A Study of Factors Related to Teacher Attrition

Leslie Ann Beaugez

University of Southern Mississippi

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A STUDY OF FACTORS RELATED TO TEACHER ATTRITION

by

Leslie Ann Beaugez

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

August 2012
ABSTRACT

A STUDY OF FACTORS RELATED TO TEACHER ATTRITION

by Leslie Ann Beaugez

August 2012

This study examined factors related to teacher attrition. The purpose of this study was to determine whether the level of teacher satisfaction that could motivate a teacher to remain in the profession in a national sample could be predicted from selected factors. Furthermore, this study examined teachers’ perceptions of worry/stress based on student performance on state and/or local tests.

The participants in the study were in two groups: teachers in a national sample that responded to items on the 1999-2000 Schools and Staffing Survey and certified teachers from a southeastern school district who also responded to one of the items from this instrument. National sample participants rated satisfaction with salary as low but were moderately satisfied with administrator support. Results indicated that salary and administrator support had a positive effect in assessing teacher satisfaction, while having the opportunity to influence professional development had a negative effect.

The regional sample did not indicate a significant difference in teachers’ perceived levels of stress related to testing based on the school level taught. However, the study indicated that teachers are concerned for the security of their jobs based on student test performance. There was no significant difference in these stresses between the national and regional samples. Finally, perceptions of pressures associated with mandatory duties, routine paperwork, and student performance on tests were similar and, when combined, predicted teachers’ perceived levels of stress. The study
concluded with recommendations for policy and practice, along with recommendations for future research.
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Leslie Ann Beaugez

A Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

Approved:

Mike Ward
Director

J. T. Johnson

Rose McNeese

David Lee

Susan A. Silitanen
Dean of the Graduate School

August 2012
DEDICATION

I would like to dedicate this body of work to the loving memory of my youngest son, Tanner Charles Fountain. When you read this, please think of Tanner in prayer.

Tanner Charles Fountain

Born March 4, 1992 – Passed January 5, 2011
ACKNOWLEDGMENTS

I would like to thank my dissertation committee. First, I would like to thank Dr. Mike Ward for serving as my committee chair. Thank you for not giving up on me even when I was certainly ready to do just that. Your dedication and commitment to your profession and students are admirable, to say the least. Three of my committee members left the university during the time that I was conducting the research and writing the final chapters of this dissertation. Therefore, I am particularly grateful to Dr. J. T. Johnson, Dr. Rose McNeese, and Dr. David Lee for being willing to serve on my committee and for going the extra mile to become current on the earlier stages of the research so that they might better evaluate the final elements.

Finally, I would like to thank my family for believing in me. To my husband Keith, thank you for the constant love and encouragement throughout this process. I would never have embarked on this journey if it were not for you. To my children, Claire, Harrison, and Tanner, thank you for being supportive and for being by my side throughout this long journey. Thank you to my parents, Jerry, Judy, Lois, and Johnny for helping me reach this point. I would like to thank my Aunt Irma for her encouragement and for being a lifelong inspiration. I would also like to thank my uncle, the late Robert Earl “Chubby” Beaugez, for always urging me to see this degree to completion.
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CHAPTER I
INTRODUCTION

This study examined the issue of teacher attrition rates and the underlying causes of attrition. The research also explored efforts being proposed or, in some cases, successfully implemented for retaining effective teachers. The literature review examined the K-12 spectrum of education. While most of these articles addressed the problem of teacher attrition from a national perspective, there was some regional focus, particularly in the section on urban and rural school systems and the particular teacher retention challenges they faced. The concluding section of the preliminary review of literature was devoted to the relatively meager amount of literature examining teacher attrition in Mississippi.

The purpose of this study was to determine whether relationships exist among teacher attrition and the following factors: administrative support, stress levels related to administrator requirements, stress levels related to performance on state/local testing, and teacher satisfaction with salary and opportunity to assist in determining professional development activities. Furthermore, this study was intended to help determine if there are statistically significant differences among teachers’ perceptions of motivation, administrative support, stress levels related to administrator requirements, and stress levels related to subject area testing in a regional sample. Finally, this study evaluated the degree to which mandatory routine duties and paperwork and pressures for students to perform on state and/or local tests impacted teachers’ perceived levels of stress in a national sample. The study employed national archival data and regional data.
Statement of the Problem

Numerous studies and articles have concluded that teacher attrition is one of the most critical problems facing American education (Certo & Fox, 2002; Harris, Camp, & Adkison, 2003; McConney, Ayers, Hansen, & Cuthbertson, 2003; McCreight, 2000; Useem & Neild, 2001). The exodus of trained teachers from the profession serves as a profound drain on resources. A brief issued by the Alliance for Excellent Education suggested the financial ramifications of high attrition:

A conservative estimate of the cost of replacing public school teachers who have dropped out of the profession is $2.2 billion a year. If the cost of replacing public school teachers who transfer schools is added, the total reaches $4.9 billion every year. For individual states, cost estimates range from $8.5 million in North Dakota to a whopping half a billion dollars for a large state like Texas. (Alliance for Excellent Education, 2005, p. 9)

The financial toll of attrition rates on education is not the only concern. As many educational researchers agree, teacher quality is the single most critical factor in improving student achievement (“Gap Shrinkers,” 2004; Hill & Barth, 2004; National Commission on Teaching and America’s Future, 2003). When experienced and trained teachers give up the profession entirely, a great deal more than their presence is lost:

Our inability to sustain strong learning communities in high turnover schools also undercuts our ability to implement school reforms. No price tag has yet been placed on this loss, but a substantial investment in teacher training and school reform implementation is often lost to high rates of teacher turnover. We never really build our capacity to sustain school improvements because the
teachers we train leave before the reform can become established practice in the school. (National Commission on Teaching and America’s Future, 2003, p. 8)

This same report concluded that simply continuing to hire new teachers to replace those lost to attrition and retirement each year was an ineffective way to go about rectifying the situation. Instead of treading water by hiring and training new teachers—a significant number of whom will then leave the profession prematurely—the focus should be on retaining quality teachers who have already received training and finding ways to encourage them to remain in the occupation.

Although the relatively high rates of teacher attrition may be alarming, the literature provides some evidence of a reversal of this trend. The research suggests the need for a full and thoughtful understanding of the reasons why teachers leave the field. The challenge lies in determining how to structure, support, and fund the strategies to address and resolve the causes underlying attrition.

Research Questions and Hypotheses

In order to examine the variables of interest in this study, the researcher posed the following research questions:

1. Do teachers’ perceptions about salary, the amount of administrative support, and their role in determining the content of professional development opportunities statistically significantly predict the level of teacher satisfaction that could motivate a teacher to remain in the profession?

2. Are there statistically significant differences among elementary, middle, and high school teachers’ perceptions of worry/stress associated with student performance on state and/or local tests?
3. Is there a statistically significant difference between the perceptions of teachers in a national sample and teachers in a regional sample regarding worry/stress associated with student performance on state and/or local tests?

4. Do mandatory routine duties and paperwork and pressures for students to perform satisfactorily on state and/or local tests statistically significantly predict teachers' perceived levels of stress?

A related hypothesis was generated for each of the research questions. These hypotheses are listed below:

**H1:** Teachers’ perceptions about salary, the amount of administrative support, and their role in determining the content of professional development opportunities statistically will significantly predict the level of teacher satisfaction that could motivate a teacher to remain in the profession.

**H2:** There are statistically significant differences among elementary, middle, and high school in teachers’ perceptions of worry/stress associated with student performance on state and/or local tests.

**H3:** There is a statistically significant difference between the perceptions of teachers in a national sample and teachers in a regional sample regarding worry/stress associated with student performance on state and/or local tests.

**H4:** Mandatory routine duties and paperwork and pressures for students to perform satisfactorily on state and/or local tests statistically significantly predict teachers’ perceived levels of stress.

**Definition of Terms**

The following terms are used periodically during the presentation of this study. Their definitions within this context are provided.
Academic discipline distribution: the area in which educators are certified to teach, such as history, mathematics, special education, etc.

Administrative leadership style: the manner in which an administrator relates to and directs teachers in the school.

Alliance for Excellent Education: helps to ensure that upon graduation from high school students will be prepared to meet the demands of life.

Attrition rate: the rate at which teachers leave the education profession.

Financial incentives: monetary bonus which school districts may offer to attract or retain teachers.

Leavers: educators who leave the teaching profession.

No Child Left Behind: an act signed in 2002 by George W. Bush which reauthorized the Elementary and Secondary Education Act, set up strict guidelines for school accountability, adequate yearly progress (AYP), and qualification standards which must be met by all teachers in schools that receive federal funding.

Out-of-field teaching: occurs when teachers must teach outside of their area of expertise.

Pre-service training: training offered by school districts to help new teachers.

Standardized testing: testing formats which are identical regardless of geographical location or district funding.

Self-efficacy: an individual’s perception of his or her ability to meet a certain goal.

Delimitations

The national archival data set is from one year’s administration of the Schools and Staffing Survey (SASS) which was administered by the National Center for
Education Statistics (NCES). A regional study component was delimited to certified teachers from selected schools in an urban school district in a southeastern state. The district had 592 certified teachers. Certified teachers from one high school, one middle school, and one elementary school were given the opportunity to participate in the study. The high school employs 72 teachers, the middle school employs 41 teachers, and the elementary school employs 37 teachers. The study did not employ all data from the SASS survey but instead used selected variables deemed specifically pertinent to this research. These variables included teacher perceptions regarding salary and benefits, administrative support, professional development, student performance on state and/or local tests, and routine duties and paperwork assigned by administrators.

Assumptions

This research may assist administrators in retaining quality teachers, thereby helping to improve upon student achievement. It was assumed that the participants in this study answered the survey questions honestly. The surveys were answered within a 2-week timeframe. The researcher assumed that the survey participants were not coerced or threatened in any way to elicit specific responses. It was furthermore assumed that correlations in the research would be a result of actual relationships between the variables being studied.

Justifications

Teaching has one of the highest turnover rates among the professions. A conservative estimate of the national cost of replacing public school teachers who have dropped out of the profession is $2.2 billion a year. If the cost of replacing public school teachers who transfer among schools is added, the total reaches $4.9 billion per year (Alliance for Excellent Education, 2005). Teacher attrition also causes morale and
teacher quality to drop. The goal of this research was to provide data to assist administrators and policymakers in retaining experienced teachers, reduce the costs of attrition, and help reduce the overall rate of attrition among teachers.

Summary

Although the relatively high rates of teacher attrition may be alarming, the literature provided some evidence of a reversal of this trend. The research suggested the need for a full and thoughtful understanding of the reasons that teachers leave the field. The challenge lies in determining how to structure, support, and fund the strategies to address and resolve the causes underlying attrition. Educational leaders and policymakers have demonstrated recognition of the problem and a willingness to genuinely and comprehensively engage the challenge at a structural level. However, much work lies ahead, and this researcher aspired to make a contribution to this ongoing effort.
CHAPTER II
LITERATURE REVIEW

Teaching has one of the highest turnover rates among the professions, which is particularly interesting when one considers that as a single occupation it employs a significant percentage (4%) of the American workforce (Harrison, 2006). As Ingersoll and Smith (2003) observed, the number of K-12 teachers is twice that of registered nurses, and teachers outnumber lawyers or professors by a 5-to-1 margin. The annual teacher turnover rate is about 15%, and it is evenly split between those who migrate to other schools to continue teaching and those who leave the profession altogether (Harrison, 2006).

Approximately 150,000 new teachers are hired annually just to replace those lost to attrition and retirement. In order to meet the increasing demand for teachers, McCreight (2000) reported that the number of new hires will have to increase to 220,000 a year just to keep abreast of the need. The problem, however, is not limited to the hiring of new teachers—there is no demonstrable shortage of new teachers on the market. In fact, the number of new teachers increased over the 1990s, and the nation often has enough new teachers to meet each year’s staffing demands. Rather, the crisis lies in the fact that the number of teachers leaving the profession continues to increase and is beginning to overwhelm the system. As Hammer and Williams (2005) stated, “‘Leavers’ exceed entrants by 23 percent’” (p. 21). The constant rotation of teachers out of the field, and particularly new teachers who leave within several years of embarking on teaching, means that students lose the benefit of being taught by experienced, quality teachers who feel confident in their work.
It is not surprising then that numerous studies and articles have concluded that teacher attrition is one of the most critical problems facing American education (Certo & Fox, 2002; Harris et al., 2003; McConney et al., 2003; McCreight, 2000; Useem & Neild, 2001). The exodus of trained teachers from the profession serves as a profound drain on resources. A brief issued by the Alliance for Excellent Education suggested the financial ramifications of high attrition: A conservative estimate of the cost of replacing public school teachers who have dropped out of the profession is $2.2 billion a year. If the cost of replacing public school teachers who transfer schools is added, the total reaches $4.9 billion every year. For individual states, cost estimates range from $8.5 million in North Dakota to a whopping half a billion dollars for a large state like Texas (Alliance for Excellent Education, 2005).

The financial toll of attrition rates on education is not the only concern. As most educational researchers agree, teacher quality is the single most critical factor in improving student achievement (“Gap Shrinkers,” 2004; Hill & Barth, 2004; “Unraveling the 'Teacher Shortage' Problem,” 2002). When experienced and trained teachers give up the profession entirely, a great deal more leaves with them.

Our inability to sustain strong learning communities in high turnover schools also undercuts our ability to implement school reforms. No price tag has yet been placed on this loss, but a substantial investment in teacher training and school reform implementation is often lost to high rates of teacher turnover. We never really build our capacity to sustain school improvements because the teachers we train leave before the reform can become established practice in the school. (“Unraveling the 'Teacher Shortage' Problem,” 2002, p. 9)
This same report concluded that one proposed solution of simply continuing to hire new teachers to replace those lost to attrition and retirement each year was an ineffective way to go about rectifying the situation. Rather than hiring and training new teachers—a significant number of whom will then leave the profession prematurely—the focus should be on retaining quality teachers who have already received training and finding ways to encourage them to remain in the occupation.

The literature discussed in this chapter explores the problem of teacher attrition rates, the underlying causes, as well as the efforts being proposed or, in some cases successfully implemented, for retaining good and experienced teachers. As this study is specifically concerned with rates of attrition among high school teachers working in Mississippi, much of the literature reviewed here is set in high school environments, with the remainder covering the broader K-12 spectrum. While most of these articles tackle the problem of teacher attrition from a national perspective, there is some regional focus, particularly in the section on urban and rural school systems and the particular teacher retention challenges they face. Finally, a section of this review is devoted to the relatively meager amount of literature examining teacher attrition in Mississippi. While it is clearly a significant problem for the state, the limited research into Mississippi’s teacher retention difficulties underscores the need for further study.

Theoretical Foundations

Teachers find their motivation in many different areas. Some teachers may find motivation to stay in the teaching profession through the smiles of students who have just mastered complex Algebraic equations, while others may find motivation in simply having a paycheck to collect. However, teacher pay being rather meager at best for a college graduate, the pay is seldom a great motivational factor. Many teachers are
motivated by internal or intrinsic motivators that may give them a sense of accomplishment (Ellis, 2000).

Maslow (1970) stated that most people have a yearning to satisfy two basic needs. Those needs are described as lower-level needs and higher-level needs. The lower-level needs are in part focused on physical satisfaction (e.g., sleep, thirst, and hunger) and a need to feel part of a group (e.g., family, church, and peers). The higher-level needs are more complex and abstract. For instance, the higher-level needs could include self-esteem and a sense of self-actualization and self-worth. Herzberg (1964) noted a distinct difference between extrinsic rewards as they are related to a job. The extrinsic rewards could be reflected by salary, insurance, retirement, and perhaps tenure while the intrinsic rewards would be intangible aspects such as having pride in contributions made to the job and having opportunities for personal growth. Herzberg also has noted that people find intrinsic rewards to be not only motivating factors but also satisfying factors. One study (Pastor & Erlandson, 1982) found that teachers have a desire to participate in the decision-making process, be valued for their abilities, be challenged, and have an opportunity for professional growth. The study concluded that internal motivation depended on “three critical states: Experienced meaningfulness, responsibility for outcomes and knowledge of results” (p. 17).

In order to be successful in their occupations, some teachers have to overcome many obstacles, some of which may include mastering their subject matter, managing classroom behavior, performing extra duties, maintaining proactive relationships with parents and peers, keeping accurate records, realizing what their administrator expects of them, and helping to ensure that their students pass standardized tests. Many new
teachers are often overwhelmed by these expectations and choose to leave the profession. House (1971) stated the following regarding Path-Goal Theory:

Subordinates’ motivation, satisfaction and work performance are dependent on the leadership style chosen by their superior. Multiple dimensions of leadership behavior were examined in the theory including: leader initiating structure, consideration, and degree of closeness of the supervision. Each of the dimensions was analyzed in terms of path-goal variables such as valence and instrumentality. (p. 321)

House (1971) defined initiating structure as psychological structure imposed by leaders upon their subordinates, for instance, outlining clear guidelines and procedures for subordinates to follow. Consideration was defined as the degree to which a leader makes a subordinate feel welcomed, supported, and needed. House had two primary findings in his study. “Subordinate role ambiguity was considered to have a negative correlation with initiating structure. In terms of consideration, for subordinates who have routine jobs, a greater consideration by the leader should result in increased job satisfaction” (p. 324).

Background of the Problem

There is an emerging conflict between what educational researchers believe to be the conditions required to retain good teachers and the government’s stringent academic achievement and performance requirements as embodied in the No Child Left Behind Act (NCLB). Harrison (2006) reported a dramatic increase in teacher attrition rates in the Roanoke, Virginia, public school system over the 2005-2006 school year, following the appointment of a new superintendent. One out of five Roanoke teachers who worked the first day of school in September 2005 had left the school system by
September 2006. While some of these retired and others left after contracts were not renewed or their teaching licenses had expired, well over half of those leaving simply resigned from their teaching careers early and unexpectedly. Harrison noted that while some reported a lack of confidence in the new superintendent, most of those interviewed for Harrison’s study reported that the NCLB’s achievement benchmarks had made their jobs increasingly untenable and morale had suffered.

Hill and Barth (2004) also cited the NCLB, with its implicit linkage of teachers’ competence to student performance on standardized tests, as a variable impacting teacher attrition: “Teachers complain about absurdity and consequences that result from measures of ‘progress’ hinging on one test, given on one day, without considering other measures of success” (p. 173). The challenges presented by frequent and arguably inefficient standardized achievement testing has strained the energies of the nation’s teachers, many of whom report they must abandon lesson plans in order to teach to the test. But the professional pressure wrought by the NCLB dictates is not the sole cause of teacher attrition, though it is certainly a complicating factor.

Luekens, Lyter, Fox, and Chandler (2004) reported that private school teachers, particularly those with < 3 years of experience, were more likely to leave the profession than their public school counterparts. However, the number of public school teachers who left the profession was steadily increasing at the time of the U.S. Department of Education’s (DoE) Teacher Follow-up Survey of 2000-2001. Public school teachers over the age of 50 years and younger than the age of 30 years had higher rates of attrition than their middle-years peers. The report also found that attrition rates trended highest for all teaching populations when the teaching salary fell below $30,000 per year. This finding was consistent with that reported throughout the literature on teacher
attrition (Alliance for Excellent Education, 2005), Certo & Fox, 2002; Hill & Gillette, 2005; Holt & Garcia, 2005; Ingersoll, 2003; Ingersoll & Smith, 2003; Jensen, Churchill, & Davis, 2001; Jorissen, 2003; Nelson, 2004). This is particularly evidenced by the fact that some states seem to suffer from an embarrassment of riches in terms of quality teacher surplus while other states struggle much more to keep teachers from leaving the profession (or leaving the practice of the profession in that state). One report demonstrated an abundance of teachers in most disciplines in the Northeast, Northwest, Rocky Mountains, and Mid-Atlantic states while troubling teacher attrition rates were happening during the same period in the South, West, and in the state of Alaska. Put simply, the “‘shortages’ that exist are shortages of people willing to work at the salaries and under the working conditions offered in specific locations,” at least, in most cases (“Unraveling the 'Teacher Shortage' Problem,” 2002, p. 6).

Young and new teachers are at the crux of the attrition movement:

About 12 to 20 percent of teachers in their first year of teaching are leaving the classroom. Among new teachers in Tennessee with no previous experience, 36 percent leave within the first four years and 42 percent leave within five years. Similar turnover occurs in other states. In Oklahoma, 13 percent of first-year teachers left in 2000. Oklahoma teachers with eight years of experience are leaving at a rate of only five percent, showing clearly that policy attention in early years is important. Georgia reports first year teachers leave at a rate of 15 percent; South Carolina 12 percent; North Carolina 13 percent; and Texas 19 percent. (Southern Regional Education Board, 2001, p. 12)

Certo and Fox (2002) cited a 1997 report issued by the National Center for Education Statistics that found slightly lower rates of attrition during these first years of
teaching, but even these figures were alarming, particularly in terms of the new teachers assigned to poorer schools who fled the profession at a significantly higher rate than their peers working in wealthier school systems. The researchers posited that new teachers “experience overwhelming isolation as they leave the support of student teaching cohorts, cooperating teachers, and university supervisors to work with children behind the closed door of a classroom” (Certo & Fox, 2002, p. 3).

There also is the problem of academic discipline distribution: There are certain fields in the teaching profession that consistently seem to want for competent professionals. Math, science, and special needs educators are in great demand, and some districts—again, the better resourced and higher paying ones—are likelier to draw qualified teachers in these fields than poorer districts. In these less-advantaged schools, teachers specializing in other academic disciplines are often assigned these classes to cover the short fall, but this can produce an unintended and unnecessary wave of teacher burnout and increase attrition rates among those teachers who do not feel competent or compelled to teach in a discipline for which they have not trained (Billingsley, 2004). Hill and Barth (2004) similarly observed that urban school systems suffering a lack of resources also experience the highest rate of “out-of-field teaching, which is linked to teacher turnover” rates (p. 175).

Cleveland (2003) included an illuminating email listserv thread involving teacher participants who had been recruited through NC Teach. This program was put in place by the North Carolina Board of Education in an effort to recruit professionals from government, industry, human services, and the military to bring their knowledge to bear in the schools by working as teachers. A September 23, 2000, email from
“Susan,” a social studies teacher, illuminated this problem of moving teachers trained in one academic discipline into another in order to cover staffing deficits:

I’m sorry to say that I, too, have resigned this week. When I took my job at Nickel Middle School, I made it clear that I was ambivalent about teaching a block schedule that was split between social studies and language arts. My principal insisted that I would have tons of support and resources, etc. Then, two weeks ago, our team had too many students and we took on another teacher. Suddenly, I’m teaching three classes of language arts and just one of social studies. To me, the main reason for any individual to jump in as a lateral entry teacher is because he or she has a passion about a certain subject and adequate background in that subject. I have a strong background in language arts but I don’t have the soul of an English teacher. I have too much respect for the profession to try to ‘wing it.’ There is also the added burden of the 7th grade writing test and the EOB. I think the last straw was when I learned that I would have to take extra college courses to beef up my language arts credentials. At 41, I’m not about to take yet another detour on my career path. (Cleveland, 2003, p. 24)

Although Susan was not moved into math, science, or special education classes, her situation perfectly captures several troubling elements of the strategy to compensate for teaching gaps by moving teachers trained in one discipline to teach another. For secondary school teachers in particular, this type of reassignment may seem dismissive of their skill sets—as if all teachers are interchangeable regardless of training or interest. This perpetuates a sense among teachers that their work is not respected; rather, it is devalued. Susan’s clear-eyed articulation of her abilities as not well
matched to teaching language arts is particularly troubling. Here, clearly, is a qualified professional who left another career to become a teacher and now finds herself essentially driven from the profession because she is not being used in the manner for which she specifically and, with intention, trained. So not only does Susan’s school lose a language arts teacher, it also loses a highly competent social studies teacher who had apparently been quite happy in her work before the switch—clearly not the end goal of the school’s discipline-shifting strategy.

The listserv thread also revealed the particular problems facing the professionals who willingly stepped into the high needs fields of science, math, and special education. Compounding the teacher deficit in these arenas is the fact that attrition rates here are much higher than for other academic disciplines; science, math, and special needs educators have an attrition rate that is twice that for social studies teachers (“Unraveling the 'Teacher Shortage' Problem,” 2002). Christine, a science teacher who regularly commented on the thread, observed (in somewhat unusual terms) her increasing dissatisfaction in a December 3, 2000, email:

I am no longer so mystified by the nationwide shortage of teachers. . . . I am so frustrated with the amount of extra poop we have to deal with – IEPs, PEPs, EOCs, EOGs, exit exams, portfolios, products, etc. And all this can be yours for the low price of only a teacher’s salary! . . . . Not only am I no longer mystified by the shortage, I am no longer sympathetic to it. A big part of why I left the lab to teach was because I felt guilty whenever I read a headline about the need for math and science teachers. I felt a duty to society to teach. That feeling left after about a month of teaching. The poop inherent in today’s education system
is a big part of the problem, and it’s beating me down so much I don’t even think I care enough to try to affect some change. (Cleveland, 2003, p. 32) Just as Susan noted the discouraging aspects of dealing with standardized tests in her language arts teaching, Christine cited a host of national and state testing systems as the “poop” getting in the way of her ability to enjoy teaching and, thereby, teach well.

Maintaining the love of teaching is critical to retaining good teachers argued Cochran-Smith (2004). Her survey of the attrition literature proceeded from agreement she shared with the majority of educational researchers on the subject that it is more critical and ultimately more effective to find ways to retain good teachers than to focus on hiring new ones to fill needed teaching spots. Cochran-Smith noted Ingersoll’s (2003) research which determined that enough teachers are being produced in the nation; the problem is in correctly placing them so that they stay in the profession. Cochran-Smith echoed the experiences of the listserv teachers excerpted above when she observed that America is experiencing a new generation of teachers unlike those who came before. While previous generations of teachers tended to enter the profession directly out of college, these days new teachers are culled from all walks of life and across a range of age and experience. Consequently, these are individuals who “are entering teaching with different expectations, and who have different opportunities over time from those of ‘your mother’s teacher’” (Cochran-Smith, 2004, p. 10). This is why maintaining the love of teaching is so important—something Susan acknowledged in her email when she said a “passion” for teaching what one knows was what draws people like her to the job. When that love is lost, there is not much motivation for this new generation of teachers to continue in the profession.
Assuming the rightness of this assessment, the trick then seems to be in alleviating or removing the obstacles that interfere with that passion. So far the review of literature has covered the potential impediments in broad terms. In the following sections, the most common and significant of these obstacles are discussed in more detailed fashion with an eye toward shaping solutions.

Teacher Factors Related to Attrition

Salaries and Benefits

When one thinks about the high rate of teacher attrition, one of the first explanations to understandably leap to mind is the relatively low compensation. McCreight (2000) reported that the national average for teacher salaries began at $26,000, making it one of the lowest paid occupations for a college graduate. Lawyers and doctors earn 50% to 75% more than teachers. This situation actually worsens in the nation’s toughest schools. Watson (2001) noted that new teachers working in inner-city Philadelphia earned almost $4,000 less annually than their experience-level peers working in suburban Pennsylvania schools. Jimerson (2003) reported that the financial prospects are even dimmer for teachers working in outlying rural districts nationwide, as reports show them earning less than suburban and urban school teachers.

If a school system is in a financial position to do so, improving teachers’ salaries is the first, and often the only, strategy employed to reduce or prevent attrition (Scarpa, 2005). Michals (2006) reported on a plan implemented by the Richland One school district located in South Carolina. The district reserved $700,000 of its budget for recruitment and retention efforts, with the centerpiece being a $1,000 to $3,000 signing bonus. There were stipulations on the bonus however: Teachers would qualify if they taught the particular needed subjects, were willing to work in schools that were
underperforming academically, and had earned their professional-level teaching certificates. Michals (2006) also noted that the school system was about to embark on a “merit bonus system for teachers whose students make significant achievement gains” (p. 7). This last strategy raises a red flag, however, as it could result in many teachers giving up their broader-based academic curriculum in order to specifically teach-to-tests. Such teaching often emphasizes rote learning and memorization and does little to further more complex and nuanced learning processes or enhance one’s ability to think creatively or originally about the information being provided.

Another financial incentive program was proposed by the more than 400 participants in a South Carolina teachers’ summit focused on improving the teaching environment in the state’s high-needs schools. Among the recommendations were retention bonuses and time-off rewards for excellent work, while one education lawyer urged that teacher salaries in high-needs schools should be doubled in order to attract and retain qualified teachers because “that’s what businesses would do” in order to fill a hard to serve position (Robinson, 2006, p. 9). Part of the reason that math and science teachers are comparatively scarce is because people well-trained in those disciplines can often command much higher salaries in the private sector or in government jobs (“Unraveling the 'Teacher Shortage' Problem,” 2002).

Bonner (2006) presented another take on the compensation improvement approach. Bonner described a program in Hertford County, North Carolina, “as a poor, rural northeastern county where turnover among teachers remains high and recruiting is hard” (p. 11). In an effort to attract and keep teachers, the district committed nine acres it owned to the construction of low-cost apartments that would be provided to new teachers. As Bonner mentioned, similar housing programs or housing subsidies are
already in play in several areas throughout the country. She noted that New York City began offering up to $14,600 in housing subsidies to attract new teachers in science, math, and special education. As one school board member was quoted: “It’s a low- to no-cost benefit to Dare County schools if we can remove housing as a reason for not getting a good math teacher or a good science teacher” (Bonner, 2006, p. 10). But housing subsidies or the construction of low-cost housing alone is not likely to reverse attrition rates in less wealthy areas. Bonner (2006) cited one policy expert who observed that good teachers would likely remain on the job in poorer areas if schools offered smaller class sizes and professional development opportunities—making the school a place the teacher wants to stay and “learn to be a great teacher” (p. 15).

Certo and Fox (2002) surveyed a group of K-12 teachers about their own reasons for remaining on the job and their perceptions about colleagues’ reasons for leaving the profession. Certo and Fox noted that, according to their sample, there is a hierarchy of reasons teachers identify for walking away from the job. First and foremost was salary and benefits, along with other incentives, which most of these continuing teachers identified as inadequate. There was, of course, the general claim that teachers are not paid enough, but the researchers were able to glean further refinements of the teachers’ perspectives on compensation. Certo and Fox found support for incentives for teachers who exceeded expectations and excelled in their work. Conversely, they found that many of the teachers disapproved of larger salary and benefit packages (relative to what they received when they started on the job) to lure new teachers. Many also cited discouragement about their salaries as compared to other professionals, feeling their significantly lower pay scales reflected negatively on their professional worth.
Non-Financial Factors

While compensation is not immaterial in the discussion of teacher attrition, it is only one of multiple factors influencing the propensity of teachers to leave the profession. Interestingly, when Certo and Fox (2002) spoke directly with some of the teachers who had left their jobs, they discovered that most of them cited a combination of factors impacting their departures. Further, while salary was on the list of contributing factors, it was not the most frequently cited. Rather, lack of administrative support was the most oft-cited complaint and one that will be discussed at greater length in the next section of this review. The hectic/stressful schedules of teaching were the next most common complaint, followed by salary.

Bernshausen and Cunningham (2001) approached the issue of teacher attrition from an interesting perspective. They focused on the nature of resiliency and explored how it might be stimulated and nurtured. They drew upon the research of Sagor (1996, as cited by Bernshausen & Cunningham, 2001, p. 3) in outlining four components of resiliency that together produce the final aspect—optimism. Competency is the first of these attributes, a sense of belonging is the second, followed by the ability to be useful, and then the belief in one’s power or “potency.” The researchers reported that “resiliency equals a unique, powerful combination of tenacity (willingness to keep trying in the face of setbacks), optimism (belief in the probability of success) and impact (commitment to standards)” (p. 4). Bernshausen and Cunningham argued that while salary considerations and job issues related to school circumstances are presumed to impact teacher retention, in fact, it is burnout related to a loss of self-efficacy that is at the heart of teacher attrition.
In order to correct this loss of confidence in one’s ability to teach, the researchers stressed the need for pre-service training that instills and reinforces these attributes. They proposed that teacher preparation programs include, among other things:

1. Frequent, successful interactions with credible teacher educators;
2. Powerful, repeated and authentic classroom experiences;
3. Memberships in school-based teams;
4. Active involvement in training and reverse mentoring;
5. Increased connections between theory and practice;
6. Co-teaching with mentors and other interns. (Bernshausen & Cunningham, 2001, pp. 6-7)

This is similar to Darling-Hammond’s (2001) argument that teacher preparation should not be conducted in isolation—divorced from the real world of practice. In a 2001 interview with Edutopia Online, an educational policy publication sponsored by the George Lucas Educational Foundation, Darling-Hammond was forceful in advocating for classroom experiences while working toward a teaching degree:

A good teacher education program, first of all, is coherent. That is, it has an idea about what good teaching is and then it organizes all of its course work, all of the clinical experiences, around that vision. So it is not just a random assortment of courses and experiences for people. The courses are very much connected to practice as well as to theory. They say in fact that there’s nothing as practical as a good theory, and in fact there is nothing as theoretical as good practice. And good teacher education programs have students in the classroom working constantly with expert master teachers while they’re also teaching
students for a variety of ideas about how students learn, about how to assess their learning, about effective teaching strategies that will allow them to build a repertoire. (Darling-Hammond, 2001, p. 19)

Darling-Hammond (2001) went on to say that solid training of this nature has been correlated with lower attrition rates. She described the new trend toward 5-year teacher training plans that produce teachers with the relevant bachelor’s degree, a master’s in teaching, and a year of in-the-classroom student teaching. Darling-Hammond observed that 90% of these graduates went directly into teaching and 90% of this group were still teaching several years later whereas 70% of those who go through shorter alternative teacher training routes (often over a summer session) leave teaching within that same several years. Darling-Hammond’s view on the problems of teacher attrition was that new teachers were largely underprepared by their training for the challenges that were ahead. “They’re often coming into teaching because they do feel a sense of mission, and if they don’t have the tools, then it’s very easy to get discouraged and to feel they can’t be competent and effective” (Darling-Hammond, 2001, p. 12).

This is directly related to the resiliency of which Bernshausen and Cunningham (2001) spoke as a necessary aspect of pre-teacher training.

The job does not end there however. Both Bernshausen and Cunningham (2001) and Darling-Hammond (2001) agreed that continuous support while on the job is necessary to reinforce teachers’ self-efficacy. While well-prepared teachers may have a greater well of resilience to draw on, it is not bottomless and the reserves need to be refilled periodically. Some teachers are able to do this through their own initiation, but for most, outside support, meaning support found within the school and school district, may mean the difference between job attrition and job retention.
School Factors Related to Attrition

Work Environment

School-related factors appear to represent the bulk of obstacles contributing to teacher attrition. Certo and Fox (2002) delineated a number of categories which they grouped as administration themes that the teachers in their study identified as central to job dissatisfaction and eventual teacher attrition: (a) amount of time administrators spend visiting classrooms; (b) whether or not administrators listened to teachers’ needs and opinions; (c) availability of professional development; (d) availability of resources and current school supplies; (e) whether or not special needs children are understood and effectively placed and educated; (f) consistency and coherency of teacher placement practices; (g) timely meetings, effectively run; (h) workload concerns, scheduling issues; (i) class size; (j) standardized test pressures; (k) lack of parental support; and (l) discipline practices and student attitudes. Ingersoll (2003) noted that while class size reduction is often argued as a way to increase teacher retention, it is not a motivating factor generally cited by departing teachers as a reason they give up teaching.

McElroy (2005) referred to a report issued by the Southeast Center for Teaching Quality (SECTQ) that determined teachers felt the most important factors related to their job satisfaction were, in descending order, the ability to spend time working with students and to find time for personal growth, their involvement in school decision-making, “adequate facilities and resources,” (p. 6) a supportive administrative staff and effective school leadership, and opportunity for and availability of professional development. Johnson et al. (2001) reported on a Massachusetts study that found most of the first- and second-year teachers they surveyed had little to no direction or support in their day-to-day curriculum plans or long-term student achievement strategies. As
new teachers, they felt largely cut off from the rest of the school and unable to find the
time or structures that would enable them to reach out to other teachers or model their
own teaching on developing best practices:

Schedules rarely provided regular time for joint planning and observation, nor
was such collaboration expected or encouraged. Meetings were designed to
dispense information to individuals, rather than to share struggles and strategies, which is necessary to fulfill a collective responsibility for educating the school’s students. Mentoring and other programs were limited because they were not embedded within a professional culture that valued and supported these relationships and activities. In the worst cases, school leaders played no role in creating a culture that was welcoming and supportive to new teachers. (Johnson et al., 2001, p. 105)

Induction and Mentoring

Mentoring of new teachers is one of the solutions frequently recommended for curbing teacher attrition rates. Mentoring programs, which attempt to match new teachers with more experienced peers, is an increasingly popular approach to trying to improve teacher retention in schools. The types of mentoring programs proposed for this purpose tend to be well-structured. They are not merely a haphazard pairing of teachers who are then left to their own devices to form a relationship. As Moir (2003) noted, in addition to providing concrete advice and steering the young teacher toward constructive self-questioning and away from confidence-eroding doubts, the effective mentor also provides emotional support to a young teacher. This helps to break the cycle of isolation mentioned by Johnson et al. (2001) and others (Harcombe, 2005; Ingersoll & Smith, 2003; NEA Foundation for the Improvement of Education, 2002).
The National Center for Education Statistics’ 1999-2000 report on its Public School Teacher Survey revealed that 66% of teachers “who were formally mentored” by another teacher working in the same subject area, said that it “improved their classroom teaching a lot” (Gruber, Wiley, Broughman, Strizek, & Burian-Fitzgerald, 2002, p. 2).

Bearden (2005) described an induction program established in 2003 in a small rural school district in Maine that was created to help retain new hires needed to replace the wave of 25-year veteran school teachers who were on the cusp of retirement. The district recognized that in order to attract and retain quality school teachers, it had to create an incentive for them to set down their roots and build a career and life in the community in order to offset the lure of higher-paying jobs and other offerings in more suburban areas. The mentoring program began in the high school where new hires were each matched with a discipline-suitable mentor whom they were to work with for the next 2 to 3 years of their teaching. Together, the mentor and the new teacher shaped the professional development teacher action plan and together they attended monthly meetings with the district’s certification committee to discuss progress on the plan and also any issues that may have arisen on the job. Monthly meetings also were established for new hires to gather together themselves and receive some additional training and counseling from veteran teachers. Each meeting tackled a different and relevant subject, such as technology use in the classroom or how to handle parent-teacher conferences. Bearden (2005) stated that most new hires claimed that these meetings helped reduce their stress and gave them a vested sense of community.

A different take on the mentoring relationship was provided by Hammer and Williams (2005). They described a formal mentoring program, the Novice Teacher Induction Program (NTIP), implemented across the teacher training programs in the
Texas University system, which relied heavily on mentors. In this program, however, the NTIP hires teacher retirees to serve as mentors to the new teachers, paying them a salary of $20,000 per year for approximately 20 hours per week of work. The researchers described the program as producing a two-for-the-price-of-one benefit: The new hires were provided direct emotional and professional support and regular monitoring and the retirees’ were reinvigorated by these second-stage careers. The researchers were particularly pleased that the wealth of experience which these retirees possessed was not just lost but conveyed to the new hires—a sort-of passing of the mantle. The NTIP mentors also were keenly aware of their impact. Hammer and William’s (2005) noted that one of these mentors told them she believed there were eight reasons why teachers give up teaching: "Teacher isolation, little teamwork, unacceptable student behavior, poor student achievement, low test scores, poor faculty interaction, administrator negativity, and unsatisfactory salary and benefits” (p. 24).

What is striking about the list provided by this one retiree in this relatively small study is that it so appropriately echoes the factors contributing to high attrition rates that are cited throughout the literature and noted in this chapter. It would appear from the research that one cannot isolate a single overwhelming factor or even consistently appearing single factor that one can hold responsible for teacher dissatisfaction and that leads to an ultimate break with the profession. Rather, a mosaic of generally related and very identifiable concerns seem to lie at the heart of teacher attrition.

While a quality induction program cannot address all of these issues, particularly not salary and benefits or even administrative support, it may serve to treat some of them, especially in creating professional teamwork and reducing or eliminating a sense of isolation. Beyond this, mentoring may also develop a sense of belonging, which
could serve to compensate for deficits in other aspects of teaching (for instance, frustration with student achievement or low salary). But, as noted above, it is likely not sufficient to simply match a new hire with an experienced teacher on an informal buddy basis and hope to reap the benefits of a genuine induction program. Structure and oversight would seem to be the necessary undergirding of any quality mentoring system.

The National Education Association (NEA) Foundation for the Improvement of Education (NFIE) provided an overview of different types of induction programs currently employed in certain school districts throughout the country (NEA Foundation for the Improvement of Education, 2002). The Basic Orientation Model is the most commonly seen version of induction in which, as the title suggests, “basic” information about the school, the students, the curriculum, and district policies are conveyed to new hires through several workshops conducted at the start of the teaching period and sometimes continuing throughout the school year. Mentors may or may not be assigned and, if assigned, tend to mentor on a casual basis “with little attention given to modeling effective instructional practice” (NEA Foundation for the Improvement of Education, 2002, p. 2). The Instructional Practice Model provides the basic orientation information but connects this information to standards and expectations for best practices in teaching. New hires are matched with well-trained mentors often for a period of 2 years or more with the mentors serving as guides to help the new teachers link theory with practice. Finally, the School Transformation Model embraces a holistic approach to new teacher training involving the entire school. New teachers are expected to participate in school reform efforts, thereby contributing ideas for challenging students to achieve. The transformation model “focuses on the development of teachers as a
‘community of learners’ and enables faculty to work together on all aspects of their job” (NEA Foundation for the Improvement of Education, 2002, p. 2).

The NEA Foundation for the Improvement of Education (2002) noted that the transformation model is rare, and from the foundation’s perspective it is also the most desirable. Efforts to assess the effectiveness of induction programs have been complicated as many school districts simply do not have the tools or structures in place to collect and analyze the data. Teacher retention is one of five categories of data collection (also program satisfaction, job satisfaction, teacher learning, and student learning) that the NFIE recommends that districts consider in terms of program assessment. The foundation also recognized the difficulty of this task: “It can be hard for school districts to correlate data on teacher retention with participation in induction activities because the information is often non-existent, inconsistently recorded, or gathered in separate offices or databases” (NEA Foundation for the Improvement of Education, 2002, p. 4). Nevertheless, the NFIE fully supported the implementation of quality induction programs, urging better record-keeping and improved program assessments to provide the data to substantiate what they believed to be fundamentally true: That “well-designed teacher induction programs reduce turnover rates and increase teacher effectiveness during the early career” (NEA Foundation for the Improvement of Education, 2002, p. 1).

Administrative Support

McElroy (2004) noted that the factors which often have the most profound impact on teacher satisfaction and willingness to remain on the job are those related to school culture and environment. It is extremely disheartening for most teachers to daily enter a school where the administration is unsupportive, disinterested in what is
happening in the classroom unless it is directly connected to standardized test scores, and dismissive of teachers’ opinions about and recommendations for education. Polansky and Semmel (2006) stated that administrators must reach out to teachers and “develop avenues for dialogue and reflection in meeting [teaching] standards” (p. 2). Ayala (2006) described changes being implemented in some rural Texas school systems and noted that administrators had intended to cut teaching aides out of the budget until they recognized that teacher retention was tied to having the classroom assistance provided by these same aides. The administration remained responsive to this need of funding for the aides and found that some teachers who had left the districts were willing to return and try teaching there again, once they saw administration’s acknowledgment of the problem and willingness to rectify it.

The National Center for Education Statistics (NCES) (1991) survey discussed by Luekens et al. (2004) reported that 38% of those teachers who left a school system cited lack of administrative support as the primary or significant factor in their decision to leave. McConney et al. (2003) noted that the teachers in their study identified a lack of administrative support as a critical determinant of their job satisfaction, “lack of follow-through, lack of support, lack of communication, lack of service coordination and lack of opportunity for input” (p. 97) were all obstacles to teacher retention. Of course, the phrase administrative support is a broad term, capturing district-wide and individual school leadership alike. While teachers may be well-removed from daily interaction with school boards and superintendents, they nevertheless experience the ramifications of the determinations made by these administrators. The beliefs, attitudes, and actions of the district administrators may be quite influential in shaping the individual school environment, and a system that welcomes teachers to participate in the improvement of
education is likelier to prove an inviting workplace. Conversely, a district administration that issues top-down decisions with little room for dialogue, or that prioritizes standardized measures of achievement for acknowledging academic success, is often a proving ground for teacher dissatisfaction.

Local school leadership may be even more influential in its impact on teacher satisfaction and willingness to remain on the job (Useem & Neild, 2001). A study conducted in the Charlotte-Mecklenburg (North Carolina) school district identified 20 schools that had high teacher retention rates and looked at what connection might exist between principals’ leadership of these schools and the teachers’ desire to remain working in the schools. One of the most salient observations of the research was these principals’ passion for the art of teaching:

They were teacher-focused. A large majority of the principals had extensive experience as teachers themselves, and many felt most comfortable in the role of “instructional leader” (though operational issues tended to dominate their time). They cited the importance of giving teachers’ continual feedback and support, involving them in decision-making, creating opportunities for them to work collaboratively, and getting to know them as individuals. (“Principal Effect,” 2004, p. 47)

Not surprisingly, these principals also tended to provide clearly articulated school objectives that remained consistent and coherent and that teachers could recognize and work toward as goals. They were problem-solvers who sought information from the teachers to inform their decisions. By valuing teachers’ work and contributions to the direction of the school, these principals created a constructive
environment of support. The corresponding teacher retention rates were the proverbial ‘proof in the pudding.’

**Alternative-Route Teachers**

A subset of the teacher attrition literature that merits a mention is that devoted to the increasing appearance of programs that recruit individuals from non-education backgrounds to make the career change to teaching. The idea behind this strategy is that people with real-world experience in a particular field will bring a professional an experienced sensibility to teaching that will compensate for his or her lack of teacher preparation and training. This strategy has been especially popular for pursuing teachers in the shortage areas of math (“Troops-to-Teachers,” 2006), science (Zhao, 2005), and special education (Billingsley, 2004; Fore, Martin, & Bender, 2002). According to the General Accounting Office (GAO) Troops-to-Teachers report, Mississippi alone realized 154 alternative route teacher hires from former military personnel between 2001 and 2005, ranking eighth among states for the largest number of these new teachers in its schools.

The literature also suggests that the efficacy of alternative route teacher recruitment and retention strategies should be further researched (Billingsley, 2004; Fore, Martin, & Bender, 2002). As the teachers in Cleveland’s (2003) listserv email thread demonstrated—these were professionals from non-education fields who left their careers to enter teaching in shortage fields—alternative route teachers may not be prepared effectively for the challenges and stresses of teaching. Zhao (2005) noted that there has been a startling lack of coherence in these alternative route programs and that “there is little agreement on how to define, structure and ensure quality control across a
diverse array of programs” (p. 1). Nagy and Wang (2006) stated that their research suggested that many principals

. . . are often reluctant to hire AR teachers because of the amount of work and support required, and problems that these teachers may have regarding discipline, lesson planning, student interaction, assessments, and instructional strategies in their first one to two years in the classroom. (p. 3)

While alternative route teacher recruitment and training may well be a useful tool in a comprehensive retention program, it is important to acknowledge the cautionary note struck in the research to date on this subject.

Professional Development

Often overlooked in mainstream media discussions of teacher attrition, where the sexier issues of salary or school culture or violence tend to receive top-billing, is the very real and influential contributor to teacher satisfaction and that is the opportunity for professional development (Polansky & Semmel, 2006). McCreight (2000) identified the lack of professional development as one of nine factors directly contributing to teacher attrition, observing that “low emphasis on professional development results in insufficient training and support for teachers” (p. 8). McCreight observed that one of the most useful moves a school district can make toward increasing retention is to provide ample time for teachers to pursue professional development activities.

But efforts toward supporting professional development must also go further than providing ample time. In their study of the high attrition rates among inner-city Philadelphia school teachers, Useem and Neild (2001) strongly recommended that professional development be supported and paid for by the city and state. They urged
the Philadelphia school district to “assist teachers with tuition reimbursement for advanced coursework” and pressed the state government to “fund advanced degrees in teachers’ academic content areas” (p. 12). One of the ways to keep teachers on the job is to ensure that their work does not become repetitive and robotic. When teachers are unable to remain engaged in their work, their chances of burnout are dramatically increased. Professional development, exposure to trends in new and best practices, and the reward of earning a higher educational degree help foster a teacher’s sense of professionalism and purpose. Unfortunately, many school systems simply do not have the financial resources to prioritize professional development.

Patton (2004) described an innovative program in one such district in Missouri that combined technology learning for students with professional development training in educational applications of technology for the district teachers assigned to the technology classrooms. The teachers received 40 hours of training before starting their technology lab work and then continued to participate in ongoing training with 30 to 50 hours more logged annually on average. Through public and private partnership grants, the district’s superintendent managed to obtain the computer equipment necessary and then recruit the teachers to participate in the program:

One of the teachers selected for the pilot program was fifth-grade teacher Cindy Kicielinski. At the time, she was a communications, arts and science teacher. . . . “I didn’t have a technology background so it was initially overwhelming to think I had to change everything I know and do”. . . . During the next two years, Kicielinski, another colleague at her school and other teachers from five other school districts were trained by the Missouri Research and Education network on Saturdays, after-school and during week-long summer workshops. Although
their salary didn’t increase, they received a stipend of $20 an hour during training. (Patton, 2004, p. 48)

While Kicielinski experienced the type of out-of-field teaching assignment that often contributes to teacher attrition, in this particular case she was invited to participate, rather than shift into a new track against her will. Additionally, the superintendent recognized that these teachers deserved to be compensated for the extracurricular time required for the professional development training.

The gains made by the students in the technology lab education programs were compelling enough—the sixth-grade students in the pilot tested at a high school senior level on the Terra Nova normed test. But an encouraging and completely ancillary benefit of the program was the improvement in the district’s teacher morale as more and more teachers were invited to participate in the technology education lab. A similar program in Texas that targeted science teachers for professional development through creation of a model science lab for both students and teachers found similar results. Here, teachers received graduate credit for their coursework readying for the lab. Harcombe (2005) reported that the 15-year retention rate for the Houston science teachers who had participated in the program was that a full 96% remained in science teaching while 74% remained in the Houston city schools, a feat “amazing for urban educators” (p. 54). The ability to obtain professional development while also improving student scores proved to be an effective combination in both these cases and helped the districts’ teacher retention rate.

Urban and Rural School Challenges

The examples mentioned above demonstrate the kind of creativity in practice that less-advantaged schools might consider implementing in order to attract and retain
teachers at a level comparable to well-endowed suburban schools. These poorer districts tend not to have the resources to address many of the problems that plague their systems, and rural and urban schools represent a special challenge in terms of attracting and retaining quality teachers.

Nelson (2004) referenced the definition of high-needs schools as those where at least 20% of the students’ families live below the poverty line. Nelson’s own experience as a new teacher hired in such a district was eye-opening, and she came to realize that her technically-based training as a teacher was not adequate preparation for dealing with the phenomenological world of her students’ daily lives. Nelson captured the sense of hopelessness that undoubtedly underlies the significantly higher rates of attrition for teachers working in high-need schools when she wrote:

This was not how I envisioned the teaching experience during my teacher preparation program. This was not how my professors told me it would be. Why weren’t any of the methods I had learned working? . . . Why, as first year teacher, did I feel so ineffective, not to mention totally exhausted? I, of course, played the “blame game.” I blamed my difficult year on the fact that the students just didn’t care about school, nor did their parents seem to care how their children performed in school. After all, out of 140 students, only three parents showed up for back-to-school night. I also blamed the administrators in my school who showed so little support for teachers and students. Whoever heard of not having enough textbooks for 7th grade students? (Nelson, 2004, p. 477)

Nelson (2004) found solace and solution in a graduate education program that expanded her own learning horizon and led her to conclude that she needed to more
directly engage her students on their level by creating a dialogue that acknowledged their circumstances and employed less technical systems of instruction (different from those she had been trained to teach).

Jimerson (2003) observed that teacher shortages in rural areas due to high rates of attrition have the spiraling effect of producing systems with poorer trained teachers, larger classes, increasing out-of-field teaching assignments, and fewer professional development opportunities (since so much effort was focused on hiring new teachers to fill the recurring gaps), all of which merely contribute further to the continuing quality of (work) life erosion within the school environment. This erosion itself feeds the cycle of attrition. Conversely, strategies for retention in these rural districts include “distance learning, on-site professional development opportunities, salary incentives/increments, and benefits” (Williams, Martin, & Hess, 2002, p. 3).

These same concerns occur in troubled urban school systems as well. The significance of the problem is clear:

A serious situation has developed in the United States, as can be seen in Patterson, NJ, where students who need the best prepared, most experienced, and most committed teachers are being taught by the least prepared teachers, many of whom are teaching out of certification area. The result of this is a substandard education for poor students, especially students of color; it is one that has serious ramifications for their post-secondary education and employment prospects. (Hill & Gillette, 2005, p. 42)

The heightened rate of attrition in the teaching profession in urban systems is striking. Around the 5-year mark of teaching, over 50% of urban school teachers have left or are on the verge of leaving their schools (Nelson, 2004). Students in these
schools have less than a 50% chance of being taught by a trained and truly competent math or science teacher (Tillman, 2003).

Smith and Smith (2006) identified student violence as one characteristic of the urban school environment that leaving teachers cited as a reason to give up teaching in these schools. They referenced research indicating that while rates of violence are up for suburban schools as well, inner-city high schools have “rates of violent victimization and injury [that] are substantially higher” (Elliott, Hamburg, & Williams, 1998, cited in Smith & Smith, 2006, p. 36). The 12 former urban school teachers interviewed by Smith and Smith all reported that the violence in their schools contributed significantly to their stress levels, and it was overall stress that was generally cited as the reason for leaving teaching. The researchers were careful to observe that these were the teachers’ perceptions of violence. The researchers did not perform a parallel track of research exploring whether the violence they experience was more or less pronounced than that experienced by teachers in suburban or rural districts and so could not state with conviction that violence was greater in these urban schools. In addition, no comparative analysis of suburban and rural teachers’ perceptions of violence in their schools was conducted.

But there were other issues for these teachers that were reflected in much of the literature on teacher attrition rates in urban schools. Smith and Smith (2006) referred to a general distrust of the community—that life around the school was more dangerous, parents were disinterested or hostile toward the teachers’ efforts to educate, and school resources were so scarce that rudimentary expectations for material support and administrative assistance were rarely fulfilled. These researchers, along with Holt and Garcia (2005) and Jorissen (2003), concluded that teachers entering high-risk schools
(rural and urban) required specialized teacher training to prepare them in advance for the particular challenges presented by these populations of students and the disadvantaged educational environments. Their arguments echo those of Nelson’s (2004) in underscoring that a one-size-fits-all approach to teacher training and continuing educational support is not sufficient to meet the different challenges presented by the range of school systems, student populations, and economic disparities that teachers may encounter in the course of their careers.

Teacher Attrition in Mississippi

There is a relatively scant amount of literature discussing teacher attrition specifically as it occurs in the state of Mississippi. However, one can gather a snapshot of the state picture by examining some of the statistics available. The Alliance for Excellent Education’s issue brief reflected that, as of 2003, Mississippi employed approximately 33,000 teachers and had around 1,935 leaving the profession. Another 2,109 teachers were transferring to other schools either within or outside the state. The issue brief estimated that the cost for Mississippi of teachers leaving the profession entirely was about $18,492,272, while the cost of teachers transferring was $20,159,747. The total projected cost of the teacher attrition for the state was $38,652,018 for that year. Based on number of teachers and rates of attrition, Mississippi falls in the middle- to low-end of total teacher turnover cost, comparatively speaking. Although Mississippi has problems with teacher attrition, some other states experience an even greater loss of teachers. For instance, North Carolina had 85,573 teachers for the same period, but lost over 23% (15,952) to attrition at a cost of $188,565,281. Arkansas, Delaware, the District of Columbia, Georgia, Maryland, Missouri, Nevada, and Texas also reported much higher rates of teacher attrition and
relative cost of turnover for this period. On the opposite end of the spectrum, Wisconsin lost only 5,147 of its 67,221 teachers to attrition and sustained turnover costs of just $63,542,804 (Alliance for Excellent Education, 2005).

In 2000, the Education Commission of the States (ECS) reported on various state programs for recruiting and retaining qualified teachers. At that time, Mississippi had implemented an incentive program for reimbursing teachers for interviewing and moving expenses incurred when they moved to an area of the state where there existed a critical staffing shortage. The state also established a Mississippi Employer Assisted Housing Teacher Program that enabled licensed teachers to apply for and receive designated home loans, particularly those teachers who lived and worked in critical shortage areas (“Teacher Recruitment/Retention Information,” 2000). Cornett and Gaines (2002) noted in their review of state incentive programs directed at curbing attrition rates that Mississippi was one of a handful of states to change its retirement laws to enable retired teachers to work up to one half of the time while continuing to receive their retirement benefits. The Mississippi Teacher Corps Annual Report, 2003-2004 (n.d.) was created to draw college graduates from non-education majors to teach in critical shortage areas. Envisioned to be a local variation of the Peace Corps, the Mississippi program is “the most competitive alternate-route teaching program in the country” (“First Semester is in the Books,” n.d.). The intent of such programs is to ensure that schools have experienced and qualified teachers available to students, even if those teachers are not working on a full-time basis or considered part of the traditional staffing pool. The 2010 budget request for K-12 education by the Mississippi Department of Education recognized teacher shortage as one of the state’s continuing challenges. The proposed budget has a teacher recruitment initiative and
teacher pay increase that amounts to approximately $45 million (Mississippi Department of Education, 2008).

Mississippi was the first state to create a truly comprehensive teacher shortage incentives program, with the passing of the Mississippi Critical Teacher Shortage Act (MCTSA) of 1998 (Cornett & Gaines, 2002). Chambless, Sweeney, and Thompson (1999) identified the motivation for the MCTSA: “The Mississippi Department of Education approved five (5) new districts as ‘critical shortage areas’ totaling 43 shortage districts out of 152 districts in Mississippi” (p. 3). Further, the legislature agreed with professional assessments that Mississippi’s teacher shortage, particularly in the critical areas, would continue to grow as surrounding states tended to offer higher wages and as increased standards and requirements for college graduates to enter the profession were continuing to winnow the field of teaching applicants. Mississippi’s difficulties were reflective of the nation at large—rural districts were sorely disadvantaged by an exodus of teachers and a dearth of qualified professionals to replace them, and certain subject areas (math, science, and special education) were constantly going wanting for teachers.

The Mississippi educators and policymakers behind the creation and passing of the MCTSA recognized three basic tenets, all of which have been discussed earlier in this chapter, as critical to a plan for attracting and retaining qualified teachers: preparation, induction, and improved working conditions with incentives for professional development. Out of the MCTSA arose the Mississippi Teacher Fellowship Program (MTFP) that prioritized the placing of well-trained teachers in critical shortage districts and subject areas. The program provided scholarships to those students who qualified and were earning a Master of Education or Educational
Specialist degree in a Mississippi state university program. In exchange, the students (fellows) made a 3-year commitment to teach in a critical shortage area. Approximately 75 fellows were selected each year to participate and their benefits included:

1. Tuition scholarship for a Master of Education or Educational Specialist degree program at a Mississippi Institution of Higher Learning;
2. A Pentium computer;
3. Professional development opportunities conducted via distance learning on a monthly basis;
4. Stipends for books and supplies;
5. MTFP annual orientation for new fellows including technology training;
6. Classroom instructional enhancement grants ($200 during the first year of teaching commitment);
7. Mentoring program;
8. MTFP annual spring convocation for fellows and their mentor teachers;
9. Ongoing cohort support via internet chat rooms, daily e-mail, content area number, resource listings through the MTFP website, and the MTFP Program Office toll-free number. (Chambless et al., 1999, p. 5)

So complete were the program incentives that only Kentucky exceeded Mississippi in teacher retention incentives, while New York was the one other state to provide as many incentive offerings (Johnson, 2005).

In less than a decade, the MTFP demonstrated some apparent success. The MTFP website reflected a total of 25 districts identified as critical shortage areas (Mississippi Teacher Fellowship Program, n.d.), which is down from the 43 districts
identified at the time the MCTSA was put into effect. Additionally, Cornett and Gaines (2002) observed:

As of [2001], there were over 1,000 prospective teachers receiving scholarships and 175 Delta teachers pursuing master’s degrees through the program. Over the first three years, nearly 400 teacher received help with moving expenses. During 2000-2001, 67 teachers were fulfilling their service requirement for their undergraduate scholarships in Delta classrooms. Sixteen teachers had completed their service requirements and of those 16, all elected to continue teaching in the Delta. (p. 10)

These figures illustrate the continued expansion of the Mississippi teacher retention program ("State Incentive Policies for Recruiting and Retaining,” 2002). The Teach Mississippi! (n.d.) website currently lists a host of programs, beyond MTFP, that are available to teachers willing to serve in shortage areas, including moving expenses, housing assistance, and school administrator sabbatical programs. In the summer of 2006, the Mississippi Department of Education released its, which encourages the creation of new incentive programs in terms of Highly Qualified Teacher Plan Revised workshops and seminars and also expands the role of recruiters in identifying and reaching out to desirable teaching candidates.

Housing and professional development are two of the incentive categories that have received additional attention over the course of the MCTSA’s implementation. Although housing had not been a focus of the original incentive plan, it garnered greater attention over time and, as the Teach Mississippi! (n.d.) grant offerings indicate, housing support and moving assistance are considered a central component of teacher retention strategies in critical shortage areas. Teachers could receive up to $1,000 in
moving expenses to relocate, while loans of up to $6,000 for down payments and closing costs were available to those relocating and buying a home (Enwefa, Enwefa, Banks, Jurden, & Buckley, 2002). Killeen, Monk, and Plecki’s (2002) national survey of professional development programs found that in the late 1990s, Mississippi ranked in the low- to mid-range of states in terms of offering real professional development programming. However, their statistics demonstrated that by 1998 Mississippi had crept forward into the upper mid-range of states, committing more of its general expenditures to staff support. This increase was also reflected in the relationship of staff support spending based on a per pupil calculation.

Collins (2005) provided an overview of one such professional development program, the New Teacher Academy, led by Columbia University educators in the Pascagoula, Mississippi, school district, specifically designed to retain teachers. The New Teacher Academy seeks to increase teacher contact and deepen relationships with students and their families. Collins described the program: “During the school year, new teachers met with experienced teachers and others to discuss classroom management issues, teaching techniques and to create projects designed to connect their students with their grade level” (p. 4) while giving the teachers’ academic credit for program participation and project completion. The program had been found to improve teacher and parent relationships over the course of its 3 years in operation and to enhance teachers’ experience of their work.

One aspect of the critical teacher shortage in Mississippi that should be mentioned is the racial composition of the teacher and student populations since some of the research suggests the relevance of this examination. Tillman (2003) noted that approximately 86% of the nation’s middle and secondary school teachers are Caucasian,
and that the turnover of African American teachers tends to run higher than the national average. In Mississippi, Caucasian females represent the largest majority within the teacher population, although the number of African American teachers (27.8%) is somewhat higher than both the national average and for other southeastern states. But it is most striking to consider these statistics alongside the fact that 45% of Mississippi’s elementary and secondary students are African American and 52% are Caucasian (Enwefa et al., 2002). A quote provided by Tillman (2003) underscores the point to be considered: “Although one’s race does not predispose a teacher to fail or succeed in urban settings, disparity in race, culture, and socioeconomic levels between teachers and students may have a significant impact on the teaching-learning scenarios” (Leake & Leake, 1995, cited in Tillman, 2003, p. 231).

Enwefa et al. (2002) described teacher preparation and education programs seeking to increase African American teacher representation within the Mississippi schools. They suggested that Mississippi districts look to balance the racial disparities of the teacher-to-student ratios by recruiting new teachers from some of the nation’s historically Black colleges and universities, including the three based in Mississippi: Jackson State, Mississippi Valley State, and Alcorn State universities. The General Accounting Office (GAO) noted in its Troops-to-Teachers report that the teacher recruits drawn from the military enhanced the racial and gender diversity of the teaching population, as 80% of these former troop teachers are male and 25% are African American (“Troops-to-Teachers,” 2006, p. 3). Recruiting African American teachers alone is not a solution to the teacher retention problems in Mississippi. Tillman’s (2003) study of an African American teacher’s first year in a predominantly Black, inner city high school revealed the teacher experienced a profound sense of
disconnect from her students and their families that was based more on differences of socioeconomic class and educational background than on a relationship deriving from shared race. Nevertheless, Enwefa et al. (2002) suggested that Mississippi recruiters should focus efforts on bringing in more African American teachers and finding ways to support them so that they do not leave the profession at the continued high and alarming attrition rates for African American teachers (Tillman, 2003).

Summary

While the alarmingly high rates of teacher attrition are discouraging, particularly as exhibited in the nation’s rural and urban schools, the literature suggests that there may be hope for reversing this trend. The research suggests a full and thoughtful understanding of the reasons that teachers leave the field. The challenge lies in how to structure, support, and fund the strategies to address and resolve the causes underlying attrition. Mississippi represents a hopeful case for addressing teacher attrition. Despite a comparative lack of resources, Mississippi’s educational leaders and policymakers have demonstrated recognition of the problem and a willingness to genuinely and comprehensively engage the challenge at a structural level. Much work lies ahead, and this research effort is designed to make a contribution to this ongoing effort.
CHAPTER III
METHODOLOGY

This chapter addresses the overall research design and discusses specific features of the study. The participants, data gathering methodology, data analysis, and reporting procedures also are presented in this chapter. The purpose of this study was to determine whether relationships exist among teacher attrition and the following factors: administrative support, stress levels related to administrator requirements, stress levels related to standardized testing, teacher satisfaction with salary, and opportunity to assist in determining professional development activities. Furthermore, this study was intended to help determine if there are statistically significant differences among teachers’ perceptions of motivation, administrative support, stress levels related to administrator requirements, and stress levels related to subject area testing in a regional sample. Finally, this study evaluated the degree to which mandatory routine duties and paperwork and pressures for students to perform on state and/or local tests impacted teachers’ perceived levels of stress in a national sample.

Research Design

This study employed a quantitative design and used a questionnaire that consisted of survey questions adopted from the 1999-2000 School and Staffing Survey (SASS). The SASS is administered to elementary and secondary teachers by the National Center for Education Statistics (NCES) (1991). NCES redesigned the SASS survey system in the mid-eighties in order to emphasize teacher demand and shortage, teacher and administrator characteristics, school programs, and general conditions in schools. SASS has four core components: the School Questionnaire, the Teacher Questionnaire, the
Principal Questionnaire, and the School District Questionnaire, which was known as the Teacher Demand and Shortage Questionnaire until the 1999–2000 SASS administration. The questionnaires are sent to respondents in public, private, and Bureau of Indian Affairs/tribal schools. In 1999-2000, public charter schools were also included in the sample. (Gruber et al., 2002, p. 3)

For the regional component of this study, the questionnaire was given to the participants in a previously scheduled faculty meeting. The participants were asked to complete the survey while in the meeting during a segment of time set aside specifically for the completion of the survey. So as to give all participants time to respond to the survey, the researcher collected the instruments 2 weeks from the date of issue. Teachers were given envelopes in which to place the completed surveys, and the surveys were stored in a secure location while awaiting pickup.

Research Questions and Hypotheses

In order to examine the variables of interest in this study, the researcher posed the following research questions:

1. Do teachers’ perceptions about salary, the amount of administrative support, and their role in determining the content of professional development opportunities statistically significantly predict the level of teacher satisfaction that could motivate a teacher to remain in the profession?

2. Are there statistically significant differences among elementary, middle, and high school teachers’ perceptions of worry/stress associated with student performance on state and/or local tests?
3. Is there a statistically significant difference between the perceptions of teachers in a national sample and teachers in a regional sample regarding worry/stress associated with student performance on state and/or local tests?

4. Do mandatory routine duties and paperwork and pressures for students to perform satisfactorily on state and/or local tests statistically significantly predict teachers’ perceived levels of stress?

A related hypothesis was generated for each of the research questions. These hypotheses are listed below:

**H$_1$:** Teachers’ perceptions about salary, the amount of administrative support, and their role in determining the content of professional development opportunities statistically will significantly predict the level of teacher satisfaction that could motivate a teacher to remain in the profession.

**H$_2$:** There are statistically significant differences among elementary, middle, and high school in teachers’ perceptions of worry/stress associated with student performance on state and/or local tests.

**H$_3$:** There is a statistically significant difference between the perceptions of teachers in a national sample and teachers in a regional sample regarding worry/stress associated with student performance on state and/or local tests.

**H$_4$:** Mandatory routine duties and paperwork and pressures for students to perform satisfactorily on state and/or local tests statistically significantly predict teachers’ perceived levels of stress.

Participants

Two research samples were used, one from an archived national data set and one from a regional data set. The responses from the national sample provide a large robust
data set that could produce very reliable results. Responses from the regional sample provided perspectives from a local district on an issue of particular interest to practitioners and policymakers in the region, given that state’s particular approach to school and district accountability. Thus, an item administered to the national sample that addressed stresses associated with student performance on standardized tests also was administered to the regional participants. Responses from both sets of sample participants were analyzed within the confines of the research hypotheses.

The national subsample for the study was drawn from an existing data set from the 1999-2000 SASS; a random sampling strategy was employed in the selection of these national participants. The SASS survey’s potential population consisted of teachers in 88,266 public schools, 140 private schools, 1,010 public charter schools, and 177 Bureau of Indian Affairs schools. The total population of teachers surveyed numbered 52,400. Of this population, a sample of 42,086 teachers participated, providing a response rate of 80%. Data collection for the 1999-2000 SASS took place during that same year.

Data collection procedures for 1999-2000 SASS had several phases. Initially the teacher questionnaires were mailed then followed by a second mailing. A non-response follow-up was conducted by phone and remaining non-respondents were assigned to field staff, who obtained interviews by phone or personal visit. (Gruber et al., 2002, p. 3)

The participants for the regional portion of the study consisted of certified practicing teachers from a southeastern school district. The district employs 597 certified teachers. There are 19 schools within the district lines. The district is comprised of two high schools, three middle schools, 11 elementary schools, one
vocational school, one alternative school, and one exceptional needs school. The district is in an urban setting with a population base of 34,978. The population is divided at 50.4% male and 49.6% female. The median household income for 2007 was approximately $39,900. The rate of adults having at least a high school diploma is at 84%, and at least 18% of the adults have a bachelor’s degree. The ethnicity in the district is represented by 66% White, 28% Black, 3.9% Hispanic, and 2.1% Other race (SchoolMatters.com, 2007). District enrollment was 6,965 students for the 2006-2007 school year. Approximately 67.2% of the students enrolled in the district were eligible for free or reduced lunch. There were 37 certified teachers from an elementary school, 41 certified teachers from a middle school, and 72 certified teachers from a high school who were asked to participate in the study.

Instrumentation

National Instrument

The national data were collected during the 1999-2000 academic year through the use of questionnaires that were administered to teachers who had been randomly sampled for the study. The random samples were gathered by asking each selected school to provide a list of teachers, along with a description of their teaching assignments. The list provided by the schools was the foundation of the teacher sample (Tourkin, Pugh, Parmer, & Gruber, 2001).

The 1999-2000 School and Staffing Survey (SASS) was created by the National Center for Education Statistics (NCES). NCES is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States. It fulfills a congressional mandate to collect, analyze, and report complete statistics related to the state of education in the United States (Tourkin et al., 2001). The SASS
was established to provide data on various schooling processes, among which are teacher development, recruitment procedures for teachers, and other factors associated with quality education on the basis of staffing processes (Cole et al., 2002). The SASS instrument was first developed for use in the 1987-88 administration of the survey. The instrument has been updated periodically over subsequent years.

The analytical power of the data is enhanced by the ability to link survey data for individual local education agencies (LEAs), schools, administrators, and teachers. For the 1993-94 cycle the data was further enhanced by linking students, library media centers, and librarians with schools, administrators, and teachers. The use of comparable questions in each cycle of SASS makes it possible to monitor changes in the nation's elementary and secondary school system. (National Center for Education Statistics, 1991, p. 2)

SASS included a re-interview program for its school and teacher surveys. The purpose of this re-interview program was to evaluate the reliability of the data from selected SASS questions. The SASS teacher questionnaire has been administered at intervals to teachers across the nation. “Improvement of questionnaires and procedures is an ongoing process for SASS. Before each survey year, field tests and other studies are conducted to test new or revised questionnaire items and changes in procedures” (Tourkin et al., 2001, p. 156).

The 1999-2000 School and Staffing Survey that was sent to public, private, public charter, and Bureau of Indian Affairs (BIA) schools collected data from teachers regarding their education and training, teaching assignment, teaching experience, certification, teaching workload, perceptions and attitudes about teaching, job mobility,
and workplace conditions. Information from SASS items permits analyses of how these factors affect movement into and out of the teaching profession.

Three items in the SASS Public School Teacher Questionnaire for 1999-2000 were used to provide data for the analyses associated with Research Question 1 and Hypothesis 1:

Item 59 stem question: Do you agree or disagree with each of the following statements?

59b: The school administration’s behavior toward the staff is supportive and encouraging.

59c: I am satisfied with my teaching salary.

Items 59b and 59c were measured on a 4-point scale in which 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Somewhat agree, and 4 = Strongly agree.

The final item in the subscale for Research Question 1 was item 57 which read as follows:

Using the scale of 1-5, where 1 means No influence and 5 means A great deal of influence, how much actual influence do you think teachers have over school policy at this school in each of the following areas?

Item 57c is presented below:

57c: Determining the content of in-service professional development programs.

Data from participants in the national archival data set also were used in the analysis related to Research Question 4 and the related hypothesis. Research Question 4 combined items 59g and 59o of the SASS Public School Teacher Questionnaire for 1999–2000 into a related subscale.
Item 59 stem question: Do you agree or disagree with each of the following statements?

59g: Routine duties and paperwork interfere with my job of teaching

59o: I worry about the security of my job because of the performance of my students on state or local tests.

Items 59g and 59o were measured on a 4-point scale in which 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Somewhat agree, and 4 = Strongly agree.

Regional Instrument

The questionnaire for the regional portion of this study consisted of a survey item that was adopted from the 1999-2000 SASS. Research Question 2 was the focus of the regional portion of this study and employed data from regional participants’ responses to SASS item 59o: I worry about the security of my job because of the performance of my students on state and local tests. This item also was administered to teachers in the national sample. This item used the following scale: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Somewhat agree, and 4 = Strongly agree. The responses were grouped as to whether the respondent taught at the high school, middle school, or elementary school level. As in the case of Research Question 2, the researcher again used responses to SASS item 59o to provide data for Research Question 3 and the related Hypothesis 3.

Validity and reliability analyses were not performed for the regional instrument. The assessments associated with the national instrument, as described earlier in this section, were deemed sufficient to establish validity and reliability for the regional instrument.
Procedures

National Procedures

The national data were collected during the 1999-2000 academic year through the use of questionnaires that were administered to teachers who had been randomly sampled for the study. SASS conducted the entire study in three phases. The initial phase involved the mailing of questionnaires to the participants. Subsequently, there were nonresponse follow-up contacts to the participants in order to prompt high rates of response (Tourkin et al., 2001).

To optimize the use of firsthand information, primary data collection procedures were conducted to establish practical information about the research problem. In contrast to secondary data collection procedures that rely on past studies, primary data research processes provide direct information from participants on the issues related to the research problems. Cooper and Emory (1995) asserted that primary data collection is usually very useful in the sense that it reveals the practical context related to the research problem in a study. In this national study, the use of primary research data collection methods provided a realistic context for assessing variables associated with teacher attrition in contemporary society. As a result, the data obtained in this study were deemed to be useful in developing effective recommendations and policymaking related to teacher management.

Regional Procedures

The researcher sought and obtained approval to conduct this study from The University of Southern Mississippi Institutional Review Board (IRB) (see Appendix A). The procedure for acquiring regional sample responses for this research included first contacting the superintendent of schools to obtain permission (see Appendix B)
conduct the survey and then contacting the principals of the three participating schools within the district and scheduling an appointment to deliver the questionnaires.

Questionnaires were distributed to teachers from the representative schools. The questionnaires were given to the participants in a previously scheduled faculty meeting in April 2008. The participants were asked to complete the questionnaire while in the meeting during a segment of time set aside specifically for the completion of the survey. So as to give all participants time to respond to the survey, the researcher collected the instruments 2 weeks from the date of issue. Teachers were given envelopes in which to place the completed surveys and the surveys were stored in a secure location while awaiting pickup.

Ethical standards of educational research were in place, and there was no intentional harm to participants. Regional participants were asked to sign an informed consent form (see Appendix C) prior to participation in the survey. These participants were also informed that their responses would be held in strict confidence. Returned instruments were kept under lock-and-key in a secure location in the researcher’s home.

Data Analysis Procedures

The first research question, which was based on the national sample, examined the relationships among teacher perceptions about selected job factors and satisfaction. In analyzing the hypothesis that was associated with Research Question 1, the researcher utilized a multiple regression model. This analysis model was considered to be the most effective due to the various variables involved in this research question. The major dependent variables involved in testing this hypothesis were teachers’ perceptions about salary, administrative support, and their role in determining the content of professional development opportunities. The independent variable in this
case was job satisfaction. Items 59c, 59b, and 57c, as profiled in the previous instrument section, provided the data for these variables. Use of the multiple regression model made it easier to compare the standardized beta coefficients obtained for each variable in order to evaluate the relative correlation of each with teacher satisfaction. Hypothesis 1 was associated with Research Question 1.

The second research question was based on the regional sample and explored differences among elementary, middle, and high school teachers’ stress associated with student performance on tests. Item 59o, as profiled in the previous instrument section, provided the data for the variables in the research question. Data analysis for the related hypothesis was accomplished with a one-way analysis of variance (ANOVA). This statistical procedure was adopted in order to determine the differences among teachers’ perceived stress in various school levels. The means and standard deviations were calculated in order to establish a basis for inferences about the underlying relationship between teachers’ perceived stress and worry and the school levels in which they teach. Hypothesis 2 was associated with Research Question 2.

Research Question 3 compared the perceptions of worry/stress associated with student performance on state/local tests for teachers from a national sample and teachers from a regional sample. Item 59o also was used for the third research question. A $t$ test was used for comparison of the national data sample and the regional data sample and to describe whether there is a significant difference between the two samples.

The fourth and final research question, which was based on the national sample, explored the relationships between teacher stress and teachers’ routine duties and pressures for students to perform on tests. Items 59g and 59o, as profiled in the previous instrument section, provided data for the variables in the research question.
Hypothesis 4 was associated with Research Question 4. The major independent variables involved were mandatory routine duties and paperwork and pressures for students to perform satisfactorily on state and/or local tests. The dependent variable was teachers’ perceived level of stress. In analyzing this hypothesis, a simultaneous multiple linear regression analysis model was adopted in order to assess the relationship between the variables. In order to determine how the variables involved in this hypothesis are correlated, the statistical significance of perceived stress with each independent variable involved in this study was established by calculating the variance. This formed a basis for making inferences on the relationship between teachers’ perceived worry and stress and other independent factors including mandatory routine duties and paperwork and pressures for students’ performance from the school administration.

Summary

This chapter described the overall design and research methodology of the study. It also included a description of the research participants, instrumentation, procedures, and analytical processes. Data were obtained from a national archival resource and from responses to a regionally administered questionnaire. Descriptive, inferential, differential, and correlational statistics were selected to describe and analyze the data. The intended use of this research was to assist school administrators and policymakers in better understanding variables that impact teacher decisions to remain in the profession and provide information that might help to diminish the attrition of experienced teachers.
CHAPTER IV
RESULTS

Chapter IV describes the results of the present study. This chapter is comprised of elements that outline the descriptive statistics and the results of analyses related to the study hypotheses. A national archival data set and results from a survey administered to a regional sample provided data for analysis. In this chapter, various data analysis regression models were employed to establish the statistical significance and relationship of the variables involved in each research hypothesis. This formed a basis for making inferences about the underlying relationship between the various variables involved in this study.

Description of the National and Regional Samples

The national subsample for the study was drawn from an existing data set from the 1999-2000 Schools and Staffing Survey, and a random sampling strategy was employed in the selection of these national participants. The SASS survey’s potential population consisted of teachers in 88,266 public schools, 140 private schools, 1,010 public charter schools, and 177 Bureau of Indian Affairs schools. Of this population, a sample of 42,086 teachers was surveyed.

Participants for the regional sample consisted of teachers from a high school, a middle school, and an elementary school in a single district in a southeastern state. The high school faculty was comprised of 72 teachers, 97% of whom were Caucasian and 3% Black, while 85% of the teachers were female and 15% of the teachers were male. The middle-school level employed 41 teachers, 93% of whom were Caucasian and 7% Black, while 90% of the teachers were female and 10% of the teachers were male. The elementary school level faculty was comprised of 37 teachers, 96% of whom were
Caucasian and 4% African American, while 96% of the teachers were female and 4% of the teachers were male. The number of teachers for all three schools totaled 150; of that number, 138 (92%) of the teachers responded to the survey. Ninety-three percent of the high school teachers, 95% of the middle-school teachers, and 90% of the elementary school teachers responded to the surveys.

The responses of the sample participants were analyzed within the context of the research hypotheses. This ensured that the entire study remained in focus and within the scope of the research questions, since the hypotheses were formulated on the basis of the research questions.

For the national and regional samples, the researcher tagged the study variables in the SASS electronic codebook. SPSS syntax was requested for those variables. Syntax then was run from the CD to draw data for analysis. Composite variables were created by combining respondents’ reported opinions/perceptions regarding whether teachers were satisfied with salary, administrative support, and opportunity to help determine professional development. SASS data were captured and analyzed for those samples of interest to enable the regression analysis of the variables. Both independent and dependent variables were highlighted and grouped in SASS syntax to enable the software to analyze them in order of their group by giving out results showing their multicollinearity.

Descriptive Statistics and Hypotheses Findings

This section provides the descriptive statistics and restates the hypotheses tested for the current study. The procedures utilized to test the hypotheses are reiterated in this section, and the results of the statistical procedures also are presented. The sample size for the national results was 42,086 teachers. The sample size used for the regional
portion of the study was 150: 72 high school teachers, 41 middle school teachers, and an elementary school with 37 teachers, respectively.

Data Analyses for Research Hypothesis 1

The first hypothesis was stated as follows: Teachers’ perceptions about salary, the amount of administrative support, and their role in determining the content of professional development opportunities statistically will significantly predict the level of teacher satisfaction that could motivate a teacher to remain in the profession.

Data for the first hypothesis were obtained from the national archival data set. Table 1 provides the descriptive statistics for this hypothesis.

Table 1

Descriptive Statistics for SASS Items Included in Hypothesis 1 (N = 42,086)

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>59c: Satisfaction with salary</td>
<td>2.07</td>
<td>.99</td>
</tr>
<tr>
<td>59b: Administrative support</td>
<td>3.12</td>
<td>.92</td>
</tr>
<tr>
<td>57c: Determining the content of professional</td>
<td>2.88</td>
<td>1.21</td>
</tr>
<tr>
<td>development</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scale: 1 = Strongly disagree, 4 = Strongly Agree.

A multiple linear regression was conducted to determine which of the following variables statistically significantly predicted the level of teachers’ satisfaction that could motivate a teacher to remain in the profession: (a) satisfaction with salary, (b) administrative support, and (c) determining the content of professional development opportunities. Evaluations of linearity, normality, homoscedascity, and
multicollinearity showed that assumptions were met within normal limits with the exception of the outliers. Because the national sample was so large, the regression was robust enough to tolerate the outliers, so they were retained in the sample. Regression results showed that the linear combination of variables significantly predicted teachers’ satisfaction, \( F(3, 42,082) = 3862.89, p < .001, R^2 = .216 \). Based on standardized beta coefficients, administrator’s support was the strongest variable (.425), and salary was the second strongest variable (.129). Administrator’s support and salary had a positive effect in assessing teacher satisfaction while professional development had a negative effect (-.031) in the assessment of teacher satisfaction. Table 2 profiles these data.

Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>( \beta_i )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative support</td>
<td>.425</td>
</tr>
<tr>
<td>Salaries</td>
<td>.129</td>
</tr>
<tr>
<td>Professional development</td>
<td>-.031</td>
</tr>
<tr>
<td>opportunities</td>
<td></td>
</tr>
</tbody>
</table>

Research Hypothesis 2

The second hypothesis was stated as follows: There are statistically significant differences among elementary, middle, and high school in teachers’ perceptions of worry/stress associated with student performance on state and/or local tests. Hypothesis 2 was based on regional sample data. Descriptive statistics are provided in Table 3.
Table 3

Descriptive Statistics for Responses Related to Item on Job Security/Test Performance

<table>
<thead>
<tr>
<th>Item</th>
<th>Response</th>
<th>School level</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>SD</td>
<td>High school</td>
<td>3.20</td>
<td>.68</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Middle school</td>
<td>3.00</td>
<td>.79</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elementary school</td>
<td>3.00</td>
<td>1.03</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>3.10</td>
<td>.79</td>
<td>68</td>
</tr>
<tr>
<td>2.00</td>
<td>SWD</td>
<td>High school</td>
<td>3.15</td>
<td>.99</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Middle school</td>
<td>3.23</td>
<td>1.01</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elementary school</td>
<td>3.30</td>
<td>.95</td>
<td>10</td>
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<tr>
<td></td>
<td></td>
<td>Total</td>
<td>3.22</td>
<td>.96</td>
<td>31</td>
</tr>
<tr>
<td>3.00</td>
<td>SWA</td>
<td>High school</td>
<td>2.83</td>
<td>1.03</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Middle school</td>
<td>3.00</td>
<td>.63</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elementary school</td>
<td>3.60</td>
<td>.55</td>
<td>5</td>
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<tr>
<td></td>
<td></td>
<td>Total</td>
<td>3.04</td>
<td>.88</td>
<td>23</td>
</tr>
<tr>
<td>4.00</td>
<td>SA</td>
<td>High school</td>
<td>3.09</td>
<td>.83</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Middle school</td>
<td>2.67</td>
<td>1.53</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elementary school</td>
<td>3.50</td>
<td>.71</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>3.06</td>
<td>.93</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>High school</td>
<td>3.11</td>
<td>.81</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Middle school</td>
<td>3.05</td>
<td>.89</td>
<td>39</td>
</tr>
</tbody>
</table>
Table 3 (continued).

<table>
<thead>
<tr>
<th>Item</th>
<th>Response</th>
<th>School level</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary school</td>
<td></td>
<td>3.21</td>
<td>.93</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3.12</td>
<td>.85</td>
<td>138</td>
<td></td>
</tr>
</tbody>
</table>

Note. SD = Strongly disagree, SWD = Somewhat disagree, SWA = Somewhat agree, SA = Strongly agree.

A two-way ANOVA was conducted to determine if there was a statistically significant difference in teachers’ perceptions of worry/stress based on student performance on state and local tests depending upon whether they taught in an elementary, middle, or high school. The independent variable was school level in which taught. The dependent variable was teachers’ perceived levels of stress. The two-way ANOVA was not significant for school level, $F(2, 126) = 1.068$, $p = .347$. Performance also was not significant, $F(3, 126) = .212$, $p = .888$, and no interaction was found, $F(6, 126) = .719$, $p = .635$.

Table 4

95% Confidence Intervals of the Mean Differences Among Elementary, Middle, and High School Teachers

<table>
<thead>
<tr>
<th>School level</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school</td>
<td>2.76 to 3.32</td>
</tr>
<tr>
<td>Middle school</td>
<td>2.83 to 3.42</td>
</tr>
<tr>
<td>Elementary school</td>
<td>2.94 to 3.55</td>
</tr>
</tbody>
</table>

Note. CI = Confidence interval.
Research Hypothesis 3

Research Hypothesis 3 was stated as follows: There is a statistically significant difference between the perceptions of teachers in a national sample and teachers in a regional sample regarding worry/stress associated with student performance on state and/or local tests. Hypothesis 3 was based on both the national and regional data samples. Table 5 presents the descriptive statistics for Hypothesis 3.

Table 5

Descriptives for National and Regional Means for Item 59o: Pressures Related to Student Test Performance

<table>
<thead>
<tr>
<th>Sample</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>3.33</td>
<td>.93</td>
<td>42,086</td>
</tr>
<tr>
<td>Regional</td>
<td>3.12</td>
<td>.85</td>
<td>138</td>
</tr>
</tbody>
</table>

A t test was conducted to determine whether there was a significant difference in teachers’ perceptions of worry/stress associated with student performance on state/local tests. The test did not indicate a significant difference, \( t(42,231) = .022, p = .982 \). The means and standard deviations are as follows: The national sample mean (\( M = 3.33, SD = .93 \)) and the regional sample mean (\( M = 3.12, SD = .85 \)) were not significantly different. Thus, the participants in the national and regional sample did not differ in perceived levels of stress/worry based on student performance on state and local tests.
Research Hypothesis 4

The fourth hypothesis was stated as follows: Mandatory routine duties and paperwork and pressures for students to perform satisfactorily on state and/or local tests statistically significantly predict teachers’ perceived levels of stress. The responses from the national sample were used for the third hypothesis. Table 6 illustrates the descriptive statistics for the fourth hypothesis.

Table 6

Descriptive Statistics for Stress (N = 42,086)

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>59g: Routine duties and paperwork</td>
<td>2.89</td>
<td>.92</td>
</tr>
<tr>
<td>59o: Pressures for student performance</td>
<td>3.33</td>
<td>.93</td>
</tr>
</tbody>
</table>

A simultaneous multiple linear regression analysis was conducted to assess whether mandatory routine duties, paperwork assigned by administrators, and pressures for students to perform on state and/or local tests statistically significantly predict teachers’ perceived levels of stress. Because the national sample data set was so large, outliers presented a minimal threat to normality and were retained in the data. Evaluations of linearity, normality, homoscedasticity, and multicollinearity showed that the assumptions were met within acceptable limits. Regression results showed that the linear combination routine duties and paperwork assigned by administrators and pressures for students to perform on state and/or local tests statistically significantly predicted teachers’ perceived levels of stress, $R^2 = .05$, $F(2, 42083) = 1102.23$, $p < .001$. 
This model accounted for 5% of the variance in teachers’ perceived levels of stress based on information from the identified two variables. The two variables almost equally predicted levels of stress. Coefficients are presented in Table 7.

Table 7

*Predicted Level of Stress*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta_i$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine duties and paperwork</td>
<td>.16</td>
</tr>
<tr>
<td>assigned by administrators</td>
<td></td>
</tr>
<tr>
<td>Pressures for students to perform on state and local tests</td>
<td>.17</td>
</tr>
</tbody>
</table>

Summary

Chapter IV presented a description of the results of the study. The descriptive data and the results of the research analyses associated with the four hypotheses were presented in this chapter. It was found that satisfaction with salary and administrative support was statistically significant in predicting the level of teacher satisfaction which could motivate a teacher to remain in the profession while having the opportunity to determine professional development was not statistically significant. In terms of perceived levels of stress, there was not a significant difference found among the perceptions of teachers in the regional sample depending upon the levels of schools taught. Similarly, teachers in the national sample and regional sample did not differ in their perceptions of stress related to the performance of students on standardized tests. Concerning the mandatory routine duties and paperwork assigned by administrators and
pressures for students to perform on state and/or local tests, the results indicated that the testing statistically significantly predicted teachers’ perceived levels of stress.
CHAPTER V
SUMMARY AND CONCLUSIONS

This study tested factors which are associated with teacher attrition. The literature of Ellis (2000), Herzberg (1964), House (1971), and Maslow (1970) contributed to the theoretical framework for this study. Maslow (1970) believed that most people have a yearning to satisfy two basic needs: lower-level needs (extrinsic) and higher-level needs (intrinsic). Herzberg (1964) noted a distinct difference between extrinsic rewards as they are related to a job. The extrinsic rewards could be reflected by salary, benefits, retirement benefits, and, perhaps, tenure. Intrinsic rewards would be intangible benefits of work, such as having pride in contributions made to the job and having opportunities for personal growth. Herzberg also has noted that people find intrinsic rewards to be not only motivating factors but also satisfying factors.

Maintaining a high level of teacher quality is a critically important factor that helps to ensure student achievement. There are a multitude of factors endangering teacher quality. For example, teachers may be unprepared to face the demands of the classroom, whether they are in the form of student behaviors, diverse student aptitudes, or performance demands associated with tests. Consequently, students are facing more challenges in achieving academic success. The tendency of experienced teachers to leave schools and the teaching profession results in an inability to preserve an experienced teaching community. This, in turn, produces many deteriorating influences on student success. What seems to come forward as yet another reality is that many educational officials seem to believe that an effective remedy to replacing experienced teachers lost to attrition is to simply hire new teachers. Past research has indicated that hiring new inexperienced teachers to replace those lost to attrition is not an effective
solution. Mississippi education administrators have attempted to reduce teacher attrition rates by attempting to instill more comprehensive teacher preparation programs, effective induction periods, and more valid professional development opportunities. Still, a great deal needs to be addressed regarding the issue of teacher attrition, and this research aspired to make a contribution to this ongoing effort through the analysis of responses to related questions.

Summary of Procedures

The purpose of this study was to determine whether relationships exist among teacher attrition and the following factors: administrative support, stress levels related to administrator requirements, stress levels related to subject area testing, and teacher satisfaction with salary and opportunity to assist in determining professional development activities.

The national component of this study was based upon data collected by NCES during the 1999-2000 School and Staffing Survey (SASS). SASS is administered to elementary and secondary teachers using a random sample design. The regional component of this study was given to all teachers in an elementary, a middle, and a high school in a southeastern school district. Item 59o of the 1999-2000 SASS was the focus of the regional sample. The regional sample was asked to complete the survey during a previously scheduled faculty meeting.

Discussion of Descriptive Statistics

The national data were drawn from the 1999-2000 SASS Teacher questionnaire. The participants were 42,086 randomly sampled teachers. The surveys were distributed to public, private, public charter, and BIA schools. The surveys were utilized to collect data regarding teachers’ education/training, teaching assignments, teaching experiences,
certifications, workloads, perceptions/attitudes in regard to teaching and workplace conditions. This large sample size provided a robust data set that enables researchers to speak with greater confidence about inferences drawn from statistical analyses of these data.

One hundred fifty teachers from a southeastern United States school district were asked to participate in the regional sample. The response rate for this sample was high; of the 150 persons surveyed, 138 (92%) returned completed instruments. The regional research sample participants appeared to be demographically representative of the population of teachers who serve elementary, middle, and high schools within the district.

Major Findings and Discussion

Past research indicates that the number of teachers leaving the educational field far exceeds those entering it; this clearly strengthens concerns about the nature of teacher attrition. The fact that teachers constantly rotate, with the experienced teachers leaving, new teachers entering the teaching process and also leaving it within a couple of years leaves the students with increased challenges of attaining their academic dreams. This is why teacher attrition is such a hotly debated issue and deemed to be such a critical situation for many schools.

Research has indicated that high levels of performance on the part of students are directly related to lower attrition rates among teachers (“Gap Shrinkers,” 2004; Hill & Barth, 2004; “Unraveling the ‘Teacher Shortage’ Problem,” 2002). It also has been shown that teachers are more likely to remain in the teaching profession when they have intensive training programs that help them to be better prepared and have greater confidence in their abilities. Research also has shown that stress plays an important role
in prompting a teacher’s exit from the profession. Many people enter the teaching profession each year only to be discouraged by poor preparation, lack of support in the schools, and issues with salary. Administrative support has been found to be a key factor in reinforcing teachers’ levels of confidence and playing a positive role in teachers’ decisions to continue teaching.

Salary and Teacher Attrition

Teacher salary has been intensely debated in the education sector as a measure to promote higher teacher satisfaction. The findings related to teacher salaries were based on responses from the national sample of teachers. The sample had the lowest mean (2.07) for the three variables in the first research question. On a scale in which 1 = *Strongly disagree* and 4 = *Strongly agree*, this response indicates that teachers are clearly displeased with their salaries.

Based on the standardized beta coefficient obtained in this study for the various variables involved in teacher satisfaction, salary, while predicting teacher satisfaction, was one of the weaker factors. This is consistent with much of the literature on this topic. Though teachers consider attractive salaries to be an important motivational incentive, other factors associated with the teaching profession, such as administrative support, are often more important than salary incentives in affecting teacher satisfaction and impacting their intent to remain in the profession. According to Glewwe and Kremer (2003), teachers are largely motivated by psychological satisfaction as opposed to physical rewards. However, the fact that salary was found to be positively, albeit modestly, related to teachers’ decision to remain in the profession is also consistent with past research. “High teacher salaries result in increased commitment and lower attrition” (Corbell, 2008, p. 4). Tourkin et al. (2010) considered higher salaries to be
associated with lower attrition rates for teachers as well. This is based on a 2004 review of teacher retention that indicated teachers’ decisions to retain their workplaces are associated with higher salaries. Therefore, since both the body of literature and the results obtained in this study indicate that satisfaction with salary is related to job satisfaction, the issue of salaries should not be ignored as an important factor in reducing teacher attrition rates.

Administrative Support

Administrator support, like salary satisfaction, had a positive effect in assessing teacher satisfaction. A 3.12 mean on a scale in which 1 = Strongly disagree and 4 = Strong agree indicates that participants in the national sample found their school administration’s behavior toward them to be generally supportive. Therefore, respondents were in moderate agreement that administrative behavior is supportive; teachers are somewhat satisfied with the support they are receiving from their administrators.

According to the regression analysis conducted in this study, administrative support, compared to other factors, was the strongest predictor with reference to the standardized beta coefficients obtained for the related hypothesis concerning satisfaction. This is not surprising in light of trends suggested by much of the literature. Many teachers who leave schools earlier than expected cite lack of administrative support as a primary or significant factor in their decision to leave. Prior research also indicates that administrator support correlates to teachers deciding to remain in the teaching profession. “Strong, high-quality administrative support is vital to successful teacher retention” (Corbell, 2008, p. 5). Lack of administrator support among teachers has been found to have a negative impact on the commitment of teachers, resulting in a
tendency to leave the teaching profession. Research indicates that in the presence of administrative support, teachers can be influenced to prolong their teaching careers with the end result of lowering teacher attrition rates. Research indicates that in the presence of administrative support, teachers can be influenced to prolong their teaching careers, thereby reducing teacher attrition rates (Czubaj, 1996; Ingersoll & May, 2011; Johnston, McKeown, & McEwen, 1999).

*Opportunity to Assist in Determining the Content of Professional Development*

The third variable related to teacher satisfaction was teacher’s opportunity to help determine the content of professional development opportunities. The mean response of 2.88 fell between the means for salary and administrator support. The regression results indicated that there is no strong relationship between having the opportunity to determine professional development and teacher satisfaction. This result is in contrast to some of the existing literature.

Although teachers only slightly agreed that they influence the school’s professional development program, this factor proved to be negatively correlated and the weakest factor relating to teacher satisfaction. Lieberman and Miller (2000) also reported that the variable had a negative correlation with teacher satisfaction. However, these findings run against the trend in much of the past research, which indicated that the lack of professional development opportunities was identified as one of the major factors directly contributing to teacher attrition. Glewwe and Kremer (2003) found that when teachers had the opportunity to acquire new skills to enhance their competency they had a greater tendency to be more committed to the profession due to higher satisfaction and increased confidence levels. With respect to the results obtained in this
study, the correlation between professional development and job satisfaction among teachers implies that the level of teacher attrition may be influenced by the opportunities offered to teachers for their professional development but not in a significant manner. The contradiction between the findings of this study and those of Lieberman and Miller (2000) and the other studies may be the result of several factors. One of those aspects could be that very often the outcomes of professional development opportunities are much less than expected. The teachers may not utilize the information or strategies presented in the professional development session and therefore may view it as a waste of time. Teachers also may view professional development as another added duty and simply not view having the opportunity to determine professional development as a primary factor in their satisfaction.

Perceptions of Worry and Stress Among Teachers

The second research question addressed worry/stress among teachers based on the level of school they taught as it related to student performance on state and local tests. The respondents were from the regional sample. The regional sample appeared to be demographically representative of the population of teachers who serve elementary, middle, and high schools within the district located in a southeastern state. The total mean for elementary school was 3.21, the total mean for middle school was 3.05, and the total mean for high school was 3.11. These means indicated that teachers in the regional sample were worried about the impact of their students’ scores on their job security. However, there were no significant differences between perceived levels of stress based on the school level taught.

The results from this part of the research were inconsistent with research in the past on the subject of varied levels of stress experienced by teachers who teach at
different school levels. Glewwe and Kremer (2003) found that teachers at the high school level have greater responsibilities in teaching mature students, thereby requiring them to prepare more thoroughly for lessons and tests. In addition to meeting the challenges of students scoring at least proficient on state tests, high school level teachers also must prepare students for college level work and college entrance exams. As a result, teachers in upper grades may experience increased stress in their jobs as compared to elementary school teachers. However, contrary to Glewwe and Kremer’s study (2003), this study did not find a difference in the level of stress based on the level of school taught.

This study also addressed, via Research Question 3, whether teachers in the national sample differed with those in the regional sample, all of whom work in the same district, in terms of worry/stress related to student test performance. States adopt unique approaches to testing and accountability programs. The rigor of standards for student performance on state tests differs from state to state (Bandeira de Mello, 2011). It was, therefore, of interest to determine whether teachers in the researcher’s home state differed from the national sample in their perceptions of stresses associated with student performance on standardized tests. Data were taken from the national sample and the regional sample for Research Question 3.

The means for worry/stress associated with test performance were 3.33 for the national sample and 3.11 for the regional sample. The national group and the regional group did not vary statistically in their perceptions. These means are based on a scale in which 1 = *Strongly disagree* and 4 = *Strongly agree*. The means indicated that the teachers in both samples are somewhat concerned that they could lose their jobs based on their students’ performance on state and local tests.
The similarity in perceptions between the two samples is somewhat surprising in that Mississippi standards for test proficiency are significantly lower than those in many other states as indicated by the most recent mapping studies conducted by the National Assessment of Educational Progress (Bandeira de Mello, 2001). Since the lower standards generate high rates of proficiency in the state, this researcher was expecting greater difference in the area of worry/stress.

Additionally, the Obama administration and many state legislatures have taken steps during the past few years to increase the role that student achievement scores play in measuring teacher effectiveness, evaluating teacher performance, and in revising salary systems for teachers. These policies will increase the stakes associated with student test scores and heighten the possibility of teacher termination based on said scores. Such policies are likely to exacerbate the already high levels of stress that teachers associate with this dimension of their work.

*Mandatory Routine Duties Among Teachers*

The fourth research question addressed stresses associated with mandatory routine duties and paperwork assigned by administrators in conjunction with pressures for students to perform on state and/or local tests and was based on the national sample. The mean for routine duties and paperwork was 2.89, and the mean for pressures for student performance was 1.88, with a scale of 1 = *Strongly disagree* and 4 = *Strongly agree*. The mean for pressures related to student performance on tests suggested that teachers feel pressure from this factor relative to job security; they noted more moderate stresses associated with paperwork and other routine duties.

The results of the linear regression showed that the combination of routine duties and paperwork assigned by administrators and pressures for students to perform
on state and/or local tests predicted teachers’ perceived levels of stress. The mean for pressures related to student performance on tests suggested that teachers feel pressure from this factor relative to job security; these responsibilities in tandem with paperwork and other routine duties create stress for teachers. This finding is supported by past research into these topics. Pressures placed on teachers by administrators for students to perform are perceived by Glewwe and Kremer (2003) as the most common factors associated with teacher attrition. Duties such as these have been found to have a great impact on teachers’ perceived stress as they strive to meet demands and achieve goals set by their administrators. The Alliance for Excellent Education (2005) considers mandatory routine duties for teachers to be one of the core factors contributing to high rates of teacher attrition.

Limitations

The following limitations were identified by researchers throughout the research process:

1. The regional sample, consisting of an elementary school, a middle school, and a high school, was limited to a specific district in a southeastern state. The original sampling plan, which addressed all schools in the district, was subsequently limited to these three schools.

2. The regional sample size of 150 teachers might ordinarily be considered to be relatively small. However, this limitation is diminished, in part, by the fact that the response rate among these potential respondents was so high.

3. The study used specific variables from the 1999-2000 Schools and Staffing Survey defining salary and benefits, administrative support, professional development, student performance on state and/or local tests, and routine
duties and paperwork assigned by administrators. Subsequent administrations of the SASS might yield different findings and conclusions.

4. The national data were collected by the National Center for Education Statistics; therefore, the analysis was limited to the information made available through that database.

Recommendations for Policy and Practice

This study examined the issue of teacher attrition and some of the underlying causes of attrition. Specifically, the study was undertaken to augment the understanding of reasons that teachers leave the field. The challenge continues to lie in how to structure, support, and fund strategies to address and resolve some of the causes of attrition. There is a significant amount of research in the field that relates to teacher attrition. Past research as well as the research conducted in this study indicated a need for a reduction of teacher attrition rates. Teacher attrition has not only a dire impact on the quality of education received by students but also on state and district budgets. Although some states and districts are attempting to address the problem of teacher attrition, it continues to pervade the profession. Therefore, it is clear that the findings of current and past research need to be integrated into policy and practice on a nationwide basis in order to effectively reduce the rates of teacher attrition. With this in mind, the following recommendations for policy and practice are offered:

Recommendations for policy and practice arising from this study and from the examination of literature include, but are not limited to, the following:

1. Districts should offer comprehensive, well-organized mentoring programs to new teachers. Providing new teachers with experienced teacher coaches offers the new teachers emotional support and gives them a sense of
belonging and camaraderie. More than half of new teachers who received formal mentoring stated that their teaching abilities had been greatly improved by the mentoring process (National Center for Education Statistics, 1991).

2. Survey elementary and secondary level teachers regarding ways to reduce their levels of stress. This study found that there were no significant differences in stress based on the level of school taught. However, as a profession, teachers continue to cite stress as a factor in their decision to leave the profession. One study found that 30% of all new teachers left the profession due to stressing factors (Nagel & Brown, 2003).

3. Districts could offer teachers bonus pay for significant improvement in student test scores. Certo and Fox (2002) found that educators would be supportive of incentives for those who exceed expectations in student progress.

4. Administrators should provide teachers feedback and support in their teaching. Teachers may struggle or feel unsure of their abilities whether it is in the delivery of a lesson or in classroom management. Useem and Neild (2001) found that administrators have a positive influence in increasing teacher satisfaction and reducing teacher attrition.

5. Districts should monitor teachers for signs of stress related to student performance and mandatory duties and provide them with stress management techniques and support.
Recommendations for Future Research

Future research in reference to factors that are related to teacher attrition should include the following recommendations:

1. Examine the effectiveness of various incentive programs for retaining teachers. Many states offer incentives such as housing allowances, retention bonuses, time off rewards, and assistance with student loan payments. It would be useful to determine whether the states employing these measures have reduced their rates of attrition.

2. Conduct research to determine whether success in meeting standards of progress in standardized tests, as measured by state accountability standards and Adequate Yearly Progress (AYP), has a bearing on teachers’ perceptions of their teaching and decisions to stay in the profession.

3. Develop research to determine if there is a relationship between a school’s status in a system of high stakes accountability and the level of teacher autonomy/empowerment in the school.

4. Research the issue of whether attrition rates are higher among alternate route teachers who may lack adequate preparation for the demands of the classroom and student needs.

5. Examine whether attrition rates are affected by student behavior and levels of parental support.

6. As the implementation of systems of evaluation and teacher compensation based on student performance scores takes place, study the impact of such policies on teacher retention/attrition.
7. In regard to the regional portion of this study, the scope was limited by the
district’s superintendent, who agreed to allow teachers from only three
schools to be surveyed. Surveying an entire district, or multiple districts,
may provide different and/or more reliable results.

Summary

This study addressed factors that are related to teacher attrition. It is hoped that
this study will present insight into teachers’ perceived levels of stress caused by certain
variables that may be related to teacher attrition rates. Although the relatively high
rates of teacher attrition may be alarming, the literature provides some evidence that this
trend might be reversed. The challenge continues to be determining how to structure
and support states in addressing and resolving the underlying causes of attrition. It is
this researcher’s desire that educators and policymakers will utilize this information to
help alleviate the stresses that their individual schools and school districts experience
due to teacher attrition.
APPENDIX A

IRB APPROVAL

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board
118 College Drive #5147
Hattiesburg, MS 39406-0001
Tel: 601.266.6820
Fax: 601.266.5509
www.usm.edu/irb

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 28051502
PROJECT TITLE: Factors Related to Teacher Attritions
PROPOSED PROJECT DATES: 11/01/07 to 08/01/08
PROJECT TYPE: Dissertation or Thesis
PRINCIPAL INVESTIGATORS: Leslie Ann Beaugaz
COLLEGE/DIVISION: College of Education & Psychology
DEPARTMENT: Educational Leadership & Research
FUNDING AGENCY: N/A
HSPRC COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 05/15/08 to 05/14/09

Lawrence A. Hoeman, Ph.D.
HSPRC Chair

5-19-08
Date
APPENDIX B

PERMISSION TO ADMINISTER SURVEY

Permission to Administer Survey

Mr. Rodolfich,

I am currently working to complete my dissertation. This is the last requirement in the pursuit of my Educational Doctorate in administration. I am writing to request your permission to administer a survey, which will be approved by the University of Southern Mississippi’s Institutional Review Board, to a select group of teachers in the district.

I plan with your permission to administer the 1999 – 2000 School And Staffing Survey to certified teachers at one high school, one middle school and one elementary school. My plan is to present the survey at a regularly scheduled faculty meeting with an explanation of its purpose. In addition I will provide the information for returning the questionnaire once it is completed. The questionnaire should not take more than 15 – 20 minutes to complete. Although the content and substance of the questionnaires is confidential once they are filled out, I would be pleased, upon request, to share the results of my research.

Thank you in advance for your consideration and time.

Sincerely,

Leslie Ann Beaugez

Permission granted by
APPENDIX C

CONSENT FORM

Consent Form

Participant’s Name: ____________________________

Consent is hereby given to participate in the research project entitled “FACTORs RELATED TO TEACHER ATTRITION”. All procedures and/or investigations to be followed and the purpose, including any experimental procedures, were explained by ______________. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected.

The opportunity to ask questions regarding the research and procedures was given by the researcher. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is will be held strictly confidential, and no names will be disclosed. Any new information which may develop during the project will be provided if that information could affect the willingness to continue participation in the project.

Questions relating to the research may be directed to Leslie Beaugez by calling 228-475-4840. This project and consent form have been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns regarding the rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Dr. #5147, Hattiesburg, Ms. 39406-0001, (601) 266-6820.

__________________________  __________________________
Signature of Participant       Date

__________________________  __________________________
Signature of person explaining the study  Date
REFERENCES


Chambless, J. R., Sweeney, M. V., & Thompson, W. D. (1999). *The Mississippi Teacher Fellowship Program: A state-based initiative for the recruitment and


Harrison, D. (2006, September 17). Teacher turnover spikes: Some former Roanoke teachers say morale was low and pressure from No Child Left Behind was high. *The Roanoke Times.*


