

**Public School Teachers' Perceptions of Administrative Support and its Mediating  
Effect on Their Job Satisfaction and Intent to Stay in Teaching**

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ABSTRACT

Due to a high rate of teacher attrition currently being experienced in public schools, a teacher shortage may be looming in the near future. Research shows that attrition rates are highest among novice teachers. In part, teacher attrition has also made it increasingly difficult for schools to meet the "highly qualified" requirement of the No Child Left Behind Act of 2001. Past efforts to reverse this trend have concentrated on increasing the supply of qualified teachers; however, more recent studies have shown that the solution lies partially in raising retention rates. Research has identified several reasons teachers have left the profession, such as, low salary, student misbehavior and working conditions, including administrative support. Another common thread among teachers who leave the profession has been dissatisfaction with working conditions in their school.

This study examined the relationship between teachers' intent to stay in teaching, teachers' job satisfaction, perceived administrative support, teaching experience, perceived student behavior, and teachers' satisfaction with their salaries. After the conduct of a preliminary descriptive analysis, a hypothesized path model was employed through the use of four different samples derived from the 2003-04 Schools and Staffing Survey, Public School Teacher Questionnaire (Form SASS-4A). The first sample was the combined environmental setting. The second, third, and fourth sub-samples were urban, urban fringe, and rural samples, respectively, as identified by the respondent.

Based on the path analysis, perceived administrative support, teaching experience, perceived student behavior, and teachers' satisfaction with their salary were identified as significant predictors of teachers' job satisfaction and intent to stay in teaching. Administrative support was the most significant predictor of teachers' job satisfaction, while teachers' job satisfaction was the most significant predictor of teachers' intent to stay in teaching. The path analysis also confirmed that perceived administrative support mediates the effect of teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to both teachers' job satisfaction and intent to stay in teaching. No significant differences were found among the sample and their sub-samples based on the environmental setting of the school.

## Dedication

First and foremost, I dedicate this dissertation to God the Father from whom all blessings flow. My prayer is that I will continue to be a good steward of the abilities and gifts which you have loaned me. God has blessed me with an amazing family; I dedicate this dissertation to you. To my “Proverbs 31” wife and best friend, Amy, we have persevered and overcome this process together. To Lauren and Logan, my babies, the joy that comes from being your father is indescribable. To my father, Dan, thank you for your unconditional love and support over the years. To mom, you never had any doubt that I could accomplish such a feat, rest peacefully. Last, I dedicate this dissertation to Brie Anne Reynolds. You inspired me immensely for the twenty-one short years you were here on earth, and you continue to inspire me from heaven. You were and will always be the first doctor in the family.

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## Chapter One: Introduction to the Study

The teacher attrition rate in public education, or the velocity at which teachers leave the profession, is disproportionately higher than for other professions (Liu & Meyer, 2005). Ingersoll and Smith (2003) report that “after just five years between forty to fifty percent of all beginning teachers have left the profession (pg.31).” This consistent loss of teachers, especially novice teachers, from the already limited supply of those entering the field is likely to create a teacher shortage as student populations continue to rise. This shortage will be compounded by the oncoming retirement wave of teachers from the baby boom generation (Liu & Meyer, 2005). In addition, the phenomenon of teacher attrition is making it increasingly difficult for school districts to secure “highly qualified” teachers (Bush & Department of Education, 2001), and thus compromises the quality of instruction.

Policymakers have responded by implementing programs intended to increase the supply of qualified teachers. Both state and local education agencies have offered various career incentives to prospective teachers in an effort to increase the number of qualified applicants, but have often neglected to properly address teacher attrition. The problem of a teacher shortage must include efforts to improve teacher retention (Ingersoll & Smith, 2003). Failing to address the issue of retaining teachers defeats the purpose for increasing the supply of teachers.

It has also been established that increased teacher job satisfaction reduces attrition, enhances collegiality, improves job performance, and positively affects student outcomes (Shann, 1998). Liu and Meyer (2005) suggest there is a direct link between job satisfaction and teacher attrition. Therefore, identifying strategies that increase teacher job satisfaction should increase teacher retention (Woods & Weasmer, 2004).

One variable that has over time remained a consistent predictor of teacher attrition and job satisfaction is compensation. Liu and Meyer (2005) found that low compensation was the leading cause of teachers’ lack of satisfaction with their job. Among beginning teachers who left the profession, more than seventy five percent linked their departure to low salary (Ingersoll & Smith, 2003). Darling-Hammond (2003) found that teacher

salaries are about twenty percent lower, on average, compared to other professions that require similar education and training.

A review of current research revealed that student behavior also affects both teachers' job satisfaction and their intent to remain in the profession. According to Liu and Meyer (2005), disruptive student behavior played a vital role in teachers' satisfaction with their profession and those teachers who left teaching due to job dissatisfaction often linked their decision to student discipline problems (Ingersoll, 2003; Liu & Meyer, 2005). These studies provide insight into teacher attrition; the excitement experienced by novice teachers may be neutralized by the misbehavior of students.

Previous research also demonstrated that teachers in urban schools have a higher rate of attrition than teachers in other schools (Smith & Smith, 2006). Ingersoll (2003) agreed and found that teacher attrition rates in urban schools are slightly higher than attrition rates recorded by teachers in suburban and rural schools. The high attrition rate for teachers in urban schools is one of many problems faced by schools that commonly serve high populations of low income, high poverty, and minority students, many who struggle academically. In addition to attrition, urban schools are traditionally harder to staff than either suburban or rural schools (Loeb, Darling-Hammond, & Luczak, 2005).

Additionally, a review of research has shown that the rate of teacher attrition is higher for beginning teachers than experienced teachers. Within the first five years of teaching, about a third of teachers leave the profession (Darling-Hammond, 2003). A later study indicated that the attrition rate was even greater and within the first three years of teaching, about one out of every three teachers leave the profession (Smith & Smith, 2006). According to Ingersoll and Smith (2003), almost forty percent of former novice teachers identified the pursuit of a better job or career as their main reason for leaving the profession.

The variables mentioned above are commonly identified as factors that influence teacher attrition; although Darling-Hammond (2003) maintains that retaining good teachers, both novice and veteran, rests primarily on teacher working conditions. By definition, working conditions of teachers include, but are not limited to the following: (a) class size; (b) availability of instructional materials; (c) teacher participation in decision making; (d) collegial learning opportunities; (e) teaching load; and (f) strong

leadership and administrative support. Strong leadership and administrative support also has been closely linked to increased job satisfaction (Perie, Baker, & American Institutes for Research, 1997). Accordingly, teachers' perceptions of leadership and administrative support may be a significant predictor of their intention to stay in teaching as well as job satisfaction. This study examined public school teachers' perceptions of administrative support and its effect on their job satisfaction and intent to stay in teaching.

### *Statement of the Problem*

#### *Teacher Attrition*

Annually, tens of thousands of public school teachers leave the profession for other occupations, transfer to other schools, or depart for various other reasons (Kelly, 2004). Evidence has been presented that indicates that a severe teacher shortage will confront our nation's public schools in the near future (Ingersoll, 2003). This will pose a major problem for public schools, especially considering the time, money, and effort districts already expend on recruiting and hiring new teachers (Edgar & Pair, 2005).

Although a lack of qualified teachers appears to plague most schools, including all grade levels and most content areas, research has identified schools and districts that are particularly targeted. The turnover rate is higher for teachers who are employed by schools that serve high proportions of low achieving, low income, and minority students and if they remain in teaching, they are likely to relocate to the more economically and educationally advantaged schools (Loeb et al., 2005). Not unexpectedly, schools that experience the highest attrition rates are also the most hard-to-staff schools. Historically, qualified special education teachers have proven the most difficult to recruit and retain. A recent study indicates that ninety eight percent of the nation's school districts reported teacher shortages in special education and the majority of these shortages were reported by the largest urban districts (McLeskey, Tyler, & Saunders-Flippin, 2004).

#### *Teacher Job Satisfaction*

Faculty are both the largest cost and largest human capital resource of any school system, and understanding factors that contribute to teacher satisfaction (or dissatisfaction) is essential to improving the information base needed to support a successful educational system (Perie et al., 1997). Consequently, teacher job satisfaction

has been shown to be a predictor of teacher retention and a determinant of teacher commitment, which contributes to school effectiveness (Shann, 1998).

Unfortunately, many teachers report that they are not satisfied with their jobs. According to Perie et al. (1997) thirty four percent of their participants from a national data set indicated they were not sure if they would again choose a teaching career. A majority indicated that it was a waste of time to try to do their best job as a teacher.

#### *The Relationship between Teacher Attrition, Teacher Job Satisfaction, and Student Achievement*

Teacher turnover, when teachers either cease teaching (attrition) or transfer to other schools, disrupts the learning process and leads to substandard instruction (Liu & Meyer, 2005). According to Ingersoll and Smith (2003) a high turnover rate of teachers does not only create staffing problems; but also harms the school environment and student performance. Liu and Meyer (2005) suggest that the inability of school districts to recruit qualified replacements in a timely manner will force them to hire temporary teachers, or relax employment criteria so that non-qualified teachers are employed. Both the inability to recruit and the employment of non-qualified teachers compromise the quality of instruction. Further, as noted by Edgar and Pair (2005), even experienced teachers require time before they settle into new assignments and become acquainted with new students, new colleagues, and new routines. Even when a replacement is employed promptly, the transition period disrupts the learning environment.

Research has shown that the level of the teachers' job satisfaction is related positively to student achievement. Shann (1998) maintains that teacher job satisfaction improves job performance and positively affects student outcomes. Accordingly, a teacher's job satisfaction may influence the quality and stability of instruction given to students (Perie et al., 1997). Therefore, both low teacher turnover and teacher job satisfaction positively influence student achievement.

#### *Policy Context of the Problem*

##### *Teacher Attrition and NCLB*

The National Commission on Teaching and America's Future (1996) maintained that the teacher shortage had forced many school systems to lower their standards for teacher quality, and sometimes waive their standards to allow less qualified individuals to

teach (Teaching & America's Future, 1996). Five years later, President George W. Bush's *No Child Left Behind (NCLB)* act of (2001) was enacted including a requirement that teachers in all schools be "highly qualified." Specifically, NCLB, which became law on January 8, 2002, required that all public school teachers become highly qualified in the core academic subjects they teach by the end of the 2005-2006 school year (Spradlin & Prendergast, 2006). *NCLB* also requires that newly hired teachers in Title I programs or schools be highly qualified immediately. To be highly qualified, a teacher must possess at minimum a bachelor's degree, have full state certification, and demonstrate subject matter knowledge in each subject taught (Office of the Deputy Secretary, 2004).

Obviously, one of the primary goals of *NCLB* was to ensure that every child was taught by a well-prepared, highly qualified teacher; however, many districts across the nation continue to struggle to meet this goal (Spradlin & Prendergast, 2006). Harrell and Jackson (2004) maintain that *NCLB* was a bold effort to improve education in the United States, but may be facilitating a decrease in the quality of student learning. They note that the removal of barriers to teacher certification under the belief that it will increase both quantity and quality is a misconception. The teacher shortage is not an inexpensive problem that can be solved quickly and easily (Harrell & Jackson, 2004). The process of recruiting new teachers, without addressing teacher retention, is much like pouring water into a bucket filled with holes (Ingersoll, 2002). On the contrary, Ingersoll and Smith (2003) argue that findings on teacher dissatisfaction, which are related to teacher attrition, are important because they point to issues that may be fixed through policy initiatives.

#### *Administrative Support and the ISLLC Standards*

Under the guidance of the Council of Chief State School Officers (CCSO), the Interstate School Leaders Licensure Consortium (ISLLC) was developed in 1988 as part of an effort to improve the quality of educational leadership in the public schools. ISLLC developed a framework for redefining school leadership commonly referred to as the standards (Murphy, Yff, & Shipman, 2000). The ISLLC standards were first adopted in November of 1999 and their most recent revision was adopted by the National Policy Board for Educational Administration on December 12, 2007. The six ISLLC standards are: (1) an education leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is



shared and supported by all stakeholders; (2) an education leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth; (3) an education leader promotes the success of every student by ensuring management of the organization, operation, and resources for a safe, efficient, and effective learning environment; (4) an education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources; (5) an education leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner; and (6) an education leader promotes the success of every student by understanding, responding to, and influencing the political, social, economic, legal, and cultural context.

The ISLLC standards address the administrative support school leaders should be exhibiting and implementing when working with teachers, and their primary purpose is to strengthen leadership in the public schools. The ISLLC standards are either being implemented, at least partially, or used by most states as a reference to develop educational leadership policy (Murphy et al., 2000). This study examined public school teachers' perceptions of administrative support in their present school, and its effect on the teachers' job satisfaction and intent to stay in teaching.

#### *Need and Purpose for the Study*

Although a moderate amount of research has demonstrated the influence of specific variables, i.e. - teaching experience, student behavior, and compensation, on teachers' job satisfaction and intent to stay in teaching, a modest amount of research has examined the influence of working conditions on teachers' decisions to stay in or leave teaching (Loeb et al., 2005). A review of these data suggests that the cause of teacher attrition and job dissatisfaction may be related to teachers' working conditions. Therefore, addressing the working conditions identified by teachers as factors that influenced their decision to leave teaching is an important, practical, and effective focus for our efforts to increase teacher retention (Ingersoll, 2001). Improved working conditions should contribute to lower rates of beginning teacher attrition, and in turn,

diminish school staffing problems and improve the academic performance of students (Ingersoll & Smith, 2003).

An undeveloped research core has addressed working conditions and their effect on teachers' job satisfaction and intent to stay in teaching. Understanding the effect of individual teacher working conditions enables policy makers to develop precise, explicit, and measurable goals. This study is specifically focused on the influence of a single working condition, administrative support. Ingersoll (2003) maintains that teachers who leave teaching have often attributed their departure to working conditions, including inadequate administrative support. For the purpose of this study, perceived administrative support is defined as the behaviors exhibited by the building level principals identified by the respondent.

#### *Research Questions*

The three research questions examined are as follows:

- (1) Does perceived administrative support mediate the effect of teaching experience, perceived student behavior and teachers' satisfaction with their salary relative to teachers' job satisfaction?
- (2) Does perceived administrative support mediate the effect of teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to teachers' intent to stay in teaching?
- (3) Does the mediating effect of perceived administrative support differ according to the environmental setting of the school?

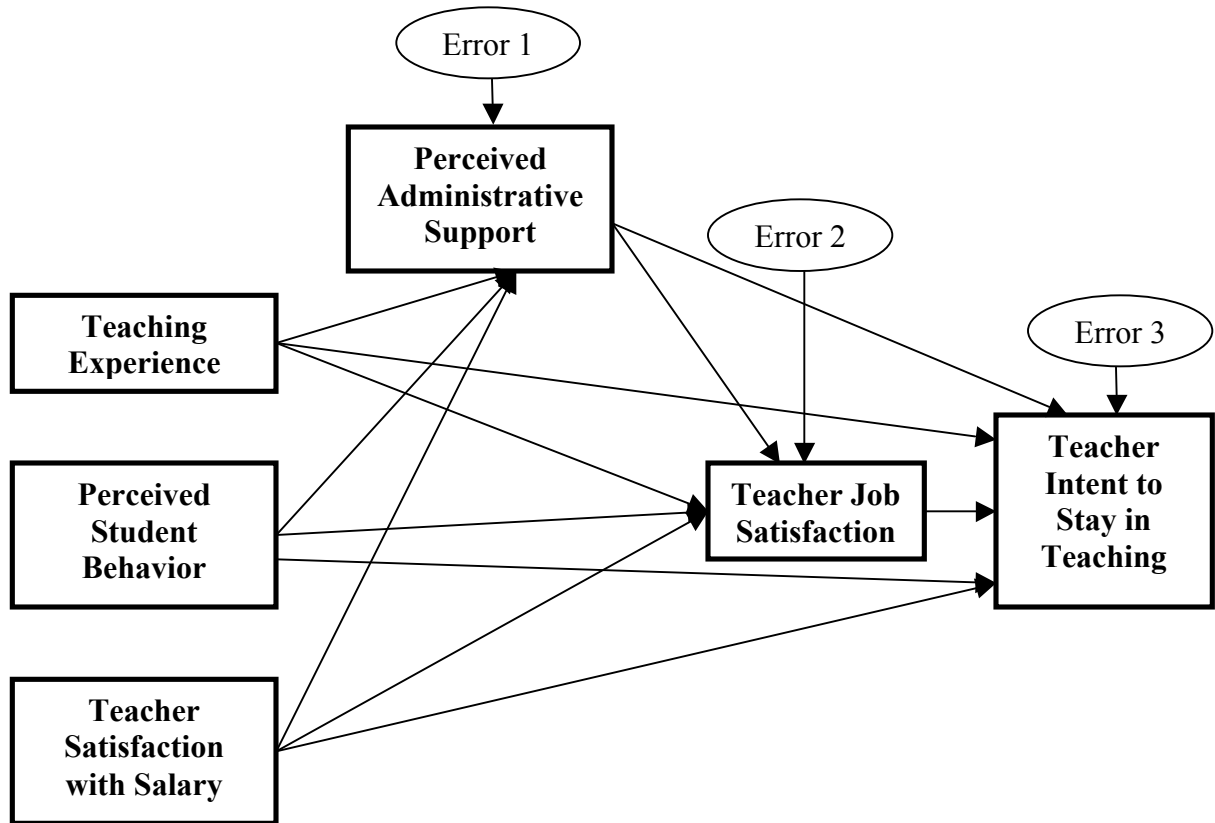
#### *Theoretical Framework*

In order to answer the research questions stated above, a hypothesized theoretical framework was constructed and contained the following hypotheses: (a) teaching experience, perceived student behavior, and teachers' satisfaction with their salary are significant predictors of perceived administrative support; (b) perceived administrative support, teaching experience, perceived student behavior, and teachers' satisfaction with their salary are significant predictors of teachers' job satisfaction and intent to stay in teaching; (c) perceived administrative support mediates the effects of teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to teachers' job satisfaction and intent to stay in teaching; and (d) teachers' job

satisfaction is a significant predictor of teachers' intent to stay in teaching. A path analysis model was employed using SPSS 14.0 to analyze data from the *2003-04 Schools and Staffing Survey (SASS)* public school teacher questionnaire (SASS-4A). Specifically, the SASS-4A gathered responses from a national sample of approximately 34,810 full-time public school teachers who held regular or standard state certification. No part-time teachers, teachers of private or Bureau of Indian Affairs schools, or teachers with any type of certification other than regular or standard certification in the state in which they were teaching at the time of the survey were included in this study. The application of appropriate weights and design effect make the findings of this study generalizable and representative of teachers throughout the United States. The initial path analysis model is presented in Figure 1.1 below.

Figure 1.1

*Initial path analysis model for overall sample: The overall model of the relationship between Teacher Intent to Stay in Teaching, Teachers' Job Satisfaction, Perceived Administrative Support, Teaching Experience, Perceived Student Behavior, and Teachers' Satisfaction with their Salary.*



### *Definitions of the Variables Used in the Study*

In order to clarify this study, the definitions for the variables employed in the initial path analysis model in Figure 1.1 are presented in Table 1.1 below.

Table 1.1

*Definitions for the theoretical framework: The Relationship between Teacher Intent to stay in teaching, Teacher Job Satisfaction, Perceived Administrative Support, Teaching Experience, Perceived Student Behavior, and Teacher Satisfaction with Salary.*

Variable	Description	Items and Coding
Teacher Intent to stay in teaching	The amount of time the teacher (respondent) plans to remain in the teaching profession.	The scale score of SASS item 0383, using reverse scoring.
Teacher Job Satisfaction	The general level of satisfaction the teacher (respondent) is feeling with his/her present teaching assignment.	The scale score of SASS item 0350, using reverse scoring.
Perceived Administrative Support	The behaviors exhibited by the principal/school administration of the teacher's (respondent's) present teaching assignment.	The factor score derived from SASS items 0330, 0331, 0337, 0340, and 0342, using reverse scoring on all items.
Teaching Experience	Whether the teacher (respondent) has more than three years of full-time teaching experience (0), or three or less years of full-time teaching experience (1).	Categorical score from SASS item 0209, a dummy variable was created where a response of 1=0 and a response of 2=1.
Perceived Student Behavior	The level which student behavior in the teacher's (respondent's) school was perceived to interfere with his/her teaching.	The scale score of SASS item 0333, using reverse scoring.

Table 1.1 (Continued)

*Definitions for the theoretical framework: The Relationship between Teacher Intent to stay in teaching, Teacher Job Satisfaction, Perceived Administrative Support, Teaching Experience, Perceived Student Behavior, and Teacher Satisfaction with Salary.*

Teacher Satisfaction With Salary	The general level of satisfaction the teacher (respondent) is feeling with his or her present teaching salary.	The scale score of SASS item 0332, using reverse scoring.
Environmental Setting of the School	A three-level categorization based on the eight-level U.S. Census Bureau definition of locale. A central city is a school located in a large or midsize central city. An urban fringe/large town school is a school located in the urban fringe of a large or midsize central city, in a large town, or in a rural area within an urbanized metropolitan area. A rural/small town school is a school located in a small town or rural setting, and located outside an urbanized metropolitan area (Strizek et al., 2006).	The respondents answer to SASS item URBAN03, 1=large or mid-size central city, 2=urban urban fringe of a large or mid-size central city, and 3=small town/rural.

### *Limitations of the Study*

The principal limitation of this study restricts the statistical analysis to the data collected from a previous national survey. The use of secondary data limits further analysis to the questions asked by the original survey and can only measure what was asked by those questions. Further, controls were not made for student or individual teacher characteristics, other than two categories for the years of teaching experience. Nor did this study control for student or teacher demographics, other than three environmental categories.

### *Significance of the Study*

Woods and Weasmer (2004) suggest that if factors that constitute job satisfaction are identified, policy and procedures can be developed that will provide support for both novice and veteran teachers to increase their levels of job satisfaction and reduce attrition rates. This study sought to establish relationships between teachers' intent to stay in teaching, teachers' job satisfaction, perceived administrative support, teaching experience, perceived student behavior, and teachers' satisfaction with their salary. Once these relationships are established, factors may be identified that increase job satisfaction and, in turn, decrease attrition rates among teachers. These findings could lead to significant changes in principal preparation programs, professional development, teacher pre-service training, and administrative and teacher mentoring programs.

## Chapter Two:

### Review of the Related Literature

The purpose of this chapter is to review literature related to the topics of teachers' intent to stay in teaching, teachers' job satisfaction, administrative support, teaching experience, student behavior, teachers' satisfaction with their salary, and the environmental setting of the school. An overview of notable studies concerning these variables is presented.

This chapter is arranged into seven categories, with six of those categories containing subcategories. Each category and subcategory is considered necessary for a clear understanding of this research study. The categories and subcategories are as follows: (1) teachers' intent to stay in teaching; (a) teacher turnover; (b) reasons for teacher attrition; (c) teacher recruitment as a response to teacher attrition; and (d) characteristics of teachers who remain in teaching (2) teachers' job satisfaction; (3) administrative support; (a) administrative support and teachers' intent to stay in teaching; and (b) administrative support and teachers' job satisfaction; (4) teaching experience, (a) teaching experience and teachers' intent to stay in teaching; and (b) teaching experience and teachers' job satisfaction; and (c) teaching experience and administrative support; (5) student behavior; (a) student behavior and teachers' intent to stay in teaching; (b) student behavior and teachers' job satisfaction; and (c) student behavior and teaching experience; (6) teachers' satisfaction with their salary; (a) teachers' satisfaction with their salary and teachers' intent to stay in teaching; (b) teachers' satisfaction with their salary and teachers' job satisfaction; (c) teachers' satisfaction with their salary and administrative support; and (d) teachers' satisfaction with their salary and teaching experience; and (7) environmental setting of the school, (a) environmental setting of the school and teachers' intent to stay in teaching; (b) environmental setting of the school and teachers' job satisfaction; (c) environmental setting of the school and administrative support; (d) environmental setting of the school and student behavior; and (e) environmental setting of the school and teachers' satisfaction with their salary.



## *Teacher Intent to Stay in Teaching*

### *Teacher Turnover*

The teaching profession suffers from chronic and a relatively high annual turnover rate compared to many other occupations (Ingersoll, 2003). Ingersoll and Smith (2003) indicate that total teacher turnover is fairly evenly split between two components: (1) attrition, or those who leave teaching altogether; and (2) migration, or those who move to teaching jobs in other schools and/or school districts. Both components constitute an instructional disruption. Edgar and Pair (2005) note that newly-appointed teachers, even those with experience, require time to become acclimated to their new jobs, students, colleagues, and routines.

The size of the teaching force, combined with a high turnover rate, has resulted in a large number of teachers who flow into, between, and out of schools annually (Ingersoll & Smith, 2003), and has developed into a major problem for public education (Edgar & Pair, 2005). Those subject areas that do not report a lack of qualified teachers still find it difficult to find replacements in a timely manner (Liu & Meyer, 2005), which forces them to hire temporary teachers, or use non-certified personnel. Obviously, the use of temporary teachers compromises the quality of instruction.

Liu and Meyer (2005) note that the early research studies on teacher attrition and teacher turnover primarily focused on teacher demographics and individual teacher characteristics. More recent research on teacher attrition and teacher turnover has tended to focus on the influence of several school factors, including, organization, reform efforts, climate, and leadership.

Ingersoll and Smith (2003) maintain that a low rate of turnover is beneficial to public education. Too little annual turnover in any organization, including public schools, may indicate stagnancy. They suggest that effective organizations benefit from a limited degree of turnover, which eliminates low-caliber performers and employs outside personnel to facilitate innovation. However, Liu and Meyer (2005) remind us that the teacher attrition rate in public education is disproportionately higher than for other professions. The higher rate of attrition experienced by the teaching profession surpasses the healthy turnover rate suggested by Ingersoll and Smith (2003). Liu and Meyer (2005) suggest that after just five years, between forty to fifty percent of all beginning teachers

have left the profession. This extensive migration is straining the already limited supply of those entering the field. Furthermore, as student populations continue to rise, the teacher shortage will be compounded by the increasing number of retirements.

Conventional wisdom places the causes for the teacher shortage external to the institution itself. Researchers and policymakers point to an increased demand for new teachers, resulting partially from the growth of student enrollments and teacher retirement thus predicting a severe teacher shortage compounded with a greater demand for resources by other governmental agencies (Ingersoll & Smith, 2003). However, Ingersoll and Smith (2003) suggest that student enrollment increases and teacher retirements are not the primary causes for the increasingly high demand for new teachers and subsequent staffing difficulties. They indicate that the more prominent reason is due to the high rates of teacher attrition recorded by novice teachers.

#### *Reasons for Teacher Attrition*

According to, *Teacher Attrition and Mobility: Results from the 2004-2005 Teacher Follow-up Survey*, nearly two-thirds of former teachers surveyed for the prior year who are now working outside of the field of education stated that their current workload can be managed better, and a similar percentage of those former teachers indicated that they are better able to balance their personal life and professional responsibilities. Over sixty percent identified their current working conditions as superior to teaching, and approximately forty-five percent stated that their salaries are better than their prior teaching compensation (Marvel et al., 2007).

Ingersoll & Smith (2003) relied on the results of the *2000-2001 Teacher Follow-Up Survey*, and the *1999-2000 Schools and Staffing Survey* to determine the reasons teachers left their profession for other employment opportunities. For responding novice teachers who had left their teaching job from the previous year, approximately twenty percent left as a result of staffing actions, including layoffs, reorganization, school closing, or termination. Over forty percent cited personal reasons, including pregnancy, child rearing, health problems, and family relocation for departing, while approximately forty percent indicated that they left to pursue a better job, another career, and/or because of job dissatisfaction.

According to Ingersoll and Smith (2003), more than three-fourths of the departing novice teachers left teaching due to inadequate compensation. An even higher percentage of teachers suggested that various working conditions affected their decision to leave teaching. The working conditions included: (1) student discipline problems; (2) lack of support from the school administration; (3) poor student motivation; and (4) lack of teacher influence over school-wide and classroom decision making. Over the past decade working conditions emerged as the major source of teacher job dissatisfaction, and significantly contributed to teacher attrition.

#### *Teacher Recruitment as a Response to Teacher Attrition*

According to Ingersoll and Smith (2003) policymakers responded primarily to the impending teacher shortage and its imbedded problem of teacher attrition solely by increasing the production of teachers. However, they warn that the simple increased production of additional teachers is misguided. Merely replacing departing teachers ignores the problem created by turnover. Instead, specific causes of teacher attrition need to be identified and remedied.

Many public school districts offer various incentives to prospective teachers in an effort to increase the number of qualified applicants (Ingersoll & Smith, 2003). Those incentives include career-change programs designed to entice prospective teachers from other professions to the public schools. Alternative teacher certification programs have been enacted by some states to allow college graduates of any degree to postpone their formal education training and begin teaching immediately. In addition, states and their school districts have offered financial incentives, such as, signing bonuses, student loan forgiveness, housing assistance, scholarships, and tuition reimbursements.

Such initiatives may prove cost-efficient and helpful, but as noted previously, are unlikely to solve the teacher staffing problems faced by the public schools. Since the early 1990's, there has been a negative gap between the number of teachers entering and departing from the public schools. And, more ominously, this gap has widened, suggesting an even greater shortage of qualified teachers (Darling-Hammond, 2003). Thus, the efforts to solve the staffing problems faced by schools should include teacher retention; however, retaining good teachers, both novices and veterans, requires attention to working conditions. Teacher working conditions include class size, teaching load,

availability of materials, teacher participation in decision making, strong and supportive instructional leadership, and collegial learning opportunities (Darling-Hammond, 2003).

### *Characteristics of Teachers Who Remain in Teaching*

Teachers who remain in the profession possess certain characteristics. Novice teachers who “make it”, or stay in the profession, often have two important characteristics, perceived self-efficacy and persistence. Persistence has several definitions, including, perseverance, determination, commitment, and *stick-with-it-ness* (Grant, 2006, p. 50). Perceived self-efficacy is a person’s beliefs about their capabilities to fulfill different levels of performance that influence life affecting events. Self-efficacy beliefs determine how people feel, think, and motivate them to make things happen rather than observe (Bandura, 1989). Further, research suggests that increasing teachers’ sense of self-efficacy and persistence may decrease teacher attrition and increase retention (Yost, 2006).

Resiliency is another characteristic of individuals who remain in teaching despite experiencing difficult circumstances. Resilient individuals seem to “bounce back” from negative events quite effectively (Tugade & Fredrickson, 2004, p. 320). Resiliency, or the ability to recover strength and spirits quickly and persevere in the face of obstacles, is a characteristic common to teachers who remain in the profession. The three variables persistence, self-efficacy, and resiliency are intricately related and connected to teachers’ tenure in the teaching profession (Yost, 2006). Accordingly, efforts to retain teachers should include professional development, in-service training, and leadership development that facilitate persistence, self-efficacy, and resiliency.

### *Teachers’ Job Satisfaction*

Improving teachers’ job satisfaction is paramount at a time when fifty percent of novice teachers leave the profession during the first five years of employment (Colbert & Wolff, 1992). Accordingly, job dissatisfaction leads to stress and ultimately burnout for teachers (Pearson & Moomaw, 2005). Shann (1998) maintains that teacher job satisfaction is a pivotal link in the chain of successful educational reform. Thus, identifying variables that have a direct effect on teachers’ job satisfaction is vital to decreasing teacher attrition and facilitating true reform in education.

In their landmark study, Perie et al. (1997) maintain that teachers' job satisfaction is one of the main factors associated with teacher quality and retention. According to Perie et al. (1997) job satisfaction has been widely studied by organizational researchers representing several fields, and has been linked to organizational commitment and performance. The study of teachers' job satisfaction holds similar importance. Compensation for instructional personnel is the largest cost of a school system, and understanding the factors associated with the teachers' job satisfaction (or dissatisfaction) is essential for the success of the educational system.

Perie et al. (1997) examined characteristics of teachers' schools, teachers' backgrounds, salaries, benefits, as well as working conditions, in order to identify their respective relationships to teachers' job satisfaction. Within the category of working conditions, administrative support and leadership, student behavior, school atmosphere, and teacher autonomy were found to be associated with teachers' job satisfaction. Not surprisingly, there was a positive relationship between favorable working conditions and job satisfaction.

According to Woods and Weasmer (2004), when teachers share a voice in establishing and moving toward organizational goals, their commitment to a school and job satisfaction increase. Teachers should be given opportunities to contribute to curriculum development and help implement new instructional practices. It is also vital that teachers be recognized for their efforts. Woods and Weasmer (2004) maintain that in order to be a true stakeholder, teachers must be recognized and honored for their contributions. Teachers who collaborate toward mutual goals are more likely to assume a shared investment and collaboration among faculty helps unify their purpose and strengthen their commitment to the school (Woods & Weasmer, 2004). Hence, professional collegiality is a strong contributor to teachers' job satisfaction.

Shann (1998) indicated that although measuring job satisfaction can be difficult its study is worthwhile. "Teacher job satisfaction has been shown to be a predictor of teacher retention, a determinant of teacher commitment, and in turn, a contributor to school effectiveness (Shann, 1998, p. 67)." Liu and Meyer (2005) regarding job satisfaction among three groups of stayers, leavers, and movers found there was a direct link between teachers' job satisfaction and teacher turnover. Their findings further

demonstrated that teachers' perceptions show varying degrees of satisfaction with different aspects of their jobs that eventually have an effect on their decision to stay in teaching, leave teaching, or move to another school.

#### *Administrative Support*

Vroom and Jago (2007) define leadership as “a process of motivating people to work together collaboratively to accomplish great things.” As such, some implications of this definition are as follows: (1) leadership is a process, not a property of a person; (2) the process involves a particular form of influence called motivation; (3) the nature of incentives, extrinsic or intrinsic, is not part of the definition; (4) the consequence of the influence is collaboration in pursuit of a common goal; and (5) the “great things” are in the minds of both leader and followers and are not necessarily viewed as desirable by all other parties (Vroom & Jago, 2007, p. 18). We must consider the important role of situational leadership; if we restrict leadership to a character trait of the individual, without consideration of the context, we form an inaccurate measure.

In addition, Vroom and Jago (2007, p. 22) identified three roles that situational leadership variables play in the leadership process: (1) organizational effectiveness (often taken to be an indication of its leadership) is affected by situational factors not under leader control; (2) situations that shape how leaders behave; and (3) situations that influence the consequences of leader behavior. If these three specific roles of the situation in leadership are taken into consideration, those who study leadership should examine behavior for specific types of situations, rather than assessing behavior across situations. By studying leadership in the context of other variables, such as teaching experience, student behavior, teachers' satisfaction with their salary, and the environmental setting of the school, more accurate generalizations regarding effective leadership and administrative support will be possible.

According to Leithwood and Jantzi (2006, p. 202), considerable progress has been made over the past 15 years in identifying the significant effects of school leadership on school reform; nevertheless, the nature of effective school leadership still remains to be much more of a “black box” than an exact model. “Instructional leadership,” is a popular concept in the United States, but it is usually more of a slogan than a precise measurable model of school leadership. They contend that new “qualifying terms” are added

annually to the word leadership, giving the false impression that something new, “leadership by adjective,” has been discovered. These characteristics and limitations of contemporary research on educational leadership suggest the need for more large-scale, sustained studies.

Leithwood and Jantzi (2006) have also identified a model encompassing three broad categories of leadership practices, including a total of nine more specific dimensions of practice. The first category, *setting directions*, includes the following specific dimensions of practice: (1) building school vision; (2) developing specific goals and priorities; and (3) holding high performance expectations. The second category, *developing people*, includes the following specific dimensions of practice: (1) providing intellectual stimulation; (2) offering individualized support; and (3) modeling desirable professional practices and values. The third broad category, *redesigning the organization*, includes the following specific dimensions of practice: (1) developing a collaborative school culture; (2) creating structures to foster participation in school decisions; and (3) creating productive community relationship. These categories consist of characteristics that are considered desirable among building principals, according to the transformational leadership model.

The above characteristics of good school leadership and administrative support have been accepted by the Interstate School Leaders Licensure Consortium (ISLLC). The Interstate School Leaders Licensure Consortium (ISLLC) was developed in 1988 by the Council of Chief State School Officers (CCSO) as part of an effort to restructure and strengthen the leadership in our public schools. The ISLLC standards provide a framework for the redefinition of school leadership (Murphy et al., 2000). These standards evolved out of conceptual metaphors describing the leadership necessary for the schools of tomorrow. The four metaphors are: (a) community servant; (b) organizational architect; (c) social architect; and (d) moral educator. ISLLC based the development of its standards on the following three central tenets: (1) there is a single set of standards that should apply to all leadership positions; (2) the focus and grounds for the standard should be the core of productive leadership; and (3) the standards should not simply codify what is; they should help elevate the profession to a higher level. Finally, in an effort to guide and orient the thinking of the consortium during the creation of the

standards, the following seven principles were developed: (1) standards should reflect the centrality of student learning; (2) standards should acknowledge the changing role of the school leader; (3) standards should recognize the collaborative nature of school leadership; (4) standards should be high, upgrading the quality of the profession; (5) standards should inform performance-based systems that contain both assessment and evaluation of school leaders; (6) standards should be integrated and coherent; and (7) standards should be predicted on the concepts of access, opportunity, and empowerment for all members of the school community. While considering the previous, six standards for reshaping educational leadership were created.

The ISLLC standards were first adopted in November of 1999, and recently, December 12, 2007, the National Policy Board for Educational Administration adopted the following standards as educational leadership policy: (1) an education leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders; (2) an education leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth; (3) an educator leader promotes the success of every student by ensuring management of the organization, operation, and resources for a safe, efficient, and effective learning environment; (4) an education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources; (5) an education leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner; and (6) an education leader promotes the success of every student by understanding, responding to, and influencing the political, social, economic, legal, and cultural context.

#### *Administrative Support and Teachers' Intent to Stay in Teaching*

The influence of administrative support relative to teacher attrition has been researched. For example, Loeb et al. (2005) used survey data administered to California teachers that revealed that the lack of administrative support was one of the key reasons teachers left the profession. In agreement, Luekens (2004) found that nearly forty percent of teachers who left teaching cited a lack of administrative support as the main



reason for their departure. Moreover, Weiss (1999) indicated that administrative support was also one of the most significant predictors of the teachers' intent to stay in teaching.

In a qualitative study of teacher attrition, the perceptions of a first-year teacher were described by Worthy (2005) through the use of a case study. The novice teacher identified a lack of administrative support as almost causing him to leave teaching forever, and described the actions of his principal as mean and disheartening. He indicated that the principal in his urban school used a "coarse, militant style of discipline (Worthy, 2005, p. 391)." Ingersoll and Smith (2003) add that administrative support for teachers includes providing classroom materials and supplies, facilitating teacher involvement in the decision making process, and furnishing reliable mentors for new teachers.

#### *Administrative Support and Teachers' Job Satisfaction*

A modest amount of research has demonstrated that administrative support influences teachers' job satisfaction. One such study, Liu and Meyer (2005) found a high correlation ( $r = 0.77$ ) between school climate and working conditions and suggested that school leadership was a significant contributor to both teachers' job satisfaction and intent to stay or leave teaching. An earlier study by Ingersoll and Smith (2003) found that teachers who were dissatisfied with their jobs often identified a lack of administrative support as a primary cause.

In their landmark study of teachers' job satisfaction, using a nationally representative sample from the SASS, Perie et al. (1997) discovered that positive teacher perceptions of administrative support and leadership led to higher job satisfaction scores. Administrative support, as indicated by the item "staff members are recognized for a job well done," was strongly associated with teachers' job satisfaction. These, and similar findings, enabled Shann (1998) to conclude that it is imperative for school administrators to work toward increased job satisfaction for their teachers.

#### *Teaching Experience*

##### *Teaching Experience and Teachers' Intent to Stay in Teaching*

As indicated previously, teacher attrition is highest during the first few years of service (Ingersoll & Smith, 2003). Liu (2007) stated, "first-year teachers stand a higher risk of leaving the teaching profession than experienced teachers (p. 1)" and "almost half

of beginning teachers leave teaching in their first five years (p. 2).” Luekens et al. (2004) indicated that teachers with one to three years of experience were slightly more likely to leave the profession. Because beginning teachers are at a higher risk of leaving the profession, it is vital to understand the specific reasons that they leave teaching.

#### *Teaching Experience and Teachers’ Job Satisfaction*

According to Ingersoll and Smith (2003), two-thirds of former first year teachers reported that dissatisfaction with teaching was their main reason for leaving the teaching profession. In contrast, Perie et al. (1997) found that less experienced teachers reported higher levels of job satisfaction than the more experienced teachers, and that administrative support was more significant in explaining teachers’ job satisfaction than years of teaching experience.

#### *Teaching Experience and Administrative Support*

Stockard and Lehman (2004) reported that social support and school management were significantly related to job satisfaction and attrition rates for new teachers. According to Ingersoll and Smith (2003), former new teachers identified the lack of administrative support as one of their main reasons for leaving the profession.

#### *Student Behavior*

##### *Student Behavior and Teachers’ Intent to Stay in Teaching*

Kelly (2004) stated, “The behavioral climate of a school is important to teacher attrition (p. 206).” Moreover, student behavior is one of the main factors identified by former new teachers that made a decision to leave teaching (Ingersoll & Smith, 2003). In addition, Harrell and Jackson (2004) found that student behavior was a significant influence on teacher attrition, second only to teacher income (Harrell & Jackson, 2004).

##### *Student Behavior and Teachers’ Job Satisfaction*

Studies have shown that student behavior is related to teachers’ job satisfaction (Shann, 1998). Ingersoll and Smith (2003), through the use of advanced statistical analysis, found that teachers who were dissatisfied with their job often cited student discipline problems for their dissatisfaction. Perie et al. (1997), in an earlier study, found a strong relationship between student behavior and teachers’ job satisfaction and a more favorable student behavior yielded higher job satisfaction for all teachers.

Liu and Meyer (2005) found that teachers' dissatisfaction level with student behavior was almost as strong as their dissatisfaction with their income. However, they found little relationship between teachers' satisfaction with their income and their perception of student discipline problems.

#### *Student Behavior and Teaching Experience*

Student behavior has traditionally been an important concern for novice teachers. Liu (2007) determined that student behavior and classroom management are major concerns for first-year teachers, and a previous study by Weiss (1999) suggested that student discipline problems were inversely highly correlated with the morale and commitment of first year teachers.

#### *Teachers' Satisfaction with their Salary*

##### *Teachers' Satisfaction with their Salary and Teachers Intent to Stay in Teaching*

Several studies have studied teacher compensation and attrition (Harrell & Jackson, 2004). Teacher compensation has consistently appeared in studies of teacher satisfaction and teacher attrition over the last twenty years. According to Darling-Hammond (2003), teacher salaries are moderately low when compared to other professions; in fact, "teacher salaries are about twenty percent below the salaries of other professionals with comparable education and training (p. 7)."

Increasing teacher compensation may help decrease teacher attrition since many studies have identified low salaries as the main predictor of teacher attrition (Liu, 2007). According to Loeb et al. (2005), a substantial amount of research exists that suggests teacher compensation plays a significant role in retaining teachers. In addition, there is current data that suggests raising teacher salaries as an effective way to retain teachers. Studies by Ingersoll and Smith (2003) and Kelly (2004) recommend higher teacher salaries would be an effective strategy for reducing teacher attrition.

##### *Teachers' Satisfaction with their Salary and Teachers' Job Satisfaction*

Shann (1998) indicated that low salaries contribute to teachers' job dissatisfaction, and a later study by Liu and Meyer (2005), found that low teacher compensation was the leading cause of teachers' dissatisfaction with their job. However, it is unlikely that teachers' dissatisfaction concerning student behavior can be easily corrected by increasing teacher compensation. According to Ingersoll and Smith (2003),

teachers who were dissatisfied with their jobs often cited low salaries as a reason. Perie et al. (1997) agreed and found a positive relationship between salary and teachers' job satisfaction.

#### *Teachers' Satisfaction with their Salary and Administrative Support*

Very little research has focused on the relationship between teachers' satisfaction with their salary and administrative support. However, a related study of California teachers by Darling-Hammond (2003) found working conditions, including administrative support, was a better predictor of teacher attrition than student demographics.

#### *Teachers' Satisfaction with their Salary and Teaching Experience*

According to Kelly (2004) the amount of teachers' salaries does affect teacher attrition, although the predicted variance is small. Discussion regarding compensation, among recent college graduates of various professions, may contribute to the stronger relationship between salaries and attrition for beginning teachers.

#### *Environmental Setting of the School*

##### *Environmental Setting of the School and Teachers' Intent to Stay in Teaching*

The highest teacher attrition rates in the nation are found in urban school districts (Adams & Dial, 1993). Although, urban schools only have a slightly higher attrition rate than urban fringe or rural schools (Ingersoll & Smith, 2003). According to Shann (1998) recruiting and retaining good teachers is a challenge for many urban school districts, and many graduates of traditional teacher education programs are reluctant to take positions in inner city schools. A study in the southeast, i.e. – Georgia, North Carolina, found that poor working conditions was a strong predictor of teacher burnout in rural schools, while poor working conditions and student misbehavior were both found to be strong predictors of teacher burnout in urban schools (Abel & Sewell, 1999).

##### *Environmental Setting of the School and Teachers' Job Satisfaction*

According to Perie et al. (1997) both elementary and secondary teachers in urban schools experience lower overall levels of job satisfaction than their peers in urban fringe and rural schools.

### *Environmental Setting of the School and Administrative Support*

Urban teachers report that a combination of a lack of support from administration, limited resources, and an inflexible bureaucracy as a major contributors to their intent to continue teaching (Gonzalez & National Association of State Directors of Special Education, 1995). Abel and Sewell (1999), report that inadequate administrative support and a lack of recognition for good teaching were principal causes of stress for urban teachers. “Teachers in urban schools experience significantly more stress from poor working conditions and poor staff relations than teachers in rural schools (Abel & Sewell, 1999, p. 287).”

### *Environmental Setting of the School and Student Behavior*

Smith and Smith (2006) used inductive analysis through qualitative interviews to determine the reasons why former urban school teachers left teaching. The data revealed that perceptions and fears of violence play a major role in the decision of urban school teachers to abandon teaching. According to Abel and Sewell (1999) both urban and rural teachers experience significantly more stress created by student misbehavior than from either poor working conditions or poor staff relations. Both rural and urban teachers identified student misbehavior and lack of classroom discipline as significant stressors and agreed that student misbehavior was a more significant stressor than working conditions. Teachers in the urban districts indicated that student misbehavior coupled with a heavy workload, added stress and affected their decisions to teaching. In contrast, rural teachers identified working conditions as a more significant influence on their decisions to leave teaching (Abel & Sewell, 1999).

### *Environmental Setting of the School and Teachers' Satisfaction with their Salary*

According to Liu and Meyer (2005), teachers in urban areas, in schools usually characterized by student misbehavior, are more likely to leave teaching or relocate, although their salaries are often higher than teachers from other districts. Shann (1998) studied the perception of teachers of urban middle schools and found that their salary was less important than working conditions.

### *Summary of the Literature Review*

Liu (2007) identified two strands of research in the area of teacher attrition. One strand focused on teacher factors, such as, “teacher demographics, teacher characteristics,

and salary (p. 2).” The other strand focused on environmental factors, such as, “school characteristics, governance, and working conditions (p. 2).” Liu (2007) also recognized the need to examine the interaction between the two strands and among the several factors. This literature review presents an overview of notable studies concerning teachers’ attrition and a discussion of the need for further studies examining the specific relationship between teachers’ satisfaction with their salary, student behavior, teaching experience, administrative support, teachers’ job satisfaction, and teachers’ intent to stay in teaching.

Studies have shown that teacher turnover, through attrition and migration, are disrupting the educational process in schools (Edgar & Pair, 2005; Ingersoll, 2003; Ingersoll & Smith, 2003). This is especially difficult for districts to manage considering resources they have invested in teacher recruitment (Edgar & Pair, 2005). School districts are finding it particularly difficult to fill their vacancies with “highly-qualified teachers” in a timely manner (Liu & Meyer, 2005).

While earlier research on the causes of teacher attrition focused on teacher characteristics, more recent studies have investigated other reasons for teacher attrition (Ingersoll & Smith 2003; Liu & Meyer, 2005; Marvel et al., 2007). Specifically, the later studies have identified working conditions as a major influence on the decisions of teachers’ intent to stay in teaching (Ingersoll & Smith, 2003; Marvel et al. 2007). Also, recent studies have warned that reducing teacher attrition will not be resolved by simply increasing the supply of teachers (Darling-Hammond, 2003; Ingersoll, 2002; Ingersoll & Smith, 2003). Previous research also indicated a strong relationship among teachers’ job satisfaction and teacher attrition (Liu & Meyer, 2005; Shann, 1998). In their landmark study, Perie et al. (1997) found that administrative support and student behavior were strongly associated with teachers’ job satisfaction.

While the relationship between working conditions, teachers’ job satisfaction, and teachers’ intent to stay in teaching has been established, there are few studies that have focused on the direct relationship between administrative support and these variables. Most of the existing research on teacher job satisfaction and teacher attrition treated administrative support as only one of several working conditions. This gap in the

research prohibits us from understanding the direct effect, and possible mediating effect, of administrative support on teachers' job satisfaction and intent to stay in teaching.

According to Ingersoll and Smith (2003), administrative support, among working conditions, has shown the strongest relationship with teachers' decision to remain in teaching. Although progress has been made in the study of administrative support, evidence of its direct effects on teacher attrition is extremely thin (Shann, 1998).

Studies have demonstrated a relationship between the transformational leadership model, teacher performance, organizational commitment, and teacher job satisfaction (Leithwood & Jantzi, 2006). However, studies on transformational leadership are usually based on broad categories of effective principal behaviors that serve as the theoretical framework of the model.

The ISLLC standards, developed by the Council of Chief State School Officers (CCSO), have established the characteristics of good school leadership and administrative support. These standards have been adopted, at least partially, by most states and identify the characteristics that should be exhibited by school principals (Murphy et al., 2000). Further studies examining the relationship between administrative support, teachers' job satisfaction, and teachers' intent to stay in teaching could provide insight into the implementation and effect of the ISLLC standards.

Vroom and Jago (2007) make the argument that any study of leadership without considering the context in which the leadership occurs will likely prove inaccurate. In essence, the role of the situation where the leadership occurs is extremely important. Other factors that have significantly effected teachers' job satisfaction and intent to stay in teaching should be considered, including teaching experience, student behavior, teacher compensation, and environmental setting.

It is well documented that attrition rates are higher among novice teachers (Ingersoll & Smith, 2003; Liu, 2007; Luekens et al, 2004). Ingersoll and Smith (2003) found that two-thirds of former first-year teachers left teaching due to job dissatisfaction. In contrast, an earlier study by Perie et al. (1997) found that teachers with less teaching experience actually experienced more job satisfaction. Further research is needed to clarify the effect of teaching experience on job satisfaction. Moreover, the need exists to

clarify the relationship between teaching experience and administrative support in terms of teachers' job satisfaction and intent to stay in teaching.

Existing studies have established strong relationships among student behavior, teachers' job satisfaction, and teachers' intent to stay in teaching (Kelly, 2006; Luekens et al., 2004; Perie et al., 1997; Weiss, 1999) and show that more favorable student behavior yields higher teacher job satisfaction. However, studies examining the specific effects of student behavior in regard to teachers' job satisfaction and teachers' intent to stay in teaching are lacking. As with administrative support, the role of the situation when considering student behavior is vital to the development of a conceptual framework. The need also exists to examine the relationship between student behavior and the environmental setting of the teachers' school.

Previous research has documented the effect of teacher salary on teachers' job satisfaction and intent to stay in teaching. Many studies have found that raising teacher salaries may reduce attrition (Ingersoll & Smith, 2003; Kelly, 2004; Liu, 2007; Loeb et al, 2005). Other studies have also noted that increased salary is related to increased job satisfaction among teachers (Ingersoll & Smith, 2003; Liu & Meyer, 2005; Perie et al., 1997; Shann, 1998).

Studies have demonstrated that retaining good teachers is more difficult for urban districts than for either urban fringe or rural districts (Abel & Sewell, 1999; Adams & Dial, 1993; Shann, 1998; Smith & Smith, 2006). Although the effect of the environmental setting of the school has been well documented, studies on the effect of administrative support, student behavior, teachers' job satisfaction, and teachers' intent to stay in teaching are less conclusive (Luekens et al., 2004; Perie et al. 1997).

Based on the findings provided by this literature review, a theoretical framework has been constructed that tested the effects of perceived administrative support, teaching experience, perceived student behavior, and teachers' satisfaction with their salary on teachers' job satisfaction and intent to stay in teaching. Four models have been examined based on data derived from four samples. Those four samples are: (1) the overall sample; (2) the urban sample; (3) the urban fringe sample; and (4) the rural sample. This allowed the researcher to consider the context or situation in which these findings occurred. A large, representative, stratified sample was used in order to test the



theoretical framework and allows for greater generalization of these findings. The findings of this study could play a significant role in the development of school district policy for teacher retention efforts, administrative preparation programs, preservice teacher education programs, professional development for both administrators and teachers, and selection and placement of administrators and teachers.

The following chapter provides detailed methodology that was used to test the theoretical framework. A description of the data collection procedures and research design are provided. The following variables were studied based on the literature review presented in Chapter Two: (a) Teachers' Intent to Stay in Teaching; (b) Teachers' Job Satisfaction; (c) Perceived Administrative Support; (d) Teaching Experience; (e) Perceived Student Behavior; and (f) Teachers' Satisfaction with their Salary.

## Chapter Three:

### Methodology

Provided in this chapter is a detailed description of the methods used to conduct this study. The research design, data, and variables are presented and discussed.

#### *Research Design*

A path model analysis was used to investigate the relationship among teachers' intent to stay in teaching, teachers' job satisfaction, perceived administrative support, teaching experience, perceived student behavior, and teachers' satisfaction with their salary. According to Schumacker and Lomax (2004, ch. 7), path model analysis is the logical extension of a multiple regression model where any number of independent and dependent variables may be used to establish any number of equations. The path analysis was developed by Sewall Wright as a method for studying the direct and indirect effects of variables (Wright, 1921, 1934, 1960). The path analysis is not a method for discovering causes, but it does test theoretical relationships. However, a specified path model might actually establish a causal relationship among two variables if (1) temporal ordering of variables exists; (2) covariation or correlation is present among all variables; and (3) other causes are controlled for (Schumacker & Lomax, 2004).

According to Schumacker & Lomax (2004, ch. 7), path models adhere to certain drawing conventions. The observed variables are always enclosed in boxes or rectangles, and a line directly from one observed variable to another denotes a direct effect. A direct effect can be defined as "the direct influence of one variable on another" (p. 51). In addition, each dependent variable always has an error term demonstrated by a circle pointing to that dependent variable. The part of the dependent variable that is not explained by the corresponding independent variable becomes the error term.

#### *Model Specification*

According to Schumacker and Lomax (2004, ch. 7), model specification is a necessary element in examining the multiple variable relationships in a path model analysis. Many different path models may be developed based on the hypothesized relationships of the study. Determining the correct model is known as model specification. This demonstrates the important role of theory in justifying a hypothesized model. Path analysis is used in order to estimate the effects among the variables once the

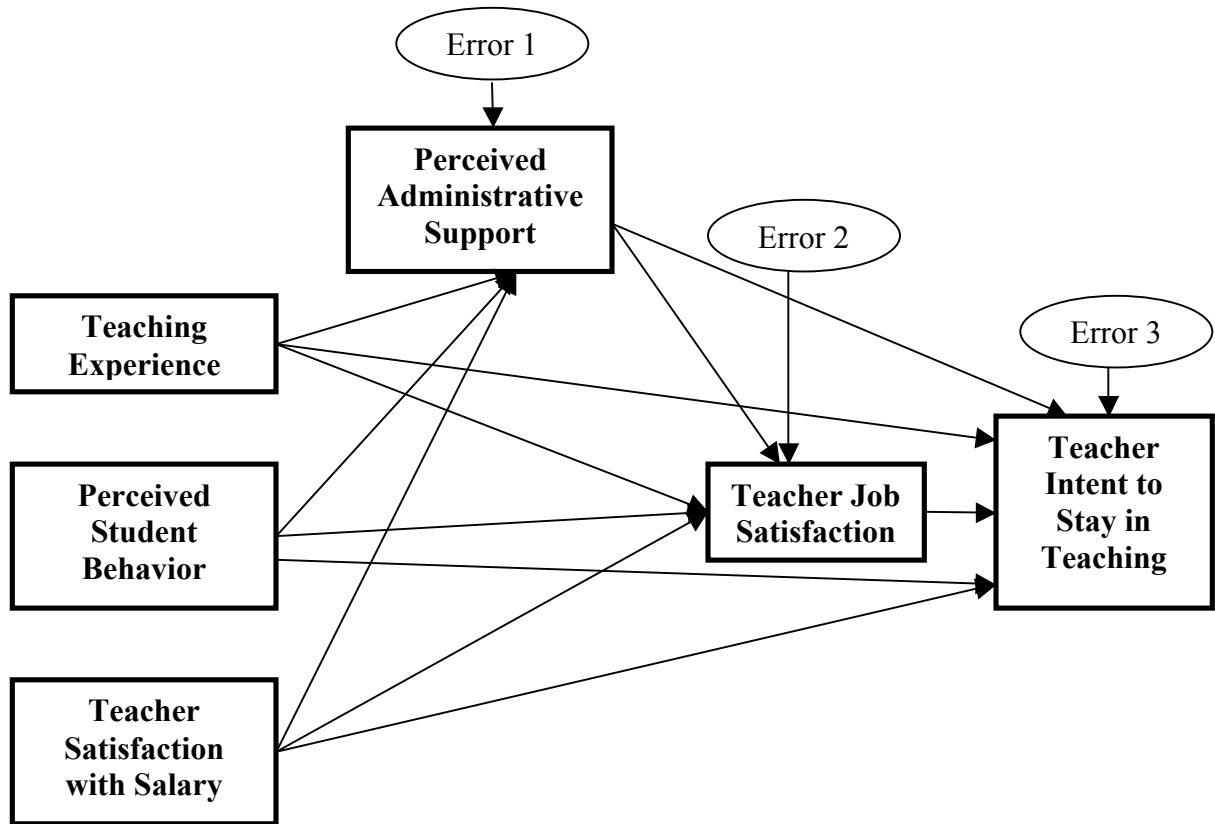
model has been specified according to theoretical considerations, not to provide a way to specify the model.

Based on the hypothesized model for the overall sample presented in figure 3.1, the overall guiding research questions for this study were as follows:

- (1) Does perceived administrative support mediate the effect of teaching experience, perceived student behavior and teachers' satisfaction with their salary relative to teachers' job satisfaction?
- (2) Does perceived administrative support mediate the effect of teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to teachers' intent to stay in teaching?
- (3) Does the mediating effect of perceived administrative support differ according to the environmental setting of the school?

Figure 3.1

*Initial path analysis model for overall sample: The overall model of the relationship between Teacher Intent to Stay in Teaching, Teachers' Job Satisfaction, Perceived Administrative Support, Teaching Experience, Perceived Student Behavior, and Teachers' Satisfaction with Salary.*



Therefore, the model specification for this study hypothesized that (a) teaching experience has a direct effect on teachers' job satisfaction and teachers' intent to stay in teaching; (b) teaching experience has an indirect effect on teachers' job satisfaction and teachers' intent to stay in teaching through perceived administrative support; (c) perceived student behavior has a direct effect on teachers' job satisfaction and teachers' intent to stay in teaching; (d) perceived student behavior has an indirect effect on teachers' job satisfaction and teachers' intent to stay in teaching through perceived administrative support; (e) teachers' satisfaction with their salary has a direct effect on teachers' job satisfaction and teachers' intent to stay in teaching; (f) teachers' satisfaction with their salary has an indirect effect on teachers' job satisfaction and teachers' intent to stay in teaching through perceived administrative support; (g) perceived administrative support has a direct effect on teachers' job satisfaction and teachers' intent to stay in teaching; and (h) teachers' job satisfaction has a direct effect on teachers' intent to stay in teaching.

Each of these hypothesized relationships was tested according to four different models, based on the environmental setting of the school. The first model, the overall model, included all cases selected for this study according to the selection criteria discussed later in this chapter. The second model, the urban model, included selected cases of public school teachers according to the selection criteria for this study, and who identified their school on the SASS as being located in a large or mid-sized central city. The third model, the urban fringe model, included selected cases of public school teachers according to the selection criteria for this study, and who identified their school on the SASS as being located in the urban fringe of a large or mid-sized central city. The fourth model, the rural model, included selected cases of public school teachers according to the selection criteria for this study, and who identified their school on the SASS as being located in a small town/rural area.

#### *Data*

The data used in this study were collected through the 2003-04 administration of the Schools and Staffing Survey (SASS). According to Tourkin, S. C., Warner, T., Parmer, R., Cole, C., Jackson, B., Zukerberg, A., et al. (2007), the SASS is conducted by the National Center for Education Statistics (NCES) on behalf of the United States

Department of Education (USDOE). The purpose of the SASS is to collect extensive data on public, public charter, Bureau of Indian Affairs (BIA) funded, and private schools in the United States. These data are collected on both elementary and secondary schools. It offers a source of data on the characteristics of teachers and principals, teacher hiring practices, professional development, class size, and other working conditions. These data are then made available for policymakers, educators, educational researchers, and the general public for analysis.

The SASS is the nation's largest, most extensive survey of K-12 schools, districts, teachers, and administrators conducted. In addition, the SASS is representative of teachers, administrators, schools, and school districts grades K-12 nationwide. The 2003-04 administration of the SASS represented the fifth data collection cycle. Previous administrations of the data collection took place during the 1987-1988, 1990-1991, 1993-1994, and 1999-2000 school years.

A major addition of the 2003-04 SASS to the previous data was to incorporate a revised data collection procedure suggested by the United States Bureau of the Census (hereinafter referred to as the Census Bureau). In order to establish rapport with school personnel, a primary in-person contact was assigned to each sample school. Field representatives from the Census Bureau were used to collect the data for the principal, school, library media center, and teacher surveys at the sampled schools. Twelve regional offices were responsible for making assignments, supervising fieldwork, checking-in completed questionnaires, editing questionnaires, and implementing quality control procedures (Strizek et al., 2006).

The 2003-04 SASS consisted of five different questionnaires: (a) a school district questionnaire; (b) principal questionnaires; (c) school questionnaires; (d) teacher questionnaires; and (e) a school library media center questionnaire (Tourkin et al., 2007). Specifically, the data used in this study were gathered from the SASS Teacher Questionnaire (form SASS-4). Form SASS-4 gathers data about teachers according to the following eleven sections:

1. General Information;
2. Class Organization;
3. Educational Background;

4. Certification and Training;
5. Professional Development;
6. Resources and Assessments of Students;
7. Working Conditions;
8. Decision Making;
9. Teacher Attitudes and School Climate;
10. General Employment Information; and
11. Contact Information.

Form SASS-4 was distributed in two versions. One version of form SASS-4 was provided for teachers in public schools (form SASS-4A) and another was provided for teachers in private schools (form SASS-4B). Because this study focused on regular, full time, public school teachers, only data from form SASS-4A were used. Form SASS-4A consisted of eighty-three questions. Many of the questions have individual components, which were assigned a specific item number. The item numbers range from 0010 to 0420.

Table 3.1 below presents the unweighted response rate (84.0) and the base-weighted response rate (84.8) for form SASS-4A, the Public School Teacher Questionnaire. According to Strizek et al. (2006), unit response rates were defined as “the rate at which the sampled units respond by substantially completing the questionnaire. The response rates can either be unweighted or weighted. The unweighted response rates are the number of interviewed sample units divided by the number of eligible (responses plus nonresponses but not ineligible units). The weighted response rates are the base-weighted number of interviewed cases divided by the base weighted number of eligible cases. The base weight for each sampled unit is the inverse of the probability of selection (p.192).”

Table 3.1

*Unweighted and Base-Weighted response rate for the 2003-04 form SASS-4A, Public School Teacher Questionnaire*

Survey Type	Unweighted Response Rate	Base-Weighted Response Rate
Public School Teacher (form SASS-4A)	84.0	84.8

*Note. Adapted from Strizek et al. (2006), Characteristics of Schools, Districts, Teachers, Principals, and School Libraries in the United States: 2003-04 Schools and Staffing Survey*

The time frame for data collection for the 2003-04 SASS actually began in the summer of 2003. Advance work was done in June of 2003 to verify all addresses for the sampled schools. In September, those schools received introductory letters concerning the logistics of the study. This was followed by postcards sent to the schools by Census Bureau field representatives. The purpose of the postcards was to verify school information and set up appointments. During the months of October 2003 through January 2004, the field representatives visited schools to distribute the questionnaires. At this time, the field representatives obtained a roster of teachers, sampled teachers, and distributed the teacher questionnaires. The field representatives continued to administer questionnaires through May 2004. School district data collection was conducted separately. It occurred first by mailing the questionnaire, and the field representatives continued to communicate with non-respondents (Tourkin et al., 2007).

*Sampling Method*

The 2003-04 SASS is not a random sample. According to Tourkin et al. (2007), the 2003-04 SASS is “a stratified probability proportionate to size sample (pg. 59).” The first level of stratification was based on school type according to the following: (a) Bureau of Indian Affairs (BIA) - funded schools were selected with certainty (automatically in sample); (b) schools with high American Indian or Alaska Native student enrollment (schools with 19.5 percent or more American Indian or Alaska Native students); (c) schools in Delaware, Maryland, Florida, Nevada, and West Virginia, where at least one school from each district in the state was selected using a probability proportionate to size algorithm (The square root of the number of full-time-equivalent



teachers reported for each school or imputed during the sampling frame creation); (d) public charter schools; and (e) all other schools. Any school that fell into more than one category was assigned to a, b, c, d, and e in that order.

The second stratification level varied according to the category of school type. Any BIA - funded schools, type a, were selected for the sample, so there was no need for additional stratification. Type b schools were stratified according to state (Arizona, California, Montana, New Mexico, Washington, the remaining Western states, Minnesota, North Dakota, South Dakota, the remaining Midwestern states, North Carolina, Oklahoma, and the remaining states except Alaska). Schools meeting the criteria for type c were first stratified by state and then by school district. Type d schools were also stratified by state (Arizona, California, Colorado, the remaining Western states, Michigan, Ohio, Wisconsin, the remaining Midwestern states, Florida, North Carolina, Texas, the remaining Southern states, Pennsylvania, and the remaining Northeastern states). The last group, type e schools, were stratified by state for all the remaining states, including the District of Columbia (Tourkin et al., 2007).

The third stratification was by grade level. Each school, type b through e, was stratified according to the following definitions:

1. Elementary: lowest grade  $\leq 6$  and highest grade  $\leq 8$
2. Secondary: lowest grade  $\geq 7$  and highest grade  $\leq 12$
3. Combined: lowest grade  $\leq 6$  and highest grade  $> 8$ , or school is ungraded

According to Tourkin et al. (2007), “the 2003-04 SASS sample was allocated so that state-level elementary and secondary public school estimates and national estimates of combined public schools could be made, and the sample was allocated to each state by grade range and school type (traditional public, public charter, and schools with high American Indian enrollment) (p. 60).”

The three school sectors covered by the 2003-04 SASS were public, Bureau of Indian Affairs (BIA), and private. This study focused on the public school sector. The sampling frame foundation for the 2003-04 SASS public school sample came from an adjusted version of the 2001-02, Common Core of Data (CCD). The CCD represents data collected annually by the National Center for Education Statistics (NCES) from all state education agencies. The CCD includes regular public schools, United States

Department of Defense (DoD) operated military base schools, public charter schools, Bureau of Indian Affairs – funded schools and special purpose schools within the United States (Strizek et al., 2006). The data from the CCD provide the most complete public school listing available at the time the 2003-04 SASS was administered. There were 97,623 schools in the CCD sampling frame, including regular public schools, public charter schools, Bureau of Indian Affairs (BIA) funded schools, Department of Defense (DoD) operated domestic military base schools, and special purpose schools. Special purpose schools included special education, vocational, and alternative schools.

According to Strizek et al. (2006), “public schools include traditional public schools and public charter schools. Traditional public schools are defined as institutions that provide educational services for at least one of grades 1-12 (or comparable grade levels), have one or more teachers who give instruction, are located in one or more buildings, receive public funds as primary support, and are operated by an education agency. They include regular schools, special education schools, vocational/technical schools, and alternative schools. They also include schools in juvenile detention centers, and domestic schools located on military bases and operated by the DoD. Public charter schools are public schools that, in accordance with an enabling state statute, have been granted a charter exempting them from selected state and local rules and regulations (p. 1).” Once the public schools were selected, the principals and districts associated with those public schools were included in the sample. The district sample; however, did not include districts with public charter schools unless they were associated with one of the public schools included in the sample

The complex sample design of the 2003-04 SASS created the need to calculate sampling errors. Replication was used in order to calculate these sampling errors. According to Strizek et al. (2006), “Replication methods involve constructing a number of sub samples, or replicates, from the full sample and computing the statistic of interest for each replicate. The mean square error of the replicate estimates around the full sample estimate provides an estimate of the variance of the statistic. The replicate weights are used to compute the variance of a given statistic (p. 198).” The restricted use data file for the 2003-04 data included a set of 88 replicate weight variables.

These weights were applied to the respondent’s information using AM statistical software. The AM Statistical Software package version 0.06.03 was created for the purpose of analyzing data from large, complex assessments. In addition, the AM package automatically provides appropriate standard errors for complex samples. This is accomplished by using a Taylor-series approximation (American Institutes for Research & Cohen, J., 2005). The SASS is one such large, complex data set that requires the application of sample unit data weights in order to provide and apply appropriate standard errors. The application of appropriate standard errors allows for greater generalizability in such a study. The 2003-04 SASS data was weighted to represent 88,113 public schools educating 47,315,700 students in grades K-12, and about 3,250,600 full and part-time teachers (Strizek et al., 2006).

*Population and Sample*

The approximate sample size for the 2003-04 SASS included 5,437 public school districts. There were 10,202 regular, traditional public schools included in the sampling frame. Additionally, 53,188 public school teachers were included. The sample sizes for the 2003-04 SASS are presented in table 3.2 below.

Table 3.2  
*2003-04 SASS Sample*

Public School Teachers	Regular, Traditional Public Schools	Public School Districts
53,188	10,202	5,437

According to Tourkin et al. (2007), the targeted population for form SASS-4A, “included teachers in the targeted school populations who taught students in any of the grades K-12 or in comparable ungraded levels during the 2003-04 school year (p. 8).” All public schools sampled for the 2003-04 SASS were asked to provide teacher rosters to a field representative during a personal visit. These lists provided by the schools contained the teacher sampling frame for the 2003-04 SASS and a sample of teachers was selected from each school list. Schools were also asked to provide the following information about their teachers: (a) if they were new (1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> year of experience) or experienced (more than 3 years of experience); (b) teaching status (part or full time); (c) race/ethnicity; and (d) subject matter taught.

In addition, teachers within each school sample were stratified into one of the following teacher types in hierarchical order:

1. Asian or Pacific Islander;
2. American Indian or Alaska Native;
3. New (3 years or fewer in the teaching profession); and
4. Experienced (more than 3 years of teaching).

“Before teachers were allocated to the new/experienced strata, schools were first allocated to an overall number of teachers to be selected. The overall sample size was chosen so as to equalize the teacher weights within each stratum (state/level for public schools, association stratum/level/region for private schools). Teacher weights within stratum were not always equalized; however, due to the differential sampling for Asian or Pacific Islander and American Indian or Alaska Native teachers (Tourkin et al., 2007).”

Table 3.3 presents the average number of new and experienced teachers selected per public school for the 2003-04 SASS.

Table 3.3

*Average number of new and experienced teachers selected per public school for the 2003-04 SASS, excluding Asian or Pacific Islander or American Indian or Alaska Native teachers*

School Type	Elementary	Secondary	Combined
Public	3.8	7.5	5.7

*Note. Adapted from Tourkin et al. (2007), Documentation for the 2003-04 Schools and Staffing Survey*

The teacher lists were then sorted according to stratum code, teacher subject code, and the teacher line number code. The teacher line number code was keyed by the field representatives, in order to assign a unique number in order to identify teachers. The teachers were selected, by stratum in each school, with equal probability. This was done in order to reduce the variance of teacher estimates. In most cases, this goal was achieved. Unfortunately, the sample size of teachers in some schools was altered due to a minimum constraint of at least one teacher per school or a maximum constraint of no more than either twice the average stratum allocation or 20 teachers per school (Tourkin

et al., 2007). Table 3.4 below presents the number of public school teachers selected for the 2003-04 SASS by school type and teacher stratum.

Table 3.4  
*Number of Public School Teachers Selected for the 2003-04 SASS, by School Type and Teacher Stratum*

Teacher Stratum	Number of Public School Teachers Selected
American Indian or Alaska Native	1,435
Asian or Pacific Islander	1,466
New	8,032
Experienced	42,255
Total	53,188

*Note. Adapted from Tourkin et al. (2007), Documentation for the 2003-04 Schools and Staffing Survey*

It is important to note that the actual teacher sample is different from the desired sample size for two reasons:

1. The average of the school’s weighted measure of size over all schools in each school stratum was based on the 2001-02, Common Core of Data (CCD).
2. Eleven percent of the in-scope public schools did not provide teacher lists; therefore, no teachers were selected for those schools.

In order to account for the fact that some schools did not provide a teacher list, a factor in the teacher weighting was used. This may cause the overall average number of teachers per school to be slightly different than the target numbers (Tourkin et al., 2007).

This study only examines regular, full-time, public school teachers, who hold regular or standard certification in the state in which they teach. In order to accomplish this, the following participant criteria were used: (1) only the data of those public school teachers who marked box one, or regular full-time teacher, when asked, ”how do you classify your position at THIS school, that is, the activity at which you spend most of your time during this school year,” were used in the study; and (2) only the data of

teachers who marked box one (regular or standard state certificate or advanced professional certificate) when asked, “which of the following describes the teaching certificate you currently hold in this state,” were used in this study. Table 3.5 below presents the final selection criteria of participants from the SASS-4A respondents. After the selection criteria was applied to the form SASS-4A restricted-use data file, the number of regular, full-time, public school teachers, who hold regular or standard certification in the state that they teach remaining in the sample was approximately 34,810.

Table 3.5  
*Selection criteria of participants from the SASS-4A respondents*

Question	Acceptable answer for participation in this study
How do you classify your position at THIS school, that is, the activity at which you spend most of your time during this school year?	(1) Regular full-time teacher
Which of the following describes the teaching certificate you currently hold in this state?	(1) Regular or standard state certificate or advanced professional certificate

In addition to the first criteria question (regular, full-time, public school teachers), the next question asked for verification of the box marked. This was used to determine the sequence of questions for each respondent. In order to confirm that the correct participants for that criteria were selected for participation, a cross tabulation was performed. The results are presented below in Table 3.6,

Table 3.6  
*Cross Tabulation results for the selection of Regular Full-Time Teachers*

Criteria	N	Percent Valid
Regular Full-Time Teachers – Position	34,810	100%
*Regular Full-Time Teachers – Question 1		

*Note: N is rounded to the nearest ten.*

## *Variables*

### *Teachers' Intent to Stay in Teaching*

A major endogenous variable in this study was the teachers' intent to stay in teaching. An endogenous variable indicates a variable with a path (single arrow) leading to it from another variable in the model (Raykov & Marcoulides, 2006). In other words, the variable has a clear cause from within the model. Using the 2003-04 SASS Public School Teacher Questionnaire, form SASS-4A, teachers' intent to stay in teaching was measured with one question. The question for that variable asks, "How long do you plan to remain in teaching?" This item is measured using an ordered response scale. The possible answers were as follows: (1) definitely plan to leave as soon as I can; (2) will probably continue unless something better comes along; (3) until I am eligible for retirement; and (4) as long as I am able. The ordered response scale for this variable was reverse coded from the original scale so that teachers' intent to stay in teaching increases as the response increases. It should also be noted that the variable for teachers' intent to stay in teaching originally had a fifth answer choice, "undecided at this time." This was treated as a missing value (12.6% of respondents) and was removed from the data analysis.

### *Teachers' Job Satisfaction*

A second major endogenous variable in this study was the teachers' job satisfaction. Using the 2003-04 SASS Public School Teacher Questionnaire, form SASS-4A; teachers' job satisfaction will be measured with one question. The question for that item asks, "To what extent do you agree or disagree with each of the following statements? – I am generally satisfied with being a teacher at this school." This item is measured using a Likert scale. The Likert scale for this variable was reverse coded from the original scale in order to create the positive correlation that one would expect. In other words, as the number of the response increases, a teachers' job satisfaction increases. The possible answers were as follows: (1) strongly disagree; (2) somewhat disagree; (3) somewhat agree; and (4) strongly agree.

### *Perceived Administrative Support*

Because form SASS-4A has several items that might be useful for measuring the independent variable of perceived administrative support, a factor analysis was conducted

by this researcher prior to the path analysis. Factor analysis is “a statistical technique applied to a single set of variables where the researcher is interested in discovering which variables in the set form coherent subsets that are relatively independent of one another (Tabachnick & Fidell, 1996, p. 635).” According to Tabachnick and Fidell (1996), factors are derived from a set of variables that are highly correlated with one another, but independent of other subsets that may be formed.

Factor analysis provided a pattern of correlations among the items finally determined to be used for the variable. In addition, it allowed the researcher to reduce the high number of observed variables to a small number of items that derived the factor. This allows the researcher to construct an operational definition (presented in table 1.1) of administrative support (Tabachnick & Fidell, 1996). Based on the result of the factor analysis, a composite variable was created by using the mean scores of the following five items which loaded to derive that variable: (a) the principal lets staff members know what is expected of them; (b) the school administration’s behavior toward the staff is supportive and encouraging; (c) my principal enforces school rules for student conduct and backs me up when I need it; (d) the principal knows what kind of school he/she wants and has communicated it to the staff; and (e) in this school, staff members are recognized for a job well done.

In part IX of the 2003-04 SASS Public School Teacher Questionnaire, form SASS-4A, participants were asked, “Do you agree or disagree with each of the following questions?” Each item was measured through the use of a Likert type scale. The possible answers were as follows: (1) strongly disagree; (2) somewhat disagree; (3) somewhat agree; and (4) strongly agree. The Likert scale for this variable was also reverse coded from the original scale. Therefore, as the amount of perceived administrative support responses increased, teachers’ job satisfaction and teachers’ intent to stay in teaching would increase.

### *Teaching Experience*

The second independent variable in this study was the teachers’ job experience. This variable was used to distinguish between teachers with three or less years of experience and teachers with more than three years of experience. Using the 2003-04 SASS Public School Teacher Questionnaire, form SASS-4A, the teachers’ job experience



was measured with the following question: “Was your FIRST year of teaching before the 1999-2000 school year?” Originally, this item was measured categorically, using a one for yes and two for no. Through the use of SPSS, a dummy variable was created in order to identify novice teachers. All answers of one (1) were recoded to a zero (0), meaning that any respondent answering zero (0) had more than three years of teaching experience. All answers of two (2) were then recoded to one (1), meaning that any respondent answering one (1) had three or less years of teaching experience.

#### *Perceived Student Behavior*

The third independent variable in this study was perceived student behavior. Using the 2003-04 SASS Public School Teacher Questionnaire, form SASS-4A, student behavior was measured with the following question: “To what extent do you agree or disagree with each of the following statements? – the level of student misbehavior in this school (such as noise, horseplay, or fighting in the halls, cafeteria or student lounge) interferes with my teaching.” This item is measured using a Likert scale. The possible answers were as follows: (1) strongly disagree; (2) somewhat disagree; (3) somewhat agree; and (4) strongly agree. The Likert scale for this variable was also reverse coded from the original scale. Thus, as the number of the response increased, the more a teacher agreed that perceived student misbehavior interfered with their teaching.

#### *Teachers’ Satisfaction with their Salary*

A fourth independent variable in this study was the teachers’ satisfaction with their salary. Using the 2003-04 SASS Public School Teacher Questionnaire, form SASS-4A, teachers’ satisfaction with their salary was measured with the following question: “To what extent do you agree or disagree with each of the following statements? – I am satisfied with my teaching salary.” This item was measured using a Likert scale. The possible answers were as follows: (1) strongly disagree; (2) somewhat disagree; (3) somewhat agree; and (4) strongly agree. The Likert scale for this variable was also reverse coded from the original scale. After the reverse coding, as the number of the response increased, a teachers’ satisfaction with their salary increased. The questions used to measure the variables and possible answer choices discussed above are presented in Table 3.7 below.

Table 3.7

*Form SASS-4A Questions used to measure independent and dependent variables*

Variable	Question	Possible Answers
Intent to Stay	How long do you plan to remain in teaching?	(1) Definitely plan to leave as soon as I can (2) Will probably continue unless something better comes along (3) Until I am eligible for retirement (4) As long as I am able
Job Satisfaction	Do you agree or disagree with each of the following statements?  I am generally satisfied with being a teacher at this school.	(1) Strongly disagree (2) Somewhat disagree (3) Somewhat agree (4) Strongly agree
Perceived Administrative Support	Do you agree or disagree with each of the following statements?  The principal lets staff members know what is expected of them.  The school administration's behavior toward the staff is supportive and encouraging.  My principal enforces school rules for student conduct and backs me up when I need it.  The principal knows what kind of school he/she wants and has communicated it to the staff.  In this school, staff members are recognized for a job well done.	(1) Strongly disagree (2) Somewhat disagree (3) Somewhat agree (4) Strongly agree

Table 3.7 (Continued)

*Form SASS-4A Questions used to measure independent and dependent variables*

Variable	Question	Possible Answers
Teaching Experience	Was your FIRST year of teaching before the 1999-2000 school year?	(0) More than three years of teaching experience (1) Three or less years of teaching experience
Satisfaction with Salary	To what extent do you agree or disagree with each of the following statements?  I am satisfied with my teaching salary.	(1) Strongly disagree (2) Somewhat disagree (3) Somewhat agree (4) Strongly agree
Perceived Student Behavior	To what extent do you agree or disagree with each of the following statements?  The level of student misbehavior in this school (such as noise, horseplay, or fighting in the halls, cafeteria, or student lounge) interferes with my teaching.	(1) Strongly disagree (2) Somewhat disagree (3) Somewhat agree (4) Strongly agree

## Chapter Four: Results of the Study

This chapter presents the results of the path model statistical analysis described in Chapter Three and is organized into four sections. The first section provides statistical information gathered during the preliminary analysis, and is sub-divided into two sections. The first sub-section contains the application of two sets of descriptive statistics for the following variables: (a) teachers' intent to stay in teaching; (b) teachers' job satisfaction; (c) perceived administrative support; (d) teaching experience; (e) perceived student behavior; and (f) teachers' satisfaction with salary. The first set of descriptive statistics was derived through the use of SPSS 14.0 and do not apply the weight and design effect of the study. The second set of descriptive statistics was derived via AM statistical software and includes the weight and design effect. Specifically, the sample size, mean, and standard deviation are presented and discussed for each variable. Sample size was defined as the number of scores (N); mean was defined as the sum of the scores divided by the number of scores ( $\bar{X}$ ); and standard deviation (SD) was defined as the positive square root of the variance (Howell, 2007). The second sub-section presented, described and compared the Pearson correlations (r) for each of the six variables identified above. Two sets of correlations were conducted. The first was derived through the use of SPSS 14.0, including computation of the significance level, but did not apply the weight and design effect. The second was derived by application of AM statistical software, including the weight and design effect, but the significance level was not computed.

Presented in the second section are descriptions for each of the four hypothesized, path models analyzed and are organized into the following four subsections: (1) the overall model; (2) the urban model; (3) the urban fringe model; and (4) the rural model. A saturated model and a final model are presented and discussed for each of the four subsections. A saturated model is defined as, "the model with all parameters indicated (Schumacker & Lomax, 2004, p. 49). Any parameter that is not significant, based on the analysis, is removed for the final model. The standardized coefficient beta ( $\beta$ ) and significance level for each variable are also reported, described, and compared.

Arranged in the third section are the effect sizes for each of the three dependent variables, i.e., perceived administrative support, job satisfaction, and intent to stay in teaching, according to the environmental setting of the school identified by the teacher's. There will be three sub-sections based on the three dependent variables for this study: (1)  $R^2$  and adjusted  $R^2$  for the dependent variable of perceived administrative support; (2)  $R^2$  and adjusted  $R^2$  for the dependent variable of teachers' job satisfaction; and (3)  $R^2$  and adjusted  $R^2$  for the dependent variable of teachers' intent to stay in teaching.

Lastly, the fourth section describes the mediating variable analysis. This section presents the procedure and results used to determine the mediating effect of administrative support in relation to teachers' job satisfaction and intent to stay in teaching. The t-ratios are presented and analyzed to determine if there is substantial evidence of a strong mediating pathway for all six variables.

#### *Preliminary Analysis*

##### *Descriptive Statistics*

After the selection criteria for this study was applied, only regular, full-time teachers, with regular or standard state certification remained, which provided an approximate sample size of 34,810 teachers ( $N = 34,810$ ). When the weight and design effect was applied through the use of AM statistical software, the sample size rose to 2,271,936 ( $N = 2,271,936$ ). Therefore, the findings of this study can be generalized to a sample of 2,271,936 regular, full-time teachers, who hold regular or standard state certification in the state where they taught.

Following adjustment for missing cases, the sample size for the variable teachers' intent to stay in teaching was approximately 30,690 ( $N=30,690$ ). It was measured by application of an ordered scale to the statement, "How long do you plan to remain in teaching?" The possible ordered scale responses ranged from (1) definitely plan to leave as soon as I can; (2) will probably continue unless something better comes along; (3) until I am eligible for retirement; and (4) as long as I am able. The resulting mean score was 3.293 ( $\bar{X} = 3.293$ ) and the standard deviation was 0.764 ( $SD = 0.764$ ). When the weight and design effect was applied through the use of AM statistical software, the mean was 3.333 ( $\bar{X} = 3.333$ ) and the standard deviation was 0.750 ( $SD = 0.750$ ). Thus, most teachers plan to remain in teaching until they are eligible for retirement.

The second variable, teachers' job satisfaction, was measured by application of a Likert type scale to the statement, "I am generally satisfied with being a teacher at this school." The Likert scale ranged from (1) strongly disagree; (2) somewhat disagree; (3) somewhat agree; and (4) strongly agree. The resulting mean score was 3.462 ( $\bar{X} = 3.462$ ) and the standard deviation was 0.728 (SD = 0.728). When the weight and design effect was applied through the use of AM statistical software, the mean was 3.484 ( $\bar{X} = 3.484$ ) and the standard deviation was 0.741 (SD = 0.741). Thus, most teachers somewhat agreed that they are generally satisfied with being a teacher at their present school.

The third variable, perceived administrative support, was measured by application of a Likert type scale to the derived factor described in Chapter Three. The Likert scale ranged from (1) strongly disagree; (2) somewhat disagree; (3) somewhat agree; and (4) strongly agree. The resulting mean score was 3.278 ( $\bar{X} = 3.278$ ) and the standard deviation was 0.659 (SD = 0.659). When the weight and design effect was applied through the use of AM statistical software, the mean was 3.310 ( $\bar{X} = 3.310$ ) and the standard deviation was 0.661 (SD = 0.661). Thus, most teachers in this study somewhat agreed that perceived administrative support exists in the school where they are presently teaching.

The fourth variable, teaching experience, was a nominal variable. The two possible responses to the statement, "Was your FIRST year of teaching before the 1999-2000 school year?" were zero (0) the respondent had more than three years of teaching experience; and one (1) the respondent had three or less years of teaching experience. The resulting mean score was 0.165 ( $\bar{X} = 0.165$ ) and the standard deviation was 0.372 (SD = 0.372). When the weight and design effect was applied through the use of AM statistical software, the mean was 0.161 ( $\bar{X} = 0.161$ ) and the standard deviation was 0.367 (SD = 0.367). Thus, most teachers in this study had more than three years of teaching experience.

The fifth variable, perceived student behavior, was measured by application of a Likert type scale to the statement, "To what extent do you agree or disagree with each of the following statements? – the level of student misbehavior in this school (such as noise, horseplay, or fighting in the halls, cafeteria or student lounge) interferes with my

teaching.” The Likert scale ranged from (1) strongly disagree; (2) somewhat disagree; (3) somewhat agree; (4) strongly agree. The resulting mean score was 2.141 ( $\bar{X} = 2.141$ ) and the standard deviation was 0.999 (SD = 0.999). When the weight and design effect was applied through the use of AM statistical software, the mean was 2.106 ( $\bar{X} = 2.106$ ) and the standard deviation was 1.015 (SD = 1.015). Thus, most teachers in this study somewhat disagree that the level of perceived student misbehavior in their present school interferes with their teaching.

The sixth and final variable, teachers’ satisfaction with salary, was measured by application of a Likert type scale to the statement, “To what extent do you agree or disagree with each of the following statements? – I am satisfied with my teaching salary.” The Likert scale ranged from (1) strongly disagree; (2) somewhat disagree; (3) somewhat agree; and (4) strongly agree. The resulting mean score was 2.215 ( $\bar{X} = 2.215$ ) and the standard deviation was 0.994 (SD = 0.994). When the weight and design effect was applied through the use of AM statistical software, the mean for this variable was 2.278 ( $\bar{X} = 2.278$ ) and the standard deviation was 1.002 (SD = 1.002). Thus, most teachers in this study somewhat disagree that they are satisfied with their current teaching salary.

It is important to note that the mean scores before and after the weights and design effect were applied are very similar. Also, there was very little variance, as measured by the standard deviation, in the responses. Table 4.1 below displays the sample size, mean, and standard deviation for each variable in the study without the weights and design effect applied. Table 4.2 displays the sample size, mean, and standard deviation with the weights and design effect applied.

Table 4.1

*Descriptive Statistics using SPSS, no weight or design effect was considered*

Variable	N	Mean	Standard Deviation
Teachers Intent to Stay in Teaching	30,690	3.293	0.764
Teachers Job Satisfaction	34,810	3.462	0.728
Perceived Administrative Support	34,810	3.278	0.659
Teaching Experience	34,810	0.165	0.372
Perceived Student Behavior	34,810	2.141	.999
Teachers Satisfaction with Salary	34,810	2.215	.994

*Note: N is rounded to the nearest ten.*

Table 4.2

*Descriptive Statistics using AM Statistical Software, weights and design effect applied*

Variable	Weighted N	Mean	Standard Deviation
Teachers Intent to Stay in Teaching	2,271,936	3.333	0.750
Teachers Job Satisfaction	2,271,936	3.484	0.741
Perceived Administrative Support	2,271,936	3.310	0.661
Teaching Experience	2,271,936	0.161	0.367
Perceived Student Behavior	2,271,936	2.106	1.015
Teachers Satisfaction with Salary	2,271,936	2.278	1.002



### *Pearson Correlation*

The Pearson's correlation coefficient ( $r$ ) is defined as the covariance divided by the standard deviation. The correlation coefficient is a point on the scale between -1 and 1. The closer the value gets to either of those limits, the stronger the relationship is between the two variables (Howell, 2007).

All Pearson correlation coefficients were significant at 0.01 significance level ( $p < 0.01$ ), except one. The Pearson correlation coefficients ( $r$ ) discussed below were obtained through the application of SPSS. The highest correlation was between teachers' job satisfaction and perceived administrative support ( $r = 0.460, p < 0.01$ ) and demonstrates that as teachers' perceptions of administrative support increase, their job satisfaction increases. The second highest correlation was between student behavior and teachers' job satisfaction ( $r = -0.291, p < 0.01$ ) suggests that as teachers' perceptions of student behavior interfering with their teaching increases, their job satisfaction decreases. The next highest correlation existed between teachers' job satisfaction and teachers' intent to stay in teaching ( $r = 0.268, p < 0.01$ ). This suggests that as teachers' job satisfaction increases, their intent to stay in teaching increases. The fourth highest correlation was between perceived student behavior and perceived administrative support ( $r = -0.253, p < 0.01$ ) and suggests that as teachers' perceptions of student behavior interfering with their teaching increases, their perception of administrative support decreases. The fifth highest correlation existed between teachers' satisfaction with salary and teachers' job satisfaction ( $r = 0.181, p < 0.01$ ). This correlation reveals that as teachers' satisfaction with their salary increases, their job satisfaction increases. The sixth highest correlation was between teachers' satisfaction with salary and perceived administrative support ( $r = 0.163, p < 0.01$ ), revealing that as teachers' satisfaction with their salary increases, their perception of administrative support increases. The seventh highest correlation existed between perceived administrative support and teachers' intent to stay in teaching ( $r = 0.159, p < 0.01$ ). This correlation shows that as teachers' perceptions of administrative support increase, their intent to stay in teaching increases. The eighth highest correlation was between teachers' satisfaction with salary and teachers' intent to stay in teaching. This demonstrates that as teachers' satisfaction with their present annual salary increases, their intent to stay in teaching increases. The ninth

highest correlation existed between student behavior and teachers' intent to stay in teaching ( $r = -0.108$ ,  $p < 0.01$ ). This negative correlation suggests that as teachers' perception that student behavior in their school was interfering with their teaching increased, their intent to stay in teaching decreased. All other Pearson correlation coefficients, with one exception, were significant at .01 ( $p < .01$ ). They ranged from -0.088 to -0.025. The only correlation that was not significant was between teachers' satisfaction with their salary and teaching experience ( $r = 0.009$ ) and suggests there is not a strong relationship between the two variables.

Table 4.3 below displays the Pearson correlation coefficients ( $r$ ). The first correlation coefficient was derived using SPSS with no weights or design effect applied; however, it does include the level of significance. The second correlation coefficient ( $r$ ), which is in parentheses, was derived through the use of AM statistical software in order to apply the weight and design effect.

Table 4.3

*Pearson correlation coefficients (r) using SPSS with no weights or design effect applied, including the level of significance. The number in parentheses indicates the Pearson correlation coefficients with the weight and design effect applied through the use of AM statistical software.*

	Teachers' Intent to Stay in Teaching	Teachers' Job Satisfaction	Perceive Administrative Support	Teaching Experience	Perceived Student Behavior	Teachers' Satisfaction with Salary
Teachers Intent to stay in teaching	1.000					
Teachers Job Satisfaction	0.268** (0.277)	1.000				
Perceived Administrative Support	0.159** (0.173)	0.460** (0.470)	1.000			
Teaching Experience	0.027** (0.036)	-0.025** (-0.017)	0.029** (0.042)	1.000		
Perceived Student Behavior	-0.108** (-0.119)	-0.291** (-0.309)	-0.253** (-0.280)	0.057** (0.051)	1.000	
Teachers Satisfaction with Salary	0.142** (0.144)	0.181** (0.197)	0.163** (0.159)	0.009 (0.013)	-0.088** (-0.109)	1.000

*Note: \*\* indicates  $p < .01$*

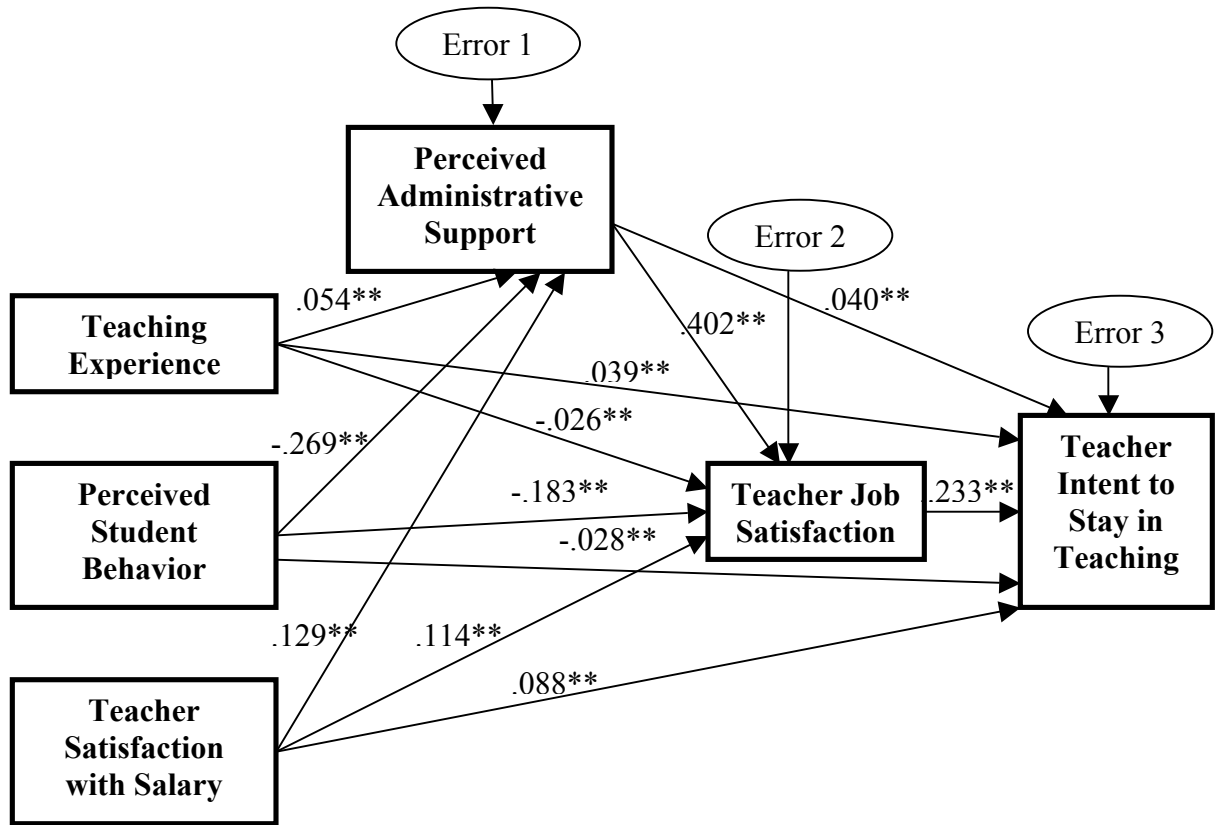
## *Path Model Analysis*

### *Overall Sample*

Following application of the selection criteria, only regular, full-time public school teachers, with regular or standard state certification remained for this study. This left an approximate sample size of 34,810. The path analysis model for the overall sample includes all of these teachers. Figure 4.1 below shows the initial, hypothesized, path analysis model applied to the overall sample, including the standardized coefficient betas generated for each direct path. The standardized coefficient betas were all significant at .01 ( $p < .01$ ), so each independent variable was a significant predictor of the dependent variable for the respective direct paths. Therefore, there was no need to remove any of the hypothesized paths, direct or indirect.

Figure 4.1 presents the final path analysis model for the overall sample. It is important to note that the strongest predictor of teachers' job satisfaction was perceived administrative support ( $\beta = .402$ ,  $p < 0.01$ ), and this path demonstrated the strongest standardized coefficient beta in the sample. The strongest predictor of teachers' intent to stay in teaching was teachers' job satisfaction ( $\beta = .233$ ,  $p < 0.01$ ). The strongest predictor of perceived administrative support was perceived student behavior ( $\beta = -.269$ ,  $p < 0.01$ ). The negative beta denotes that as teachers' perceptions that student misbehavior interferes with their teaching increases, their perception of administrative support declines.

Figure 4.1  
 Path analysis model for the overall sample



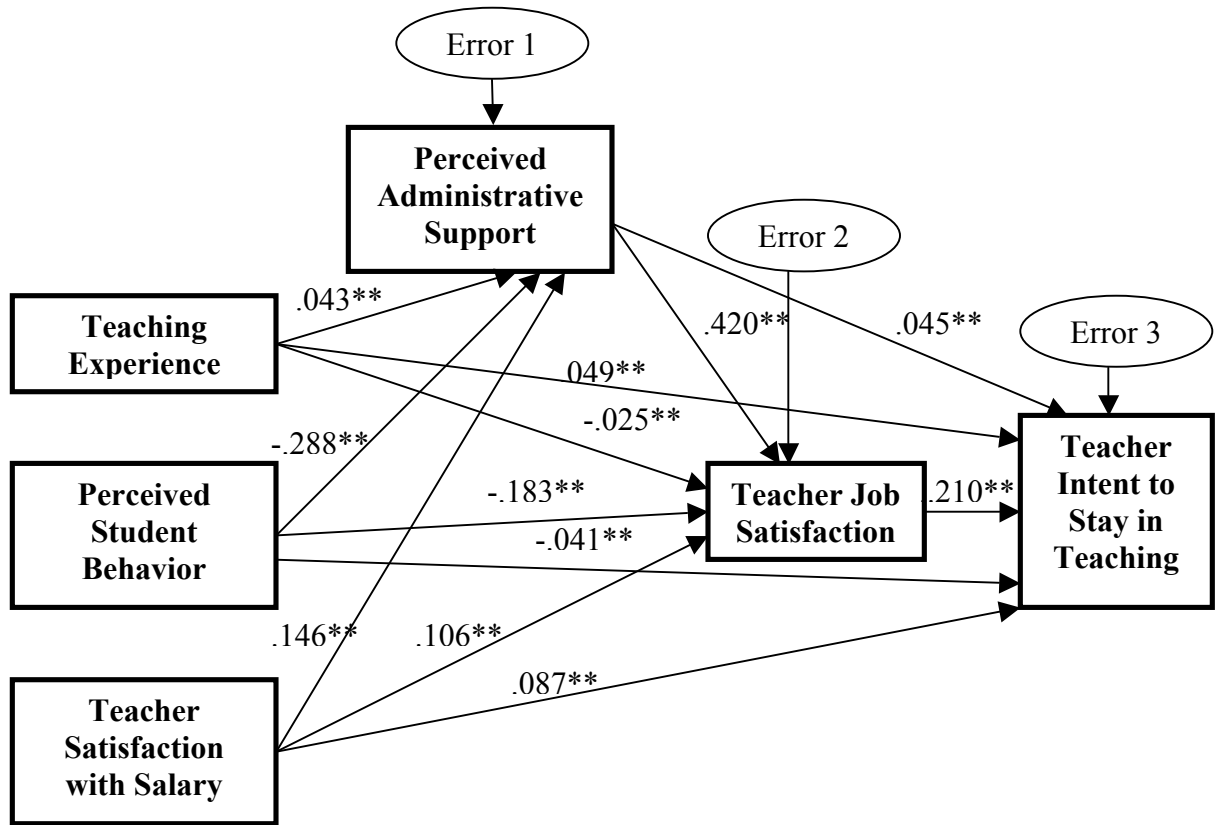
Note: Standardized Coefficient Beta is above the corresponding line.  
 \*\* indicates  $p < .01$

### *Urban Sample*

The path analysis model for the urban sample only included self-selected cases from the overall sample that identified themselves as teachers at a school located in a large or midsize central city (Strizek et al., 2006). This produced an approximate sample size of 8,490 teachers for the urban sample. There was no significant difference between the overall sample and the urban sample. Figure 4.2 below shows the initial, hypothesized, path analysis model for the urban sample, including the standardized coefficient betas produced for each direct path. The standardized coefficient betas for this model were all significant at the 0.01 significance level ( $p < 0.01$ ). Thus, independent variables were significant predictors of the respective dependent variables for each direct path. There was no need to remove any of the hypothesized paths, direct or indirect, and Figure 4.2 displays the final model for the urban sample.

The strongest predictor of teachers' job satisfaction was perceived administrative support ( $\beta = .420, p < 0.01$ ), and this path demonstrated the strongest standardized coefficient beta for the urban sample. The strongest predictor of teachers' intent to stay in teaching was teachers' job satisfaction ( $\beta = .210, p < 0.01$ ) and perceived administrative support was the strongest predictor of student behavior ( $\beta = -.288, p < 0.01$ ). The strength of the standardized coefficient beta for perceived administrative support and teachers' job satisfaction, as well as perceived student behavior and perceived administrative support, increased slightly for the urban sample, while teachers' job satisfaction and teachers' intent to stay in teaching registered slight decreases.

Figure 4.2  
 Path analysis model for the urban sample



Note: Standardized Coefficient Beta is above the corresponding line.  
 \*\* indicates  $p < 0.01$

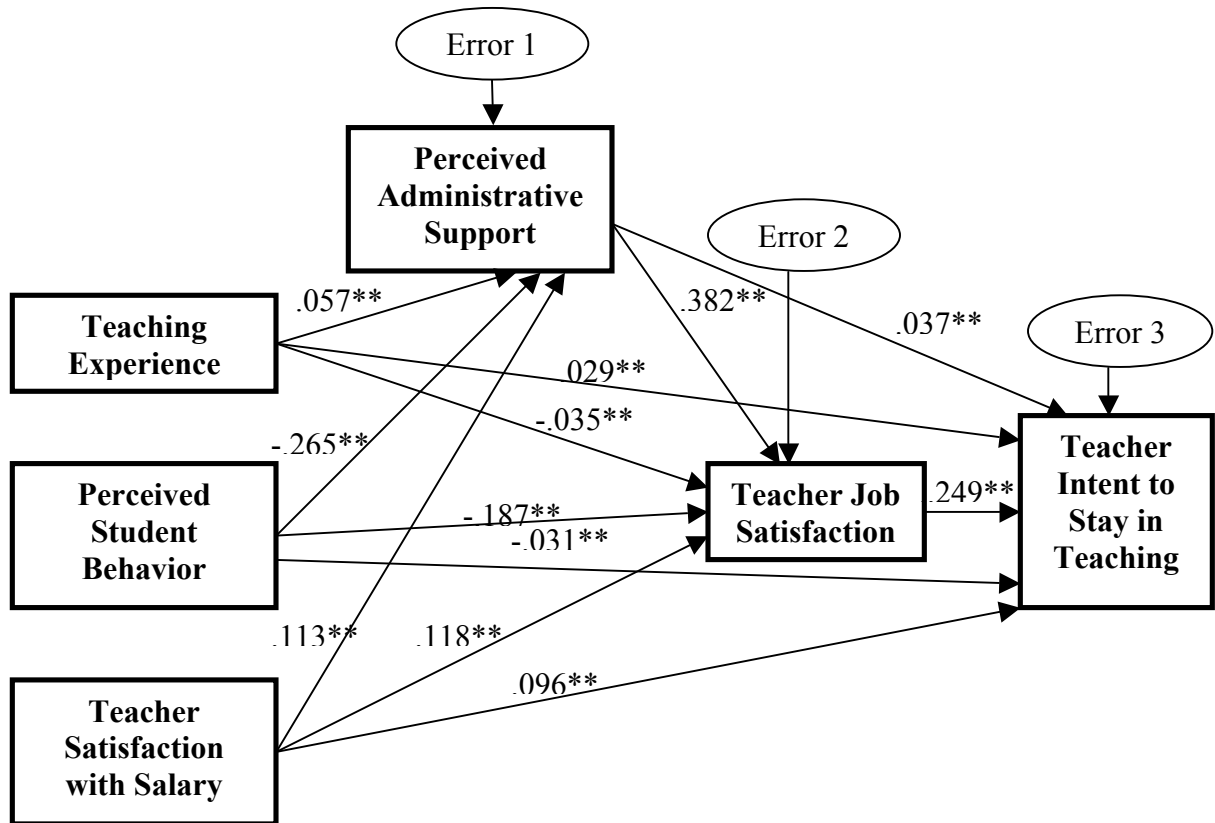
### *Urban Fringe Sample*

The path analysis model for the urban fringe sample only included select cases from the overall sample that identified themselves as teachers at a school located in the urban fringe of a large or midsize city, in a large town, or in a rural area within an urbanized metropolitan area (Strizek et al., 2006). This produced an approximate sample size of 15,150 teachers for the urban fringe sample. Figure 4.3 below shows the initial, hypothesized, path analysis model for the urban fringe sample, and contains the standardized coefficient beta for each direct path. Each standardized coefficient beta for this model was significant at the 0.01 significance level ( $p < 0.01$ ), so each independent variable was a significant predictor of the dependent variable for each direct path. Based on these findings, there was no need to remove any of the hypothesized paths, direct or indirect, and Figure 4.3 presents the final model for the urban fringe sample.

It is important to note that the strongest predictor of teachers' job satisfaction was perceived administrative support ( $\beta = .382$ ,  $p < 0.01$ ), and this path registered the strongest standardized coefficient beta for the urban fringe sample. The strongest predictor of teachers' intent to stay in teaching was teachers' job satisfaction ( $\beta = .249$ ,  $p < 0.01$ ) and perceived administrative support was the strongest predictor of perceived student behavior ( $\beta = -.265$ ,  $p < 0.01$ ). There was no significant difference between the overall sample, urban sample, and the urban fringe sample. The strength of the standardized coefficient beta for perceived administrative support and teachers' job satisfaction, as well as perceived student behavior and perceived administrative support decreased slightly for the urban fringe sample. The strength of the standardized coefficient betas for teachers' job satisfaction and teachers' intent to stay in teaching both increased slightly for the urban fringe sample.



Figure 4.3  
*Path analysis model for the urban fringe sample*



Note: Standardized Coefficient Beta is above the corresponding line.  
 \*\* indicates  $p < 0.01$

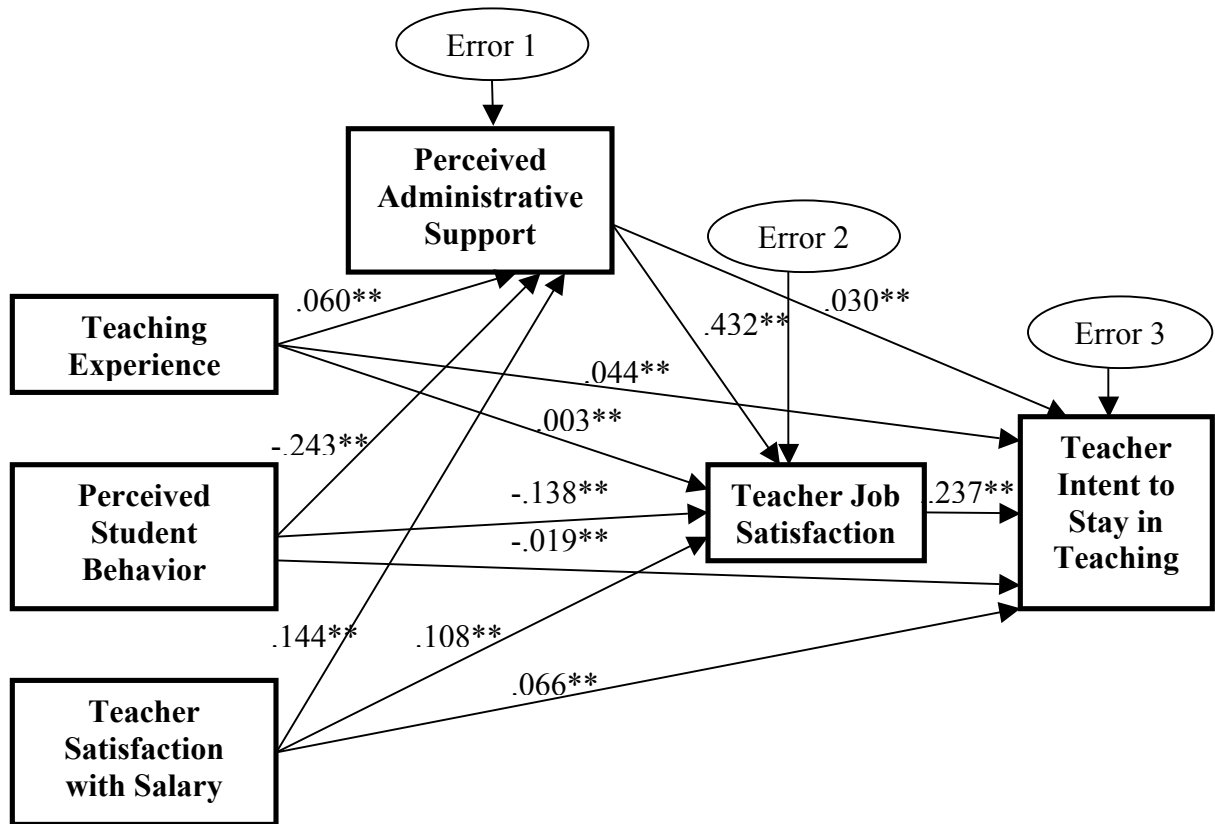
### *Rural Sample*

Following application of the selection criteria, a sample of regular, full-time public school teachers, with regular or standard state certification remained. This left an approximate sample size of 34,810 ( $N = 34,810$ ). The path analysis model for the rural sample included self-selected cases from the overall sample that identified themselves as teachers at a school located in a small town or rural setting, and were located outside an urbanized metropolitan area (Strizek et al., 2006). An approximate sample size of 11,170 ( $N=11,170$ ) teachers was formed for the rural sample and Figure 4.4 displays the initial, hypothesized, path analysis model for the rural sample. The standardized coefficient betas for the direct paths are shown, including their respective levels of significance ( $p < .01$ ). All independent variables were significant predictors of their respective dependent variables for each direct path. There was no need to remove any of the hypothesized paths, direct or indirect, and Figure 4.4 displays the final model for the rural sample.

It is important to note that the strongest predictor of teachers' job satisfaction was perceived administrative support ( $\beta = .432, p < 0.01$ ), and this path registered the strongest standardized coefficient beta for the rural sample. The strongest predictor of teachers' intent to stay in teaching was teachers' job satisfaction ( $\beta = .237, p < 0.01$ ) and perceived administrative support was the strongest predictor of perceived student behavior ( $\beta = -.243, p < 0.01$ ). There was no significant difference between the overall sample, urban sample, urban fringe sample, and the rural sample. The strength of the standardized coefficient betas for perceived administrative support and teachers' job satisfaction increased slightly for the rural sample and was the strongest beta of all four samples ( $\beta = .432, p < 0.01$ ). The strength of the standardized coefficient betas for perceived student behavior and perceived administrative support decreased slightly for the rural sample. The strongest standardized coefficient beta for perceived student behavior and teachers' intent to stay in teaching of all four samples was from the urban sample ( $\beta = -.288, p < 0.01$ ). The strength of the standardized coefficient betas for teachers' job satisfaction and teachers' intent to stay in teaching increased slightly for the rural sample. The strongest standardized coefficient beta for teachers' job satisfaction

and teachers' intent to stay in teaching of all four samples was from the urban fringe sample ( $\beta = .249, p < 0.01$ ).

Figure 4.4  
*Path analysis model for the rural sample*



Note: Standardized Coefficient Beta is above the corresponding line.  
 \*\* indicates  $p < .01$

### *Proportion of Variance Explained as Effect Size*

To better understand the influence of the significant predictors determined in the path, we will examine the proportion of variance explained as effect size. This will also help us to determine differences that exist according to the environmental setting of the school. According to Tabachnick and Fidell (2007), effect size is the proportion of variance in the dependent variable that is associated with levels of an independent variable. A rough estimate of the effect size is  $R^2$ . When analyzing multiple correlations, researchers are very interested in  $R^2$  because it is interpreted in terms of the percentage of accountable variation. Unfortunately,  $R^2$  may be biased and the amount of bias depends on the relative sizes of the sample and population. The adjusted  $R^2$  provides a relatively unbiased estimate.

#### *$R^2$ and Adjusted $R^2$ for the Dependent Variable of Perceived Administrative Support*

Table 4.4 below presents the  $R^2$  and adjusted  $R^2$  when the dependent variable perceived administrative support is regressed against the independent variables of teaching experience, perceived student behavior, and teachers' satisfaction with salary. The amount of variance in teachers' perceptions of administrative support is explained by teaching experience, perceived student behavior, and teachers' satisfaction with their salary combined. Table 4.4 presents the comparison of these measures according to the environmental setting of the school. The  $R^2$  was the largest for the urban sample and provides the amount of variance in teachers' perceptions of administrative support explained by teaching experience, perceived student behavior, and teachers' satisfaction with salary is greatest among teachers combined in urban schools.

Table 4.4

*The R<sup>2</sup> and adjusted R<sup>2</sup> when perceived administrative support was regressed on the combined independent variables of teaching experience, perceived student behavior, and teachers' satisfaction with their salary, according to the environmental setting of the school.*

Effect of Independent Variables on Perceived Administrative Support		
Environmental Setting	R <sup>2</sup>	Adjusted R <sup>2</sup>
Overall Sample	.098	.098
Urban Sample	.113	.113
Urban Fringe Sample	.091	.091
Rural Sample	.090	.090

*R<sup>2</sup> and Adjusted R<sup>2</sup> for the Dependent Variable of Teachers' Job Satisfaction*

Table 4.5 below displays the R<sup>2</sup> and adjusted R<sup>2</sup> when the dependent variable teachers' job satisfaction is regressed against the independent variables of teaching experience, perceived student behavior, teachers' satisfaction with salary, and perceived administrative support. The amount of variance in teachers' perceptions of job satisfaction is explained by teaching experience, perceived student behavior, teachers' satisfaction with their salary, and perceived administrative support combined. Table 4.5 presents the comparison of these measures according to the environmental setting of the school and the R<sup>2</sup> was the largest for the urban sample. The amount of teachers' perceptions of job satisfaction is explained by teaching experience, perceived student behavior, teachers' satisfaction with their salary, and perceived administrative support combined was highest among teachers' in urban schools.

Table 4.5

*The R<sup>2</sup> and adjusted R<sup>2</sup> when teachers' job satisfaction was regressed on the combined independent variables of teaching experience, perceived student behavior, teachers' satisfaction with their salary, and perceived administrative support, according to the environmental setting of the school.*

Effect of Independent Variables on Teachers' Job Satisfaction		
Environmental Setting	R <sup>2</sup>	Adjusted R <sup>2</sup>
Overall Sample	.268	.268
Urban Sample	.288	.288
Urban Fringe Sample	.252	.252
Rural Sample	.267	.267

*R<sup>2</sup> and Adjusted R<sup>2</sup> for the Dependent Variable of Teachers' Intent to Stay in Teaching*

Table 4.6 below presents the R<sup>2</sup> and adjusted R<sup>2</sup> when the dependent variable teachers' intent to stay in teaching is regressed against the independent variables of teaching experience, perceived student behavior, teachers' satisfaction with salary, perceived administrative support, and teachers' job satisfaction. The amount of variance in teachers' intent to stay in teaching is explained by teaching experience, perceived student behavior, teachers' satisfaction with their salary, perceived administrative support, and teachers' job satisfaction combined. Table 4.6 presents the comparison of these measures according to the environmental setting of the school. The R<sup>2</sup> for the dependent variable of teachers' intent to stay in teaching was the largest in the urban fringe sample and provides the amount of the variable teachers' intent to stay in teaching explained by teaching experience, perceived student behavior, teachers' satisfaction with their salary, perceived administrative support, and teachers' job satisfaction combined is highest among teachers' in schools located on the urban fringe of large or mid-size central cities.

Table 4.6

*The R<sup>2</sup> and adjusted R<sup>2</sup> when teachers' intent to stay in teaching was regressed on the combined independent variables of teaching experience, perceived student behavior, teachers' satisfaction with their salary, perceived administrative support, and teachers' job satisfaction, according to the environmental setting of the school.*

Effect of Independent Variables on Teachers' Intent to Stay		
Environmental Setting	R <sup>2</sup>	Adjusted R <sup>2</sup>
Overall Sample	.089	.089
Urban Sample	.083	.083
Urban Fringe Sample	.099	.099
Rural Sample	.081	.081

### *Mediating Variable Analysis*

According to Howell (2007), a mediating variable is one that mediates the relationship between an independent and dependent variable. In order to establish a mediating relationship the following criteria must be met: (a) a significant relationship must be established between the independent variable and the dependent variable, the independent variable and the mediating variable, and the mediating variable and the dependent variable; and (b) demonstration that when the mediating variable and the independent variable are used simultaneously to predict the dependent variable, the previously demonstrated significant relationship between the independent variable and the dependent variables is greatly reduced, if not insignificant. According to Baron and Kenny (1986), as specified in by Howell (2007), the initial conditions can be tested by looking at the Pearson correlation between the variables in question. Table 4.7 displays the Pearson correlations between the independent variables of perceived administrative support, teaching experience, perceived student behavior, teachers' satisfaction with their salary and the exogenous variables of teachers' job satisfaction and teachers' intent to stay in teaching. All of the correlations in Table 4.7 are significant at the 0.01 level.

Table 4.7

*Pearson correlation coefficients (r) using SPSS, including the level of significance*

	Teachers' Intent to Stay in Teaching	Teachers' Job Satisfaction
Teachers Intent to Stay in Teaching	1	
Teachers Job Satisfaction	0.268**	1
Perceived Administrative Support	0.159**	0.460**
Teaching Experience	0.027**	-0.025**
Perceived Student Behavior	-0.108**	-0.291**
Teachers Satisfaction with Salary	0.142**	0.181**

*Note: \*\* indicates  $p < .01$*



If the direct paths between the independent variables and endogenous variables would have become insignificant during the path model analysis, this would satisfy the remaining criteria for establishing a mediating effect. However, all direct paths remained significant. To demonstrate a mediating effect, we must show that when the independent variable and mediating variable are used simultaneously to predict the dependent variable, the direct path from the independent variable to the dependent variable is greatly reduced. Therefore, in order to meet the remaining criteria, we must know the regression coefficients and their standard errors for the paths in the mediating chains (Howell, 2007).

The SPSS regression output does not show the standard error of beta ( $\beta$ ). However, we can calculate that statistic by dividing the standardized coefficient beta by the t statistic for each variable in each path. Table 4.8 below displays the regression coefficient and the two parts of each mediating path being evaluated to test for the mediating effect of perceived administrative support. Those direct paths are from the independent variable to the suspected mediating variable (or path a) and from the suspected mediating variable to the dependent variable (or path b). Note that path c is the direct path from the independent variable to the dependent variable. The statistics for table 4.8 were taken from the regressions performed on the overall sample in Chapter Four.

Table 4.8

*Regression coefficients and standard errors for the two parts of the mediating path of each mediating path being evaluated to test for the mediating effect of perceived administrative support*

Path	Beta ( $\beta$ )	Standard Error of Beta (s)	t Statistic (t)
Perceived Administrative Support to Teachers' Job Satisfaction	.402	0.0006	672.467
Perceived Administrative Support to Teachers' Intent to Stay in Teaching	.040	0.0007	54.883
Teaching Experience to Perceived Administrative Support	.054	0.0006	85.617
Perceived Student Behavior to Perceived Administrative Support	-.269	0.0006	-423.306
Teachers' Satisfaction with their Salary to Perceived Administrative Support	.129	0.0006	203.494

Next, we must calculate the path coefficient and the standard error of the combined path for each path. The path coefficient is simply calculated by the betas of the paths being analyzed. The standard error of the combined path is calculated as  $\sqrt{\beta_a^2 s_b^2 + \beta_b^2 s_a^2 - s_a^2 s_b^2}$ . Table 4.9 below displays the path coefficient and standard error for the combined path being analyzed.

Table 4.9

*Path coefficient and standard error for the combined path for each path a and b being analyzed to determine the possible mediating effect of perceived administrative support*

Path	Path Coefficient	Standard Error for the Combined Path
Teaching Experience to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Job Satisfaction (path b)	0.021708	0.000243
Teaching Experience to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Intent to Stay in Teaching (path b)	0.00216	0.000045
Perceived Student Behavior to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Job Satisfaction (path b)	-0.108138	0.000290
Perceived Student Behavior to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Intent to Stay in Teaching (path b)	-0.01076	0.000190
Teachers' Satisfaction with their Salary to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Job Satisfaction (path b)	0.051858	0.000253
Teachers' Satisfaction with their Salary to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Intent to Stay in Teaching (path b)	0.00516	0.000093

The final step to determining a strong mediating pathway is to form a t ratio. The t ratio is calculated by dividing the path coefficient by the standard error for the combined path. According to Sobel (1982), as referenced by Howell (2007), the t ratio is “asymptotically normally distributed, which, for large samples, would lead to rejection of the null hypothesis at the 0.05 significance level when the ratio exceeds plus or minus 1.96 (p. 531).” Therefore, if the t-ratio is greater than 1.96, there is convincing evidence

of a strong mediating pathway (Howell, 2007). Table 4.10 below presents the t ratio and mediating status based on the determining criteria for each suspected mediating path.

Table 4.10

*The t ratio and mediating status based on the determining criteria for each suspected mediating path.*

Path	T Ratio	Mediating Status
Teaching Experience to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Job Satisfaction (path b)	89.333	Perceived administrative support mediates the effect of teaching experience relative to teachers' job satisfaction.
Teaching Experience to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Intent to Stay in Teaching (path b)	48.000	Perceived administrative support mediates the effect of teaching experience on teachers' intent to stay in teaching.
Perceived Student Behavior to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Job Satisfaction (path b)	372.890	Perceived administrative support mediates the effect of perceived student behavior relative to teachers' job satisfaction.
Perceived Student Behavior to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Intent to Stay in Teaching (path b)	53.630	Perceived administrative support mediates the effect of perceived student behavior relative to teachers' intent to stay in teaching.
Teachers' Satisfaction with their Salary to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Job Satisfaction (path b)	204.970	Perceived administrative support mediates the effect of teaching satisfaction with their salary relative to teachers' job satisfaction.
Teachers' Satisfaction with their Salary to Perceived Administrative Support (path a), Perceived Administrative Support to Teachers' Intent to Stay in Teaching (path b)	55.480	Perceived administrative support mediates the effect of teaching satisfaction with their salary relative to teachers' intent to stay in teaching.

There is substantial evidence for determining a strong mediating pathway for all six paths. In other words, perceived administrative support strongly mediates the effects of teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to teachers' job satisfaction and their intent to stay in teaching.

Chapter Four has provided a detailed statistical analysis of the present study. In Chapter Five, the researcher will discuss the findings presented by this analysis, based on the review of the literature presented in Chapter Two.

## Chapter Five: Discussion

According to Liu and Meyer (2005), the teacher attrition rate in education, or percentage of teachers' leaving the profession, is disproportionately higher than it is in other professions. This has made it increasingly difficult for public schools to meet the "highly qualified" requirement of No Child Left Behind (Spradlin & Prendergast, 2006). Additionally, it has negatively affected the quality of education in the classroom. Research has clearly demonstrated a relationship between teachers' job satisfaction and teacher attrition (Colbert & Wolff, 1992; Liu & Meyer, 2005; Pearson & Moomaw, 2005; Perie et al., 1997; Shann, 1998; Woods & Weasmer, 2004).

While earlier research on the causes of teacher attrition and job satisfaction focused on teacher characteristics, more recent studies have focused on other sources (Ingersoll & Smith 2003; Liu & Meyer, 2005; Marvel et al., 2007). Liu (2007) identified the necessity to study the interaction among these strands of research relative to teacher attrition and job satisfaction. This study examined the interactions among six variables that, as demonstrated by previous research, are related to one another. Those six variables are teachers' intent to stay in teaching, teachers' job satisfaction, perceived administrative support, teaching experience, perceived student behavior, and teachers' satisfaction with their salary. These variables were examined within the context of the environmental setting of each teacher's (respondent's) school, demonstrated by the four different path analysis models in Chapter Four.

Other than absence of a relationship between teachers' satisfaction with their salary and teaching experience, this study supports previous research that demonstrates relationships between teachers' intent to stay in teaching, teachers' job satisfaction, perceived administrative support, teaching experience, perceived student behavior, and teachers' satisfaction with their salary. Presented in Table 4.3 are the correlations among these six variables which are significant at the 0.01 level ( $p < 0.01$ ), with the exception of the relationship between teachers' satisfaction with their salary and teaching experience ( $r = 0.009$ ). According to Kelly (2004) teachers with higher salaries and more experience are less likely to leave teaching. In contrast, in this study the Pearson correlation between

teachers' satisfaction with their salary and teaching experience ( $r = 0.009$ ) did not yield a significant relationship.

The path analysis models in Chapter Four (Figures 4.1, 4.2, 4.3, and 4.4) presented the results of an examination of the direct and indirect effects of the relationships specified between the variables and verified: (a) teaching experience has a direct effect on teachers' job satisfaction and teachers' intent to stay in teaching; (b) teaching experience has an indirect effect on teachers' job satisfaction and teachers' intent to stay in teaching through perceived administrative support; (c) perceived student behavior has a direct effect on teachers' job satisfaction and teachers' intent to stay in teaching; (d) perceived student behavior has an indirect effect on teachers' job satisfaction and teachers' intent to stay in teaching through perceived administrative support; (e) teachers' satisfaction with their salary has a direct effect on teachers' job satisfaction and teachers' intent to stay in teaching; (f) teachers' satisfaction with their salary has an indirect effect on teachers' job satisfaction and teachers' intent to stay in teaching through perceived administrative support; (g) perceived administrative support has a direct effect on teachers' job satisfaction and teachers' intent to stay in teaching; and (h) teachers' job satisfaction has a direct effect on teachers' intent to stay in teaching. Moreover, these effects were confirmed on all four samples, indicating that there was no change in the results based on the environmental setting of the school. Thus, all four models presented were confirmed and no changes in the initial path analysis model were necessary for any environmental setting identified.

Based on the relationships stated above, it was first hypothesized that teaching experience, perceived student behavior, and teachers' satisfaction with their salary are significant predictors of perceived administrative support. The findings of the present study support this hypothesis. Second, it was hypothesized that perceived administrative support, teaching experience, perceived student behavior, and teachers' satisfaction with their salary are significant predictors of teachers' job satisfaction and intent to stay in teaching. Again, the findings of this study support that hypothesis. Third, it was hypothesized that perceived administrative support mediates the effects of teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to teachers' job satisfaction and intent to stay in teaching. This hypothesis was

also supported by the findings of this study. Fourth and last, it was hypothesized that teachers' job satisfaction is a significant predictor of teachers' intent to stay in teaching. The findings of the present study confirmed this hypothesis. The next section contains some comments, considerations, and discussion specific to the individual variables used in this study and is based partially on the literature presented in Chapter Two.

### *Teaching Experience*

Research consistently reveals that teacher attrition is higher among novice teachers (Ingersoll & Smith, 2003; Liu, 2007; Luekens, 2004) and has demonstrated that former novice teachers often identify job dissatisfaction as one of their main reasons for leaving the profession (Ingersoll & Smith, 2003). Specifically, Ingersoll and Smith (2003) recognized that former novice teachers have often identified dissatisfaction with administrative support as their main reason for leaving. In a somewhat contradictory study, Perie et al. (1997) found that teachers with less experience reported higher levels of job satisfaction than more experienced teachers.

As displayed in Figure 4.1 for the overall sample, teaching experience was a significant predictor of teachers' intent to stay in teaching, teachers' job satisfaction, and perceived administrative support. Findings were nearly identical for the urban sample, urban fringe sample, and rural sample as well and indicated that the less experienced teachers are they are more likely to favorably perceive administrative support and have an increased intent to stay in teaching, but their job satisfaction decreased (due to negative beta). These findings are somewhat contradictory with the prior research reported. Table 5.1 presents the standardized coefficient betas for the variable teaching experience relative to perceived administrative support, teachers' job satisfaction, and teachers' intent to stay in teaching, according to the environmental setting of the school.



Table 5.1

*The standardized coefficient beta for the variable teaching experience relative to perceived administrative support, teachers' job satisfaction, and teachers' intent to stay in teaching, according to the environmental setting of the teacher's (respondent's) school*

Environmental Setting for the variable Teaching Experience	Perceived Administrative Support	Teachers' Job Satisfaction	Teachers' Intent to Stay in Teaching
Overall Sample Beta ( $\beta$ )	.054**	-.026**	.039**
Urban Sample Beta ( $\beta$ )	.043**	-.025**	.049**
Urban Fringe Sample Beta ( $\beta$ )	.057**	-.035**	.029**
Rural Sample Beta ( $\beta$ )	.060**	.003**	.044**

*Note: \*\* indicates  $p < .01$*

### *Perceived Student Behavior*

Student behavior has been identified in previous studies as a significant predictor of teacher attrition (Harrell & Jackson, 2004; Ingersoll & Smith, 2003; Kelly, 2004). Studies also show that student misbehavior negatively affects teachers' job satisfaction (Ingersoll & Smith, 2003; Liu & Meyer, 2005; Perie et al., 1997; Shann, 1998). Since administrative support has been shown to positively affect teachers' job satisfaction, it was hypothesized that student misbehavior would also negatively predict perceived administrative support.

The findings of this study support the previous research studies regarding student behavior. This study found that perceived student behavior was indeed a significant predictor of perceived administrative support, teachers' job satisfaction, and teachers' intent to stay in teaching and the findings were nearly identical for the urban sample, urban fringe sample, and rural sample. The standardized coefficient betas for all three variables are negative. As the teachers' perception that student behavior, or misbehavior, increasingly interferes with teaching increases, the variable in question decreases. The standardized beta coefficients for the variable of perceived student behavior relative to perceived administrative support, teachers' job satisfaction, and teachers' intent to stay in teaching, according to the environmental setting of the school are presented in Table 5.2.

Table 5.2

*The standardized coefficient beta for the variable perceived student behavior relative to perceived administrative support, teachers' job satisfaction, and teachers' intent to stay in teaching, according to the environmental setting of the teacher's (respondent's) school*

Environmental Setting for the variable Perceived Student Behavior	Perceived Administrative Support	Teachers' Job Satisfaction	Teachers' Intent to Stay in Teaching
Overall Sample Beta ( $\beta$ )	-.269**	-.183**	-.028**
Urban Sample Beta ( $\beta$ )	-.288**	-.183**	-.041**
Urban Fringe Sample Beta ( $\beta$ )	-.265**	-.187**	-.031**
Rural Sample Beta ( $\beta$ )	-.243**	-.138**	-.019**

*Note: \*\* indicates  $p < .01$*

### *Teachers' Satisfaction with their Salary*

Research has demonstrated consistently that teacher compensation influences both teacher attrition and job satisfaction. Teacher salaries have been identified as the most influential variable affecting teachers' decisions to leave the profession (Harrell & Jackson, 2004; Ingersoll & Smith, 2003; Kelly, 2004; Loeb et al., 2005). Liu (2007) found that low teaching salary was the main predictor of teacher attrition. Considerable research has reported that teachers' job satisfaction was related positively to teachers' salary (Ingersoll & Smith, 2003; Liu & Meyer, 2005; Perie et al., 1997; Shann, 1998). However, few studies have examined teachers' salary relative to administrative support. Although, Darling-Hammond (2003) suggested that salary, together with working conditions, including administrative support, are stronger predictors of teacher attrition than student demographics.

This study agreed and found that teachers' satisfaction with their salary was a significant predictor of perceived administrative support, teachers' job satisfaction, and teachers' intent to stay in teaching. As teachers' satisfaction with their salary increased, their perceptions of administrative support, job satisfaction, and intent to stay in teaching also increased. This is an important finding and could influence teacher compensation in terms of attrition and job satisfaction. Table 5.3 below displays the standardized coefficient betas for the variable teachers' satisfaction with their salary relative to perceived administrative support, teachers' job satisfaction, and teachers' intent to stay in teaching, according to the environmental setting of the school.

Table 5.3

*The standardized coefficient beta for the variable teachers' satisfaction with their salary relative to perceived administrative support, teachers' job satisfaction, and teachers' intent to stay in teaching, according to the environmental setting of the teacher's (respondent's) school*

Environmental Setting for the variable Teachers' Satisfaction with their Salary	Perceived Administrative Support	Teachers' Job Satisfaction	Teachers' Intent to Stay in Teaching
Overall Sample Beta ( $\beta$ )	.129**	.114**	.088**
Urban Sample Beta ( $\beta$ )	.146**	.106**	.087**
Urban Fringe Sample Beta ( $\beta$ )	.113**	.118**	.096**
Rural Sample Beta ( $\beta$ )	.144**	.108**	.066**

*Note: \*\* indicates  $p < .01$*

A major purpose of this study was to determine whether perceived administrative support was a mediating variable among the variables teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to their job satisfaction and intent to stay in teaching. Prior to this determination, it was necessary to ascertain whether significant relationships existed among these variables. This study verified those relationships and supports the first hypothesis of the study, that is, teaching experience, perceived student behavior, and teachers' satisfaction with their salary are significant predictors of perceived administrative support.

*Perceived Administrative Support*

Previous research has indicated that administrative support is strongly associated with teachers' job satisfaction and intent to stay in teaching (Ingersoll & Smith, 2003; Loeb et al., 2005; Luekens et al., 2004; Liu & Meyer, 2005; Perie et al., 1997; Shann, 1998; Weiss, 1999; Worthy, 2005). The findings of this study support those previous

findings. This study determined that perceived administrative support is a significant predictor of both teachers' job satisfaction and intent to stay in teaching. In addition, the standardized coefficient betas for the direct effect of perceived administrative support on teachers' job satisfaction are the strongest betas in all four samples. These findings show that perceived administrative support is a stronger predictor of teachers' job satisfaction than teaching experience, perceived student behavior, and teachers' satisfaction with their salary. This contradicts previous studies suggesting that salary and perceived student behavior are the strongest predictors of teachers' job satisfaction (Liu & Meyer, 2005). Table 5.4 below presents the standardized beta coefficient for the direct effect of perceived administrative support on both teachers' job satisfaction and intent to stay in teaching, based on the environmental setting of the school.

Table 5.4

*The standardized coefficient beta for the variable perceived administrative support, according to the environmental setting of the teacher's (respondent's) school*

Environmental Setting for the variable Perceived Administrative Support	Teachers' Job Satisfaction	Teachers' Intent to Stay in Teaching
Overall Sample Beta ( $\beta$ )	.402**	.040**
Urban Sample Beta ( $\beta$ )	.420**	.045**
Urban Fringe Sample Beta ( $\beta$ )	.382**	.037**
Rural Sample Beta ( $\beta$ )	.432**	.030**

*Note: \*\* indicates  $p < .01$*

### *The Mediating Effect of Perceived Administrative Support*

In addition to being a significant predictor of both teachers' job satisfaction and intent to stay in teaching, perceived administrative support was proven to be a mediating variable. Based on the analysis in Chapter Four (Tables 4.7, 4.8, 4.9, and 4.10), this study determined that perceived administrative support mediates the effect of teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to teachers' job satisfaction and intent to stay in teaching.

This finding is of great importance. Previous studies found that student behavior and teachers salaries were the largest influences on teachers' attrition (Liu & Meyer, 2005). The present study not only demonstrates that perceived administrative support is a stronger predictor, but mediates the effects of those two variables relative to teachers' job satisfaction and intent to stay in teaching. This finding shines light on the importance and influence of teachers' perceptions of administrative support for the purpose of increasing their job satisfaction and intent to remain in teaching. Because perceived administrative support mediates the effect of teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to teachers' job satisfaction and intent to stay in teaching, this finding could help to decrease the high rate of attrition. Additionally, these findings make the implementation of and accountability to the ISLLC standards vital for decreasing teachers' attrition.

### *Teachers' Job Satisfaction*

Previous research has identified a link between teachers' job satisfaction and teacher attrition (Liu & Meyer, 2005; Shann, 1998, Woods & Weasmer, 2004). This link is supported by the present study. This study identified teachers' job satisfaction as the most significant predictor of teachers' intent to stay in teaching. Once again there was no difference according to the environmental setting of the school. Table 5.5 below displays the standardized coefficient beta, according to the environmental setting of the school.

Table 5.5

*The standardized coefficient beta for the variable teachers' job satisfaction, according to the environmental setting of the teacher's (respondent's) school*

Environmental Setting for the variable Teachers' Job Satisfaction	Teachers' Intent to Stay in Teaching
Overall Sample Beta ( $\beta$ )	.233**
Urban Sample Beta ( $\beta$ )	.210**
Urban Fringe Sample Beta ( $\beta$ )	.249**
Rural Sample Beta ( $\beta$ )	.237**

*Note: \*\* indicates  $p < .01$*



### *Environmental Setting of the School*

Previous research indicates the highest attrition rates occur in urban schools (Abel & Sewell, 1999; Adams & Dial, 1993; Ingersoll & Smith, 2003). Perie et al. (1997) determined that urban school teachers experience lower overall job satisfaction. Additionally, the lack of administrative support is a major contributor to teacher attrition and dissatisfaction in urban schools (Abel & Sewell, 1999; Gonzalez & National Association of State Directors of Special Education, 1995).

The findings of the present study demonstrated that the three variables of teaching experience, perceived student behavior, and teachers' satisfaction with their salary were significant predictors of perceived administrative support, teachers' job satisfaction, and teachers' intent to stay in teaching. Additionally, these findings were true regardless of the environmental setting of the school.

The information presented in Table 4.4 indicates that when perceived administrative support was regressed on teaching experience, perceived student behavior, and teachers' satisfaction with their salary, the  $R^2$  was greatest among teachers in urban schools. When teachers' job satisfaction was regressed on teaching experience, perceived student behavior, teachers' satisfaction with their salary, and perceived administrative support, the  $R^2$  was greatest among teachers in urban schools. Interestingly, when teachers' intent to stay in teaching was regressed on teaching experience, perceived student behavior, teachers' satisfaction with their salary, perceived administrative support, and teachers' job satisfaction, the  $R^2$  was greatest among teachers in the urban fringe sample.

### *Summary*

This study identified perceived administrative support as the most significant predictor of teachers' job satisfaction. In addition, this analysis demonstrates that perceived administrative support mediates the effect of teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to teachers' job satisfaction. These findings were significant across environmental settings and more likely to occur in urban schools.

This study also identified perceived administrative support as a significant predictor of teachers' intent to stay in teaching. However, teachers' job satisfaction was

found to be the most significant predictor of teachers' intent to stay in teaching. This indicates that finding ways to increase teachers' job satisfaction, such as increasing teachers' perceptions of administrative support, should decrease teacher attrition. These findings were significant across environmental settings, but they are most likely to occur in schools located in the urban fringe of a large or mid-sized central city. Additionally, perceived administrative support mediates the effect of teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to teachers' intent to stay in teaching.

Previous research pointed to student behavior and teachers' salary as the two variables that are most influential on teachers' job satisfaction and intent to stay in teaching. This study found that perceived administrative support is the most significant predictor of teachers' job satisfaction and mediates the effect of teaching experience, perceived student behavior, and teachers' satisfaction with their salary relative to teachers' job satisfaction and intent to stay in teaching. This study also identified teachers' job satisfaction as the most significant predictor of teachers' intent to stay in teaching, indicating that increased job satisfaction may decrease teachers' intent to stay in teaching.

#### *Recommendations for Practice*

Based on the findings, this study may have a significant impact on policy and procedure for increasing teachers' job satisfaction and decreasing teacher attrition. The ISLLC standards reviewed in Chapter Two embrace and include the very characteristics used to derive the factor of perceived administrative support in this study. Meaning, increased knowledge and implementation of the ISLLC standards should increase teachers' job satisfaction and decrease attrition. This should motivate those involved in principal and administrative preparation, as well as central office personnel, to increase accountability for the implementation of the ISLLC standards. Additionally, these findings should influence and motivate those professionals in a position to have an affect on public school policy to increase implementation and accountability for the ISLLC standards. The amount of administrative support teachers perceive in a school is a variable that can be influenced by the powers that be. Some states have offered "high quality professional development" institutes in an effort to improve the quality of special

education teachers teaching core content area classes. One suggestion, based on the findings of the current study, might be “high quality professional development” institutes for administrators. The purpose would be increasing administrators’ knowledge of the ISLLC standards and improving their ability to apply the standards during specific scenarios. By improving teachers’ perceptions of administrative support, increasing teachers’ job satisfaction, and decreasing attrition, public school districts should save millions of dollars yearly and redirect those funds to directly benefit the students.

Further, this study confirmed teaching experience, perceived student behavior, and teachers’ satisfaction with their salary as significant predictors of both teachers’ job satisfaction and teachers’ intent to stay in teaching. While policy cannot control years of teaching experience, it may influence student behavior and teachers’ salaries. Because these are two of the most influential and consistent predictors of teachers’ job satisfaction and attrition, critical decisions must be made immediately in order to hinder the looming teacher shortage.

#### *Recommendations for Future Research*

More studies are needed examining the interactions between teacher characteristics and school characteristics, and their effect on teachers’ job satisfaction and attrition. Additional research should also include the specific study of individual working conditions identified by teachers in previous research. Administrative support is only one of those working conditions; however, the findings of this study strongly suggest the need for further research examining the effect of perceived administrative support on teachers’ job satisfaction and attrition. Only a modest amount of research exists that specifically considers the effects of perceived administrative support. This research may include differences among elementary and secondary teachers, and differences among different content areas.

Because of the array of variables that have been identified as having an affect on teachers’ job satisfaction and attrition, research should continue to examine variables that mediate the effect of additional variables. Future studies of mediating variables may provide some valuable, policy amendable insight. In addition, the variable teachers’ satisfaction with their salary revealed some interesting findings and should be considered for future studies of teacher attrition. A case could be made that the teachers’ satisfaction

with their salary is more important than the actual amount, especially when considering issues of equity.

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