An Investigation of the Relationship between Parents' Perceptions of Parental Involvement and the Academic Achievement of Their Children.

This study examines the relationship between parents' perceptions of certain attributes of their involvement in various aspects of their child's or children's school environment and their child's or children's academic achievement within that school. Parents and children from 132 schools in Louisiana participated in the School Analysis Model 2000 in this study. Data were collected using a variety of methods, including questionnaires for stakeholders, parents, and students. Parents were surveyed regarding their perceptions of six aspects of parental involvement: (1) parent and school relations; (2) administrative leadership; (3) school climate; (4) school culture; (5) curriculum and instruction; and (6) the Louisiana Public School and District Accountability System (LPSDAS). Findings indicated that how parents perceived the administrative leadership of the school, the curriculum and instruction of the school, and the school climate best predicted a school's performance score. Schools with more favorable climates had higher school performance scores. There were no significant relationships between how parents perceived their involvement and academic achievement, the poverty level of the school, or the school's location (urban, suburban, or rural). White parents had more agreeable perceptions of the total involvement than did black parents. Parents without a high school diploma had less agreeable perceptions of their total involvement than parents within greater educational levels. Parents who had graduated from a four-year college or university had more agreeable perceptions of their total involvement than parents at other educational levels. Appended is the parent questionnaire and an explanation of the questionnaire coding. (Contains 35 references.) (KB)
AN INVESTIGATION OF THE RELATIONSHIP BETWEEN PARENTS’ PERCEPTIONS OF PARENTAL INVOLVEMENT AND THE ACADEMIC ACHIEVEMENT OF THEIR CHILDREN

Dr. Joanne L. Hood
Assistant Principal
Homer Junior High School
Homer, Louisiana

Dr. Otis K. LoVette
Professor of Educational Leadership
The University of Louisiana at Monroe
Monroe, Louisiana

A paper presented at the Annual Meeting of the Louisiana Education Research Association in Ruston, Louisiana, on February 28, 2002-March 1, 2002
Introduction

In the world of public education, the 1990s will be considered a decade of school reform. The latter part of the decade especially will be recognized for increased school accountability efforts as legislators and educators across the nation focused on improving schools and increasing student achievement. As early as 1957, Americans first realized that the United States' educational system might be faltering. When the Russians launched Sputnik, the United States responded by beginning reform of its educational system. As a part of this process, committees comprised of parents and community leaders were formed (Obiakor & Ford, 1995). In 1983, "A Nation at Risk" was released, and Americans focused on the report's statement that there was a "rising tide of mediocrity in today's schools" (Talley & Short, 1995, p. 1).

Much of the current reform is based on a set of eight national educational goals that were enacted in the Goals 2000: Educate America Act of 1994. The groundwork for Goals 2000 was laid when President George H. Bush called an Education Reform Summit in 1989 that was attended by the nation's governors. The major provisions of Goals 2000 were outlined in this meeting when a set of six education goals that directed the nation's effort in improving student academic achievement were formulated. Congress added two additional goals before the Goals 2000 legislation was signed into law. Goals 2000, P. L. 103-227, was approved by President Bill Clinton on March 31, 1994, and authorized federal support for educational reform. President Clinton supported the passage of Goals 2000 in an attempt to have all public schools operating at certain levels of achievement by the turn of the century. The Goals 2000: Educate America Act stated that certain objectives would be met by the year 2000. These objectives centered on school readiness; school completion; student achievement and citizenship; teacher education and professional development; mathematics and science; adult literacy and lifelong learning; safe,
disciplined, and alcohol- and drug-free schools; and parental and family involvement. Goals 2000 provided for a National Education Goals Panel to monitor progress toward the attainment of the eight goals (Talley & Short, 1995). This law also provided funding to states and communities for raising academic standards, increasing parental involvement, expanding the use of computers and technology, and supporting high-quality teacher training (U. S. Department of Education, 1998).

Prior to Goals 2000, the 1965 Elementary and Secondary Education Act (ESEA) had been the main thrust behind raising educational performance nationwide for over 30 years. In October 1994, the Improving America's Schools Act (IASA) was signed into law and revised the ESEA of 1965. At that time, the ESEA was the largest single source of federal support in America for K-12 education and the passage of IASA continued its funding and established new, additional programs. Both ESEA and IASA focused on providing compensatory education to educationally disadvantaged children through programs like Title I, which served disadvantaged children with low test scores in the areas of reading and mathematics. Title I programs were broadened to include schoolwide projects and enrichment programs when changes were made in 1988 and again in 1994 (Sherwood, 1999; Talley & Short, 1995). IASA moved away from the isolated efforts of ESEA and toward an integrated system of service that concentrated on improving the performance of all students. The IASA assists states, districts, and schools in their efforts to help students reach high state standards by providing valuable resources (U. S. Department of Education, 1995).

In 1997, Congress approved funding for the creation and implementation of Comprehensive School Reform Demonstration (CSRD) programs found mostly in high-poverty and low-achieving areas, especially Title I schools. The $150 million approved by Congress was
for schools to implement proven models and strategies for “whole-school restructuring” (Sherwood, 1999). The aim of CSRD was to raise student achievement by helping public schools implement successful, comprehensive school reforms that were based on reliable research and effective practices, and included an emphasis on basic academics and parental involvement. The President and Congress acknowledged that comprehensive school reform would be more successful if proven, research-based models were incorporated. This program has assisted high-poverty and low-achieving schools by increasing the quality and accelerating the pace of schoolwide reform (U. S. Department of Education, 2001).

As a result of the impetus for increased student achievement that began as early as 1957, states have developed challenging content standards outlining what students were expected to know and be able to do. Student performance, under these standards, has often been categorized into levels that represent student achievement. In order to determine if students met the performance standards, states, including Louisiana, have administered high quality assessments that were aligned with state content standards (Louisiana Department of Education, 2000a).

Louisiana’s students rank near the bottom in several measures of academic performance when compared to students in other states. Louisiana students perform poorly on standardized tests, and Louisiana schools have high dropout rates. Louisiana colleges and universities report high numbers of Louisiana freshman students enrolling in college remedial courses. All of these factors result in low levels of employment by high school graduates, and Louisiana citizens have indicated that education was a major concern and demanded improved public schools (Louisiana Department of Education, 1999). In 1997, the Louisiana Legislature created the School and District Accountability Commission. The Commission was given the responsibility of creating a statewide system of accountability for public education in Louisiana. This system of
accountability was recommended to the Board of Elementary and Secondary Education and received its approval (Louisiana Department of Education).

The Louisiana Public School and District Accountability System (LPSDAS) and Title I of the IASA have several common components. Both programs call for a mission statement, a comprehensive needs assessment, goals and objectives, research-based methods and strategies, family involvement, professional development, evaluation strategies, coordination of resources, and an action plan. One component of both the Accountability System and Title I that could directly influence student achievement was “family involvement.” Research has shown that increased parental involvement has a positive effect on student achievement (Anderson, 2000; Chavkin, 1989; Greenwood & Hickman, 1991; Salerno & Fink, 1992; Wikelund, 1990).

Successful, comprehensive education improvement efforts include the following key elements: (1) “high standards for all students; (2) teachers better trained for teaching to high standards; (3) flexibility to stimulate local reform, coupled with accountability for results; and (4) close partnerships among families, communities, and schools” (U. S. Department of Education, 1995, p. 3). Parental involvement plays a major role in the LPSDAS and Title I of the IASA. Both include components associated with parental involvement. These programs:

1. Focus on student achievement
2. Outline steps to encourage parental participation and optimize communication
3. Require written policies for parental involvement
4. Emphasize shared responsibility
5. Require training for parents
6. Provide timely information to parents
7. Include parents in school planning
As a result of schools not attaining the desired level of performance, one component of the LPSDAS provides for the establishment of a statewide school support structure for schools. Support teams (District Assistance Teams and School Support Teams) trained to provide school support are composed of Louisiana Education Association personnel, retired educators, university personnel, and Tech-Prep coordinators. Each school has a four-member team with two team co-leaders. The responsibilities of the support teams are to assist and support schools in “Corrective Actions.” The teams have many responsibilities that include conducting an in-depth school analysis to identify school needs and evaluating the effectiveness of School Improvement Plans (SIP). District Assistance Teams (DAT) are trained in the use of the School Analysis Model (SAM 2000) in order to conduct needs analyses for schools. The SAM 2000 would then be used to write and evaluate the SIP (Louisiana Department of Education, 2000a).

As shown in current research (Anderson, 2000; Chavkin, 1989; Greenwood & Hickman, 1991; Salerno & Fink, 1992; Wikelund, 1990) and its inclusion in the LPSDAS, parental involvement is recognized as one aspect of school reform that plays a major role in increasing student academic achievement. By investigating parental perceptions of their involvement in various aspects of the school/parent relationship, information can be gained which can be used to find ways to help improve the academic performance of students, especially in low performing schools. For the purpose of this study, parental perceptions of parent and school relations, administrative leadership, school climate, school culture, curriculum and instruction, and the LPSDAS were used to determine a parental involvement score for each school represented.

Purpose of the Study

The purpose of this study was to examine the relationship between parents' perceptions of certain attributes of their involvement in various aspects of the schools' environment and
student academic achievement in the schools. The study examined parental responses on a questionnaire associated with parent and school relations, administrative leadership, school climate, school culture, curriculum and instruction, and the LPSDAS. Parents' perceptions of these six aspects play an integral role in the level of parental involvement at a school.

The first aspect being investigated in this study analyzed how parents perceived the parent and school relationship. Parents' perceptions in regard to this relationship may determine the degree of parental involvement at a school. If the relationship is viewed as positive, parents will probably feel more comfortable when visiting or contacting the school. When parents perceive this relationship to be negative, a barrier to parental involvement may form. The perceptions that a community has of the administrative leadership of a school can influence the frequency and number of contacts made by parents. If the principal is perceived by the community as someone who does not listen to concerns of parents, involvement of parents will probably be limited.

The climate and culture of a school may directly influence the level of parental involvement. If parents perceive the school to be warm, inviting, and open to diversity, a positive relationship between home and school can be developed. When parents believe their heritage and culture are welcomed, they often become more involved. What parents perceive the curriculum and instruction of a school to be may impact the amount of support teachers receive. If parents perceive a school to have a solid curriculum and sound instruction, they may become involved in their child's education.

In the state of Louisiana, as in most states, a new accountability system has been initiated. The Louisiana Public School and District Accountability System includes parents and solicits their perceptions about parental involvement in their children's school. The level of awareness
that parents possess in regard to the LPSDAS may determine the level of parental involvement at school. If parents perceive the accountability system as an avenue for helping their children succeed, they may be more likely to take an active role in their child’s education.

Significance of the Study

The State Department of Education in Louisiana requires the organization of a DAT in each school system to assist in the area of school improvement and reform. One responsibility of the DAT members is to conduct a needs analysis for Title I schools using the SAM 2000. A major component of this process involves administering questionnaires to four groups of individuals: administrators, teachers, students, and parents. This study examined the parental responses reflecting the perceptions of the parents who participated in the activity.

The state of Louisiana plans to utilize the collected data to develop and improve programs associated with the LPSDAS and increase student academic achievement. Schools will be able to use the results obtained in developing parental involvement programs based upon parents’ perceptions of the school. As a result of this study, factors may be determined that can be useful in predicting the successful academic achievement of students and consequently help schools reach “Growth Targets” and “School Performance Scores.” According to the Louisiana Department of Education (LDE), a “Growth Target” is the amount of progress a school must make every two years to reach the state’s 10- and 20-year goals. “School Performance Scores” (SPS) are scores assigned to schools ranging from zero to beyond one hundred that are an average of three or four weighted indicators (criterion-referenced tests, norm-referenced tests, student attendance for grades K-12, and drop-out rates for grades 7-12).
Assumptions of the Study

1. The data collected on the parent questionnaire were collected accurately and appropriately.

2. The parent questionnaire was valid and reliable.

3. Parents responded honestly to the questionnaire.

Limitations of the Study

The schools that participated in the SAM 2000 during the 2000-2001 school year were identified by school districts for the LDE as schools that might not achieve their “Growth Targets.” Therefore, the study was limited to a specific group of schools in the state of Louisiana. Participants in this study may or may not have been representative of populations in school districts in other geographic regions, thus, limiting the ability to generalize the findings. In order for a school to be included in this investigation, at least 10 parents from the school had to return parent questionnaires. Schools with less than 10 parental responses were omitted.

All Title I schools participated in the study in addition to the schools that were identified by the districts as likely not to meet their target scores. Perceptions of parents whose children attended higher performing or growing schools may have generated different results. Region V of Louisiana, five parishes in the southwest corner of Louisiana, did not participate in this program; therefore, no data were collected from schools in this area. This region, which includes the parishes of Calcasieu, Cameron, Jefferson Davis, Beauregard, and Allen, utilized a different model to address low-performing schools.
Research Questions

This study examined the following research questions regarding parents’ perceptions of parental involvement and student achievement. The first six research questions were used to determine a score for parental involvement that served as the dependent variable in research questions nine, ten, and eleven.

Research Question 1:

Is there a significant relationship between parents’ perceptions of parent and school relations and student achievement?

Research Question 2:

Is there a significant relationship between parents’ perceptions of administrative leadership and student achievement?

Research Question 3:

Is there a significant relationship between parents’ perceptions of school climate and student achievement?

Research Question 4:

Is there a significant relationship between parents’ perceptions of school culture and student achievement?

Research Question 5:

Is there a significant relationship between parents’ perceptions of curriculum and instruction in the schools and student achievement?

Research Question 6:

Is there a significant relationship between parents’ perceptions of the Louisiana Public School and District Accountability System and student achievement?
Research Question 7:

Is there a significant relationship between parents’ perceptions of their involvement and student achievement?

Research Question 8:

Is there a significant relationship between parents’ perceptions of their involvement and poverty level?

Research Question 9:

Is there any significant difference in parents’ perceptions of their involvement among rural, urban, and suburban schools?

Research Question 10:

Is there any significant difference in parents’ perceptions of their involvement by race?

Research Question 11:

Is there any significant difference in parents’ perceptions of their parental involvement across educational levels?

Definitions of Terms

Following are definitions of terms that were used in the study:

Academic achievement. The LDE defined academic achievement as the scaled score a student received on a criterion-referenced test or the standard score a student received on a norm-reference test. For the purpose of this study, academic achievement was measured by a school’s performance score.
Administrative leadership. This study will utilize the definition of the LDE of administrative leadership as the characteristics of an effective leader. The LDE focused on the qualities of decision-making, support for teachers, and visibility in an administrator.

Climate. Current feelings and attitudes about an organization or school held by parents, students, and teachers (Gonder & Hymes, 1994). The LDE stated that climate was a measure of a school's safety and discipline procedures.

Corrective actions. A school is placed in “Corrective Actions” when it has a SPS of 30 or below or fails to meet its Growth Target and has a SPS of less than 100 (Louisiana Department of Education, 1999).

Culture. Assumptions, values, and beliefs that give an organization its identity and specify its standards for behavior based on past experiences (Gonder & Hymes, 1994).

Distinguished educator. An individual selected and appointed by the LDE who had been identified as an outstanding educator. One distinguished educator is assigned to schools in Levels II and III of “Corrective Actions.” He or she prepares public reports for school improvement (Louisiana Department of Education, 2000a).

Growth target. The amount of progress a school must make every two years to reach the state’s 10- and 20-year goals (Louisiana Department of Education, 1999).

Parent and school relations. The LDE identified parent and school relations as parental support for education and active parental participation.

Parental involvement. Any interaction between a parent and child that contributes to the child’s development. Direct parent/guardian participation with a child’s school in the interest of the child (Reynolds, 1996).
Rural. Schools were classified using the National Center of Educational Statistics’ operational definition in a common core of data and included the locale codes of 7 and 8. These schools were classified as rural if the area has less than 2,500 people (National Center for Educational Statistics, 1993).

School Analysis Model (SAM 2000): User’s Guide for District Assistance Teams. This guide has been developed by the LDE to guide school personnel in conducting comprehensive program evaluations of schools (Louisiana Department of Education, 2000b).

School Improvement Plan. Plans that were mandated by legislation in 1998 of schools which are in “Corrective Actions,” receive CSRD grants, or have applied for new CSRD funding. They serve as the basic foundation for all grant applications and merge school support teams and district assistance teams (Louisiana Department of Education, 2000a).

School Performance Score. An average of three or four weighted indicators (LEAP 21 scores, Iowa test scores, student attendance, dropout rate) that range from zero to beyond one hundred (Louisiana Department of Education, 1999).

Suburban. Schools were classified using the National Center of Educational Statistics’ operational definition in a common core of data and included the locale codes of 5 and 6. These schools were classified as suburban if the town was not within a Metropolitan Statistical Area (MSA) and the population was greater than 2,500 (National Center of Educational Statistics, 1993).

Tech-Prep Coordinator. For the purpose of this study, a Tech-Prep coordinator was an individual employed by the LDE who assisted with the implementation of Tech-Prep Programs for local school districts. These programs provided technical preparation in career fields.
Urban. Schools were classified using the National Center of Educational Statistics’ operational definition in a common core of data and included the locale codes of 1, 2, 3, and 4. These schools were within a MSA of a mid-size or large central city (National Center of Educational Statistics, 1993).

The Louisiana Public School and District Accountability System

As a result of the nation’s push for student academic success, accountability efforts have increased across America. Louisiana has incorporated an accountability system in all 66 school districts that is similar to many other accountability programs. In states’ systems of accountability for student performance, schools that are high performing receive awards while schools which do not reach set goals encounter penalties. Successful schools are provided incentives to strive to increase student achievement and unsuccessful schools receive “Corrective Actions.” Louisiana’s plan for reform was based on the same premise (Louisiana Department of Education, 1999).

Louisiana’s Public Education Accountability System was intended:

“to drive fundamental changes in classroom teaching by helping schools and communities focus on improved student achievement. The system was designed to encourage and support school improvement by: clearly establishing the state’s goals for schools and students; creating an easy way to communicate to schools and the public how well a school is performing; recognizing schools for effectiveness in demonstrating growth in student achievement; and focusing attention, energy, and resources on those schools that need help in improving student achievement” (Louisiana Department of Education, 1999, Preface, p. 1).

The Louisiana Public School and District Accountability System was rooted in the concept of continuous growth. The accountability system was based on every school improving and showing academic growth. Schools were to be compared to themselves, not to each other.
The twelve underlying beliefs of the LPSDAS are:

1. "All students can and must learn at significantly higher levels: there should be accountability in some fashion for every child in public school.
2. The need to improve student achievement is urgent.
3. Continuous growth in student achievement must occur in all schools.
4. The focus must be on measurable student achievement results.
5. Poverty impacts student learning; however, it does not prevent students from achieving.
6. Rewards and corrective actions can motivate educators, communities, and students to improve student learning.
7. Parents, educators, and community members should be involved in the ongoing development and revision of school and district improvement plans.
8. Districts and school sites must have the flexibility to improve learning in schools.
9. The general public must be kept involved in and informed about the accountability process.
10. All stakeholders should work together to reach the state's education goals.
11. The accountability system must be kept simple.
12. The State must provide adequate funding to support the accountability system and not back down on funding or standards once instituted" (Louisiana Department of Education, 1999, Preface, p. 1-2).

The accountability system in Louisiana has several components. First, a new testing program for students that utilized the Iowa Test of Basic Skills and LEAP for the 21st Century was incorporated. Next, 10- and 20-Year State Goals that depicted schools' levels of educational performance were established by the Board of Elementary and Secondary Education. A third component provided for the awarding of a "School Performance Score" (SPS) for each school. "Growth targets" represented the progress a school must make over a two-year period to reach the 10- and 20-Year Goals. Finally, "Growth Labels," that were based on the school's success in reaching its "Growth Target," were given to all schools in Louisiana. Labels received by the schools were:
1. Exemplary Academic Growth: A school that exceeded its Growth Target by five points.
2. Recognized Academic Growth: A school meeting its Growth Target or exceeding it by less than five points.
3. Minimal Academic Growth: A school that improved but did not meet its Growth Target.

Educators and legislators felt an urgent need to assist Louisiana’s lowest performing schools and consequently the Board of Elementary and Secondary Education established a minimum score below which a given school would receive immediate additional support. The schools in Louisiana who had a SPS of 30 or below were labeled as an “Academically Unacceptable School” and fell into this category. “Corrective Actions” were intended to provide Title I schools with additional assistance in order to improve student achievement. Schools in this category required extensive efforts by students, parents, teachers, principals, administrators, and the school board to improve student performance. Schools entered “Corrective Actions” if their SPS was 30 or below or if they failed to reach their “Growth Target” and had a SPS of less than 100. If adequate growth was not made the amount of “Corrective Actions” increased. In Level I of “Corrective Actions,” the schools worked with District Assistance Teams. The schools utilized a diagnostic process to identify needs, redeveloped school improvement plans, and examined use of school resources. Level II and Level III of “Corrective Actions” provided a school with assistance from a highly trained Distinguished Educator. The Distinguished Educator worked in an advisory capacity to assist the school in improving student achievement (Louisiana Department of Education, 1999).

Research has shown that educational deprivation was more likely to occur in areas where there was a high concentration of poverty. Impoverished children were the main concern under
the Improving America’s Schools Act (IASA) which allocated funds based on the number of poor children in an area. Schoolwide programs were supported in order to incorporate research-based practices into the instructional programs to benefit entire schools. A second option under IASA for schools with a high percentage of impoverished students involved “Targeted Assistance.” Under this option, local educational agencies set criteria to classify students who were educationally at risk. Schools in “Targeted Assistance” wrote a plan to assist the students who had been identified as at-risk. Effective, research-based instructional strategies were incorporated and an accelerated, high quality curriculum was implemented (Louisiana Department of Education, 2000a).

Methodology

The rationale for this study is based on the desire to increase student academic achievement in the state of Louisiana. The School Analysis Model (SAM 2000): User's Guide for District Assistance Teams was created to assist school personnel in conducting comprehensive program evaluations of schools based upon school effectiveness and productivity research. School effectiveness and productivity research have provided insight into factors influencing a school’s academic performance (Louisiana Department of Education, 2000b). As outlined by Louisiana’s Public School and District Accountability System, school performance, rather than academic productivity, is measured using four indicators: norm-referenced test scores, criterion-referenced test scores, attendance rates, and dropout rates. Students’ performance on the norm-referenced and criterion-referenced tests makes up 90% of the school performance score. The aggregate of these indicators provide a baseline score to project a school’s “Growth Target.” The model presented in the LPSDAS user’s guide provides a method to determine a school’s strengths and weaknesses and to provide the information needed to develop and implement
school improvement activities. The purpose of this procedure was to identify and change ineffective practices in schools and to emphasize the areas of strength. It also provided needed information to develop and implement school improvement activities (Louisiana Department of Education, 2000b).

Description of the Sample

Louisiana schools were identified in their districts, by district administrative personnel, as schools that were at risk of not meeting their “Growth Targets” for the 2000-2001 school year. Schools were enlisted to participate in the SAM 2000 in an attempt to ensure success in meeting “Growth Targets.” One hundred thirty-two schools participated in the SAM 2000 during the fall of 2000. Over 7,000 parent questionnaires were collected from parents who had children attending these schools. In schools with enrollments above 200 students, at least 200 students completed the student questionnaire. In schools with small student populations, i.e., less than 200 eligible students, all students who could complete the questionnaire responded. Schools with large student populations, greater than 800 eligible students, were to sample 25% of the student population. Of the 132 schools that participated in the study, the percentage of students on free and/or reduced lunch ranged from 21-98% and the percentage of minority students ranged from 1-100%. The Louisiana Department of Education’s (LDE) original goal was to distribute 26,400 questionnaires. However, because small of school size and multiple children in the same family, this number was not achieved. Of those questionnaires distributed, over 7,000 were received (Louisiana Department of Education, 2000b).

Research Design

Causal comparative studies use a research design that investigates cause-and-effect relationships. There are two types of causal-comparative designs, ex post facto and correlational;
this study utilized the *ex post facto* design. An *ex post facto* design is used when the independent variables in the study cannot be manipulated because the presumed cause has already occurred. Researchers attempt to determine whether or not one or more preexisting conditions caused differences in the groups being studied. Data are collected to investigate the relationship of the varying conditions to the resulting behavior (McMillan, 2000). According to Gall, Borg, & Gall (1996), the main reason to utilize *ex post facto* designs is due to the many cause-and-effect relationships in education that are not amenable to experimental manipulation. *Ex post facto* designs allow researchers to study these relationships where experimental manipulation is difficult or impossible. A second advantage to *ex post facto* research is that it allows the researcher to investigate many relationships in a single research project.

A causal comparative research design was used to analyze the relationship of parents’ perceptions of certain attributes of parental involvement (independent variables) and student achievement (dependent variable). Parents completed the parent questionnaire to provide their perceptions of parent and school relations, administrative leadership, school climate, school culture, curriculum and instruction, and the Louisiana Public School and District Accountability Plan. Student academic achievement was based on the SPS of the school the parent’s child attended. The SPS is an aggregate mean of four measures of performance in a school: norm-referenced test scores, criterion-referenced test scores, attendance rates, and dropout rates.

**Instrumentation**

The School Analysis Model design provided for data concerning a school to be collected from numerous sources and instruments. The questionnaires collected attitudinal data from individuals who were involved with the schooling process. The stakeholder questionnaires, which provided quantitative data from 36 questions, were collected following standardized
collection procedures. The questionnaires had a closed-response format and were self-reported across groups (administrators, instructional staff, parents, and students). These instruments used a five-point scoring mechanism ranging from “strongly agree” to “strongly disagree.” The procedures for collecting data using the questionnaires were designed to ensure confidentiality for the respondents and to increase the timeliness wherein data were reported back to the DAT members and the school (Louisiana Department of Education, 2000b).

The Parent Questionnaire was a scannable document that was administered to the parents of those students who were given the Student Questionnaire. When appropriate, the District Assistance Team Leader (DAT-L) also sampled parents from grades K-3. The questionnaire contained a five-point, Likert-type response scale. The quantitative data were aggregated at the school-level by the LDE and reported as frequency distributions and averages (Louisiana Department of Education, 2000b).

During the fall of 1999, approximately 25,000 individuals provided usable data on five questionnaire versions, the Parent Questionnaire being one of them. Internal reliability statistics (Cronbach’s alpha) were computed for each version of the questionnaire. Other measures of reliability could not be computed because either (a) a test-retest scenario was prohibitive or (b) the items were not randomly distributed throughout the questionnaires. The latter condition prohibited the opportunity to compute a split-half coefficient (Spearman-Brown correlation coefficient) (Louisiana Department of Education, 2000b).

The Parent Questionnaire was completed by five thousand four hundred ninety-three parents in the fall of 1999 with a reliability coefficient of .9223. Evidence of construct validity and internal reliability of the teacher questionnaire suggested this instrument obtained information from the targeted stakeholder as intended by its developer. The revisions to all
versions of the questionnaire were developed using the 1999 Teacher Questionnaire version as the basis for building the other three versions, including the Parent Questionnaire (Louisiana Department of Education, 2000b).

**Procedures**

As outlined in the Louisiana Public School and District Accountability Plan, DAT conducted school visits during the fall of 2000. These visits allowed DAT members to assist schools in completing the requirements of the SAM 2000. The SAM 2000 had several components that were implemented at each school. These activities included a faculty needs assessment, classroom observations, focus groups for teachers and students, and questionnaires. Individuals at the schools were selected to complete the Instructional Staff Questionnaire, Administrative Questionnaire, and Student Questionnaire. Student Questionnaires were completed by at least one class per grade level for Grades 4 through 12. The Parent Questionnaire was filled out by the parents of the students who completed the Student Questionnaire. The Parent Questionnaire was limited to one per household for those parents having several children attending the same school (Louisiana Department of Education, 2000b).

The DAT-L requested the survey forms and other scannable documents from the LDE. The requests for scannable documents were quality controlled by LDE personnel to ensure that sampling frames were within the guidelines. The DAT-Ls forwarded all completed scannable documents directly to the LDE contractor (Louisiana Department of Education, 2000b).

Teachers whose classes completed the Student Questionnaire received packets containing the Student and Parent Questionnaire and DAT members were randomly assigned to assist in administering the questionnaires. Each child in the class received an envelope containing the Parent Questionnaire and a memo explaining the use of the instrument, a date for completion,
and the manner/format in which data would be reported. A collection point on campus was established and the completed instruments were kept in a secure file that was kept off the school campus and marked confidential. Any identifying marks on the questionnaire made by the respondent were removed. The district and school identification codes were put in the appropriate locations on the instrument. Any documents that were completed with ink were removed or remarked with lead pencils (Louisiana Department of Education, 2000b).

Statistical Analysis

When analyzing data that investigates the relationship between a single dependent variable and one or more independent variables, the method of statistical analysis recommended is multiple regression (Kerlinger, 1986). A multiple regression analysis is used to predict the changes in the dependent variable as they relate to the changes in the independent variables (Hair, Anderson, Tatham, & Black, 1995). In this study, the significance of the relationship between student academic achievement (dependent variable) and various independent variables was determined using a stepwise multiple linear regression analysis which identifies those independent variables which best predict academic achievement for the first seven research questions. Parental involvement (total) was the sum of the items dealing with parent and school relations, administrative leadership, school climate, school culture, curriculum and instruction, and the LPSDAS. In question eight, poverty was used as the dependent variable with parents’ perceptions of their involvement (total) used as the independent variable. A significance level of $p < .05$ was chosen as it is the standard probability level used in social science research. This procedure was used to identify the independent variables which appear to influence the academic achievement of students in selected school systems throughout the state of Louisiana.
A correlation matrix which shows all of the inter-correlation coefficients among all variables was developed to examine the relative strengths of the relationships among the variables. The level of significance was set at $p < .05$. The Statistical Package for the Social Sciences (1996) was used to enter and analyze the data. Stepwise multiple linear regression analyses were conducted to determine the relative strengths of each independent variable on the dependent variable. Independent variables were entered and tested based on a probability level of $p < .05$. The regression model determines an $R^2$ (Coefficient of Determination) for each variable entered. This value explained the amount of variance accounted for by each variable added in the equation.

All null hypotheses were tested at the .05 level of significance. Based on the data generated from the correlation matrix and stepwise multiple linear regression analyses, the hypotheses were either retained or rejected. Utilizing the stepwise multiple regression analysis allows the researcher to determine which independent variables best predict the dependent variable.

The final three research questions were analyzed using one-way analysis of variance. This analysis is appropriate for a research design where demographic variables are used as independent variables in order to determine differences among groups. The sum of the parental involvement scores used for research questions one through six was the dependent variable for the last three questions.

Data Analysis

This study initially consisted of 7,250 participants from 132 schools. However, subsequent to screening the data for missing cases, 47 participants were discarded as they represented schools that had received fewer than 10 completed surveys. Additionally, 220
participants were discarded for omitting answers to more than 15% of their survey queries (George & Mallery, 1999). Upon excluding these 267 participants (3.7%), the sample yielded 6,983 participants from 100 schools.

In addition to demographic data, the School Analysis Model (SAM 2000) Parent Questionnaire asked parents questions that provided information about their perceptions of six factors: parent and school relations, administrative leadership, school climate, school culture, curriculum and instruction in the schools, and the LPSDAS. Scores for these six measures were derived via an aggregate mean of responses to specific questions from the 32 items of the SAM 2000 survey that inquired about each of these factors. Participants’ six factor scores were then averaged to obtain their perception of their total involvement. These seven factors were then arithmetically averaged for participants at each of the 100 schools to provide each school with a mean score for these factors.

Research Question 1:
Is there a significant relationship between parents’ perceptions of parent and school relations and student achievement?

Research Question 2:
Is there a significant relationship between parents’ perceptions of administrative leadership and student achievement?

Research Question 3:
Is there a significant relationship between parents’ perceptions of school climate and student achievement?
Research Question 4:

Is there a significant relationship between parents’ perceptions of school culture and student achievement?

Research Question 5:

Is there a significant relationship between parents’ perceptions of curriculum and instruction in the schools and student achievement?

Research Question 6:

Is there a significant relationship between parents’ perceptions of the Louisiana Public School and District Accountability System and student achievement?

A stepwise multiple linear regression analysis was conducted utilizing the means of parents’ perceptions of parent and school relations, administrative leadership, school climate, school culture, curriculum and instruction in the schools, and the LPSDAS as the independent measures and the school performance score for each school as the dependent measure. As seen in Table 1, significant correlations were found between and among independent variables used in the study. The multiple regression identified variables entered in the equation and removed the variables that were not significant. This analysis indicated, as shown in Table 2, that parents’ perceptions of administrative leadership, school climate, and curriculum and instruction in the schools were significant predictors of a school performance score which is a measure of student academic achievement. The table shows the rank order of these variables which contributed most to the predictability.

Table 3 shows that, as a whole, these predictors accounted for 17.9% (15.4% adjusted) of the variability in school performance. The low degree of variance is contributed to the large sample size of 6,983 questionnaires. As shown in Table 4, the analysis of variance of regression
shows a significant $F$ value of 6.927 which was significant at .000. As seen in Table 5, this regression analysis also indicated an inverse relationship between school performance score and administrative leadership ($B = -150.145$) and curriculum and instruction in the schools ($B = -168.665$). A direct relationship was indicated between the dependent measure and school climate ($B = 220.356$).
Table 1  *Intercorrelations of the Independent Variables*

<table>
<thead>
<tr>
<th></th>
<th>Parent &amp; Sch. Rel.</th>
<th>Admin. Leader.</th>
<th>LPSDAS</th>
<th>School Climate</th>
<th>School Culture</th>
<th>Curr. &amp; Instruc.</th>
<th>Total Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent &amp; Sch. Rel.</td>
<td>1.00</td>
<td>.399**</td>
<td>.252**</td>
<td>.431**</td>
<td>.412**</td>
<td>.409**</td>
<td>.627**</td>
</tr>
<tr>
<td>Admin. Leader.</td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>6983</td>
<td>6983</td>
<td>6974</td>
<td>6983</td>
<td>6983</td>
<td>6983</td>
<td>6983</td>
</tr>
<tr>
<td>LPSDAS</td>
<td>.252**</td>
<td>.382**</td>
<td>1.00</td>
<td>.334**</td>
<td>.324**</td>
<td>.349**</td>
<td>.671**</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>6974</td>
<td>6974</td>
<td>6974</td>
<td>6974</td>
<td>6974</td>
<td>6974</td>
<td>6974</td>
</tr>
<tr>
<td>School Climate</td>
<td>.431**</td>
<td>.604**</td>
<td>.334**</td>
<td>1.00</td>
<td>.375**</td>
<td>.616**</td>
<td>.772**</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>6983</td>
<td>6983</td>
<td>6974</td>
<td>6983</td>
<td>6983</td>
<td>6983</td>
<td>6983</td>
</tr>
<tr>
<td>School Culture</td>
<td>.412**</td>
<td>.345**</td>
<td>.324**</td>
<td>.375**</td>
<td>1.00</td>
<td>.477**</td>
<td>.660**</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>6983</td>
<td>6983</td>
<td>6974</td>
<td>6983</td>
<td>6983</td>
<td>6983</td>
<td>6983</td>
</tr>
<tr>
<td>Curr. &amp; Instruction</td>
<td>.409**</td>
<td>.581**</td>
<td>.349**</td>
<td>.616**</td>
<td>.477**</td>
<td>1.00</td>
<td>.789**</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>6983</td>
<td>6983</td>
<td>6974</td>
<td>6983</td>
<td>6983</td>
<td>6983</td>
<td>6983</td>
</tr>
<tr>
<td>Total Involvement</td>
<td>.627**</td>
<td>.774**</td>
<td>.671**</td>
<td>.772**</td>
<td>.660**</td>
<td>.789**</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>6983</td>
<td>6983</td>
<td>6974</td>
<td>6983</td>
<td>6983</td>
<td>6983</td>
<td>6983</td>
</tr>
</tbody>
</table>

**p < .01
Table 2

*Variables Entered in the Stepwise Multiple Regression Analysis*<sup>a</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents' Perceptions of Administrative Leadership</td>
<td></td>
<td>Stepwise (Criteria: Probability-of-F-to-enter &lt;= .050, Probability-of-F-to-remove &gt;= .100).</td>
</tr>
<tr>
<td>Parents' Perceptions of School Climate</td>
<td></td>
<td>Stepwise (Criteria: Probability-of-F-to-enter &lt;= .050, Probability-of-F-to-remove &gt;= .100).</td>
</tr>
<tr>
<td>Parents' Perceptions of Curriculum and Instruction</td>
<td></td>
<td>Stepwise (Criteria: Probability-of-F-to-enter &lt;= .050, Probability-of-F-to-remove &gt;= .100).</td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: School Performance Score

Table 3

*Adjusted $R^2$ for Variables Entered*

<table>
<thead>
<tr>
<th>$R$</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>SE of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>.424&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.179</td>
<td>.154</td>
<td>80.0063</td>
</tr>
</tbody>
</table>

<sup>c</sup> Predictors: (Constant), Parents’ Perceptions of Administrative Leadership, Parents’ Perceptions of School Climate, Parents’ Perceptions of Curriculum and Instruction
The data analysis for the first six research questions identified three of the independent variables as significant predictors of student academic achievement in a school. Based on this investigation, a school’s SPS was lower when parents perceived the administrative leadership or the curriculum and instruction of the school as favorable. It was also discovered that when parents perceived the climate of a school to be positive, the SPS was higher. If the school’s climate was perceived as unsatisfactory by the parents, the students were not academically successful.

The formula containing the regression coefficients (B) for the stepwise multiple linear regression were \( \hat{Y} = -150.145X_1 + 220.356X_2 -168.665X_3 + 432.625 \) where \( X_1 = \) Administrative Leadership, \( X_2 = \) School Climate and \( X_3 = \) Curriculum and Instruction.

As seen in the regression analysis, only Administrative Leadership, School Climate, and Curriculum and Instruction were used to predict student academic achievement with a positive relationship existing between school climate and student academic achievement. As shown in Table 6, Parent and School Relations, School Culture, and the LPSDAS were not significant indicators and were excluded from the equation.
Table 4

*Analysis of Variance for Regression*

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>133019.81</td>
<td>3</td>
<td>44339.936</td>
<td>6.927</td>
<td>.000**</td>
</tr>
<tr>
<td>Residual</td>
<td>608095.73</td>
<td>95</td>
<td>6401.008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>741115.54</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < .01

Table 5

*Coefficients and Constant Entered for Regression Equation*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>432.625</td>
<td>157.192</td>
<td>2.752</td>
<td>.007</td>
</tr>
<tr>
<td>Parents' Perceptions of Administrative Leadership</td>
<td>-150.145</td>
<td>45.932</td>
<td>-3.269</td>
<td>.002</td>
</tr>
<tr>
<td>Parents' Perceptions of School Climate</td>
<td>220.356</td>
<td>57.588</td>
<td>3.826</td>
<td>.000</td>
</tr>
<tr>
<td>Parents' Perceptions of Curriculum and Instruction</td>
<td>-168.665</td>
<td>74.664</td>
<td>-2.259</td>
<td>.026</td>
</tr>
</tbody>
</table>

*a Dependent Variable: School Performance Score*
Table 6

Variables Not Included in Regression Equation

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta In</th>
<th>t</th>
<th>Sig.</th>
<th>Partial Correlation</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents' Perceptions of Parent and School Relations</td>
<td>.052</td>
<td>.453</td>
<td>.651</td>
<td>.047</td>
<td>.663</td>
</tr>
<tr>
<td>Parents' Perceptions of the Louisiana Public School and District Accountability System</td>
<td>.223</td>
<td>1.960</td>
<td>.053</td>
<td>.198</td>
<td>.646</td>
</tr>
<tr>
<td>Parents' Perceptions of School Culture</td>
<td>.031</td>
<td>.264</td>
<td>.792</td>
<td>.027</td>
<td>.625</td>
</tr>
</tbody>
</table>

Research Question 7:

Is there a significant relationship between parents' perceptions of their involvement and student achievement?

Research Question 8:

Is there a significant relationship between parents' perceptions of their involvement and poverty level?

To analyze parents' perceptions of their involvement in their child's school, the school performance score was used as an independent variable. Thus, a stepwise multiple linear regression was conducted to examine the relationship between the independent measures, school performance score and proportion of a schools' students who were impoverished, and the dependent measure of parents' perception of their total involvement. Parents' perceptions of their
total involvement were a value represented by the grand mean of the six means from the first six research questions. As seen in Table 7, this analysis yielded no significant relationship among these measures. A Pearson’s product-moment correlation indicated nonsignificant relationships between parents’ perceptions of their total involvement and school performance score, 
\( r(99) = -0.055, p = .591 \). There was also a nonsignificant relationship between parents’ perceptions of their total involvement and the proportion of a school’s students who were impoverished, 
\( r(99) = 0.015, p = .881 \). Therefore, it was determined that parents’ perceptions of their total level of involvement and a school’s level of poverty were not significant indicators of a school’s level of student academic achievement.

Table 7

<table>
<thead>
<tr>
<th></th>
<th>Parents’ Perceptions of their Total Involvement</th>
<th>School Performance Score</th>
<th>Proportion of Poverty Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents’ Perceptions of Their Total Involvement</td>
<td>Pearson corr. 1.000</td>
<td>-0.055</td>
<td>0.015</td>
</tr>
<tr>
<td>N</td>
<td>99</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>School Performance Score</td>
<td>Pearson corr. -0.055</td>
<td>1.000</td>
<td>-0.436**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.591</td>
<td>.</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>99</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>Proportion of Poverty Students</td>
<td>Pearson corr. 0.015</td>
<td>-0.436**</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.881</td>
<td>.000</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>99</td>
<td>99</td>
<td>99</td>
</tr>
</tbody>
</table>

\(* * p < .01\)
Research Question 9:

Is there any significant difference in parents' perceptions of their involvement among rural, urban, and suburban schools?

A univariate analysis of variance (ANOVA) was conducted to determine if school performance scores differed as a function of school location (urban, suburban, or rural). The Levene's test of homogeneity indicated ANOVA to be an appropriate analytical tool, $F(2, 96) = 1.05, p = .353$. The results, however, indicated no significant difference in the amount of variability among the three groups. Thus, there was no significant difference in parents' perceptions of their total involvement based upon school location, $F(2, 96) = 1.15, p = .320$ (see Tables 8 and 9).

Table 8

ANOVA Test of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>$DF$</th>
<th>$MS$</th>
<th>$F$</th>
<th>Sig.</th>
<th>Eta Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>6.517E-02$^a$</td>
<td>2</td>
<td>3.258E-02</td>
<td>1.152</td>
<td>.320</td>
<td>.023</td>
</tr>
<tr>
<td>Intercept</td>
<td>1233.790</td>
<td>1</td>
<td>1233.790</td>
<td>43613.377</td>
<td>.000</td>
<td>.023</td>
</tr>
<tr>
<td>School Location</td>
<td>6.517E-02</td>
<td>2</td>
<td>3.258E-02</td>
<td>1.152</td>
<td>.320</td>
<td>.023</td>
</tr>
<tr>
<td>Error</td>
<td>2.716</td>
<td>96</td>
<td>2.829E-02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1513.068</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>2.781</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$^a R^2 = .023$ (Adjusted $R^2 = .003$)
Table 9

Mean Values of Total Parental Involvement by School Location

<table>
<thead>
<tr>
<th>School Location</th>
<th>N</th>
<th>Subset 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>47</td>
<td>3.8796</td>
</tr>
<tr>
<td>Suburban</td>
<td>16</td>
<td>3.9172</td>
</tr>
<tr>
<td>Rural</td>
<td>36</td>
<td>3.9350</td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td>.259</td>
</tr>
</tbody>
</table>

Research Question 10:

Is there any significant difference in parents’ perceptions of their involvement by race?

Research Question 11:

Is there any significant difference in parents’ perceptions of their parental involvement across educational levels?

A univariate ANOVA was run that utilized parents’ race (Black, Asian/Pacific Islander, Hispanic, Alaskan Native/American Indian, and White) and parents’ education level (less than high school, high school graduate, vocational/technical training, 2-year college, and 4-year college) as the independent measures and parents’ perceptions of their total involvement as the dependent measure. However, the Levene’s test of homogeneity indicated that error variance in the dependent measure was not dispersed evenly among the groups of the two independent measures, $F(24, 6606) = 2.36, p < .001$. Results from this analysis indicated that ANOVA was not the most appropriate inferential analysis. Therefore, separate Kruskal-Wallis one-way analysis of variance by ranks tests were used. This statistical examination indicated there to be a significant difference in parents’ perceptions of their total involvement by education level,
$H(4) = 62.68, p < .001$ (see Table 10). A non-directional test was utilized to identify differences between any and all pairs. An alpha of .01 was used to reduce the likelihood of Type I errors. These planned comparisons indicated there to be significant differences between those who did not graduate from high school and all other education levels. Parents who did not possess a high school diploma perceived their level of involvement as unacceptable. A significant difference was found between parents with a 4-year college/university degree and all other education levels. This group of parents perceived their level of involvement as high. As shown in Table 11, the second Kruskal-Wallis one-way analysis by ranks test indicated there was a significant difference in parents’ perceptions of their total involvement based upon race, $H(4) = 15.63, p = .004$. Significant differences were found between all the races but due to the small sample size of many of the groups, it was difficult to draw significant conclusions. However, the test for planned comparisons indicated there was a significant difference between Whites and Blacks. White parents perceived their level of involvement to be higher than Black parents.

Table 10

*Kruskal-Wallis Test by Ranks for Educational Level*

<table>
<thead>
<tr>
<th>Education Level</th>
<th>N</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents’ Perceptions of Their Total Involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; High School</td>
<td>1497</td>
<td>3152.87</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>2608</td>
<td>3301.75</td>
</tr>
<tr>
<td>Vocational/Technical School</td>
<td>1073</td>
<td>3397.07</td>
</tr>
<tr>
<td>2-year Junior College</td>
<td>632</td>
<td>3316.67</td>
</tr>
<tr>
<td>4-year College/University</td>
<td>887</td>
<td>3783.82*</td>
</tr>
<tr>
<td>Total</td>
<td>6697</td>
<td></td>
</tr>
</tbody>
</table>

*Significant mean ranks were found at $p < .05$
Table 11

*Kruskal-Wallis Test by Ranks for Race*

<table>
<thead>
<tr>
<th>Race</th>
<th>N</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents’ Perceptions of Their Total Involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>4066</td>
<td>3362.25</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>155</td>
<td>3515.35</td>
</tr>
<tr>
<td>Hispanic</td>
<td>69</td>
<td>3205.37</td>
</tr>
<tr>
<td>Alaskan Native/American Indian</td>
<td>82</td>
<td>3116.93</td>
</tr>
<tr>
<td>White</td>
<td>2478</td>
<td>3539.95*</td>
</tr>
<tr>
<td>Total</td>
<td>6850</td>
<td></td>
</tr>
</tbody>
</table>

*Significant mean ranks were found at p < .05

Summary of Results

The first six research questions were generated to determine which of the six components of the SAM 2000 survey best predicted student academic achievement. It was determined that how parents perceived the administrative leadership of the school, the curriculum and instruction of the school, and the school climate best predicted a school’s performance score. A positive relationship was found between a school’s climate and academic achievement. Schools whose parents perceived the school climate as favorable had higher school performance scores.

The parents’ responses to the questionnaires were averaged to determine a level of total parental participation for each school. The number generated was used in the remaining five research questions. When the statistical analyses were run, no significant relationships were found between how parents perceived their involvement and academic achievement or how parents perceived their involvement and the poverty level of the schools, as was being studied in research questions seven and eight.
Research question nine examined the difference in the location of the school (urban, suburban, or rural) and how parents perceived the level of their involvement. No significant differences were found. Research questions ten and eleven compared the race and educational level of the parents to the level of total parental involvement and a significant difference was detected. In relation to race, a difference was found between Black and White parents. White parents appeared to have more agreeable perceptions of their total involvement than those parents who were Black. Post hoc analysis indicated that parents without a high school diploma had less agreeable perceptions of their total involvement than those parents within greater educational levels. Parents who had graduated from a 4-year college or university had more agreeable perceptions of their total involvement than parents at other educational levels.

Implications for Education

As shown in this study and evidenced in recent research, the climate of a school can be a positive influence on the learning environment and how parents perceive the climate can also affect student academic achievement (Freiberg, 1998). According to Sizer, founder and director of the Coalition for Essential Schools, the key to keeping students in school and promoting a positive school climate is personalization. A school in California has made dramatic improvements in the area of student academic achievement by improving the climate of the school. Teachers at this school made efforts to know their students, recognize their accomplishments, and take a stand against violence (Shore, 1995). As evidenced in this study, student academic achievement was higher in schools where parents perceived the climate as positive. Therefore, feedback from parents about a school’s climate should be requested periodically. In an effort to increase student academic achievement, parents’ perceptions of the
school climate should be assessed and adjustments made to provide a climate which is perceived as positive. Even if it is "not broken, we should polish it."

"A healthy school climate contributes to effective teaching and learning" (Freiberg, 1998, p. 22). Unfortunately, school climate is usually ignored and often hard to define. It is made up of elements that range from the "quality of interactions in the teachers' lounge to the noise levels in the cafeteria and hallways, from the physical structure of the building to the physical comfort levels of the individuals and how safe they feel. Even school size and student-teacher opportunities for interaction affect the climate of a school" (Freiberg, p. 22).

As evidenced in the research of Freiberg (1998), school climate has a definite influence on the academic achievement of a school. The present investigation revealed that when attempting to improve student academic achievement, educators should be aware of the importance of school climate and should focus on its improvement. Before significant improvement in academic achievement can be made, the climate must be perceived as positive.

There are numerous reasons for developing partnerships with schools, families, and communities. They can:

"improve school programs and school climate, provide family services and support, increase parents' skills and leadership, connect families with others in the school and in the community, and help teachers with their work. The main reason to create such partnerships is to help all students succeed in school. When parents, teachers, students, and others view one another as partners in education, a caring community forms around students" (Epstein, 1995, p. 701).

This study found that Black parents perceived their level of involvement to be low when compared to White parents. This may have been caused by the differences in parental expectations about school achievement that some Black and White families have (Cairns, Cairns, & Neckerman, 1989). Some Black families experience ongoing poverty which may lead to a
condition of emotional depression. These feelings of depression make it difficult for parents to interact with their children in a sensitive and positive way (McLoyd, 1990), and consequently it may impact their perceptions regarding their level of school involvement.

Many parents shy away from becoming involved in their children’s school because their own parents were not involved and therefore, the parents lack models of parental involvement (Ballantine, 1999). “Research tells us that the children who achieve the most are the ones whose parents are most involved. All parents can be involved, and they can have a say in what the school does” (Ballantine, 1999, p. 170).

Epstein stated, “The way schools care about children is reflected in the way schools care about the children’s families. If educators view children simply as students, they are likely to see the family as separate from the school” (Epstein, 1995, p. 701). Schools should make efforts to increase the involvement level of their Black parents in the education of their children. Educators must develop programs which go beyond just inviting parental involvement. Programs should say we value and need your involvement to produce the best learning situation for your child.

According to Peterson and Deal (1998), the leaders of a school are the key to building a positive climate. Though hard to define, climate is powerful and the leaders of a school are the main components in shaping the school’s climate (Peterson & Deal). In this study, when considering parents’ perceptions of a school, a negative relationship was found between a school’s administrative leadership and student academic achievement. A positive relationship was discovered between parents’ perceptions of school climate and academic achievement. Administrators need to be aware of their influence on the achievement of the students in their schools and attempt to develop a climate conducive to student success.
Recommendations for Further Study

The following recommendations for further research are offered based on the results of this study and the review of literature:

1. Further research should extend to schools in the three highest categories of the Louisiana Public School and District Accountability System. A sample that contained schools from all academic levels, such as Schools of Academic Distinction, Schools of Academic Achievement, and Academically Above Average Schools, would strengthen future investigations.

2. If a qualitative component were added to this study, parents' opinions and suggestions could be analyzed and data that were not collected in the questionnaire could be included in this investigation.

3. As indicated in Tables 5 and 6, this study discovered a significant negative relationship between the percentage of a school's students at the poverty level and the school's school performance score. Since this specific question was not examined in this study, a similar study could investigate the relationship between the poverty levels of the students and the schools' academic achievement.

4. A positive relationship between student academic achievement and curriculum and instruction and student academic achievement and administrative leadership was expected. Further investigations should examine the relationship found between these variables.
REFERENCES


APPENDIX A

PARENT QUESTIONNAIRE
DIRECTIONS: The information that you give us on this document is confidential. Reports will be made with data summed at the school level, and no one person will be identified with his/her particular information.

Incorrect marks Correct mark Use a #2 pencil only

DARKEN THE OVAL BESIDE THE SINGLE (ONE) BEST ANSWER TO EACH QUESTION.

1. How would you best describe your race?
   Black (not Hispanic).................................(1)
   Asian or Pacific Islander............................(2)
   Hispanic.............................................(3)
   Alaskan Native or American Indian..............(4)
   White (not Hispanic)................................(5)

2. What is your highest completed level of education?
   Less than 12th Grade................................(1)
   High school...........................................(2)
   Vocational/technical school.........................(3)
   2-yr. junior college................................(4)
   4-yr. college or university...........................(5)

3. On average, how long does your child spend each school night (Sun. - Thurs.) doing homework?
   0 - 15 minutes.........................................(1)
   15 - 30 minutes........................................(2)
   30 - 45 minutes........................................(3)
   45 - 60 minutes........................................(4)
   More than 60 minutes................................(5)

4. On average, how long does your child spend each school night (Sun. - Thurs.) watching television and/or playing video games?
   Less than an hour.....................................(1)
   1 - 2 hours............................................(2)
   2 - 3 hours............................................(3)
   3 - 4 hours............................................(4)
   More than 4 hours....................................(5)

5. Most of my child's teachers recognize me on sight when I am at school.........................(1)
   (2) (3) (4) (5) (6)

6. Administrators willingly provide assistance to me about my child's teacher.....................(1)
   (2) (3) (4) (5) (6)

7. I understand most aspects of Louisiana's High Stakes Testing Policy that affect my child........(1)
   (2) (3) (4) (5) (6)

8. The rules at this school are consistently enforced by my child's teachers.......................(1)
   (2) (3) (4) (5) (6)

9. My child can achieve in school at or above the levels of other students in Louisiana.........(1)
   (2) (3) (4) (5) (6)

10. This school does a good job teaching my child social studies....................................(1)
    (2) (3) (4) (5) (6)

11. I often provide help to my child with his/her school work...........................................(1)
    (2) (3) (4) (5) (6)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Do Not Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Administrators encourage parents to help in efforts to improve the school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Parents participate in developing this school's improvement activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Classroom rules are enforced fairly by most of my child's teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. In this school, my child feels safe in his/her classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. My child will graduate from high school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. This school does a good job in teaching my child to read well</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I care about what grades my child earns at school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I tell my child that he/she needs a good education for success as an adult</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. When I go to school, I often see administrators talking with students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. The classroom rules at this school keep other students from bothering my child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. My child can do better school work than other students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Most of my child's teachers encourage him/her to do extra work to improve his/her grades</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. This school does a good job teaching my child science</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am involved in school-supported activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Administrators emphasize parent participation in decision-making activities at this school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. When I visit my child's school, I feel safe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. The ability of my child to do well with his/her school work is higher than that of students at other schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. This school does a good job teaching my child to write well</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. I understand most aspects of Louisiana's School Accountability System that affect my child's school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. I want feedback from teachers about my child's grades and behavior at this school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Parents participate in developing this school's policies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Student fights are not frequent at school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. My child can achieve in school at or above the level of other students in the nation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. My child will attend some form of higher education after graduating from high school (e.g. college, junior college, technical school)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. This school does a good job in teaching my child mathematics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B

EXPLANATION OF QUESTIONNAIRE CODING
Below are the categories from the School Analysis Model and the six components that were examined in this study. The questions that correspond to each component are listed after the heading.

Parent and school relations  5, 11, 18, 19, 25, 31
Administrative leadership  6, 12, 13, 20, 26, 32
School climate  8, 14, 15, 21, 27, 33
School culture  9, 16, 22, 28, 34, 35
Curriculum and instruction  10, 17, 23, 24, 29, 36
Louisiana Public School and District Accountability System  7, 30
I. DOCUMENT IDENTIFICATION:

Title: An Investigation of the Relationship Between Parents’ Perceptions of Parental Involvement and the Academic Achievement of Their Children

Author(s): Dr. Joanne L. Hood & Dr. Otis K. LoVette

Corporate Source: 

Publication Date: 3-1-02

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

---

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 1

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2A

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2B

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: Dr. Joanne L. Hood

Printed Name/Position/Title: Dr. Joanne L. Hood

Organization/Address: 147 Lester Road, Arcadia, Louisiana 71001

Telephone: 1-318-263-2402

FAX: 

E-Mail Address: phood@bayou.com

Date: 4-5-02
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

<table>
<thead>
<tr>
<th>Publisher/Distributor:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>Price:</td>
<td></td>
</tr>
</tbody>
</table>

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
</tbody>
</table>

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: ericfac@inet.ed.gov
WWW: http://ericfacility.org

EFF-088 (Rev. 2/2001)