_Home); Cohen, 1992; independent means effect sizes of .20, .50, .80 are small, medium, and large, respectively).

Table 10
Pairwise Comparisons and Effect Sizes of the Parent Involvement Variables

| Variable | <i>M</i> Difference | | <i>d</i> | |
|----------|---------------------|-----------------|---------------|---------------|
| | w/o SES Control | w/o SES Control | w/SES Control | w/SES Control |
| HW_Help | -.53* | -.32 | -.38* | -.22 |
| SPI | .49* | .16 | .80* | .25 |
| PI_Home | -.38* | -.68 | -.27* | -.52 |
| P_Doing | -.61* | -.64 | -.37* | -.38 |
| P_Talk | .10* | .34 | .08* | .31 |

Note. Student perception parent involvement variables: HW_Help=Homework Help; SPI=Student Parent Involvement. Parent perception parent involvement variables: PI_Home=Parent Involvement at Home; P_Doing=Parents Doing; P_Talk=Parents Talking. Results based on estimated marginal means with Bonferroni adjustment for multiple comparisons. Positive result= higher mean for African Americans; Negative result=higher mean for European Americans. * = $p < .05$.

Results of the Multivariate Analysis of Covariance (MANCOVA) also provided a statistically significant Wilks' Lambda F test that indicated differences in perception by ethnic group when controlling for SES, $F(10,4694) = 1577.56, p < .05$, partial $\eta^2 = .77$. Given this significant F , pairwise comparisons, again using a Bonferroni adjustment procedure for multiple comparisons, and effect sizes were calculated for each parent involvement variable while controlling for SES (see Table 10). Although the mean differences were smaller in most cases when controlling for SES, the results remained significant and were in the same direction, such that European Americans' means were statistically significantly higher than those of African Americans on one of the two student perception variables (i.e., HW_Help) and two of the three parent perception variables (i.e., PI-Home and P_Doing). The effect sizes also tended to be somewhat smaller when controlling for SES but still ranged from small to medium according to Cohen's (1992) effect sizes for independent means.

Hypothesis 1. The parents' perceptions of involvement will be significantly higher among European American parents as compared to African American parents.

This hypothesis was partially supported by the data. European American parents' perceptions of parent involvement were significantly higher on two of the three parent perception parent involvement variables (i.e., PI-Home and P_Doing), even when SES was controlled for as shown via mean differences in Table 10.

Research Question 3 Analyses. What is the direction and strength of the relationship between perceptions of parent involvement in education and student academic achievement? Pearson correlation and multiple regressions were computed to determine the relationship between the parent involvement variables and the academic achievement variable – the CTBS Battery NCE scores. Four multiple regression analyses were run – two per rater with the second time to control for SES. The academic achievement variable was entered as the dependent variable. The demographic variable of SES was entered in the first step when it was the control variable. The parent involvement variables were entered in subsequent steps. As noted previously, the assumptions of independence and normality were met for these data (with the exception of normality on the Parent Involvement at Home variable, which was interpreted with caution as a result).

Regarding the analyses of the students' perceptions of parent involvement, the Pearson correlation coefficient revealed a positive but rather weak relationship between the Homework Help variable (e.g., people helping student with homework) and the CTBS Battery scores, $r(2897) = .20, p < .001$. This was indicative of a small effect size for product-moment correlations per Cohen (1992). However, the Pearson correlation coefficient revealed a negative, extremely weak, and not statistically significant relationship between the Student Parent Involvement variable (e.g., general at-home and at-school parent involvement) and the CTBS Battery scores, $r(2897) = -.01, p = ns$. This was indicative of an extremely small effect size. The variance explained in the CTBS Battery scores by these two parent involvement variables combined was minimal, $R^2(1,2894) = .04$, and even smaller when SES was accounted for, $R^2(1,2880) = .03$.

With regard to the parents' perceptions of parent involvement, the Pearson correlation coefficient revealed a positive but rather weak relationship between the Parent Involvement at Home variable (e.g., education materials made available at home) and the

CTBS Battery scores, $r(2034) = .23, p < .001$. This was indicative of a small effect size for product-moment correlations per Cohen (1992). Similarly, the Pearson correlation coefficient revealed a positive but rather weak relationship between the Parents Doing (e.g., participating in school activities) variable and the CTBS Battery scores, $r(2034) = .35, p < .001$. Although this was a weak correlation, this was considered to be a medium effect size per Cohen. The Pearson correlation coefficient revealed a negative and even weaker relationship between the Parents Talking variable (e.g., talking with teachers or principals) and the CTBS Battery scores, $r(2034) = -.20, p < .001$. This was indicative of a small effect size. The variance explained in the CTBS Battery scores by these three parent perception parent involvement variables combined also was minimal but somewhat larger than that explained by the student perception parent involvement variables, $R^2(1,2030) = .19$. When taking into account SES, the variance explained by these three parent perception parent involvement variables in the CTBS scores was even smaller, $R^2(1,2021) = .12$.

Hypothesis 2. There will be a moderately positive relationship between parents' perceptions of parent involvement and students' achievement. With regard to this particular sample of parents, this hypothesis was partially supported by the data. Although all of these relationships were weak, two of the three parent perception parent involvement variables (i.e., PI_Home and P_Doing) revealed a positive relationship with students' academic achievement (and all three relationships were statistically significant). In addition, a medium effect size was noted for the Parents' Doing variable (e.g., participating in school activities). Nonetheless, the variance explained in academic achievement scores by these three parent involvement variables was small, indicating a limited relationship.

Research Question 4 Analyses. Is the relationship between perceptions of parent involvement and student achievement consistent across African American and European American families? Multiple regressions were computed to determine the relationship between the parent involvement variables and the academic achievement variable by ethnic group. The interaction between each perception of parent involvement variable and the demographic variable of ethnicity was computed to create five interaction

variables. Then the multiple regression analyses were run twice for each parent involvement variable – the second time to control for SES. The academic achievement variable was entered as the dependent variable. The demographic variable of SES was entered in the first step when it was the control variable. Then the demographic variable of ethnicity, one parent involvement variable, and its corresponding interaction variable were entered in subsequent steps. As reported earlier, the assumptions of independence and normality were met for these data (except for the Parent Involvement at Home variable, which violated normality and thus was interpreted with caution).

The results of the last step for each of these multiple regression models are found in Table 11. Only the last step with the interaction variable was reported because it was the only step in the model which provided the necessary information to answer this research question. When the interaction variables were added in the last step of the regression models, the data revealed there were no changes in R^2 for all the parent involvement variables regardless of rater and whether or not SES was controlled. This indicated that there were no statistically significant interactions of parent involvement by ethnicity.

Table 11
Regression Model of Parent Involvement Variables by Ethnicity

| PI Interaction Variable | <u>w/o SES Control</u> | | <u>w/SES Control</u> | |
|-------------------------|------------------------|--------------|----------------------|--------------|
| | β | ΔR^2 | β | ΔR^2 |
| HW_Help x Ethnicity | .04 | .00 | .05 | .00 |
| SPI x Ethnicity | .10 | .00 | .16 | .00 |
| PI_Home x Ethnicity | -.05 | .00 | -.02 | .00 |
| P_Doing x Ethnicity | .00 | .00 | .05 | .00 |
| P_Talk x Ethnicity | -.06 | .00 | -.04 | .00 |

Note. Student perception parent involvement variables: HW_Help=Homework Help; SPI=Student Parent Involvement. Parent perception parent involvement variables: PI_Home=Parent Involvement at Home; P_Doing=Parents Doing; P_Talk=Parents Talking. Separate models were run for each parent involvement variable. Only results for last step in each model were reported, which included the following variables per model: SES (when controlled for), ethnicity, parent involvement, and interaction variable. $p = ns$.

Hypothesis 3. There will be consistency in this relationship across African American and European American students when parents are the raters of parent involvement. This hypothesis was supported by the data. No statistically significant

interactions were found when introducing the interaction between ethnicity and parents' perceptions of parent involvement for students' academic achievement. In other words, the relationship between parent involvement and academic achievement was not significantly different for African Americans and European Americans.

Summary

The results of the data analyses revealed that there was a generally positive but weak relationship between students' and parents' perceptions of parent involvement. When comparing between ethnic groups, perceptions of parent involvement tended to be higher for European Americans than for African Americans. There tended to be a positive but somewhat weak connection between perceptions of parent involvement and students' academic achievement, with no apparent differences in this relationship between the two ethnic groups. Therefore, hypothesis 1 and 2 were partially supported by the data, and hypothesis 3 was supported by the data.

CHAPTER V

DISCUSSION

The purpose of this study was to examine student and parent perceptions of parent involvement by rater and by ethnic group, their relationship with student outcomes (i.e., academic achievement), and whether this relationship was consistent across ethnic groups. This study was conducted using archival data from the Omnibus Project Longitudinal Study of Pinellas County Schools, Florida. The current study's participants were an Omnibus Project subsample of seventh grade students and their parents who had responded to the parent involvement items on the student and parent surveys.

In this chapter, the study's key findings are discussed first, followed by the findings' relationship to previous research and their implications. Finally, the current study's limitations and recommendations for future research are presented.

Key Findings

The results of this study revealed that the relationship between student perceptions and parent perceptions of parent involvement was positive, which means that when students perceived higher levels of parent involvement, parents also perceived higher levels of involvement. However, this relationship between rater perceptions also was found to be weak, meaning that the student perception parent involvement variables likely were measuring different aspects of parent involvement than the parent perception parent involvement variables. The effect sizes of the relationships between student and parent perceptions were found to be small overall. The only exception was one medium effect size when comparing the students' perceptions of parent involvement at home and at school in general and the parents' perceptions of parent involvement via participation in school activities. This medium effect size may have been due to some overlapping items contained in these two student and parent variables (e.g., participation at school

items), which would imply that, in part, they were measuring a similar aspect of parent involvement.

When comparing student and parent perceptions of parent involvement by ethnic group, the findings were similar to those of the overall sample (e.g., generally positive but weak relationships). However, the relationship between student and parent perceptions tended to be weaker (i.e., smaller correlations and fewer statistically significant results) for African Americans than for European Americans. As noted in the previous chapter, this may be due to the much smaller sample size of African Americans as compared to that of European Americans. In general, these findings indicate that comparing multiple raters' perceptions of parent involvement is useful in confirming levels of involvement, even if the type of involvement being measured is not the same. However, the validating aspect of comparing multiple raters' perceptions of involvement would be more valuable if the perceptions were measuring similar aspects of parent involvement, which would require asking parents and students similar survey questions per the resultant medium effect size when items overlapped.

Results of this study also revealed that there were significant differences in the perceptions of parent involvement by ethnic group. European American students, as compared to African American students, perceived higher levels of parent involvement with homework specifically but lower levels of at-home and at-school involvement overall. The effect sizes for the differences in perceptions of parent involvement between African American students and European American students were small. On the other hand, European American parents, as compared to African American parents, perceived higher levels of parent involvement via participation in school activities and by providing educational materials at home but lower levels of involvement via communication with teachers and principals regarding students' behavior and schoolwork. There were medium effect sizes for the differences in perceptions of parent involvement between African American parents and European American parents. Therefore, the parent perception differences by ethnic group had more practical significance than the student perception differences by ethnic group.

When controlling for the socioeconomic level of the families, the significant differences between African Americans and European Americans were in the same direction but somewhat lower as compared to the differences when the socioeconomic level was not taken into account. As a result, the effect sizes for student perception differences and parent perception differences tended to be smaller as well, with only one difference (i.e., parent perception variable related to supplying educational materials at home) showing a medium effect size. These findings indicate that some of the differences in perceptions of parent involvement actually were due to differences in socioeconomic levels and not to ethnicity. Nevertheless, there continued to be significant differences between the two ethnic groups in perceptions of levels of involvement even when taking socioeconomic level into account.

Other study findings revealed that, in general, there was a positive but weak relationship between perceptions of parent involvement and students' academic achievement. Specifically, there was a positive but weak relationship (e.g., small effect size) between students' academic achievement via standardized test scores and their perceptions of parent involvement via helping with homework. However, there was an inverse but non-significant relationship between students' academic achievement and their perceptions of parent involvement via at-home and at-school activities in general. It was found that student perceptions of parent involvement accounted for very little of the variability in students' academic achievement and even less when the family's socioeconomic level was considered. This means that other factors played a much more important role in seventh grade achievement for this particular sample, at least from the students' perspective. This weak relationship may not be such a surprise if taking into account the traditional decline in parent involvement in the middle school and high school years. If students no longer perceive parent involvement as relevant once they enter middle school, then it likely will no longer carry the same relation to those students' achievement. When speculating why these relationships were weak, one must also consider the possibility of measurement issues in that the student survey items related to parent involvement may not have been measuring adequately the construct of parent

involvement. A different choice of item wording, or a different category of items altogether, may have sampled this construct rather differently.

When considering parent perceptions of parent involvement, there was a positive but weak relationship (e.g., small effect size) between students' academic achievement via standardized test scores and parent involvement via providing educational materials at home. There was a positive but somewhat stronger relationship (e.g., medium effect size) between students' academic achievement and parent perceptions of involvement via participating in school activities. However, there was an inverse but rather weak relationship (e.g., small effect size) between students' academic achievement and parent perceptions of involvement via communication with teachers and principals. This inverse relationship is not surprising given, as noted earlier, that this kind of communication traditionally has been perceived as negative since it is often associated with academic or behavior problems. Therefore, academic achievement likely will be lower among students having problems requiring higher levels of communication between parents, teachers, and principals. It was found that parent perceptions of parent involvement accounted for a bit more of the variability in students' academic achievement than did student perceptions. Again, parent perceptions accounted for less of the variability when the family's socioeconomic level was considered. There did appear to be some evidence that parents' physical involvement at the schools (i.e., attending open house or PTA and volunteering at the school) played a part in their children's achievement. As noted in the previous paragraph, the overall weak relationship between parent perceptions and student achievement may be due to the decrease in parent involvement at the middle and high school levels. Other factors tend to become more important as the student gets older.

Finally, as predicted, the study findings revealed that there was no evidence that differences existed between African Americans and European Americans with regard to the relationship between perceptions of parent involvement and student academic achievement. These findings held up even when the socioeconomic level of the families was taken into account. These results would have been more meaningful if, in the current study, it had been found that there was a strong relationship between perceptions of parent involvement and student academic achievement. However, this was not the case.

Thus, there may have been no differences in this relationship across the two ethnic groups, but that only means the relationship generally was weak for both African Americans and European Americans.

Relationship to Previous Research

This researcher was not able to find any prior studies comparing (e.g., correlating) multiple rater source perceptions regarding levels of parent involvement similar to those in the current study. Therefore, the current study's findings comparing parent and student perceptions regarding levels of parent involvement provides new information within this literature base. Only with future research comparing the perceptions of multiple rater sources will the true value of this type of comparison be confirmed.

The present findings regarding differences in perceptions of parent involvement between African American parents and European American parents were fairly consistent with previous research in this area (Griffith, 1996; Muller & Kerbow, 1993; Wood & Baker, 1999). Specifically, Wood and Baker found that Caucasian parents reported attending parent education events at the school more often than did African Americans. Similarly, Griffith reported lower levels of parent involvement at predominantly minority schools based on aggregated parent ratings. The one aspect of parent involvement that resulted in higher ratings by African American parents than by European American parents was related to the traditional school communication (e.g., talking with teachers or administrators about behavior and schoolwork). Prior studies that have considered home-school communication have not reported the type of communication that was being surveyed, which makes it difficult to formulate valid comparisons.

Regarding the current study's findings related to differences in perceptions of parent involvement between African American students and European American students, they appear both to contradict and be consistent with previous research (Menacker et al., 1988; Muller & Kerbow, 1993). Unlike the current study, Menacker et al. found that African American students reported higher levels of parent involvement via homework help but lower levels via attendance at school activities. However, consistent with the current study, Muller and Kerbow found that European American students reported their parents helping with homework at a much higher rate than African

American students reported. Given the variation of student perceptions in the literature, it appears that parents may be more reliable reporters across the various studies.

Notably, the current study's findings regarding the relationship between perceptions of parent involvement and student academic achievement were not consistent with the vast amounts of parent involvement research supporting a strong relationship between these two variables (Catsambis, 2001; Fan & Chen, 2001; Griffith, 1996; Keith et al., 1986; Muller, 1993; Stevenson & Baker, 1987). Over the past several decades, most research in the area of parent involvement has found a moderate to strong relationship between parent involvement (e.g., especially in at-school activities, parent-child communication regarding education, and at-home educational activities) and student academic achievement, from elementary students and their standardized test scores (Griffith) to high school students and their course credit completion (Catsambis). On the other hand, the path analysis (based on multiple regression results) conducted by Keith et al did find that perceptions of parent involvement (via supervision at home and parent-child communication) had a negligible direct effect on achievement and a somewhat stronger indirect effect via homework. The multiple regression results for the negligible direct effects were slightly lower than those found in the current study for student perceptions, whereas the results for the somewhat stronger indirect effects were rather similar to those found in the current study for parent perceptions. It is likely that the differences between the findings of this study and previous studies are related to the differences in how parent involvement was measured. Specifically, there were only a few questions asking about participation in at-school activities and at-home educational activities and only one question regarding parent-child communication, which were the top three types of parent involvement most often related to higher academic achievement.

Finally, the current study's findings regarding the consistency in the relationship between parent involvement and student achievement across ethnic groups is rather consistent with the long history of parent involvement research showing that minority parents' involvement is just as important as European American parents' involvement (Hong & Ho, 2005; Kerbow & Bernhardt, 1993; Reynolds, 1992; Shumow & Miller, 2001). Specifically, Reynolds findings revealed that African American and Hispanic

parents' school and home involvement in their children's education had a moderately strong relationship with their students' academic achievement. Most recently, Ho and Hong found that various aspects of parent involvement had direct and indirect effects (using latent growth modeling) on student academic achievement across all ethnic groups.

Implications

The findings from this study have both research and applied implications. First, this study demonstrated the difficulty in making multiple rater comparisons when the survey items rated were not measuring necessarily the same aspects of parent involvement and, therefore, the importance in attempting to use the same (or similar) types of survey items across raters in order to measure raters' perceptions on the same aspects of parent involvement. This likely would produce stronger results in terms of reliability and correlations that would provide, in turn, more valid multiple rater comparisons. Relatedly, the survey items developed need to measure the construct of parent involvement as accurately as possible. Thus, when determining the relationship between parent involvement and academic achievement, the researcher is assured that the results truly are reflective of this relationship and not one between achievement and some underlying or vague construct.

Second, the impact of SES on the results of the current study has both research and applied implications. When researchers have controlled for or taken into account SES, as the current study did, they consistently have found SES to be a moderator variable when analyzing parent involvement, its relationship to achievement, how ethnicity relates to parent involvement. However, much of the parent involvement research either did not include SES in the analyses or did not pay special attention to it in the interpretation and discussion of the results when it was included. Given the significant moderating effects found when SES was included and interpreted, this brings into question the validity of results and their interpretation when SES is not adequately considered in the parent involvement research. What traditionally has been seen as ethnic differences in parent involvement and the moderately strong relationship between parent involvement and academic achievement may be more related to the families' SES than

any other factor. Therefore, considering SES when researching the construct of parent involvement, would allow researchers to make the most valid interpretations of their findings. In addition, taking into account SES when applying parent involvement strategies in the schools, would allow faculty and staff to reach the uninvolved families more effectively.

Third, the traditionally negative perception related to parent communication with teachers and principals regarding student academics and behavior appeared to still be an issue according to the inverse relationship found in this study between perceptions of parent communication and students' academic achievement. Schools can, and should, change this negative perception of communication by making a point of communicating positive information about their children to parents more often. This means faculty and staff calling home or sending notes praising the accomplishments of the students and not just the difficulties the students may be having. This would not only change a parent's perception of communication from negative to positive but could create a positive home-school relationship, such that if a problem were to arise, the parent would be more willing to work collaboratively with the school to help the student overcome the problem (Becker-Klein, 1999).

Fourth, given the limited relationship between student perceptions of parent involvement and their academic achievement (and the somewhat limited relationship between parent perceptions of involvement and achievement), the implication is that parents need to learn to work more effectively with middle school-aged students. Traditionally, elementary schools have tended to emphasize and provide more opportunities for parent involvement at school for the students' families. Elementary teachers also have tended to provide parents more strategies on how to become involved in their children's education at home. This, in general, has not been the case at the middle or high school levels (Adams & Christenson, 2000; Alldred & Edwards, 2000; Epstein & Dauber, 1991), which was reflected in the current study's results for this particular population of seventh grade students. If parent involvement is to become more of a factor at the secondary level, then middle (and high) schools are going to need to

make a concerted effort to provide parents with opportunities and strategies for becoming involved in their children's education at school and at home.

Limitations

First, the parent response rate was a limitation. The parent response rate was only 48% for the students' seventh grade year, which was on the lower end of the spectrum as compared to other years the parents were surveyed by the Omnibus Project. However, this lower rate was not surprising for seventh grade parents given the rates generally followed a downward trend as the students progressed in grades, and it was never the exact same group of parents responding each survey year.

Second, the small number of parent involvement survey items that loaded on to each parent involvement variable was a limitation. Essentially, each variable contained only three to nine parent involvement survey items to which the parent or student responded. These limited measures of parents' and students' perceptions of parent involvement negatively affected reliability and restricted interpretation of the results.

Third, using archival data was a limitation in and of itself. By conducting secondary analyses of already existing data sets, this researcher did not have any control over data collection measures or procedures and had to accept the choices that were made by the Omnibus Project's researchers, such as item selection or sampling strategy. Also, this researcher had to trust that the data were collected using the most reliable and valid methods and reported in the most accurate and honest manner based on the Omnibus methodological information provided by the school district. There is always a risk that this was not the case. Having access to such a large sample of parents and students, however, provides benefits that outweigh this risk.

Recommendations for Future Research

Future studies should be conducted to further explore the usefulness of multiple rater comparisons for confirmatory or social validity purposes. Comparing the perceptions of more than two rater groups, such as by adding teacher, administrator, social worker, or school psychologist perceptions, would extend the current research by comparing home perceptions to school perceptions. However, when conducting this type of cross-informant correlations, it is vital that researchers use similar or overlapping

survey items across the multiple rater surveys in order to produce strong, reliable, and valid results.

Future studies also should include additional ethnic minority groups (i.e., Asian Americans, Hispanics, and Native Americans) as participants, with ethnic group sample sizes large enough to produce valid and reliable statistical analyses. Given the academic achievement gap between European Americans and most minority groups, including other ethnic minority groups in this line of research may help researchers understand how parent involvement relates to their achievement and whether the former can play an important role in improving the latter.

Given the growing research base supporting the fact that SES may be more important than ethnicity in relation to levels of parent involvement and than parent involvement with relation to student outcomes, future researchers should place more emphasis on studying the relationship and impact of SES with regard to these factors. As more research accumulates in this area, lawmakers will need to adjust regulations and policies and practitioners in the schools will need to adjust their emphasis and strategies regarding issues of student academic achievement and parent involvement.

Relatedly, future research should place more emphasis on studying the barriers to implementation, including SES issues, at the middle school level given the decline of parent involvement at the secondary level. This could be done by adding a barriers rating section and including barriers proposed by the parent involvement literature, such as schools' lack of resources (e.g., money, staff, time, etc.), parents' lack of resources (e.g., money, time, transportation, etc.), whether or not parents are asked to participate, ease of implementation, parents' attitudes toward education, and parents' and school personnel's attitudes toward parent involvement. This would allow future research to further clarify and examine the barriers to parent involvement at school and at home. For middle schools that have the goal of increasing effective parent involvement, a section rating barriers would provide a better understanding of the potential barriers to parent involvement and offer a starting point from which these schools could begin to tear down these barriers.

Finally, given the weak relationship between academic achievement and the aspects of parent involvement measured in this study, more emphasis should be placed on studying other aspects of parent involvement and their relationship to achievement, such as parents' aspirations for their children's education. Recent research in the area of parent involvement has been finding that parent aspirations for their children's education consistently have the strongest relationship with, or is the most salient predictor of, higher academic achievement. If future research confirms recent study findings in this area, then schools again may need to reconsider how they approach parent involvement to more effectively eliminate the academic achievement gap.

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APPENDIX

Appendix A: Parent Involvement Item Descriptive Statistics

| Parent Items | <i>M</i> | <i>SD</i> | <i>N</i> |
|---|----------|-----------|----------|
| available for child's use in home: books | 0.97 | 0.17 | 2504 |
| available for child's use in home: magazines | 0.89 | 0.31 | 2504 |
| available for child's use in home: encyclopedia/dictionary | 0.93 | 0.26 | 2504 |
| volunteer at child's school | 0.30 | 0.46 | 2504 |
| attend open house | 0.67 | 0.47 | 2504 |
| participate/attend PTA/SAC | 0.21 | 0.41 | 2504 |
| spoke to the teacher about behavior | 0.45 | 0.50 | 2504 |
| spoke to teacher about school work | 0.64 | 0.48 | 2504 |
| talk to principal about behavior | 0.22 | 0.41 | 2504 |
| talk to principal about school work | 0.14 | 0.34 | 2504 |
| Student Items | | | |
| homework help: | | | |
| mother | 0.80 | 0.40 | 3537 |
| father | 0.59 | 0.49 | 3537 |
| brother/sister | 0.34 | 0.48 | 3537 |
| grandparent | 0.18 | 0.39 | 3537 |
| other relative | 0.15 | 0.36 | 3537 |
| adult not related | 0.17 | 0.38 | 3537 |
| teacher | 0.40 | 0.49 | 3537 |
| classmate/friend | 0.60 | 0.49 | 3537 |
| parent(s)/guardian(s): | | | |
| help with homework | 1.79 | 0.56 | 3503 |
| ask about homework | 1.45 | 0.60 | 3496 |
| check homework | 2.21 | 0.70 | 3483 |
| school materials | 1.71 | 0.72 | 3494 |
| encourage hard work | 1.20 | 0.46 | 3489 |
| attend school events | 2.08 | 0.68 | 3485 |
| knows teacher | 1.54 | 0.72 | 3486 |
| attend PTA meetings | 2.66 | 0.65 | 3482 |
| volunteer at my school | 2.60 | 0.60 | 3494 |

Note. Response scale for parent items and student homework help items was 0 = No, 1 = Yes. *Response scale for other student items was 1 = Always, 2 = Sometimes, and 3 = Never (*Later recoded for analyses)

ABOUT THE AUTHOR

Michelle Marie Darter-Lagos received a Bachelor's Degree in Government with a concentration in Latin American Studies from Dartmouth College in 1994. Upon graduating, she was awarded a one-year Congressional Hispanic Caucus Institute Fellowship where she worked at the U.S. Department of Education's White House Initiative on Educational Excellence for Hispanic Americans under the Clinton Administration. After completing the fellowship, Michelle continued to work in the political and advocacy realm until entering the School Psychology program at the University of South Florida in August 1999.

While in the Ph.D. track of this program, Michelle also earned her Master's and Specialist's degrees in School Psychology. Since July 2004, she has been working as a school psychologist for the Polk County School Board, specializing in bilingual evaluations and adolescent counseling. Michelle has made presentations to schools and at the Florida Association of School Psychologists conferences on parent involvement, intervention assistance teams, and positive behavior support.