

# JOB SATISFACTION AMONG ELEMENTARY SCHOOL TEACHERS

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## **ABSTRACT**

SANDY CHAMBERS: Job Satisfaction Among Elementary School Teachers  
(Under the direction of Frank Brown)

This study examined teacher job satisfaction as influenced by school factors. One hundred and twenty-four elementary teachers, from one large urban school district in North Carolina, rated their level of job satisfaction. The independent variables were schools factors of (a) academic achievement, (b) student racial composition, and (c) social economic status; and teacher variables of (d) age, and (e) years of experience. The dependent variable was job satisfaction as measured by the Job Satisfaction Questionnaire, a modified version of the Job Descriptive Index (Balzer et al. 2000). The questionnaire measured overall job satisfaction as well as satisfaction with (a) pay, (b) supervision, (c) work itself, (d), promotion, and (e) co-workers. A two-way ANOVA was used to compare the means, holding school achievement constant across all analyses. The theoretical framework used in this study was Maslow's Hierarchy of Human Needs (1943). This theory proposes a hierarchy of human needs where five basic needs or goals are organized in an order according to relative prepotency (a) physiological, (b) safety, (c) love, (d) esteem, and (e) self-actualization. As the lower order needs are met, higher order needs emerge and motivate behavior. The first four basic needs are described as *deficiency needs*. Self-actualization is considered a higher or growth need that continues to motivate behavior after it is satisfied. This study proposed teachers experience job dissatisfaction due to unmet needs.

All elementary school teachers in the researched district (Kindergarten through fifth grades) were sent the Job Satisfaction Questionnaire (Balzer et al., 2000) survey via e-mail that contained a link to the survey created through a web-based survey, Zoomerang (1999). The survey was active for three weeks with one reminder e-mail sent each week. Out of the 1300 certified teachers in the researched district; K-5 classroom teachers of who received the survey were 715.

Findings showed elementary teachers were generally satisfied with their job. There were no significant findings for variables specific to the schools; however, significant results revealed teachers with 0-4 years of teaching experience were generally less satisfied with their job than teachers with 5 or more years of experience.

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## **Chapter One: Introduction**

### **Introduction**

The purpose of this research is to examine teachers' job satisfaction. Since the 1954 *Brown v. Board of Education* Supreme Court ruling desegregating public education across America, educational news and policy has focused on discrimination, equality issues, and the improving of public education for all of America's children. The Elementary and Secondary Education Act (ESEA) of 1965 provided financial support for children categorized as educationally and economically disadvantaged. Reauthorized since its enactment in 2001, the ESEA is now known as the No Child Left Behind Act (NCLB). Continuing the premise of the ESEA, now NCLB is based on four principles: stronger accountability for students and teachers, increased flexibility and local control, expanded options for parents, and effective teaching methods (U.S. Department of Education, 2008). Basically, the law mandates state administered standardized testing, flexibility within the school budget (allocation of funds to various NCLB programs), parental options in regards to sending children to "better" public schools than their "failed" home schools, and innovative professional development for faculty and staff.

Some 50 years after *Brown v. Board of Education* (1954), limited school desegregation is now reality. The courts could not, however, change feelings and attitudes, and with more Black children enrolling into urban schools, White families began fleeing to suburbia areas leaving urban schools with more poor and minority

students to serve (*Brown v. Board of Education*, 2010). Thus student demographics of schools began changing in most urban areas.

With shifting racial and ethnic distributions of public school students, high-poverty schools (schools with more than 75% of students eligible for free or reduced-price lunch program) are enrolling larger percentages of Black and Hispanic-Latino students. According to the National Center for Education Statistics (Marvel, Lyter, Peltola, Strizek, & Morton, 2006), enrollment projections are expected to set records each year from 2008 through 2017 in the United States. The demand for teachers will increase and intensify to meet increasing student enrollments. Unfortunately, teacher turnover is increasing in part due to teacher job dissatisfaction (Marvel et al., 2006, Ingersoll, 2002). According to the National Center for Education Statistics (2008), there is approximately a 21.1% turnover among high-poverty schools versus 14.2% from low-poverty schools. Nationally, the teaching profession loses approximately 13.2% of its teachers annually to attrition, including 7.2% to career migration and 6.0% to retirement (NCES, 2008). The overall teacher attrition rate in urban, high-poverty public schools is 14.4%: including 8.7% attributable to career migration and 5.7% to retirement (NCES, 2008). The typically reported reasons for this attrition include retirement, school staffing actions, and such personal reasons as pregnancy, pursuit of another job, and dissatisfaction (Ingersoll, 2001).

For various reasons, many teachers become disillusioned or dissatisfied with the profession (Dworkin, 1980; Diamant & Lachman, 1987; Mont & Rees, 1996; Ingersoll, 2001; Guin, 2004; Darling-Hammond & Loeb, 2005; Zumwalt & Craig, 2005; B. Smith & D. Smith, 2006; Kersaint, Lewis, Potter, & Meisels, 2007; Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2008). Thus, job satisfaction is important for employers seeking to retain and

recruit quality employees. Gathering feedback from employees regarding their thoughts and feelings about their job is an important process in assessing attitudes and making improvements (Wiltse, 2008). For example, many businesses conduct annual satisfaction surveys to assess their employees' job satisfaction. Job satisfaction can influence overall organizational functioning, the employees' emotional well-being, their treatment, and their cooperative behavior (Spector, 1997). Most managers also correlate job satisfaction with organizational health indicators: increased productivity, minimal absenteeism, profit, customer satisfaction, fewer errors, and lessened turnover (Cranny, Smith & Stone, 1992; Parker & Martin, 2009). Accordingly, most school systems conduct annual school satisfaction surveys to gauge job satisfaction levels among teachers.

Job satisfaction can be described as one statistically significant measure of effective schools (Zigarelly, 1996). Evans (1997) describes job satisfaction as ambiguous due to lack of distinction between what is *satisfying* and *satisfactory* and that reconceptualizing the term into job fulfillment and job comfort is suggested. Bogler (2002) defines job fulfillment as "one's assessment of how well the job is performed, and is based on the assumption that achievements enhance both job-related and achievement-related satisfaction (p. 666). Job comfort "relates to the degree to which one is satisfied with the conditions of the job (Bogler, 2002, p. 666). In this study, job satisfaction is primarily an individual's cumulative feelings about their job (Gruneberg, 1976; and Spector, 1997).

In a recent survey of nearly 105,000 North Carolina school teachers, less than half felt that their school was a good place to teach and learn (NC Office of The Governor, 2008). A 2006 survey of 1,001 public school teachers found significant improvement in teachers' job satisfaction over the past two decades; 56% of teachers reported being *very satisfied* with

their careers, in comparison to the 40% of teachers polled in 1984 (Greifner, 2006). Klassen & Anderson (2009) replicated aspects of the 1962 W. G. A. Rudd and S. Wiseman job satisfaction study by polling 210 teachers in southwest England. Teachers were asked to rate their level of job satisfaction, and the authors compared their results with the results of the 1962 survey. The analyzed data showed that teachers in the 2007 sample rated their job satisfaction significantly lower than teachers in the 1962 sample (Klassen & Anderson, 2009).

In determining job satisfaction, at least four measures interrelate positively with each other (a) the characteristics of the individual (b) the level of individual compliance (c) work situations and (d) work roles. Measuring job satisfaction establishes reasonable actions for employers and policy makers to take, and a direction for future research (Smith, Kendall & Hulin, 1969). In the researcher's thirteen years of educational experience as a teacher and currently as a principal, she has observed and dealt first hand with teachers' frustrations with their employment. Some teachers have resigned mid-year to teach in another school district and teachers resign at year's end to leave teaching altogether or to transfer to another school in the same district. Teachers, generally, expressed their dissatisfaction with student issues. From my experience in one school district, many teachers who express job dissatisfaction (most teachers are White) work in high-poverty schools. Many teachers leave schools that serve poor minority students. To what can one attribute this attrition?

The research reported here sought to assess elementary school teachers' satisfaction with their employment in one urban school district. Hopeful, this information may prove useful in helping school systems improve the job satisfaction of elementary school teachers which in turn could help with teacher shortage (Webb & Norton, 2003).



## The Problem

School teachers are leaving the profession at alarming rates and turnover is higher in high-poverty schools than in low-poverty public schools (Shen, 1997; Winter, Brenner, & Petrosko, 2006; NCES, 2008). More over, teacher attrition, in low-achieving schools, is higher (Hanushek, Kain, & Rivkin, 2004; Boyd et al., 2008) as well as schools with higher percentages of minority students-more specifically Blacks (Mueller, Finley, Iverson, & Price, 1999; Scafidi, Sjoquist, & Stinebrickner, 2007).

Based upon Maslow's theory of human motivation (1943), one of the most frequently cited theories of motivation in the management and organizational literature (Wahba & Bridwell, 1987), Gawel (1997) concluded that the esteem needs of teachers are not being met, causing dissatisfaction and stress. Maslow (1943) proposed a hierarchy of human needs where five basic needs or goals are organized in an order according to relative prepotency (a) physiological, (b) safety, (c) love, (d) esteem, and (e) self-actualization. As the lower order needs are met, higher order needs emerge and motivate behavior. The first four basic needs are described as *deficiency needs*: the individual feels nothing if basic needs are met; but feels anxious if basic needs are not met (Reid-Cunningham, 2008). Self-actualization is considered a higher or growth need that continues to motivate behavior after it is satisfied.

The most basic set of human needs are physiological: eating, breathing, drinking, and excretion (Maslow, 1943). These needs dominate human beings as they strive to maintain homeostasis. As physiological needs are met, safety needs emerge as motivators (Maslow, 1943). Human beings search for order and predictability, especially young children. As physiological and safety needs are met, love needs emerge as motivators (Maslow, 1943). Love needs are described as social relationships, connections with people, and a sense of

belonging; not in sexual terms. Next, esteem needs emerge as motivators when physiological, safety, and love needs are met (Maslow, 1943). Esteem needs refers to the opinions of others about oneself, and self-esteem. People who have satisfied their esteem needs tend to be productive and well adjusted (Reid-Cuningham, 2008). When all four basic needs are satisfied, self-actualization needs emerge as motivators (Maslow, 1943). Self-actualization refers to human beings embodying their full potential, and is a lifelong process.

In a study of 30,000 teachers, salary proclaims to be a contributing factor to reasons good teachers leave the profession due to less satisfaction with their personal achievement self-esteem than with their achievement of self-actualization concluding that self-actualization is a proponent need for esteem (Gawel, 1997). Iwanicki and Anderson (1984) position that teachers' struggle to find job satisfaction through fulfillment of professional needs. In this study of 808 teachers, need deficiency is determined by the level of fulfillment teachers derive from work. Sources of dissatisfaction related to conditions of work are related to the fulfillment of lower level security and social needs of teachers. Sources of satisfaction related to meeting higher level esteem, autonomy, and self-actualization needs (Iwanicki & Anderson, 1984).

Various reasons account for why teachers move from school to school or leave the profession (Dworkin, 1980; Diamant & Lachman, 1987; Mont & Rees, 1996; Ingersoll, 2001; Guin, 2004; Darling-Hammond & Loeb, 2005; Zumwalt & Craig, 2005; B. Smith & D. Smith, 2006; Kersaint, Lewis, Potter, & Meisels, 2007; Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2008). Some teachers who move from school to school seek such better working conditions in the form of improved student discipline, a more collaborative environment, or

more congenial teaching assignments (Johnson and Birkeland, 2003). Many teachers who leave the profession seek more control over their work environment (Marvel et al., 2006).

Ingersoll (2002), Webb and Norton (2003), and Inman and Marlow (2004) revealed that job dissatisfaction constitutes the reason offered by 50% of teachers who leave the profession. Also, Bobek (2002) found that dissatisfaction explains why 50% of new teachers leave the teaching profession within the first five years. After their first year of teaching, 11% of new teachers leave; another 10% leave after the second year; 29% leave after the third year; and 39% leave after the fourth year (Ingersoll & Smith, 2003). Truch (1980) reported that 90% of teachers questioned in surveys reported feelings of stress and 95% indicated a need for stress-management strategies. Other survey results (Smith, Brice, Collins, Matthews, & McNamara, 2000) suggest that teaching may be the third most stressful of all occupations, following air traffic controllers and surgeons. Kyriacou (1987), Dunham (1992), and Gold and Roth (1993), report that teaching is the most stressful occupation.

Teacher turnover creates school staffing problems, and urban school districts face greater teacher attrition problems than suburban districts. Duarte (2000) reports that urban districts tend to have high teacher turnover, large number of new and inexperienced teachers, poor working conditions, and a “growing disparity between the demographics of teachers and students” (616). Conditions resulting from inadequate resources, discipline or safety issues, and a lack of parental involvement (Simurda, 2004) are just a few of the issues facing urban schools.

In summary, teacher turnover is greater in schools with high poverty, a high minority population, and low achieving students. Teaching does not provide many extrinsic rewards--they tend to be mostly intrinsic. Teachers’ salary is not compatible with the amount of work a

high-quality job requires. In a profession that educates our youth, we need to retain more quality teachers in the profession. Certain school variables have a presumed influence upon teachers' job satisfaction, and their retention rate in the classroom. These variables will be explored in this study.

### **The Study**

This research examines the job satisfaction of elementary school teachers in an urban school district. It explores the relationship between teachers' job satisfaction and school factors. School factors include variables of the school (a) school academic achievement level, (b) school social economic status (SES), and (c) student racial composition; and teacher variables (e) age, and (d) years of experience; that are crucial factors intrinsic to each school. Elementary teachers were asked to complete a job satisfaction questionnaire and provide demographic information for this study. This study sought to reveal how selected school and teacher variables influence teachers' job satisfaction. Typical teacher variables of gender, race, and roles were not chosen because the researcher believes there is more diversity within the teacher variables of age and experience. The theoretical framework for this study depended upon previous research on job satisfaction and behavior motivation.

For purposes of this study, job satisfaction is defined using Balzer, Kihm, Smith, Irwin, Bachiochi, Robie, Sinar, and Parra's (2000) Job Satisfaction Questionnaire. This questionnaire measures five facets of job satisfaction--work itself, pay, promotion, supervision, and co-workers; and measure overall job satisfaction. Attributes that identify satisfaction related to work include amount of work, job complexity, changes in responsibility, job autonomy and enrichment, changes in responsibility, creativity and task variety (Balzer et al., 2000). Work that can be accomplished and intrinsically challenging are

satisfying. Pay satisfaction is based upon the perceived difference between actual pay and expected pay. Factors influencing pay satisfaction are influenced by the personal financial situation of the employee, the economy, and pay previously received (Balzer et al., 2000). Satisfaction with promotion measures the employee's satisfaction with the company's promotion policy, frequency of promotions, and desirability of promotions (Balzer et al., 2000). Supervision satisfaction reflects the employee's satisfaction with his or her supervisor. Supervisors that are employee centered, listen to feedback, praise good performance, and collaborate tend to receive higher satisfaction ratings (Balzer et al., 2000). Co-worker satisfaction assesses the employee's level of satisfaction with his or her fellow employees. The degree of satisfaction is determined by the work-related interaction among co-workers, and the mutual liking or admiration for co-workers (Balzer et al., 2000). The facets mentioned above can be generalized to most jobs and job levels and have considerable conceptual and empirical support. In addition, measuring satisfaction can be researched in a limited amount of time.

An Analysis of Variance (ANOVA) statistical design was used to assess relationships between teacher and school variables and job satisfaction. To achieve this purpose the study sought answers to the following research questions.

1. What teacher variables (age and experience) influence his/her job satisfaction as measured by a Job Satisfaction Questionnaire (Balzer et al., 2000)?
2. What school variables (social economic status, academic achievement level, student racial composition) influence his/her satisfaction as measured by a Job Satisfaction Questionnaire (Balzer et al., 2000)?

The population sample for this study was elementary teachers employed in the county public schools in North Carolina. The researched school district is the seventh largest in the state.

The researched school district is a county wide school district including 53 schools enrolling approximately 33,000 students with 2,300 teachers. The student racial composition is: 53.9% African-American, 22.6% White, 17.1% Hispanic-Latino, 3.6% multi-racial, 2.6% Asian, and 0.2% Native American. The students' poverty rate as represented by number of students qualifying for free and reduced-price lunch is 57.05%. Schools are mostly neighborhood, which mean the schools in the city part of the county have a high concentration of Black and Hispanic-Latino students versus the schools outside of the city, which evidence more diversity.

The researched district's elementary schools have a high teacher turnover rate. Among elementary schools for the 2006-2007 school years, the turnover rate of all teachers was 31%. Of tenured teachers, 15.97% left the system, and of teachers in the Initial Licensure Program from one to three years in the system, 15.03% left (State Board of Education, 2007 – researched district's Human Resources Dept.). One elementary school lost 29.17% of its tenured teachers, and 22.22 % of its new teachers. Another school lost 28.57% of tenured teachers, and 25% of its new teachers. Few industries could be successful with a turnover rate of around a third of its staff each year. The elementary schools in the researched district, in the 2003-2004 school years the system lost 17.11% of its teachers, and in the 2004-2005 school year 17.54% left. In the 2005-2006 school year 19.20% of the teaching staff left. More recent data reports a 16.70% turnover rate in 2007-2008 with the North Carolina State average being 9.36%, and 2008-2009 data reports a 16.98% turnover rate. The top three reasons for leaving stated on exit surveys are a) to teacher elsewhere, b) retire, and

c) family relocation. Clearly, the problem of teacher attrition in the researched district is critical.

This research seeks relationships between teachers' job satisfaction (Balzer et al., 2000) and selected school variables. Using Maslow's Hierarchy of Human Needs Theory, this research posited that teachers' job satisfaction is related to certain teacher and school variables. The researcher used the ANOVA statistical design to assess whether school variables influenced teachers' job satisfaction.

### **Significance of the Research**

This research provides information about teachers' job satisfaction and selected teacher and school variables among elementary teachers. In the sampled school district, the researcher has over thirteen years of educational experience in elementary schools. The researcher chose to survey elementary teachers because the teaching population is more homogeneous--teachers teach all subjects and the same subjects as opposed to the departmentalization that occurs in middle and high schools. The curriculum provides the beginnings and basic skills in reading, writing, and mathematics, as well as introductions to science, health, art, and physical education (Howey and Post, 2002). The elementary school setting provides greater differences between teachers and students in age, strategic sophistication, and physical size in most cases (Hargreaves, 2000). "Elementary classrooms came across as places of emotional intensity where personal and physical closeness and expectations of professional warmth in continuous and enduring classroom relationships create a solid basis for emotional understanding" (Hargreaves, 2000, p. 824).

It appears reasonable to conclude that there is a need for more research on elementary teachers' job satisfaction after the establishment of No Child Left Behind (NCLB) and state

accountability standards. If one can identify stress factors among teachers after new state and federal accountability measures, maybe school district's policy makers and administrators will have additional more useful information to design and implement measures to relieve teachers' stress and improve their job satisfaction. Justice, Greiner, and Anderson (2003) polled 159 teachers in Texas found "teachers leaving the profession cite low teacher morale, enhanced by school and district pressure for high student achievement on standardized tests" (p. 384). Hill and Barth (2004) assert that NCLB has changed the 'educational climate' wherein teaching, already a stressful job, has become more stressful. Thus, examining teachers' satisfaction levels should help identify specific teachers' needs which may help reduce stress and improve job satisfaction.

This research provides insight about teacher's job related needs as teachers. Schools concerned with recruiting and retaining quality teachers should remain alert to teachers' needs. Eliminating factors pertaining to job dissatisfaction are necessary (Williams, 1978).

### **Limitations of the Research**

This research used a Job Satisfaction Questionnaire assessing the job related needs of teachers in one school district eliciting responses to questions about their level of job satisfaction while controlling for teacher and school variables. The researcher assumed that low teachers' job satisfaction is related to higher teacher turnover rates. This study appeared, however, to be limited by the following four factors.

- The measure of teachers' job satisfaction is based upon the teachers' perceptions.
- The demographic data may not reflect the special situation in all schools.
- The participants may have occasionally exaggerated their answers to some questions.
- This research is limited to elementary teachers.



In summary, measuring job satisfaction has its inherent limitations. Many of the limitations coincide with the characteristics of the individuals participating in the study, their level of compliance and understanding of what is being asked may not be accurate. This research was limited to elementary teachers in 29 schools in one school district.

### **Definition of Terms**

This research used a variety of variables. Teacher and school variables served as independent measures. Measurements on the Job Satisfaction Questionnaire constituted the dependent variable. Maslow's Hierarchy of Human Needs Theory provided the theoretical framework for this research. Definitions for important terms are listed below.

**Accountability System.** Each state sets academic standards for students at each grade level. The results of these annual tests are reported to the public (U.S. Department of Education, 2001). The current accountability model for the district in this study operationalizes *growth* as academic change.

**Elementary School.** This term refers to a school in which the student body consists of consecutive grades that include kindergarten through fifth grades.

**End-of-Grade (EOG).** This term refers to tests designed to measure student performance on goals, and grade-level competencies specified in the standard course of study.

**Dependent Variables.** As measured by the Job Satisfaction Questionnaire.

1. Overall job satisfaction
2. Work itself
3. Pay
4. Promotion

5. Supervision
6. Co-workers

**Independent Variables.** As measured by school and teacher variables.

***School Variables.*** The school characteristics are the school's racial composition, academic achievement level, and social economic status.

1. *Social economic Status.* This term denotes the percentage of students receiving free or reduced-price school lunches.
2. *School Achievement.* Student test scores on third, fourth, and fifth graders on the state mandated mathematics and reading tests on a scale of 1 to 4.
3. *Racial Composition.* The percentage of African-American, Caucasian, and Hispanic-Latino students in schools.

***Teacher Variables.*** The teacher characteristics are the teachers' age, and years of teaching experience.

4. *Age.* Age is categorized as (a) 22 and 32, (b) 33 and 42, and (c) 43 and above.
5. *Years of Experience.* Experience is categorized as (a) 0-4 years, (b) 5-10 years, and (c) 11 and more years.

**Job Satisfaction.** Satisfaction is primarily an individual's total feelings (likes--that is, satisfactions; and dislikes--that is, dissatisfactions) about the job (Spector, 1997; and Gruneberg, 1976).

The information described above specifies terms used throughout this study. It provides familiarity with current educational and served as a useful foundation for concepts used in this study.

## **Assumptions of the Research**

Teachers' job satisfaction today may have changed in reaction to state and federal accountability testing of students and other accountability measures—racial sub-groups and the ability of students to transfer out of failing schools. These changes require schools to be identified annually as *successful* or *failing*, and these designations affect student enrollment, demand for replacement teachers, and decisions by teachers to stay, move, or leave teaching. Meanwhile, urban school districts face challenges from student and from teacher attrition. This study assesses elementary teachers' job satisfaction and results from this study should provide valuable information about teachers' satisfaction with their work. The Job Satisfaction Questionnaire developed by Balzer et al. (2000) is one of many job satisfaction scales available; however, their questionnaire is most frequently used to conduct job satisfaction research, and a better measure of job satisfaction among teachers. The questionnaire requires less time and administers in approximately ten minutes. The questionnaire may be scored quickly and is a useful tool for spotting problem areas within organizations (Balzer et al., 2000). The researcher expected to find a positive correlation between selected school variables and teachers' job satisfaction. If teachers are not having their job related needs met, higher teacher turnover may be the result (SECTQ, 2004). In short, education continues to change and policy must change as well. This research assumes that elementary teachers will show some levels of job dissatisfaction due to high teacher turnover in the school district.

## **Theoretical Framework**

Employee job satisfaction is important to all formal organizations including education. Job satisfaction is influenced by both work behavior (attendance, cooperation with

others, quality output) and the work environment (acknowledgment and rewards from supervisor, work itself) (Balzer et al., 2000). While several theoretical frameworks address job satisfaction, the most appropriate framework for this research is Maslow's Hierarchy of Human Needs Theory (1943) which states that humans have specific needs they seek to satisfy in a particular order. In educational organizations, Maslow's theory is best observed and applicable with each level of need and a teacher's behavior is motivated by an attempt to satisfy the need most important at that time (Maslow, 1943; Hoy & Miskel, 2008).

Maslow's Needs theory emphasizes five basic categories of human needs. These needs are arranged in a hierarchical order of prepotency--lower-level needs must be satisfied before the higher level needs may be satisfied (a) physiological (b) safety and security (c) belongingness and love (d) esteem and achievement and (e) self-actualization (Maslow, 1943, 1970; Locke, 1976; Hoy & Miskel, 2008). The study of work motivation is related to job satisfaction. For this research, Maslow's theory--recognizing that humans have needs that must be satisfied but in a particular order--is the foundation as it links most appropriately with the instrument used to measure job satisfaction among elementary teachers.

This Job Satisfaction Questionnaire (Balzer et al., 2000) measures how certain work situation influence the needs of teachers. This questionnaire blends with Maslow's Needs theory in that each of the five need groups (work itself, pay, promotion, supervision, and co-workers) are connected with each tier in Maslow's Need Hierarchy of needs. The school variables should influence teachers' job satisfaction (Hoy & Miskel, 2008). Maslow's Hierarchy of Human Needs Theory served to guide this research. This research seeks to assess the independent variables list on the dependent variables, teachers' job satisfaction levels.

## **Theory and Literature**

Wolf (1970) provided an updated explanation of Maslow's Needs theory in explaining job satisfaction through the lens of need gratification. Individuals seek to satisfy low-level needs first and either experience satisfaction or dissatisfaction to the degree that the need is satisfied or not satisfied. Individuals seek on-going satisfaction of lower order needs, and then begin attempting to satisfy higher order needs. Other studies (Sweeney, 1981; Porter, 1961; Trusty and Sergiovanni, 1966) have shown that in many occupations, including teaching, higher order needs deficiencies tend to cause most job dissatisfaction. Cockburn (2000) interviewed 12 elementary teachers about why they were satisfied with their job. Teachers expressed satisfaction with their basic needs being met (a) self-fulfillment, (b) co-worker relationships, and (c) challenges were reasons they felt satisfied with teaching. Erlandson and Pastor (1981) surveyed 150 teachers in a variety of districts in different geographically regions and found that teachers with higher-order needs were least satisfied with teaching, and that schools generally do a better job of satisfying basic needs.

One may view human motivation in organizational settings as individuals having motives and needs that drive their behavior in those settings; and Maslow's theory provides lens for understanding job satisfaction. Job satisfaction, again referring to what employees like about their jobs, is a part of the daily work environment vital for maintaining consistency and stability. Certain work situations (variables) can cause job dissatisfaction; however, this research restricts itself to the influence school variables have on the job satisfaction of teachers.

With teacher shortages on the increase, new empirical studies (Guin, 2004; Day, Elliot, & Kington, 2005; Yong & Yue, 2007; Kearney, 2008; Grayson & Alvarez, 2008;

Kersaint, Lewis, Potter, & Meisels, 2008) have been exploring factors that influence teachers that move from school to school, from district to district, or leave the teaching profession. As early as the 1950s, researchers began examining job satisfaction and discovering patterns in the careers of teachers. Grissmer & Kirby (1987) reviewed personnel data from 40,000 teachers. The data showed that a teacher's age and experience influence their attrition rate--high for young teachers, low for middle-aged teachers and high for older teachers. Murnane, Singer & Willet, (1989a) examined data on 5100 North Carolina teachers. The data showed that less experienced elementary teachers tend to leave the profession than more experienced teachers.

Conflicting findings have emerged with regard to a teacher's gender and attrition. Ingersoll (2001) reviewed the Schools and Staffing Survey from the National Center for Education Statistics (Ingersoll, 1995) and found that male teachers are more liable to quit than female teachers, while Rees (1991) found males and females exhibiting similar attrition behavior before getting married but women becoming more liable to leave after they get married.

With respect to school characteristics, if the racial make-up of the student body is largely minority, poor and urban; analysis of the 1999-2000 Schools and Staffing Survey indicate that teachers are more liable to leave teaching or transfer to another school (Strunk & Robinson, 2006). These characteristics are known to influence school working conditions that may cause dissatisfaction among teachers (Loeb, Darling-Hammond, & Luczak, 2005). Using data from educational surveys, Darling-Hammond (1997) found teachers dissatisfied with aspects of the school environment: low student motivation, lack of administrative

support, and inadequate pay. Pay is, in fact, consistently associated with teachers' dissatisfaction, mainly because their compensation is low.

This research used a survey instrument to determine the level of job satisfaction among elementary teachers in an urban school district. The results should help schools better meet teacher needs. The study is expected to reveal that elementary teachers' job satisfaction is influenced by school factors in the researched district.

### **Summary**

In North Carolina, teachers are increasingly in high demand, since the number of teachers entering into the profession failed to equal the number of teachers leaving the profession. Education administrators and policy makers began asking teachers to complete exit surveys in hopes of learning the reasons for teachers' flight. In 2002, the National Education Association (NEA) reported that the annual turnover rate for teachers was 15.9% (Caroll & Fulton, 2004); 539,778 teachers moved to other school districts or left the profession. Major reasons for teachers leaving the profession were: a lack of professional support, poor school leadership, low pay, and personal reasons. Many teachers leave the profession ("leavers") or they move from one school to another ("movers") to increase job satisfaction. In short, a school's work environment is crucial in fostering job satisfaction among teachers (Johnson & Birkeland, 2003).

This research assesses the job satisfaction of elementary school teachers in the researched district. This district has a high teacher turnover rate. Over half of its student's are minorities, and almost half of the students are from poor families and qualify for free and reduced-price lunches. The schools racial composition is unbalanced with the inner-city schools having a higher minority enrollment. Schools with higher concentrations of

minorities, poor students, and students struggling academically, the teacher turnover rates are higher (Loeb et al., 2005). The importance of this research lies in its efforts to correlate personal and school characteristics of a teacher's job with their job satisfaction. This information may be used to improve teachers' job satisfaction.

This study uses a Job Satisfaction Questionnaire (Balzer et al., 2000) that measures teachers' job satisfaction, and it is assumed that this instrument will provide a valid assessment of job satisfaction. In developing this instrument, Balzer et al. (2000) researched early studies of job satisfaction (Smith et al., 1969) finding five facets of satisfaction that were clearly distinguishable from others with discriminably different aspects of the work situation (a) work itself, (b) pay, (c) promotions, (d) supervision, and (e) co-workers, plus overall job satisfaction. Satisfaction with work involves intrinsically challenging and accomplishable work (Herzberg, Mausner, Synderman, 1959; Smith et al., 1969). Satisfaction with pay addresses attitudes towards pay--actual and expected (Smith et al., 1969). Satisfaction with promotions measures the employees' satisfaction with the company's promotion policy and its implementation (Porter, 1961; Locke, 1976; Smith et al., 1969; Herzberg et al., 1957). Satisfaction with supervision involves the employees' satisfaction with his or her supervisor (Vroom, 1964; Smith et al., 1969). Satisfaction with co-worker assesses an employees' satisfaction with his or her co-workers (Locke, 1976; Smith et al., 1969). These facets appear to generalize most jobs and job levels, and have received considerable conceptual and empirical support (Balzer et al., 2000). Overall job satisfaction correlates with global measures of life satisfaction, intention to leave, trust in management, and identification with the organization (Balzer et al., 2000).



The researcher used Maslow's Hierarchy of Needs theory as the framework to examine job satisfaction (Miskel, 2008). This theory is widely used to study motivation in organizations. Maslow's theory (Maslow, 1943, 1970) is derived from a need hierarchy-an inborn or innate set of needs specific to humans arranged in hierarchical order (from lowest to highest) with the lowest being the most potent.

1. Physiological needs--food, sex, sleep, oxygen.
2. Safety and security needs--a need for physical safety, freedom from fear or anxiety, need for order and structure.
3. Social or belonging needs--friendship, acceptance by others, belonging to groups.
4. Esteem needs--achievement, appreciation, and self-respect.
5. Self-actualization needs--maximizing one's potential, autonomy, and creativity.

Using Maslow's motivational theory, the researcher seeks to determine whether teacher and school variables influence job satisfaction among elementary teachers in Durham, North Carolina.

The next chapter provides a review of literature on job satisfaction research and Maslow's theory; and examines the literature on the influence of school variables on teachers' job satisfaction. The chapter concludes with a review of school variables and job satisfaction.

## **Chapter Two: Literature Review**

### **Introduction**

This study examines the influences of selected school variables on teachers' job satisfaction (Perrachione, Peterson, & Rosser, 2008; Liu & Ramsey, 2008; Klassen & Anderson, 2009) as measured by the Job Satisfaction Questionnaire (Balzer et al., 2000). Maslow's Hierarchical Theory of Human Needs served as the theoretical framework for this study (Maslow, 1943, 1954, 1970; Erlandson & Pastor, 1981; Hoy and Miskel, 2008). More precisely, the study controlled for teacher's age and teaching experience; and the social economic status (SES), academic achievement, and the racial composition of an elementary school.

Elementary school teachers in The researched district participated in this study. The researcher chose elementary schools for research on teachers' job satisfaction because of the consistently common curriculum of elementary schools compared to secondary schools.

This chapter reviews literature derived from a variety of scholarly journals and research studies in education. These resources lend background to and support the legitimacy of this study. The chapter is divided into five sections:

- A. Theoretical Framework: Maslow's Hierarchy of Human Needs Theory
- B. Job Satisfaction Overview
- C. Job Satisfaction Measures in this Study
  - 1. Independent Variable—Teacher's age and experience

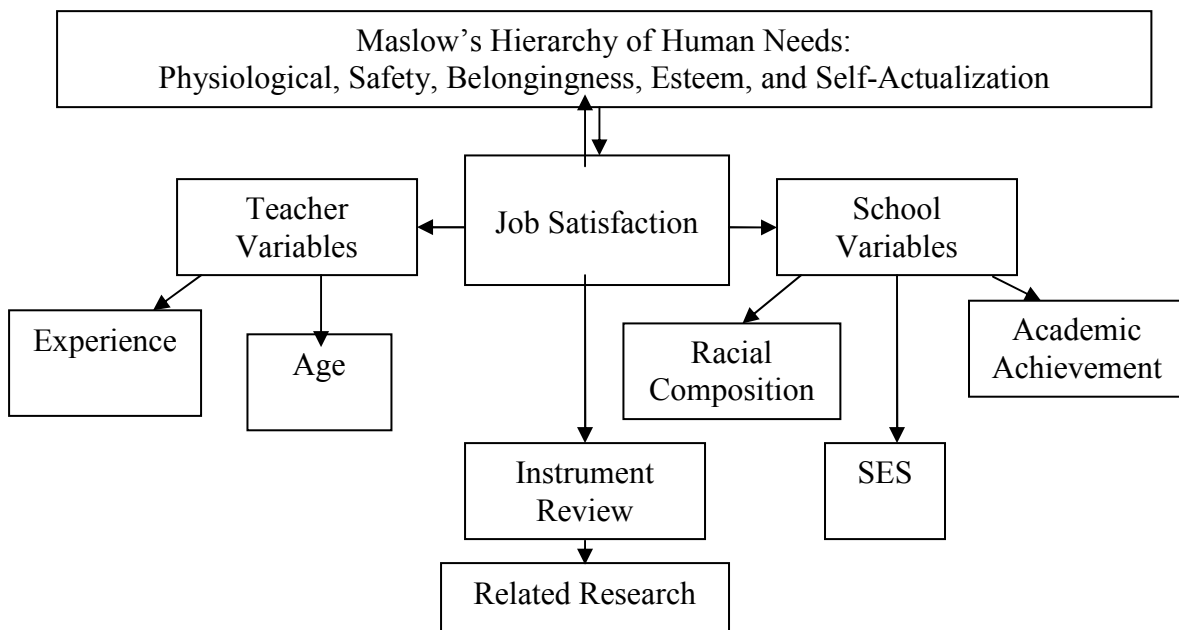
2. Independent Variable—School’s SES, academic achievement level, racial composition
3. Dependent Variable—Total Job Satisfaction
4. Dependent Variable—Sub-dependent levels of Job Satisfaction

D. Questionnaire—Instrument Review

E. Related Research

A visual diagram (Figure 1) assists the reader with the scope and sequence of the chapter.

Figure 1. Diagram of Chapter Two



## Organization of Review

### *Theoretical Framework: Maslow's Theory.*

Schools are social systems affected by students, teachers, parents, state mandates, politics, and other environmental forces. Schools consist of interdependent parts and distinctive cultures that work normatively together to achieve their goals. Schools are *peopled*: staff members operate in response to defined roles, needs, beliefs, and motivations.

All of these influences affect organizational behavior (Hoy and Miskel, 2008). The ultimate goal in an educational social system is student learning, and when schools do not create structures that support effective teaching and learning, they are deemed ineffective. Learning indicates change in one's knowledge or behavior. Behavioral theories of learning emphasize observable changes in habits and behaviors. "Behavior is simply what a person does in a given situation" (Hoy and Miskel, 2008, p. 43).

Organizations exist to serve human needs as part of their "organizational goal." (Maslow, 1943). In order to gain information about teachers as individuals within organizations, one must examine their needs, goals, motivations and beliefs. Human needs and motivations are key elements in organizations in determining how individuals behave. Teachers try to meet their needs and their students' needs; parents are concerned with the needs of their children, and administration is concerned with the needs of all elements involved with schools. Basically, needs explain why people behave the way they do (Maslow, 1943).

Maslow (1943) developed his human needs theory from his experience as a clinical psychologist. In explaining job satisfaction, Maslow's theory has become one of two common theories used most widely, the second being Herzberg et al.'s (1959) Motivator-Hygiene Theory. Maslow's theory emphasizes five basic categories of human needs (a) physiological needs like water, food and air; (b) safety needs like freedom from physical harm and economic security; (c) belongingness and love needs like positive associations with others; (d) esteem needs like self-respect and a sense of achievement; and (e) self-actualization needs like maximum self-development and accomplishment (Maslow, 1954, 1970; Locke, 1976; Williams, 1978; Pardee, 1990; Reid-Cunningham, 2008; and Hoy and

Miskel, 2008). Maslow arranged these needs in a hierarchy of dominance where generally speaking, the lower-level needs must be satisfied before the higher-level needs. For example, before a human being can think about establishing relationships with friends or co-workers, his or her safety and security needs must be met.

Herzberg et al. (1959) Motivator-Hygiene Theory, also known as the Two-Factor Theory, states that job satisfaction and job dissatisfaction result from two different causes. Motivators (achievement, recognition, and the work itself) cause satisfaction, and hygienes (co-worker relationships, salary, working conditions, and the supervisor) cause dissatisfaction. Sergiovanni (1967) found support for Herzberg's theory--namely, that satisfiers and dissatisfiers tend to be mutually exclusive. Factors that caused satisfaction emerged in the work itself: achievement, recognition, responsibility and advancement. Factors that caused dissatisfaction also appear in the work environment.

Maslow's theory encourages research relating to job satisfaction and job dissatisfaction since it posits job motivation as the driving force and catalyst of an individual's desire to achieve (Wolf, 1970). Weller (1982) believes that the major causes of teacher dissatisfaction concerns people-problems. He believes Maslow's Hierarchy of Human Needs Theory (1943) provides a foundation for schools to meet teachers' needs. Erlandson and Pastor (1981) analyzed the presence of higher-level needs in 150 teachers from different geographical regions. Their findings indicated that two-thirds of teachers surveyed possessed a predominance of higher-level needs and were least satisfied, whereas teachers possessing a predominance of lower-order needs were more likely to be satisfied since schools generally meet the needs of teachers with a predominance of lower-level needs. Cockburn (2000) examined literature and interviewed 12 teachers on why are they satisfied

with teaching. Teachers reported (a) self-fulfillment, (b) co-worker relationship, and (c) challenge as reasons why they are satisfied with their job; “teaching potentially includes many of the factors others have classed as important when considering basic needs satisfactions” (Cockburn, 2000, p. 12). Veenman (1984) examined 83 studies since the 1960s regarding the perceived problems of beginning teachers. The studies revealed that lower-order needs such as security, belongingness, and self-esteem; must be satisfied before teachers can behave as self-actualized persons supports job satisfaction.

Also, in examining Maslow’s theory, Hall and Nougiam (1968) found that as managers advance, lower level needs fulfillment decreases while higher level needs fulfillment increases. Accordingly, it is assumed that job-holding individuals have the desire to “move up” in their careers the longer they remain on the job. The fulfillment of that desire can either cause job satisfaction or dissatisfaction, Maslow’s theory (1943) provides the foundation for clarifying satisfaction levels, and is used here to gain insight into teachers’ satisfaction levels with their work.

### ***Job Satisfaction Research.***

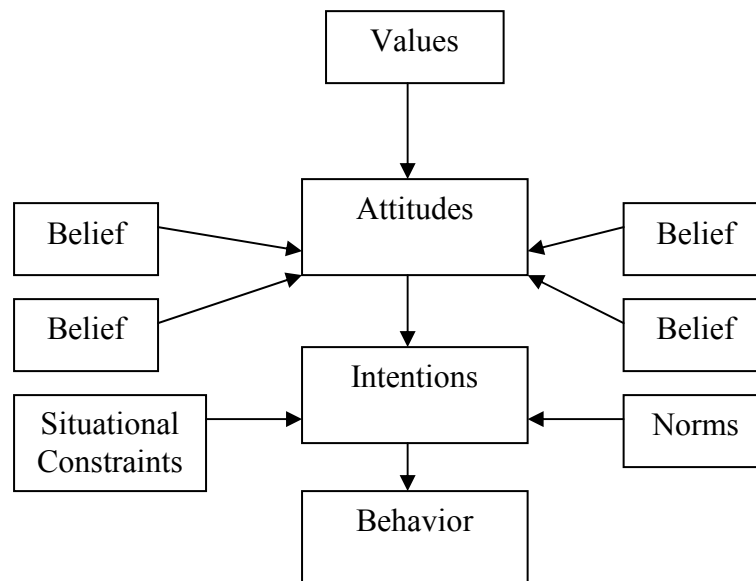
Job satisfaction research began in conjunction with attitude and morale research (Mitchell, 1978). To understand job satisfaction, one must begin by examining attitudes necessary to understand organizational behavior. Mitchell (1978, pp. 118-119) stated the following.

- “Attitude is related to behavior”--that is, people behave certain ways based upon their attitudes toward something.
- “Attitude is an unidimensional variable”--that is, it is a variable to which one’s feelings are associated with an object.

- “Attitude is a hypothetical construct” (p.119)--that is, actions attributable to attitude can be observed but not attitude itself.

Mitchell (1978) believed that attitudes are evaluative feelings formed by their beliefs and rooted in their psychological framework. Attitudes may predict our beliefs, values and behavior, and can define our values. The diagram below (Mitchell, 1978, p. 120) indicates the relationship between attitudes and other factors.

Figure 2. Attitudes and Related Factors



One of the most frequently researched attitudes is how one feels about one’s job--that is to say, job satisfaction. In 1978, Mitchell found that this particular topic had been widely researched with more than 3000 articles and research reports. By 1992, Cranny et al. reported more than 5000 articles and research reports have been published on job satisfaction. An *attitude* is more than just about *feelings* if workers were cooperating with management, paid well, and experienced little or no fatigue, the assumption would be that these are satisfied and productive workers (Taylor, 1970). Fatigue reduction on the job was investigated throughout early 1900s began extensively reviewing the effects of environmental factors like ventilation,

noises and illumination on fatigue (Burt, 1931; Ryan, 1947; and Viteles, 1932). The Hawthorne studies (Mayo, 1960) initiated in the late 1920s heralded the first systematic examination of industrial dissatisfaction problems. Textile mill workers experienced extreme fatigue because of a lack of rest breaks. These findings set in motion investigations into such industrial factors as rest pauses and productivity incentives. When employees showed little reaction to rest pauses and other incentives, the emphasis quickly shifted to studying employees' attitudes. Hoppock (1935) first studied job satisfaction involving employed adults in industrial and school teachers. He studied factors that could affect job satisfaction like working conditions and supervision. He later studied achievement.

The researchers who followed Hoppock (1935) researched the importance of the supervisor and work groups on employee satisfaction (Homans, 1950; and Likert, 1961). Herzberg et al., (1959) redirected the meaning of employee satisfaction to include work itself-true job satisfaction comes from allowing individuals responsibility and opportunities to grow mentally. Thus, three major schools of thought concerning employee job satisfaction emerged (Locke, 1976).

- The Physical-Economic School, centered on pay, working conditions, and physical arrangement of work.
- The Social (Human Relations) School, centered on cohesive work groups, good supervision, and employee-management relations.
- The Work Itself School, centered on growth in skill, efficacy, mentally challenging work.

Locke (1976, p. 1300) defined job satisfaction as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences”. A job is “a complex



interrelationship of tasks, roles, responsibilities, interactions, incentives, and rewards”

(Locke, 1976, p. 1301). Locke classified jobs into nine dimensions.

- Work--variety, opportunities for growth and learning, amount, difficulty.
- Pay--amount, equity, method of payment.
- Promotion--fairness, opportunities for.
- Recognition--celebrations, praise, criticism.
- Benefits--pension, leave time, vacations, health.
- Working conditions--hours, breaks, physical layout, temperature, location.
- Supervision--style, skill, ability, human relations.
- Co-workers--friendliness, competence, support.
- Company and management--employee relations, benefit packages.

Locke (1976) further separated these dimensions into two different levels (a) events or conditions--the first six dimensions, and (b) agents--the last three. Since someone or something causes events or conditions and agents are either liked or disliked for actions completed or not completed, some theories of job satisfaction analyze the interactions between events or conditions and agents. According to Locke (1961, p. 316):

Job dissatisfaction is the unpleasurable emotional state resulting from the appraisal of one's job as frustrating or blocking the attainment of one's job values or as entailing disvalues. Job satisfaction and dissatisfaction are a function of the perceived relationship between what one wants from one's job and what one perceives it as offering or entailing.

Meanwhile, three causal models or job satisfaction frameworks attempt to identify variables relating to overall employee job satisfaction (Locke, 1961).

- *Content theories of job satisfaction* attempt to explain job satisfaction as needs that must be satisfied or values most conducive to job satisfaction.

- *Process theories of job satisfaction* attempt to explain job satisfaction by categories of variables (for example, values, needs, expectancies, and so forth) in which they relate with or combine to cause job satisfaction.
- *Situational models of job satisfaction* attempt to explain job satisfaction by categories of variables (task, organizational, or individual characteristics) and how they combine to relate to job satisfaction.

Thompson, McNamara, and Hoyle's (1997) research sought to synthesize findings on job satisfaction from the numerous job satisfaction studies from 1965-1990. A discussion of these three theoretical frameworks will follow.

### ***Content Theories of Job Satisfaction***

Content theories attempt to explain job satisfaction according to needs that must be satisfied or values that must be attained (Locke, 1976). Examples include Maslow's Hierarchy of Human Needs Theory (1943), and Herzberg's Two-Factor Theory (Herzberg et al., 1959). This theory describes motivators (like achievement, the work itself and advancement) as increasing satisfaction while hygienes (the salary and working conditions, supervision) as producing job dissatisfaction (Hoy and Miskel, 2008). Cockburn's 2000 teacher job satisfaction research explored why teachers are satisfied with their job through the lens of needs satisfaction. This study revealed that teachers enjoy the relationships developed and challenges presented; satisfaction of lower-order needs. Erlandson and Pastor (1981) discovered that teachers with high-order needs were least satisfied, and schools tend to meet lower-order needs.

### ***Process or Discrepancy Theories of Job Satisfaction***

Process theories attempt to explain job satisfaction by categories of variables (such as values, needs, expectancies, and so forth) they relate to or combine with to cause job satisfaction (Locke, 1976). Discrepancy theories attempt to explain job satisfaction as the difference between (a) what the employee hopes to accomplish or desired outcomes and what the employee actually accomplishes (Locke, 1976), or (b) an employee's work motivation and organizational incentives (Hoy and Miskel, 1996). For example Porter's (1961) Needs Satisfaction Research, which is concerned with the need satisfactions and perceptions of individuals in management jobs; March and Simon's (1958) Inducements-Contributions Theory, which hypothesizes that individuals make costs-benefits analysis (discomforts and pleasures) in deciding whether to work for an organization; and Vroom's (1964) Subtractive and Multiplicative Models of Job Satisfaction. Subtractive models of job satisfaction assume need satisfaction is a function of the difference between the extent to which a need is met in a work situation and the strength of the need, whereas Multiplicative models assume an interaction between motivational and work role variables.

### ***Situational Models of Job Satisfaction***

These models attempt to explain job satisfaction by categories of variables (task, organizational, or individual characteristics) and how they combine to influence job satisfaction (Hoy and Miskel, 1996). Examples include Glisson and Durick's (1988) Predictors of Job Satisfaction which implies that skill variety and role ambiguity are the best predictors of job satisfaction; and Situational Occurrences Theory of Job Satisfaction assumes job satisfaction to be determined by two factors: situational characteristics and situational occurrences (Quarstein, McAfee, and Glassman, 1992). Situational characteristics

refer to the job facets applicants evaluate before accepting a job--for example, pay, working conditions, promotional opportunities, company procedures, and so forth. Situational occurrences refer to job facets that go without being pre-evaluated and occur after an applicant has been on the job. These facets can be positive or negative. Positive examples might include spontaneous treats like doughnuts or breakfast biscuits; negative examples might include broken copiers and annoying or confusing memos.

Quarstein et al. (1992) found that situational occurrences and situational characteristics affect job satisfaction, and overall job satisfaction can be better predicted from an awareness of both situational occurrences and situational characteristics. This theory also provides a possible explanation for situations in which employees hold similar jobs at the same or different organizations with different job satisfaction levels. It has particular relevance for this particular study involving teachers across one district but in different buildings supervised under different leaders.

The Situational Occurrences Theory further explains why the satisfaction levels of employees change over time. Situational occurrences may change quickly and can be positive one moment and negative the next. Responding to this volatility, employee attitudes towards job satisfaction can also change abruptly. The researcher has experienced a change in teachers' job satisfaction within a school. One year, teachers had high levels of job satisfaction based upon staff surveys and little attrition. A year later, three employees resigned during the school year, one to teach in another school district and the other two dissatisfied with teaching. This information appeared in their resignation exit forms.

## **Summary**

Why is it important for teachers to experience high levels of job satisfaction? The research generally suggests that well-prepared, capable teachers have the greatest positive impact on student learning (Darling-Hammond, 2003). Satisfaction appears to influence teacher effectiveness which, in turn, promotes student achievement (NCES, 1997). In addition, satisfied teachers are less likely to move from school to school or leave teaching altogether. While some attrition is natural, too much disrupts the school environment and increases school district expenses in seeking reinforcements. Job dissatisfaction constitutes one reason why half of all teachers leave the profession (Ingersoll, 2002).

Much of teachers' low satisfaction, results from excessive paperwork and undue emphasis on standardized tests (Inman & Marlow, 2004). Other reasons affecting job satisfaction include non-professional activities, such as schedule planning time and breaks, signing in and out, limited access to the school building, and bus and hall duty (Inman & Marlow, 2004). Elementary teachers must prepare for several different subjects and supervise students during lunch, recess, bathroom breaks; during transition times between special classes such as physical education, library, music and art. The teaching profession differs from most professions in three areas (a) teachers always feel challenged by supervisors (b) teachers usually lack autonomy in carrying out their tasks and (c) teachers tend to be inadequately rewarded (Chapman and Lowther, 1982). Teachers prepare children for the future but are compensated only slightly more a store clerk.

Research on teacher data shows motivating teachers to remain in the profession constitutes an ongoing concern for most school districts, which can often attribute to high teacher turnover due to low salaries and poor working conditions (Darling-Hammond, 2003;

Ingersoll and Smith, 2003; LoCascio-Creel, 2004; and Millinger, 2004). Factors both intrinsic and extrinsic affect teacher job satisfaction (Perrachione et al., 2008; Klassen & Anderson, 2009). Intrinsic motivators perceived in influencing job satisfaction are (a) personal teaching efficacy, (b) working with students, and (c) job satisfaction as suggested by 201 public school teachers. Extrinsic factors perceived in influencing job dissatisfaction are (a) student discipline, and (b) time demands (Klassen & Anderson, 2009). Hongying (2007) states that job satisfaction research centers mainly around (a) overall job satisfaction, (b), dimensions of job satisfaction, and (c) influencing factors of job satisfaction today. Accordingly, this study examines school factors that influence teachers' job satisfaction.

### **Independent Variables**

#### **Teacher Variables**

While various determinants of job satisfaction exist, this research examines teacher characteristics for their influence on job satisfaction levels. These characteristics are important predictors of turnover which can connect with teachers' levels of satisfaction. The data on teachers; age and years of experience are expected to influence teachers' job satisfaction.

**Age.** The NCES (1997), surveyed approximately 14,000 schools with more than 75,000 teachers, and found teachers' satisfaction levels decreasing as age increased. Different researchers find varying relationships between age and job satisfaction. Herzberg, F., Mausnes, B., Peterson, R., & Capwell, D. (1957) researched industry workers and found a curvilinear relationship between job satisfaction and age--job satisfaction starting high, dropping, and then increasing again as age increases. Bolin's (2008) research defined job satisfaction into five aspects (a) pay, (b) work itself, (c) supervision, (d) co-workers, and (e)

self-fulfillment. 434 teachers in China reported that with increased age, job satisfaction increased in all aspects of job satisfaction. Research in this area, however, remains inconsistent (Gruneberg, 1979).

Dworkin (1980) sampled 3,063 teachers from a Southwestern metropolis area and found that teachers plans to leave teaching decreased as age increased. With attrition, older teachers were less likely to leave teaching than younger teachers; however, teachers age 51 or older were more likely to leave than teachers younger than age 50--most likely due to retirement (Borman & Dowling, 2008). Thus age, as an independent variable, is not consistent with being a determining factor of teachers' level job satisfaction.

**Years of Experience.** It is the researcher's beliefs, based on experiences, that if a teacher stays in the teaching profession longer than five years, it is more likely for that teacher to remain in the profession until retirement. However, the researcher also believes that teachers stay in the profession because their needs are being met at various schools and within various positions at the school level. NCES (1997) study found that teachers' satisfaction levels decrease as experience increases. (One tends intuitively to associate increasing teacher experience with increasing satisfaction levels.) As with job satisfaction and age, research on job satisfaction and length of service (experience) is inconsistent. Wild and Dawson (1972) found that with increased length of service comes increased satisfaction whereas Gibson and Klein (1970) found that with increased length of service comes decreased satisfaction. Hanushek, Kain and Rivkin (2004), using the Texas database of about 400,00 teachers, found a U-shaped movement in teacher attrition: younger, less experienced teachers have a high turnover rate, while the turnover rate for teachers in the middle of their career declines, and then the turnover rate rises again for teachers nearing retirement. Liu and

Ramsey (2008) used data from the National Center for Education Statistics from 1999-2001 and found that with increased years of experience, teachers' job satisfaction improves. Zhongshan (2000) developed a survey that assessed teachers' job satisfaction through dimensions similar to the Job Satisfaction Questionnaire (Balzer et al., 2000) listed (a) supervision, (b) promotion, (c) work, (d) pay, and (d) co-workers. Results showed that teachers' job satisfaction increased with age in all dimensions except for supervision (Zhongshan, 2000). A similar study (Bolin, 2008) revealed comparable results.

Teacher attrition research reviewed by Borman and Dowling (2008) found that teachers with 5 or 6 years of experience have a greater chance of attrition than teachers within the first 5 years of teaching. The researcher contends that there are various reasons for attrition--satisfaction is one of them--and in her experience, attrition is largely affected by teacher circumstances, which includes satisfaction.

Again, research related to job satisfaction and years of experience is inconsistent as well. The researcher continues to believe that if a teacher stays in the profession for many years, that teacher is maneuvering around in the system to create opportunities that promote satisfaction and met needs.

### **School Variables**

One finds the literature on the school variables of racial composition, school achievement level, and social economic status quite extensive. This research suggests that schools at any level (elementary, middle, high) with a high teacher turnover rates are schools with a high minority population and low school achievement level generally serving a poor population (Borman and Dowling, 2008; Strunk and Robinson, 2006; Loeb and Darling-Hammond, 2005).



**Racial Composition.** The National Center for Education Statistics (NCES, 1997) survey found schools with low percentages of minority students demonstrated higher employee satisfaction levels than schools with high percentage of minority students. Hanushek et al. (2004) research shows student racial composition, of various school levels, to be determinant of teacher mobility. Carroll, Reichardt and Guarino (2000) tracked patterns of teachers leaving schools with high-minority population for schools with fewer minority students. Mueller et al. (1999) found that racial composition affects job satisfaction and it causes teachers to move from school to school, even though they do not leave teaching. Guin (2004) researched a large urban district, similar to the sampled district in this research, and found schools with higher percentages of minority students experiencing higher levels of teacher turnover.

On the contrary, the National Longitudinal Study, 1972, completed in 1986 (sampling over 14,000 teachers) reported that 56.3% of teachers would choose to be teachers again if the racial composition of a school was over 60% minority, and that the attrition rate for the same racial composition was 42%--satisfaction rate was slightly higher, but attrition rate was also higher for schools with less than 10% minority (Heyns, 1988).

Research points to high minority schools as having less satisfied teachers and a high turnover rate (Hanushek et al., 2004; Guin, 2004). The researcher's previous experience was in a high minority school and was witness to teachers' low morale and high turnover. The researcher also is currently experiencing a school with a 24% minority population, minimal turnover, and average to high satisfaction levels.

**School Achievement Level.** Research conducted in a Texas school district attributed the most dramatic movement among teaching staff to student achievement (Hanushek et al.,

2004). Schools in the bottom quartile lost 20% of their teachers. The state of Georgia database in the 1990s on all public school teachers, also revealed that teachers tend to leave low-performing schools for better performing schools (Scafidi et al., 2007). After examining teachers employed in a New York State public school from 1995-1996 through 2003-2004, Boyd, D., Lankford, H., Loeb, S., and Wyckoff, J. (2005) found consistencies with earlier studies where the determinants of teacher attrition were: level of student achievement and racial composition.

Stolp (1994) surveyed students in grades four, six, eight and ten from 820 public schools in Illinois and found “support for the proposition that students are more motivated to learn in schools with strong cultures” (§ 7). School culture correlates with teachers’ job satisfaction and student achievement (Stolp, 1994). School culture is defined as traditions or historical patterns that include norms, beliefs, rituals, ceremonies, and values that shape how people think and act (Stolp, 1994). Teachers experience high levels of satisfaction in environments identified with stronger cultures--shared decision-making, positive leadership, and sense of belongingness.

In today’s world of accountability, student achievement matters (Nicholas, Glass, & Berliner, 2006). It matters to the teachers, but more importantly, it matters to the media as first reported in *A Nation at Risk* (National Commission for Excellence Education, 1983). The media play a role in boosting or harming schools and school districts. Test scores (student achievement) are the reason most parents send their child to a particular school. Teachers want to teach at schools recognized as being successful, not at schools that is not progressing or deemed failing according to NCLB. This research is consistent with research on high-stakes testing and student achievement (Nicholas et al., 2006).

**Social economic Level (SES).** The NCES (1997) data found that teachers in schools with lower middle class students (with low percentages of students receiving free or reduced-price lunches) demonstrate higher satisfaction levels. Shen (1997) found teacher attrition to be greater in schools with larger populations of low-income students. Loeb and Darling-Hammond (2005), using data from a 2002 survey of 1,071 California teachers from 370 school districts in the state, found the strongest predictor of low satisfaction levels was the social economic level of students. Seventy-five percent of the teachers taught in urban schools where approximately 50% of students were from low income families. In contrast, Kelly (2004) studied the results from the Schools and Staffing survey of 1990-1991 and the 1992 Teacher Follow-up survey and found job dissatisfaction no higher in schools with low income students.

Low-income populations in schools bring challenges (Boyd, Lankford, Loeb, & Wyckoff, 2005; Hanushek et al., 2004). Those challenges range from academic to emotional and social behaviors. Dealing with such challenges demand extra time and efforts from teachers. Teachers should develop personal education plans for at-risk students, and also have to develop behavior contracts with students with behavioral problems. Schools with a large proportion of low-income students face more challenges.

## **Summary**

The independent variables of this research represent variables related to school factors that affect teachers' job satisfaction. This research examined background factors of teachers--age and years of experience--and its influence on job satisfaction. This research also examined characteristics of schools--student racial composition, academic achievement level, and SES--and its influence on job satisfaction.

Research on job satisfaction and influencing factors of a teacher's age and years of experience showed inconsistencies. Zhongshang's (2000) research concluded with increased age and years of experience come increased job satisfaction. Jirong and Jiping (2004) concluded the relationship between age and job satisfaction is U-shaped. Hanushek et al.'s (2004) research revealed job satisfaction maintained a U-shaped with respect to a teacher's age and years of experience. Liu and Ramsey's (2008) research concluded that as years of experience increased, so did job satisfaction.

Research on school characteristics of student racial composition, academic achievement, and SES show these that factors have an influence teachers' job satisfaction. Guin (2004) reports schools with high minority and high SES populations have high teacher turnover attributed to high job dissatisfaction levels. Using data, Scafidi et al. (2007) found newer teachers more likely to leave schools that have low academic performance, students with low income, and increased proportions of minorities. Kelly's (2004) research showed inconclusive results. Teachers' job satisfaction in schools with low income students was no higher than in schools without low income students.

### **Dependent Variables**

#### **Instrument**

The Job Satisfaction Questionnaire used in this research is the most widely used instrument to conduct measures of employee job satisfaction (DeMeuse, 1985; Zedeck, 1987). It uses 72 items to measure five facets of job satisfaction (a) the work itself, (b) pay, (c) promotion, (d) supervision, and (e) co-workers. These five facets diagnose job satisfaction issues. This questionnaire was carefully constructed to measure overall satisfaction with 18 items.

In order for this instrument to be useful, it has to adhere to the following six requirements.

- Instrument items should include major aspects of job satisfaction.
- Instrument items should be easy to administer and complete.
- Instrument items should be easy to score and interpret.
- Instrument items should apply to all jobs in all organizations.
- Instrument items should show evidence that they are measuring what they are supposed to measure in a consistent fashion.
- Instrument items should be useful for identifying problems, solutions, and evaluating changes (Balzer et al., 2000).

A Job Satisfaction Questionnaire is the most appropriate instrument in measuring job satisfaction (Smith et al., 1969). This instrument is structured to measure specific areas of satisfaction; its questions ask a respondent to describe their work; and it is designed to guide the respondent in answering the questions.

This instrument combines two surveys into one to measure job satisfaction. With 90 measured items, this instrument proves to be useful, valid, and not time consuming. The instrument was initially designed for settings other than educational; however, it is applicable to all work settings.

### **Measuring Job Satisfaction**

“Global and facet measures are two general ways to measure teaching satisfaction” (Ho & Au, 2006, p. 172). Global measures of job satisfaction include an individual’s predisposition to experiences and reactions to circumstances and events in positive or negative ways. The respondent gives an overall evaluation of job aspects and responds (Ho

& Au, 2006). Whereas facet measures of job satisfaction include satisfaction coming from particular domains or aspects of the job, for example: co-worker relationships, environment, and roles (Ho & Au, 2006). The questionnaire used in this research uses facets and global measures of job satisfaction.

The Job Satisfaction Questionnaire (Balzer et al., 2000) is a modified version of the Job Descriptive Index (JDI) and Job in General (JIG) scales (Smith et al., 1969) measuring five facets of job satisfaction previously mentioned and overall job satisfaction respectively. The questionnaire can be generalized to most job levels and generates scores indicative of satisfaction with certain work situations (a) work, (b) pay, (c) promotions, (d) people, and (e) supervision (Balzer et al., 2000).

#### ***Facet Measures.***

The Job Satisfaction Survey (JSS) was developed to measure employee satisfaction in human service, public, and nonprofit organizational fields (Spector, 1985). The survey uses a nine-subscale measure of employee satisfaction in 40-items whereas the questionnaire used in this research uses five-subscales in 90 items. The nine items measuring job satisfaction are (a) pay, (b) promotion, (c) supervision, (d) benefits, (e) contingent rewards, (f) operating procedures, (g) co-workers, (h) nature of work, and (i) communication.

Warr's Job Satisfaction Scale (WJSS) is a 14-item questionnaire that classifies satisfaction/dissatisfaction into three underlying factors (a) satisfaction with co-workers, (b) intrinsic satisfaction, and (c) extrinsic satisfaction (Warr, Cook, & Wall, 1979). The facets measuring job satisfaction are not identified by number or proportion.

### ***Global Measures.***

The Teaching Satisfaction Scale (TSS) was proposed to offer a simple, direct, valid and reliable measure of teaching satisfaction (Ho & Au, 2006). The five-item questionnaire was developed upon the Life Satisfaction Scale (LSS) as there is consistent and significant relationship between a person's job satisfaction and life satisfaction (Judge, Locke, Durham, & Kluger, 1998). The questionnaire measures teaching satisfaction on a global scale and allows respondents to assess satisfaction from a variety of psychological and situational appraisals (Ho & Au, 2006).

The Brayfield-Rothe Job Satisfaction Scale (BRJSS) is a global measure of teaching satisfaction. It measures the affective level of the present job only in five-items (Brayfield and Rothe, 1951). "Solely measuring the affective level of teachers cannot full address teaching satisfaction" (Ho & Au, 2006, p. 174).

The above questionnaires were developed out of inadequacies contained with either global or facet measures as perceived by researchers (Ho & Au, 2006).

### **Related Research**

Trusty and Sergiovanni (1966) surveyed 223 educators in elementary, middle and high schools in a school district and found teachers' need deficiencies to be greatest during the age range between 25 and 35; and concluded that teachers in this range are most dissatisfied with their jobs. They also found male teachers less satisfied with their jobs than female teachers. With regarding to experience, Trusty and Sergiovanni (1966) found that with more years of experience, teachers' need deficiencies grew, but not greatly. They stated that the discrepancy between actual and desired need fulfillment was an index of job satisfaction. Zhongshan (2008) surveyed the job satisfaction level of 461 elementary teachers

in Shanghai, China with their jobs, leadership, colleagues, promotion, income, and overall job satisfaction using a similar job satisfaction questionnaire. It found that teachers were less satisfied with promotion and their income, and more satisfied with colleagues, teaching, principals, and overall job satisfaction.

Anderson and Iwanicki (1984) focused on problems teachers faced in the classroom with regard to job satisfaction. This study examined the relationship between teachers' need deficiencies to burnout based upon their: gender, age, experience, and grade level taught. Out of 808 classroom teachers surveyed, 459 responded from suburban elementary, middle and high schools. They found teacher burnout to be related to higher levels of need deficiencies affected job satisfaction, and that these higher levels of need deficiencies increased with more years of teaching.

Mertler (2001) surveyed 969 teachers and found 23% were dissatisfied with their jobs. Previously, Mertler (1992) had found an equal number of teachers dissatisfied with their jobs. These teachers represented elementary, middle, and high schools in suburban, urban, and rural areas.

Another study of teacher job satisfaction in the Northwestern United States showed that 44% of teachers considered leaving teaching altogether, because of: poor student discipline, low student motivation, and poor student attitudes. Emotional factors emerged in expressions of lack of fulfillment, stress, and boredom with the daily school routine. Difficult working conditions and low salaries were also factors contributing to low job satisfaction (Marlow, Inman and Betancourt, 1997).

A study of the North Carolina Teacher Working Conditions Survey (New Teacher Center, 2002) found teachers' job satisfaction was significantly correlated to school



achievement level and the social economic level of students. Two thousand nine hundred school teachers in 46 middle schools expressed concerns around time demands, poor facilities and limited resources (Turner, 2007). This research also states the varying reasons why teachers are dissatisfied with teaching and specifically according to certain teacher characteristics.

### **Summary**

This research established a scope and sequence applicable to the concept of job satisfaction. In educational organizations, the ultimate goal is student learning and any change in learning indicates a change in behavior (Hoy & Miskel, 2008). As organizations exist to meet human needs, so needs explain why people behave the way they do. Derived from his clinical psychology experiences, Abraham Maslow's Theory of Human Needs (1943) established a framework for understanding needs and job satisfaction. His belief that human needs fall into one of five hierarchical categories (a) physiological, (b) safety, (c) belongingness, (d) esteem, and (e) self-actualization--and that they drive human behavior. It is this theory upon which this research on job satisfaction is based.

Job satisfaction research began as attitude and morale research in the early 1900s; Hoppock (1935) being the first to conduct a comprehensive review of job satisfaction and publish a study on job satisfaction. Satisfaction research then became oriented toward the concept of satisfaction as influenced by the human relations movement (Smith et al., 1969). In the mid 1900s, several studies began dissecting and identifying dimensions of job satisfaction that produced three jobs satisfaction frameworks (a) content theories (b) process theories and (c) situational models (Thompson et al., 1997). Although individual

idiosyncrasies made job satisfaction difficult to define, it is basically considered to be one's feelings about one's job.

In the late 1900s, concern with teachers' job satisfaction increased because of increased teacher attrition (Macdonald, 1999). Studies that emerged centered on high teacher turnover rates causes. This study focused on selected variables: characteristics of teachers (age and experience); student characteristics (racial composition, social economic status and academic achievement) as possible explanations for teachers' job satisfaction. Studies have shown that the pattern with the variables of age and experience with regard to job satisfaction among teachers has been U-shaped. The results with school variables and job satisfaction have, however, been fairly consistent; schools with a high minority population, a high percentage of students receiving free and reduced-lunch prices, and low school achievement tend to produce low teachers' job satisfaction.

The Job Satisfaction Questionnaire (Balzer et al., 2000) is considered to be reliable and valid measures of teachers' job satisfaction among elementary teachers' in an urban North Carolina school district as influenced by teacher, student, and school factors.

This study is expected to complement the job satisfaction research in general and specifically in the area of teachers' job satisfaction. The next chapter reviews procedures and methods the researcher used to examine research questions defined for this study. The chapter outlines the setting, the sample, the instrumentation, data collection and analysis, the hypotheses, the variables, and the study's limitations.

## **Chapter Three: Methodology**

### **Introduction**

This study measures elementary teachers' job satisfaction as defined by a job satisfaction questionnaire. Maslow's Hierarchy of Human Needs Theory (1943) is used to inform this study about job satisfaction. The study examines school factors that influence teachers' levels of job satisfaction. Job satisfaction is the dependent variable; and the independent variables are: school characteristics (students' race, social economic status, and school achievement) and teacher variables (age and experience). The job satisfaction questionnaire collects information on dependent and independent variables. These data will define the influence of the independent variables on job satisfaction, the dependent variables.

### **Sample and Population**

The population includes approximately 1300 licensed elementary teachers from 29 elementary schools in the researched district; a large urban school district in southern North Carolina. The elementary teacher population is comprised of approximately 1000 career teachers and 300 initially licensed new teachers with 1200 females and 100 males. The demographic breakdown includes approximately 900 White, 400 African-American, 15 Asian, 15 Hispanic-Latino, and 1 Indian. Teachers were requested to complete the job satisfaction questionnaire. The sample includes 715 classroom teachers from Kindergarten to fifth grades in 28 out of 29 elementary schools.

### ***The Researched District.***

The district's 53 schools enroll approximately 33,000 students and is the seventh largest in the state. The system includes 29 elementary schools, nine middle schools, one special secondary school, twelve high schools, one alternative school, and one hospital school. The student enrollment in the researched district is disbursed among the following school levels: Pre-K, 426; grades K-5, 15,394. The district's overall K-12 student racial composition is 53.9% African-American, 22.6% White, 17.1% Hispanic-Latino, 3.6% multi-racial, 2.6% Asian, and 0.2% Native American. The free and reduced-price lunch recipient percentage is 57.05. The total number of teachers is 2,300 with 1300 at the elementary level.

This researcher has over thirteen years of educational experience in elementary schools in the sampled district. The researcher chose to survey elementary teachers because the teaching population is more homogeneous--teachers teach all subjects as opposed to the departmentalization that occurs in middle and high schools. The curriculum provides the beginnings and basics of reading, writing, and mathematics, as well as introductions to science, health, art, and physical education (Howey and Post, 2002). Elementary school is an institution where children receive the first stage of compulsory education; and it is the researcher's belief that elementary school is where classroom teachers make the greatest impact on a child's life (Elementary School, 2010).

### **Instrumentation**

Researchers typically assess how one feels about one's job by interviewing or distributing questionnaires where workers list their likes or dislikes about aspects of their jobs (Vroom, 1964). This study collected data on job satisfaction about elementary teachers using a modified questionnaire developed by Balzer et al. (2000). This questionnaire was

developed as a standardized test with national norms comparing satisfaction across organizations. The 90-item questionnaire was designed to assess five facets of job satisfaction (a) the work itself, (b) pay, (c) the supervision, (d) the co-workers, and (e) promotion, as well as overall job satisfaction. The questionnaire response uses a 4-point Likert Scale (1) disagree strongly, (2) disagree somewhat, (3) agree somewhat, and (4) agree strongly. This job satisfaction questionnaire was designed to meet six characteristics.

- Principal aspects of job satisfaction.
- Easy to administer and complete.
- Easy to score and interpret.
- Apply to elementary school teachers.
- Show evidence of reliability and validity.
- Identify problems and solutions.

Overall, the job satisfaction questionnaire was designed to measure the needs among civil service workers, university employees, county employees, and nuclear plant construction employees (Ironson, Smith, Brannick, Gibson, & Paul, 1989). Although this survey was not sampled in educational organizations, the results were found to be similar across different samples and employee levels. It is easily administered and scored, and provides useful information on important areas of job satisfaction for diagnosing and evaluating organizations (Balzer et al., 2000).

### **Data Collection and Analysis**

This study sought to conduct research on elementary teachers' job satisfaction. All elementary teachers in the researched district were sent a job satisfaction survey via e-mail using a web-based survey. The e-mail included a letter explaining the purpose of the study

and reassuring participants of its confidentiality. E-mail addresses are public information and accessible through the school district's websites. Subjects had three weeks to respond. Two reminder e-mails were sent to addresses that neglected to respond to the questionnaire. Data analysis began after three weeks.

The researcher used the F-test, Analysis of Variance (ANOVA) design to examine the relationships between job satisfaction and school variables. The F-test was used to test the null hypothesis ( $H_0$ ) that group means on the dependent variable was not affected by independent variables. It was used to test the significance between the dependent and independent variables. The F-test measures of significance difference between mean scores were set at the .05 level or less. If the level of significance was greater than .05, then we concluded that the independent variable had no effect on the dependent variable (Garson, 2008); therefore, (a) reject the null hypothesis if it is less than .05 (b) or accepted the null hypothesis if it was greater than .05 for sample degrees of freedom.

Below are sample ANOVAs and means tables that will be used in Chapter 4 to display the data.

Table 1

*Sample ANOVA Table for Total Job Satisfaction: School Achievement by Teacher's Age*

Source	df	Sum of Squares	Mean Square	F	n2
School Achievement	Between				
Teacher's Age					
School					
Achievement X Teacher's Age	Within				
	Total				

Note. P is significant at the .05 level

Table 2

*Sample Means Table for Job Satisfaction: Years Experience by School Achievement*

Years Experience	School Achievement	Mean	Std. Deviation	N
0-4 years (ILT)	Low achievement (69% and below grade level)			
	Middle achievement (89%– 70% at or above grade level)			
	High achievement (100%– 90% at or above grade level)			
	Total			
5-10 years (experienced)	Low achievement (69% and below grade level)			
	Middle achievement (89% – 70% at or above grade level)			
	High achievement (100% – 90% at or above grade level)			
	Total			
11+ years (career)	Low achievement (69% and below grade level)			
	Middle achievement (89% – 70% at or above grade level)			
	High achievement (100%– 90% at or above grade level)			
	Total			
Total	Low achievement (69% and below grade level)			
	Middle achievement (89% – 70% at or above grade level)			
	High achievement (100% – 90% at or above grade level)			
	Total			

This design is best for studies where the purpose is to explore relationships between discrete variables with more than two mean scores. The F-test is most frequently adopted statistical tool for this type of study (Weiss, 2005). Bonferoni and Scheffé's post-hoc comparisons, gives a measure of the difference between all means scores, were conducted, if the test was significant. Bonferoni's post-hoc comparison is most commonly used and highly flexible; however Scheffé's post-hoc comparison is more conservative and commonly used with ANOVA.

### **Instrument**

Table 3 (Balzer et al., 2000) shows Cronbach's Alpha reliability measures of the job satisfaction questionnaire are within the accepted minimum standard for internal consistency. The reliability scales were calculated from approximately 1600 cases of national norm data.

Table 3

*Coefficient Table: Job Satisfaction Questionnaire*

JDI Subscale	$\alpha$	n
Work	.90	1623
Pay	.86	1603
Opportunities for Promotion	.87	1611
Supervision	.91	1613
Co-Workers	.91	1615
Job in General	.92	1629

*Note.* Coefficient Alpha ( $\alpha$ ) Values for the questionnaire.

Researchers who first validated the questionnaire collected and evaluated evidence using a variety of job situations and samples over a period of five years. Four discrete but



similar studies with unique samples were conducted yielding similar results across all categories (Balzer et al., 2000, p. 39).

## **Setting**

This research is set in elementary schools in a large urban school district in southern North Carolina, a county wide school district of approximately 33,000 students (a) 16,000 in elementary, (b) 7,000 in middle schools, and (c) 10,000 in high school. Elementary school consists of students in grades Pre-Kindergarten, Kindergarten, first, second, third, fourth, and fifth; middle school has students in grades sixth, seventh, and eighth; and high school includes students in grades ninth, tenth, eleventh, and twelfth. Schools in this district are located in rural, urban, and suburban areas; however, the district is generally categorized as an urban district. The schools are mostly neighborhood or community schools, which mean the schools in the city part of the county, have a higher concentration of Black and Hispanic-Latino students than the schools outside of the city, which exhibit more diversity and more White students.

The Research, Development, and Accountability Department (2009) for the researched district posted data revealing the district's performance ability. The district's instructional metric for the 2008-2009 school year shows 3<sup>rd</sup> graders with a 59.1% composite score; 5<sup>th</sup> graders with a 60% composite score; and 8<sup>th</sup> graders with a 55.6% composite score on end-of-grade tests. High school students demonstrated a 56.2% composite score on end-of-course tests (tests that sample a student's knowledge of subject-related concepts). The district *met* its accountability growth target and has a 64% cohort graduation rate. Stakeholder satisfaction metric shows the district average for the North Carolina Teacher

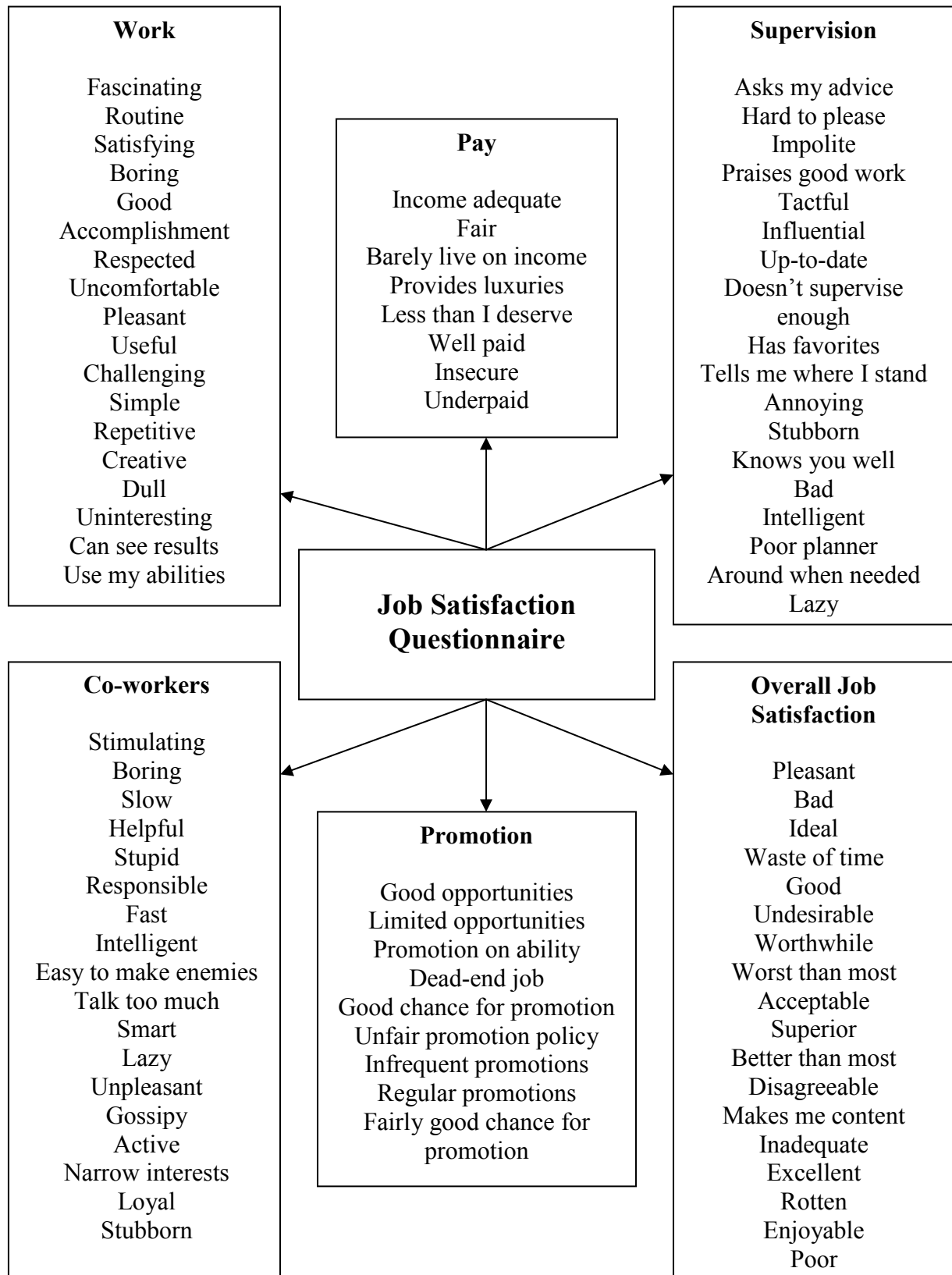
Working Conditions Survey was 3.30 on a 5-point Likert Scale. The percent of parents reflecting a positive image of this district was 76% as reported by the city's visitor's bureau.

### **Variables**

The dependent variable is the Job Satisfaction Questionnaire (Balzer et al., 2000). The questionnaire measures facets aligned with job features. The facets are defined below. Figure 3 show the statements and adjectives used in the survey for respondents to rate their level of satisfaction.

- Work satisfaction is defined as satisfaction with the work itself: task variety, amount of work, complexity, enrichment, autonomy.
- Pay satisfaction is defined as attitude towards pay: perceived difference between actual and expected pay.
- Promotion satisfaction is defined as satisfaction with company's promotion policy and is influenced by the economy, personal financial situation of employee.
- Supervision satisfaction reflects employees' satisfaction with his or her supervisor.
- Co-workers satisfaction reflects employees' satisfaction with his or her fellow employees.

Figure 3. Job Satisfaction Questionnaire



The independent variables are school factors. Demographic data provided by the participants are listed in Figure 4.

Figure 4. School Factors

School Factors	
School	Teacher
<b>Estimate Free or Reduced-Price Lunch Percentage in school</b> <ul style="list-style-type: none"> <li>High (60% and above)</li> <li>Moderate (59% - 40%)</li> <li>Low (39% and below)</li> </ul>	<b>Gender</b> <ul style="list-style-type: none"> <li>Male</li> <li>Female</li> </ul>
<b>Estimate School Achievement</b> <ul style="list-style-type: none"> <li>High achievement (100% - 90% at or above grade level)</li> <li>Middle achievement (89% - 70% at or above grade level)</li> <li>Low achievement (69% and below grade level)</li> </ul>	<b>Age Range</b> <ul style="list-style-type: none"> <li>22-32</li> <li>33-42</li> <li>43 and above</li> </ul>
<b>Estimate School's Performance level</b> <ul style="list-style-type: none"> <li>Low performing school</li> <li>Average performing school</li> <li>High performing school</li> </ul>	<b>Teacher Experience</b> <ul style="list-style-type: none"> <li>0-4 years (ILT)</li> <li>5-10 years (experienced)</li> <li>11+ years (career)</li> </ul>
<b>Estimate Percentage of Ethnicity in School</b> <ul style="list-style-type: none"> <li>White</li> <li>African-American</li> <li>Hispanic-Latino</li> <li>Other</li> </ul>	<b>Working Area</b> <ul style="list-style-type: none"> <li>Grades K-2</li> <li>Grades 3-5</li> <li>Other</li> </ul>
	<b>Years at School</b> <ul style="list-style-type: none"> <li>4 years or less</li> <li>5-10 years</li> <li>11+ years</li> </ul>

Variables pertaining to certain school aspects described in Figure 4 are defined below.

- The percentage of free or reduced-price lunches in a school is defined as the percentage of students receiving free or reduced-price lunches--economically disadvantaged students.
- School achievement is defined as the percentage of students' proficient among third, fourth, and fifth graders out of 100% on the state end-of-grade math and reading tests--school achievement.
- School ethnicity is defined as the percentage of minorities at a particular school--racial composition.

### **Hypotheses**

This study hypothesized that school factors of (a) SES, (b) racial composition, and (c) academic achievement, as perceived by teachers; and (e) teachers' age, and (f) teachers' years of experience influence teachers' job satisfaction. Job satisfaction is the dependent variable and is measured by the Job Satisfaction Questionnaire (Balzer et al., 2000). Sub-dependent variables of job satisfaction also measured are (a) pay, (b) work itself, (c) promotion, (d) supervision, and (e) co-workers. Fifteen hypotheses were tested holding student achievement constant across all analyses.

### **Total Job Satisfaction**

#### **Teachers' Factors**

1. **Age.** The age of teachers' did not affect their total job satisfaction.
2. **Experience.** The teaching experience of teachers did not affect their total job satisfaction.

#### **School Factors**

3. **Academic Achievement.** The school's overall academic achievement did not influence the total job satisfaction of teachers.
4. **Social economic Status (SES).** The school's social economic status of students did not influence the total job satisfaction of teachers.
5. **Racial Composition.** The school's racial composition of students did not influence the total job satisfaction of teachers.

### **Sub-Factors and School Factors on Job Satisfaction**

#### **Working Conditions**

6. **Academic Achievement.** The academic achievement of the school did not influence the teachers' satisfaction of the school's working conditions.
7. **SES.** The school's social economic status of students did not influence the views of teachers about the school's working conditions.

#### **Pay**

8. **Academic Achievement.** The academic achievement of the school did not influence the teachers' satisfaction with their pay.
9. **SES.** The school's social economic status of students did not influence the views of teachers about their pay.

#### **Promotion**

10. **Academic Achievement.** The academic achievement of the school did not influence the teachers' satisfaction with their opportunities for promotion.
11. **SES.** The school's social economic status of students did not influence the views of teachers about their opportunities for promotion.

#### **Co-Workers**

12. **Academic Achievement.** The academic achievement of the school did not influence the teachers' satisfaction with their co-workers.

13. **SES.** The school's social economic status of students did not influence the views of teachers about their co-workers.

### **Supervision**

14. **Academic Achievement.** The academic achievement of the school did not influence the teachers' satisfaction with their supervisors.

15. **SES.** The school's social economic status of students did not influence the views of teachers about their supervisors.

### **Limitations**

This study may be limited by the following items.

- Job satisfaction measures. The questionnaire uses five facets to measure satisfaction with certain areas of work and one global measure to measure overall satisfaction.
- School variables are based on the teachers' perceptions. The racial composition, SES, and academic achievement of the school are categorized based on the teachers' perceptions.
- Participants may misunderstand questions or exaggerate their answers.
- Instrument developed among industrial workers may not be the best measure of job satisfaction for teachers. The questionnaire itself is just one satisfaction survey that was originally developed to survey workers in industrial fields. It is; however, applicable to all work settings.

### **Summary**

This study solicited the perceptions of 715 elementary teachers in grades K-5 on their job satisfaction as it relates to certain school variables. Using Maslow's Hierarchy of Human Needs Theory (1943) remains key to exploring the needs of elementary school teachers. The

researcher used Maslow's Theory to explain job satisfaction among elementary teachers of varying school characteristics that may cause job satisfaction or job dissatisfaction regarding needs met or unmet. The Job Satisfaction Questionnaire (Balzer et al, 2000) served to measure elementary teachers' job satisfaction. This instrument is considered appropriate, reliable, valid and feasible tool to measure job satisfaction. The F-Test (ANOVA) was used to analyze the data so as to examine the relationship between the dependent variable (job satisfaction) and independent variables: teacher and school variables. The researcher expects the data to show that elementary teachers' job satisfaction is not influenced by these variables.

The next chapter reports the findings and significance of the findings on teacher's job satisfaction.



## **Chapter Four: Findings**

### **Introduction**

This study examined the influences of selected variables upon teachers' job satisfaction in a large urban school district in North Carolina. "Job satisfaction and dissatisfaction are a function of perceived relationship between what one wants from one's job and what one perceives it as offering or entailing" (Locke, 1961, p. 316). Teacher characteristics were collected as ancillary data. The focus of this study was on the influence of school variables of academic achievement, racial composition and social economic status on teacher job satisfaction among elementary school teachers. Maslow's Hierarchy of Human Needs Theory (1943) was used to inform this study about job satisfaction. This study was conducted in the researched district where teacher turnover is high, the number of students qualifying for free and reduced-price lunches is rising, and school achievement levels are inconsistent. This research was conducted for the purpose of exploring teachers' perceptions of job satisfaction. The researcher is currently a school administrator, not in the researched district, and works to keep teachers satisfied despite the given working conditions of a school. Satisfaction appears to influence teacher effectiveness which, in turn, promotes student achievement (NCES, 1997). Capable teachers have the greatest positive impact on student learning (Darling-Hammond, 2003). Hulpia and Devos (2010) examined the significance school leadership had on 1522 teachers in Belgium. Their research revealed that leadership practices influence teachers' organizational commitment.

## **Problem Statement**

The dependent variable is the Job Satisfaction Questionnaire (Balzer et al., 2000) which measured total satisfaction. Sub-dependent variables of job satisfaction were work, pay, promotion, supervision, and co-worker satisfaction. The independent variables are teacher variables of age and teacher experience; and school variables of academic achievement, racial composition, and social economic status. Maslow's Human Needs Theory (1943) was used as the theoretical framework to guide this research. Maslow's Theory (1943) emphasizes five basic categories of human of needs (a) physiological needs like water, food and air, (b) safety needs like freedom from physical harm and economic security, (c) belongingness and love needs like positive associations with others, (d) esteem needs like self-respect and a sense of achievement, and (e) self-actualization needs like maximum self-development and accomplishment (Maslow, 1970; Locke, 1976; & Hoy & Miskel, 2008). Organizations exist to serve human needs as part of their "organizational goals." Human needs and motivations are key elements in organizations in determining how individuals behave (Hoy & Miskel, 2008). For this research, teachers rated their level of job satisfaction as it related to their needs.

## **Methodology**

All elementary school teachers in the researched district (Kindergarten through fifth grades) were sent the Job Satisfaction Questionnaire (Balzer et al., 2000) survey via e-mail that contained a link to the survey created through a web-based survey, Zoomerang (1999). The survey was active for three weeks with one reminder e-mail sent each week. Out of the 1300 certified teachers in the researched district, 740 are K-5 classroom teachers. The survey, via e-mail, was not sent to 25 teachers at one elementary school that was recently opened. K-

5 classroom teachers of who received the survey were 715. Twenty-two percent of K-5 teachers (158 out of 715) responded to the survey with 124 participants having completed the survey by answering all of the questions. Data sets have been collected on teacher age and teacher years of experience; teachers' estimates of academic achievement, school racial composition, and school social economic status; and teachers' level of satisfaction with work, pay, promotion, supervision, and co-workers. The ANOVA design was used to analyze the data. Descriptive statistics were calculated (means, standard deviations, ranges), as well as skewness and kurtosis. The F-test was used to test the null hypothesis ( $H_0$ ) that group means on the dependent variable was not affected by independent variables.

This study was limited to the following four factors.

- One school district sampled. The researched district is a large urban district in North Carolina (NC). There are 115 districts in NC and this particular district is the seventh largest.
- Only elementary school teachers in grades K-5 surveyed; one school omitted. Classroom teachers have first-hand experience with the day-to-day successes and struggles in a classroom. Classroom teachers are responsible for implementing daily instructional activities that support academic growth and the teaching population is more homogeneous--teachers teach all subjects and the same subjects as opposed to the departmentalization that occurs in middle and high schools. The curriculum provides the beginnings and basic skills in reading, writing, and mathematics, as well as introductions to science, health, art, and physical education (Howey and Post, 2002). The school omitted opened in the Spring of 2009. The researcher believed surveying the teachers at this school could have skewed the results.

- Survey questions solicited teachers' perceptions.
- Low participant response rate. Twenty-two percent of K-5 teachers responded to the 90-item survey. Ninety items on a survey is quite lengthy.

With the abovementioned limitations, the value sought in this study was the relationship between teacher job satisfaction and certain school working conditions. Using data from the Schools and Staffing Surveys in 1987-88 and 1993-93, Weiss (1999) states working conditions play key roles in keeping teachers in the profession. Characteristics known as working conditions can cause dissatisfaction among teachers (Loeb, Darling-Hammond, & Luczak, 2005). Therefore, the focus should be placed on the relationship between the social organizational aspects of the school environment and teachers' commitment. Specifically, this research asked the following questions.

1. What teacher variables (age and experience) influence his/her job satisfaction as measured by the Job Satisfaction Questionnaire (Balzer et al., 2000)?
2. What school variables (SES, academic achievement level, student racial composition) influence his/her job satisfaction as measured by the Job Satisfaction Questionnaire (Balzer et al., 2000)?

### **Major Findings**

Overall, elementary teachers rated their level of satisfaction as not being influenced by school variables. However, a teacher's years of experience does influence a teacher's overall level of job satisfaction for teachers with 0-4 years of teaching experience. The mean score for teachers with 0-4 years of experience and their level of satisfaction was 235 within a distribution of 222 to 275. The findings for the sub-dependent variables were not significant.

## **Demographics of Population**

Of the population studied, teacher characteristics represented 92% females. More teachers between the ages of 22 and 32 responded to the survey at 49%. Twenty-eight percent were 43 and older, and 23% of the teachers surveyed were between the ages of 33 and 42. The number of years of experience held by the teacher population studied with 0-4 years was 36% as well as teachers with 5-10 years; 27% of the teachers studied had 11 and more years experience. The divide between the grade level areas of the population studied was fairly even with 48% of the teachers teaching in grades 3, 4, and 5; and 52% of the teachers teaching in grades Kindergarten, first and second.

The population studied estimated 64% of students in their school receive free and reduced-price lunch while 54% categorize the level of school achievement in their school as low performing (69% of the student body are below grade level). Fifty percent of teachers estimate their school has a high concentration (60-100%) of African-American students. Fifty-eight percent of teachers estimate their school has a low percentage (25% or less) of White students. Sixty percent of teachers estimate their school has an average percentage (26-59%) of Hispanic-Latino students. Ninety-five percent of teachers estimate their school has a low concentration (25% or less) of *other* students.

## **Hypotheses and Instrumentation**

### **Sample**

The weakness of the population studied is that 22% of the teachers e-mailed completed the survey with three reminder emails; however 17% of the respondents' scores are considered valid. This is a poor return rate; however, the findings proved to be consistent among the population. It is possible that the researcher should have used stratified sampling

so the results could have been more representative of elementary teachers K-5. Measuring the effects of racial composition on job satisfaction was broken down into specific races rather than compiled into one. Results were analyzed as African-American students, White students, and Hispanic-Latino students.

### **Instrument**

A modified version of the Job Satisfaction Questionnaire (Balzer et al., 2000) was used to determine the satisfaction level of elementary teachers in grades K-5 in a large urban school district in North Carolina as evidenced by five factors and total job satisfaction. Although this questionnaire was originally developed and used for industrial workers; it's applicable in all work settings and has since been recently updated. The questionnaire displayed a Likert Scale with 90 items and answer choices displayed as 1 or 4 = disagree strongly, 2 or 3 = disagree somewhat, 3 or 2 = agree somewhat, and 4 or 1 = agree strongly. All negatively worded statements were reversed scored starting with 4 while positively worded items were scored starting with 1. Sub-dependent variables encompassing overall job satisfaction were work, pay, promotion, supervision, and co-workers satisfaction. This instrument is quite lengthy and does not grasp specific contextual concepts unique to the teaching profession unlike the North Carolina Teaching Working Conditions Survey (NCTWC). Although the NCTWC survey takes 30 minutes, it does measure teachers' perceptions of their school environment in the areas of a) time, b) facilities and resources, c) community support and involvement, d) managing student conduct, e) teacher leadership, f) school leadership, g) professional development, h) instructional practices and support, i) overall, j) new teacher support, k) and principal mentoring. This survey is specifically designed for educators. The reliability of the Job Satisfaction Questionnaire has been

checked by other studies and was found to have the following Coefficient Alpha ( $\alpha$ ) Values for the questionnaire in Table 3.

Table 3

*Coefficient Table: Job Satisfaction Questionnaire*

JDI Subscale	$\alpha$	n
Work	.90	1623
Pay	.86	1603
Opportunities for Promotion	.87	1611
Supervision	.91	1613
Co-Workers	.91	1615
Overall Job Satisfaction	.92	1629

Reliability analyses (Cronbach's Alpha) were computed to confirm the reliability for each leadership sub-scale variable, as well as overall reliability coefficient for the Job Satisfaction Questionnaire. The coefficients were calculated as work (.893), pay (.639), promotion (.863), supervision (.937), co-workers (.910), and overall job satisfaction (.954). High Cronbach's Alpha scores reflect that the instrument is consistently measuring the variables that are encompassed in the instrument. Each item on the questionnaire was measured on a Likert Scale. Positively worded statements scores ranged from 1 (strongly disagree) to 4 (strongly agree). Negatively worded statement scores ranged from 4 (strongly disagree) to 1 (strongly agree). Descriptive statistics (means, standard deviation, ranges, skewness and kurtosis) were completed on the job satisfaction scales. Univariate Analysis of Variance was completed on each subscale to explore each variable in a data set, separately.

### **Strengths and Weaknesses of Dependent Variable**

Lack of job satisfaction has been often cited as a major reason for teacher turnover. Over 21% of public school staff turnover in high-poverty schools while 14.2% turnover in



low-poverty schools (NCES, 2008). Job satisfaction is important because capable teachers have the greatest positive impact on student learning (Darling-Hammond, 2003) and satisfaction appears to influence teacher effectiveness which, in turn, promotes student achievement (NCES, 1997). North Carolina has implemented a Teacher Working Conditions Survey (NCTWC) that measures teachers' perceptions of school working conditions bi-annually, and schools and principals are directed to use the results of this survey to make school improvements. The results of elementary teachers' job satisfaction as influenced by school variables would provide information on school conditions, teacher demographics as related to school conditions, and how improvements can be made to improve teachers' job satisfaction.

“Job satisfaction and dissatisfaction are a function of perceived relationship between what one wants from one's job and what one perceives it as offering or entailing” (Locke, 1961, p. 316). Measuring teachers' job satisfaction is a result from teachers rating their perceptions on any given day. Peterson and Wilson (1992) believe “true satisfaction is probably so intertwined with both intrapersonal characteristics and methodological considerations that it may never be possible to disentangle them” (p. 69). In this researcher's experience, the timing with assessing a teacher's job satisfaction matters--teacher morale often rides on a roller coaster throughout a school year. The survey for this study was launched in November of 2009. The NCTWC survey is traditionally launched in the springtime--8 to 9 months into the school year.

### **Strengths and Weaknesses of Independent Variables**

Teacher perceptions were used to rate the academic achievement level of the school, SES percentage of the school, and racial composition of the school for this study. It is plausible for teachers' perceptions to be inaccurate, but not far-flung.

### **Hypotheses**

Fifteen hypotheses were tested. Hypotheses were analyzed using the F-test, set at a significance level of 0.05. The decision rule is given by rejecting the null when the F scores were greater than the critical value of F. Job satisfaction was the dependent variable with five sub-dependent variables; and the independent variables were: school characteristics (students' race, social economic status, and school achievement) and teacher variables (age and experience).

### **Total Job Satisfaction**

#### **Teachers' Factors**

Hypothesis 1 states the age of teachers' did not affect their total job satisfaction. Teachers were asked to identify themselves into an age-range category--22 and 32, 33 and 42, or 43 and above. The results were not significant and the interactional relationship with academic achievement had not significant effects. These findings are reflected in Table 4 followed by the means Table 5.

Table 4

*ANOVA of Overall Level of Job Satisfaction, School Achievement by Teacher's Age*

Source		df	Sum of Squares	Mean Square	F	<i>n2</i>
School Achievement	Between	2	5322.659	2661.329	2.55	0.043
Teacher's Age		2	3546.228	1773.114	1.699	0.029
School Achievement X Teacher's Age		4	5770.218	1442.555	1.382	0.046
	Within	114	118964.814	1043.551		
	Total	124	7716183			

*Note.* A, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,114)} = 3.09$

B, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,114)} = 3.09$

AXB, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(4,114)} = 2.46$

Table 5

*Means Table of School Achievement by Teacher's Age*

Achievement	Age	Mean	Std. Deviation	N
Low achievement (69% and below grade level)	22-32	250.49	30.109	37
	33-42	226.31	27.541	16
	43 and above	245	45.631	15
	Total	243.57	34.299	67
Middle achievement (89%–70% at or above grade level)	22-32	250.45	31.497	20
	33-42	245.75	29.422	12
	43 and above	264.87	30.076	15
	Total	253.85	30.883	47
High achievement (100%–90% at or above grade level)	22-32	237.6	40.259	5
	33-42	265	.	1
	43 and above	278	13.528	3
	Total	254.11	35.431	9
Total	22-32	249.44	31.029	62
	33-42	235.69	29.508	29
	43 and above	257.41	37.828	32
	Total	248.27	33.242	124

Hypothesis 2 states the teaching experience of teachers did not affect their total job satisfaction. However, a teacher's years of teaching experience influenced overall level of job satisfaction for teachers with 0-4 years of experience. Teachers were asked to identify the category of which marked their years of experience--0-4, 5-10, or 11 and more. The interactional relationship of years of experience by academic achievement showed no effects. Tables 6, 7, 8, and 9 reflect the abovementioned findings executed with Bonferroni's and Scheffé's post-hoc comparison that showed significant results.

Table 6

*ANOVA of Overall Level of Job Satisfaction, Years of Experience by Academic Achievement*

Source		df	Sum of Squares	Mean Square	F	<i>n</i> <sup>2</sup>
Years Experience	Between	2	7024.114	3512.057	*3.137	0.052
Achievement		2	2365.911	1182.956	1.057	0.018
Years Experience X Achievement		4	6448.573	1612.143	1.44	0.048
	Within	115	128763.633	1119.684		
	Total	124	7746459			

*Note.* \*A, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

B, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

AXB, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(4,115)} = 2.46$

Table 7

*Means Table of Years of Experience by Academic Achievement*

Years Experience	Achievement	Mean	Std. Deviation	N
0-4 years (ILT)	Low achievement (69% and below grade level)	242.1	31.129	31
	Middle achievement (89%– 70% at or above grade level)	252.36	37.441	11
	High achievement (100% – 90% at or above grade level)	212.5	42.462	4
	Total	241.98	34.371	46
5-10 years (experienced)	Low achievement (69% and below grade level)	243.65	31.901	23
	Middle achievement (89%– 70% at or above grade level)	251.9	32.446	20
	High achievement (100% – 90% at or above grade level)	259	31.432	3
	Total	248.24	31.786	46
11+ years (career)	Low achievement (69% and below grade level)	246.92	46.521	13
	Middle achievement (89% – 70% at or above grade level)	257.31	25.247	16
	High achievement (100% – 90% at or above grade level)	278	13.528	3
	Total	255.03	35.204	32
Total	Low achievement (69% and below grade level)	243.57	34.299	67
	Middle achievement (89%– 70% at or above grade level)	253.85	30.883	47
	High achievement (100% – 90% at or above grade level)	246.1	41.924	10
	Total	247.67	33.772	124

Table 8

*Pairwise Comparisons, Dependent Variable: Job Satisfaction*

(I) Years Experience	(J) Years Experience	a			95% Confidence Interval for Difference <sup>a</sup>	
		Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	Lower Bound	Upper Bound
0-4 years (ILT)	5-10 years (experienced)	-15.864	9.976	0.344	-40.101	8.373
	11+ years (career)	-25.092*	10.259	*0.048	-50.015	-0.168
5-10 years (experienced)	0-4 years (ILT)	15.864	9.976	0.344	-8.373	40.101
	11+ years (career)	-9.228	10.579	1	-34.929	16.474
11+ years (career)	0-4 years (ILT)	25.092*	10.259	0.048	0.168	50.015
	5-10 years (experienced)	9.228	10.579	1	-16.474	34.929

*Note.* Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni

\* The mean difference is significant at the .05 level.

Table 9

*Multiple Comparisons, Dependent Variable: Job Satisfaction*

(I) Years Experience	(J) Years Experience	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0-4 years (ILT)	5-10 years (experienced)	-6.26	6.977	0.67	-23.56	11.04
	11+ years (career)	-13.05	7.703	0.242	-32.16	6.05
5-10 years (experienced)	0-4 years (ILT)	6.26	6.977	0.67	-11.04	23.56
	11+ years (career)	-6.79	7.703	0.679	-25.89	12.31
11+ years (career)	0-4 years (ILT)	13.05	7.703	0.242	-6.05	32.16
	5-10 years (experienced)	6.79	7.703	0.679	-12.31	25.89

*Note.* Based on observed means.

The error term is Mean Square (Error) = 1119.684.

Adjustment for multiple comparisons: Scheffé

### **School Factors**

Hypothesis 3 states the school's overall academic achievement did not influence the total job satisfaction of teachers. Teachers were asked to categorize their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at the .05 level. The mean score for teachers who rated their school as low achieving with low satisfaction was 238 within a distribution of 214 to 262. Teachers who rated their school as middle achieving with middle satisfaction had a mean score of 256 within a distribution of 246 to 266. Teachers who rated their school as high achieving with high satisfaction had a mean score of 252 within a distribution of 225 to 279.



Hypothesis 4 states the school's social economic status of students did not influence the total job satisfaction of teachers. Teachers were asked to categorize their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level. The mean score for teachers who rated their school as having low SES with high satisfaction was 247 within a distribution of 221 to 272. The mean score for teachers who rated their school as having moderate SES with middle satisfaction was 244 within a distribution of 229 to 259. The mean score for teachers who rated their school as having high SES with low satisfaction was 256 within a distribution of 233 to 279. The interactional relationship between SES and academic achievement showed no effects. Table 10 shows the ANOVA results and the means results are in table 11.

Table 10

*ANOVA of Overall Level of Job Satisfaction, SES by Academic Achievement*

Source		Df	Sum of Squares	Mean Square	F	<i>n2</i>
SES	Between	2	975.555	487.778	0.426	0.007
Achievement		2	1997.188	998.594	0.872	0.015
SES X Achievement		4	3323.276	830.819	0.725	0.025
	Within	115	131760.735	1119.684		
	Total	124	7746459			

*Note.* A, Sig.  $\leq$  .05 level of significance, critical value is  $F_{.05(2,115)} = 3.09$

B, Sig.  $\leq$  .05 level of significance, critical value is  $F_{.05(2,115)} = 3.09$

AXB, Sig.  $\leq$  .05 level of significance, critical value is  $F_{.05(4,115)} = 2.46$

Table 11

*Means Table of SES by Academic Achievement*

SES	Achievement	Mean	Std. Deviation	N
Low (39% and below)	Low achievement (69% and below grade level)	225	.	1
	Middle achievement (89%– 70% at or above grade level)	270	21.975	10
	High achievement (100%– 90% at or above grade level)	246	46.787	5
	Total	259.69	32.97	16
Moderate (59% to 40%)	Low achievement (69% and below grade level)	248.14	36.53	7
	Middle achievement (89%– 70% at or above grade level)	244.5	31.111	18
	High achievement (100%– 90% at or above grade level)	239.5	45.332	4
	Total	244.69	33.176	29
High (60% and above)	Low achievement (69% and below grade level)	243.34	34.527	59
	Middle achievement (89%– 70% at or above grade level)	254.21	32.394	19
	High achievement (100%– 90% at or above grade level)	273	.	1
	Total	246.33	34.053	79
Total	Low achievement (69% and below grade level)	243.57	34.299	67
	Middle achievement (89% – 70% at or above grade level)	253.85	30.883	47
	High achievement (100%– 90% at or above grade level)	246.1	41.924	10
	Total	247.67	33.772	124

Hypothesis 5 states the school's racial composition of students did not influence the total job satisfaction of teachers. Teachers were asked to estimate the percentage of their school's racial composition (low: 25% or less; middle: 26%-59%; high: 60%-100%) of ethnicities comprising African-Americans, Whites, Hispanic-Latinos, and Other. The results

for African-American students were not significant at the .05 level. The mean score for teachers who rated their school as having a low percentage of African-American students with high satisfaction was 257 within a distribution of 234 to 280. The mean score for teachers who rated their school as having a middle percentage of African-American students with middle satisfaction was 250 within a distribution of 238 to 262. The mean score for teachers who rated their school as having a high percentage of African-American students with low satisfaction was 251 within a distribution of 234 to 268. The interactional relationship between African-American students and academic achievement showed no effects. Table 12 shows the ANOVA results and the means results are in table 13.

Table 12

*ANOVA of Overall Level of Job Satisfaction, African-American Students (AA) by Academic Achievement*

Source		df	Sum of Squares	Mean Square	F	<i>n2</i>
AA	Between	2	301.612	150.806	0.133	0.002
Achievement		2	960.947	480.473	0.425	0.007
AA X Achievement		4	4212.764	1053.191	0.932	0.031
	Within	115	129955.99	1130.052		
	Total	124	7746459			

*Note.* A, Sig.  $\leq$  .05 level of significance, critical value is  $F_{.05(2,115)} = 3.09$

B, Sig.  $\leq$  .05 level of significance, critical value is  $F_{.05(2,115)} = 3.09$

AXB, Sig.  $\leq$  .05 level of significance, critical value is  $F_{.05(4,115)} = 2.46$

Table 13

*Means Table of African-American Students (AA) by Academic Achievement*

AA	Achievement	Mean	Std. Deviation	N
Low (25% or less)	Low achievement (69% and below grade level)	266.5	7.778	2
	Middle achievement (89%– 70% at or above grade level)	273.75	34.97	4
	High achievement (100%– 90% at or above grade level)	231.67	30.551	3
	Total	258.11	33.191	9
Middle (26%-59%)	Low achievement (69% and below grade level)	250.52	28.999	25
	Middle achievement (89%– 70% at or above grade level)	255.35	28.54	23
	High achievement (100%– 90% at or above grade level)	245.8	55.414	5
	Total	252.17	31.283	53
High (60%-100%)	Low achievement (69% and below grade level)	238.08	37.188	40
	Middle achievement (89%– 70% at or above grade level)	248.15	32.445	20
	High achievement (100%– 90% at or above grade level)	268.5	6.364	2
	Total	242.31	35.47	62
Total	Low achievement (69% and below grade level)	243.57	34.299	67
	Middle achievement (89% – 70% at or above grade level)	253.85	30.883	47
	High achievement (100% – 90% at or above grade level)	246.1	41.924	10
	Total	247.67	33.772	124

For White students, the results were not significant at the .05 level as well. The mean score for teachers who rated their school as having a low percentage of White students with low satisfaction was 254 within a distribution of 231 to 277. The mean score for teachers who rated their school as having a middle percentage of White students with middle satisfaction was 250 within a distribution of 235 to 265. The mean score for teachers who

rated their school as having a high percentage of White students with high satisfaction was 261 within a distribution of 240 to 281. The interactional relationship between White students and academic achievement showed no effects. Table 14 shows the ANOVA results and the means results are in table 15.

Table 14

*ANOVA of Overall Level of Job Satisfaction, White Students by Academic Achievement*

Source		df	Sum of Squares	Mean Square	F	<i>n2</i>
White	Between	2	574.425	287.212	0.254	0.004
Achievement		2	1234.694	617.347	0.545	0.009
White X Achievement		4	4234.731	1411.577	1.246	0.032
	Within	115	129121.732	1132.647		
	Total	124	7611410			

*Note.* A, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

B, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

AXB, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(4,115)} = 2.46$

Table 15

*Means Table of White Students by Academic Achievement*

White Students	Achievement	Mean	Std. Deviation	N
Low (25% or less)	Low achievement (69% and below grade level)	241	35.464	55
	Middle achievement (89% – 70% at or above grade level)	249.67	37.107	15
	High achievement (100% – 90% at or above grade level)	273	.	1
	Total	243.28	35.652	71
Middle (26%-59%)	Low achievement (69% and below grade level)	257.45	26.666	11
	Middle achievement (89% - 70% at or above grade level)	250.19	27.466	26
	High achievement (100% – 90% at or above grade level)	243	61.262	3
	Total	251.65	29.581	40
High (60%-100%)	Middle achievement (89 % – 70 % at or above grade level)	279.2	15.353	5
	High achievement (100% – 90% at or above grade level)	243.17	38.753	6
	Total	259.55	34.631	11
Total	Low achievement (69% and below grade level)	243.74	34.532	66
	Middle achievement (89% – 70% at or above grade level)	253.17	30.87	46
	High achievement (100% – 90% at or above grade level)	246.1	41.924	10
	Total	247.49	33.85	122

For Hispanic-Latino students, the results were not significant at the .05 level also. The mean score for teachers who rated their school as having a low percentage of Hispanic-Latino students with high satisfaction was 249 within a distribution of 237 to 261. The mean score for teachers who rated their school as having a middle percentage of Hispanic-Latino students with middle satisfaction was 241 within a distribution of 227 to 255. The mean score for teachers who rated their school as having a high percentage of Hispanic-Latino students

with low satisfaction was 259 within a distribution of 237 to 281. The interactional relationship between Hispanic-Latino students and academic achievement showed no effects.

Table 16 shows the ANOVA results and the means results are in table 17.

Table 16

*ANOVA of Overall Level of Job Satisfaction, Hispanic-Latino Students by Academic Achievement*

Source		df	Sum of Squares	Mean Square	F	<i>n2</i>
Hispanic-Latino	Between	2	2345.667	1172.834	1.014	0.017
Achievement		2	2074.056	1037.028	0.897	0.015
Hispanic-Latino X Achievement		4	913.292	304.431	0.263	0.007
	Within	116	134125.247	1156.252		
	Total	124	7746459			

*Note.* A, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,116)} = 3.07$

B, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,116)} = 3.07$

AXB, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(4,116)} = 2.44$

Table 17

*Means Table of Hispanic-Latino Students by Academic Achievement*

Hispanic-Latino	Achievement	Mean	Std. Deviation	N
Low (25% or less)	Low achievement (69% and below grade level)	240	26.285	10
	Middle achievement (89% – 70% at or above grade level)	256.17	32.384	18
	High achievement (100% – 90% at or above grade level)	252.43	39.832	7
	Total	250.8	32.208	35
Middle (26%-59%)	Low achievement (69% and below grade level)	241.83	35.464	47
	Middle achievement (89% – 70% at or above grade level)	251.04	30.858	26
	High achievement (100% – 90% at or above grade level)	231.33	51.791	3
	Total	244.57	34.446	76
High (60%-100%)	Low achievement (69% and below grade level)	255.3	36.402	10
	Middle achievement (89% – 70% at or above grade level)	264.33	28.361	3
	Total	257.38	33.817	13
Total	Low achievement (69% and below grade level)	243.57	34.299	67
	Middle achievement (89% – 70% at or above grade level)	253.85	30.883	47
	High achievement (100% – 90% at or above grade level)	246.1	41.924	10
	Total	247.67	33.772	124

**Sub-Factors and School Factors on Job Satisfaction**

The study examined the sub-dependent variables of job satisfaction as measured by the Job Satisfaction Questionnaire (Balzer et al., 2000) and academic achievement by economically disadvantaged students.



## **Working Conditions**

Hypothesis 6 states the academic achievement of the school did not influence the teachers' satisfaction of the school's working conditions. Teachers were asked to categorize their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at the .05 level for working conditions. The mean score for teachers who rated their school as low achieving with low satisfaction of the school's working conditions was 51 within a distribution of 45 to 56. Teachers who rated their school as middle achieving with middle satisfaction of the school's working conditions had a mean score of 56 within a distribution of 54 to 59. Teachers who rated their school as high achieving with high satisfaction of the school's working conditions had a mean score of 54 within a distribution of 47 to 60. Table 18 shows the ANOVA results and the means results are in table 19.

Hypothesis 7 states the school's social economic status of students did not influence the views of teachers about the school's working conditions. Teachers were asked to categorize their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level for working conditions. The mean score for teachers who rated their school as having low SES with high satisfaction of the school's working conditions was 52 within a distribution of 46 to 58. The mean score for teachers who rated their school as having moderate SES with middle satisfaction of the school's working conditions was 52 within a distribution of 49 to 56. The mean score for teachers who rated their school as having high SES with low satisfaction of the school's working conditions was 56 within a distribution of

51 to 62. The interactional relationship between SES and academic achievement showed no effects. Table 18 shows the ANOVA results and the means results are in table 19.

Table 18

*ANOVA of Overall Level of Work Satisfaction, SES by Academic Achievement*

Source		df	Sum of Squares	Mean Square	F	<i>n2</i>
SES	Between	2	114.985	57.493	0.887	0.015
Achievement		2	251.525	125.762	1.941	0.033
SES X Achievement		4	342.297	85.574	1.321	0.044
	Within	115	7450.933	64.791		
	Total	124	386260			

*Note.* A, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

B, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

AXB, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(4,115)} = 2.46$

Table 19

*Means Table of Overall Level of Work Satisfaction, SES by Academic Achievement*

Reduced Lunch	Achievement	Mean	Std. Deviation	N
Low (39% and below)	Low achievement (69% and below grade level)	43	.	1
	Middle achievement (89% – 70% at or above grade level)	59.6	4.115	10
	High achievement (100% – 90% at or above grade level)	54.8	6.87	5
	Total	57.06	6.475	16
Moderate (59% to 40%)	Low achievement (69% and below grade level)	55.43	7.525	7
	Middle achievement (89% – 70% at or above grade level)	55.44	6.582	18
	High achievement (100% – 90% at or above grade level)	47.5	14.731	4
	Total	54.34	8.334	29
High (60% and above)	Low achievement (69% and below grade level)	54.85	8.678	59
	Middle achievement (89% – 70% at or above grade level)	55.95	7.509	19
	High achievement (100% – 90% at or above grade level)	60	.	1
	Total	55.18	8.339	79
Total	Low achievement (69% and below grade level)	54.73	8.572	67
	Middle achievement (89% – 70% at or above grade level)	56.53	6.636	47
	High achievement (100% – 90% at or above grade level)	52.4	10.658	10
	Total	55.23	8.102	124

### **Pay**

Hypothesis 8 states the academic achievement of the school did not influence the teachers' satisfaction with their pay. Teachers were asked to categorize their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at

the .05 level for teachers' satisfaction with their pay. The mean score for teachers who rated their school as low achieving with low satisfaction with pay was 14 within a distribution of 12 to 17. Teachers who rated their school as middle achieving with middle satisfaction with pay had a mean score of 14 within a distribution of 13 to 15. Teachers who rated their school as high achieving with high satisfaction with pay had a mean score of 12 within a distribution of 10 to 15. Table 20 shows the ANOVA results and the means results are in table 21.

Hypothesis 9 states the school's social economic status of students did not influence the views of teachers about their pay. Teachers were asked to categorize their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level for teachers' satisfaction with their pay. The mean score for teachers who rated their school as having low SES with high satisfaction with pay was 14 within a distribution of 11 to 17. The mean score for teachers who rated their school as having moderate SES with middle satisfaction with pay was 14 within a distribution of 13 to 16. The mean score for teachers who rated their school as having high SES with low satisfaction with pay was 12 within a distribution of 10 to 15. The interactional relationship between SES and academic achievement showed no effects. Table 20 shows the ANOVA results and the means results are in table 21.

Table 20

*ANOVA of Overall Level of Pay Satisfaction, SES by Academic Achievement*

Source		df	Sum of Squares	Mean Square	F	<i>n2</i>
SES	Between	2	21.467	10.734	0.886	0.015
Achievement		2	14.054	7.027	0.58	0.01
SES X Achievement		4	14.238	3.559	0.294	0.01
	Within	115	1393.793	12.12		
	Total	124	26888			

Note. A, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

B, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

AXB, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(4,115)} = 2.46$

Table 21

*Means Table of Overall Level of Pay Satisfaction, SES by Academic Achievement*

SES	Achievement	Mean	Std. Deviation	N
Low (39% and below)	Low achievement (69% and below grade level)	15	.	1
	Middle achievement (89% – 70% at or above grade level)	15.3	3.713	10
	High achievement (100% – 90% at or above grade level)	13.2	1.924	5
	Total	14.62	3.202	16
Moderate (59% to 40%)	Low achievement (69% and below grade level)	15.43	4.65	7
	Middle achievement (89% – 70% at or above grade level)	14.28	3.159	18
	High achievement (100% – 90% at or above grade level)	14.75	2.754	4
	Total	14.62	3.427	29
High (60% and above)	Low achievement (69% and below grade level)	14.47	3.762	59
	Middle achievement (89% - 70% at or above grade level)	13.32	2.496	19
	High achievement (100% - 90% at or above grade level)	11	.	1
	Total	14.15	3.512	79
Total	Low achievement (69% and below grade level)	14.58	3.806	67
	Middle achievement (89% – 70% at or above grade level)	14.11	3.066	47
	High achievement (100% – 90% at or above grade level)	13.6	2.366	10
	Total	14.32	3.435	124

### Promotion

Hypothesis 10 states the academic achievement of the school did not influence the teachers' satisfaction with their opportunities for promotion. Teachers were asked to categorize their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The

results were not significant at the .05 level for teachers' satisfaction with their opportunities for promotion. The mean score for teachers who rated their school as low achieving with low satisfaction with their opportunities for promotion was 17 within a distribution of 13 to 21. Teachers who rated their school as middle achieving with middle satisfaction with their opportunities for promotion had a mean score of 18 within a distribution of 16 to 20. Teachers who rated their school as high achieving with high satisfaction with their opportunities for promotion had a mean score of 21 within a distribution of 16 to 24. Table 22 shows the ANOVA results and the means results are in table 23.

Hypothesis 11 states the school's social economic status of students did not influence the views of teachers about their opportunities for promotion. Teachers were asked to categorize their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level for teachers' satisfaction with their opportunities for promotion. The mean score for teachers who rated their school as having low SES with high satisfaction with their opportunities for promotion was 16 within a distribution of 12 to 20. The mean score for teachers who rated their school as having moderate SES with middle satisfaction with their opportunities for promotion was 18 within a distribution of 16 to 21. The mean score for teachers who rated their school as having high SES with low satisfaction with their opportunities for promotion was 21 within a distribution of 17 to 24. The interactional relationship between SES and academic achievement showed no effects. Table 22 shows the ANOVA results and the means results are in table 23.

Table 22

*ANOVA of Overall Level of Promotion Satisfaction, SES by Academic Achievement*

Source		df	Sum of Squares	Mean Square	F	<i>n2</i>
SES	Between	2	103.317	51.658	1.902	0.015
Achievement		2	26.431	13.216	0.487	0.01
SES X Achievement		4	62.417	15.604	0.575	0.01
	Within	115	3123.515	27.161		
	Total	124	49820			

Note. A, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

B, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

AXB, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(4,115)} = 2.46$



Table 23

*Means Table of Overall Level of Promotion Satisfaction, SES by Academic Achievement*

Reduced Lunch	Achievement	Mean	Std. Deviation	N
Low (39% and below)	Low achievement (69% and below grade level)	13	.	1
	Middle achievement (89% – 70% at or above grade level)	18.1	8.239	10
	High achievement (100% – 90% at or above grade level)	17.6	4.98	5
	Total	17.63	6.994	16
Moderate (59% to 40%)	Low achievement (69% and below grade level)	19.43	4.577	7
	Middle achievement (89% – 70% at or above grade level)	18.44	5.327	18
	High achievement (100% – 90% at or above grade level)	18.25	3.594	4
	Total	18.66	4.828	29
High (60% and above)	Low achievement (69% and below grade level)	20.2	4.642	59
	Middle achievement (89% – 70% at or above grade level)	19.05	5.359	19
	High achievement (100% – 90% at or above grade level)	25	.	1
	Total	19.99	4.818	79
Total	Low achievement (69% and below grade level)	20.01	4.653	67
	Middle achievement (89% – 70% at or above grade level)	18.62	5.929	47
	High achievement (100% – 90% at or above grade level)	18.6	4.526	10
	Total	19.37	5.173	124

### Co-Workers

Hypothesis 12 states the academic achievement of the school did not influence the teachers' satisfaction with their co-workers. Teachers were asked to categorize their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at

the .05 level for teachers' satisfaction with their co-workers. The mean score for teachers who rated their school as low achieving with low satisfaction with their co-workers was 54 within a distribution of 48 to 61. Teachers who rated their school as middle achieving with middle satisfaction with their co-workers had a mean score of 55 within a distribution of 53 to 58. Teachers who rated their school as high achieving with high satisfaction with their co-workers had a mean score of 51 within a distribution of 44 to 58. Table 24 shows the ANOVA results and the means results are in table 25.

Hypothesis 13 states the school's social economic status of students did not influence the views of teachers about their co-workers. Teachers were asked to categorize their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level for teachers' satisfaction with their co-workers. The mean score for teachers who rated their school as having low SES with high satisfaction with their co-workers was 55 within a distribution of 48 to 61. The mean score for teachers who rated their school as having moderate SES with middle satisfaction with their co-workers was 55 within a distribution of 51 to 59. The mean score for teachers who rated their school as having high SES with low satisfaction with their co-workers was 51 within a distribution of 45 to 57. The interactional relationship between SES and academic achievement showed no effects. Table 24 shows the ANOVA results and the means results are in table 25.

Table 24

*ANOVA of Overall Level of Co-workers Satisfaction, SES by Academic Achievement*

Source		df	Sum of Squares	Mean Square	F	<i>n2</i>
SES	Between	2	78.251	39.126	0.514	0.906
Achievement		2	96.113	48.057	0.631	0.009
SES X Achievement		4	271.948	67.987	0.893	0.011
	Within	115	8757.595	76.153		
	Total	124	363260			

Note. A, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

B, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

AXB, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(4,115)} = 2.46$

Table 25

*Means Table of Overall Level of Co-worker Satisfaction, SES by Academic Achievement*

Reduced Lunch	Achievement	Mean	Std. Deviation	N
Low (39% and below)	Low achievement (69% and below grade level)	57	.	1
	Middle achievement (89% – 70% at or above grade level)	57.6	7.152	10
	High achievement (100% – 90% at or above grade level)	51	13.342	5
	Total	55.5	9.381	16
Moderate (59% to 40%)	Low achievement (69% and below grade level)	56.29	8.361	7
	Middle achievement (89% – 70% at or above grade level)	53.89	7.537	18
	High achievement (100% – 90% at or above grade level)	55.75	7.136	4
	Total	54.72	7.492	29
High (60% and above)	Low achievement (69% and below grade level)	51.53	9.248	59
	Middle achievement (89% – 70% at or above grade level)	55.84	7.769	19
	High achievement (100% – 90% at or above grade level)	48	.	1
	Total	52.52	9.013	79
Total	Low achievement (69% and below grade level)	52.1	9.167	67
	Middle achievement (89% – 70% at or above grade level)	55.47	7.526	47
	High achievement (100% – 90% at or above grade level)	52.6	10.211	10
	Total	53.42	8.747	124

### Supervision

Hypothesis 14 states the academic achievement of the school did not influence the teachers' satisfaction with their supervisors. Teachers were asked to categorize their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at

the .05 level for teachers' satisfaction with their supervisors. The mean score for teachers who rated their school as low achieving with low satisfaction with their co-workers was 51 within a distribution of 45 to 56. Teachers who rated their school as middle achieving with middle satisfaction with their supervisors had a mean score of 56 within a distribution of 54 to 59. Teachers who rated their school as high achieving with high satisfaction with their supervisors had a mean score of 54 within a distribution of 47 to 60. Table 26 shows the ANOVA results and the means results are in table 27.

Hypothesis 15 states the school's social economic status of students did not influence the views of teachers about their supervisors. Teachers were asked to categorize their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level for teachers' satisfaction with their supervisors. The mean score for teachers who rated their school as having low SES with high satisfaction their supervisors was 55 within a distribution of 46 to 64. The mean score for teachers who rated their school as having moderate SES with middle satisfaction with their supervisors was 58 within a distribution of 44 to 55. The mean score for teachers who rated their school as having high SES with low satisfaction with their supervisors was 53 within a distribution of 45 to 62. The interactional relationship between SES and academic achievement showed no effects. Table 26 shows the ANOVA results and the means results are in table 27.

Table 26

*ANOVA of Overall Level of Supervision Satisfaction, SES by Academic Achievement*

Source		df	Sum of Squares	Mean Square	F	<i>n2</i>
SES	Between	2	161.737	80.869	0.538	0.009
Achievement		2	76.107	38.054	0.253	0.004
SES X Achievement		4	182.648	45.662	0.304	0.01
	Within	115	17291.481	150.361		
	Total	124	343818			

Note. A, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

B, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

AXB, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(4,115)} = 2.46$

Table 27

*Means Table of Overall Level of Supervision Satisfaction, SES by Academic Achievement*

Reduced Lunch	Achievement	Mean	Std. Deviation	N
Low (39 % and below)	Low achievement (69% and below grade level)	54	.	1
	Middle achievement (89% – 70% at or above grade level)	58.6	8.897	10
	High achievement (100% – 90% at or above grade level)	53.6	18.968	5
	Total	56.75	12.228	16
Moderate (59% to 40%)	Low achievement (69% and below grade level)	48.57	12.752	7
	Middle achievement (89% – 70 % at or above grade level)	49.33	11.807	18
	High achievement (100% – 90% at or above grade level)	53.25	15.966	4
	Total	49.69	12.207	29
High (60% and above)	Low achievement (69% and below grade level)	49.85	11.653	59
	Middle achievement (89% – 70% at or above grade level)	52.89	13.237	19
	High achievement (100% – 90% at or above grade level)	59	.	1
	Total	50.7	12	79
Total	Low achievement (69% and below grade level)	49.78	11.599	67
	Middle achievement (89% – 70 % at or above grade level)	52.74	12.148	47
	High achievement (100% – 90% at or above grade level)	54	15.748	10
	Total	51.24	12.173	124

### **Total Job Satisfaction**

Total job satisfaction was analyzed holding constant academic achievement and social economic status of students. It is hypothesized that school factors did not influence the teachers' total job satisfaction. Teachers categorized their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%),

and high achieving (90%-100%). The results were not significant at the .05 level for teachers' total job satisfaction. The mean score for teachers who rated their school as low achieving with low satisfaction for total job satisfaction was 49 within a distribution of 42 to 56. Teachers who rated their school as middle achieving with middle satisfaction for total job satisfaction had a mean score of 57 within a distribution of 53 to 60. Teachers who rated their school as high achieving with high satisfaction for total job satisfaction had a mean score of 58 within a distribution of 50 to 66. For SES, teachers categorized their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The mean score for teachers who rated their school as having low SES with high satisfaction for total job satisfaction was 53 within a distribution of 45 to 60. The mean score for teachers who rated their school as having moderate SES with middle satisfaction for total job satisfaction was 52 within a distribution of 47 to 56. The mean score for teachers who rated their school as having high SES with low satisfaction for total job satisfaction was 59 within a distribution of 52 to 66. The interactional relationship between SES and academic achievement showed no effects. Table 28 shows the ANOVA results and the means results are in table 29.



Table 28

*ANOVA of Overall Level of Total Satisfaction, SES by Academic Achievement*

Source		Df	Sum of Squares	Mean Square	F	$\eta^2$
SES	Between	2	370.777	185.389	1.793	0.03
Achievement		2	415.386	207.693	2.009	0.034
SES X Achievement		4	510.688	127.672	1.235	0.041
	Within	115	11889.246	103.385		
	Total	124	375935			

Note. A, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

B, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(2,115)} = 3.09$

AXB, Sig.  $\leq .05$  level of significance, critical value is  $F_{.05(4,115)} = 2.46$

Table 29

*Means Table of Overall Level of Total Satisfaction, SES by Academic Achievement*

Reduced Lunch	Achievement	Mean	Std. Deviation	N
Low (39% and below)	Low achievement (69% and below grade level)	43	.	1
	Middle achievement (89% – 70% at or above grade level)	60.8	4.984	10
	High achievement (100% – 90% at or above grade level)	55.8	12.153	5
	Total	58.13	8.724	16
Moderate (59% to 40%)	Low achievement (69% and below grade level)	53	10.408	7
	Middle achievement (89% – 70% at or above grade level)	53.11	10.397	18
	High achievement (100% – 90% at or above grade level)	50	5.944	4
	Total	52.66	9.685	29
High (60% and above)	Low achievement (69% and below grade level)	52.44	10.874	59
	Middle achievement (89% – 70% at or above grade level)	57.16	9.494	19
	High achievement (100% – 90% at or above grade level)	70	.	1
	Total	53.8	10.781	79
Total	Low achievement (69% and below grade level)	52.36	10.73	67
	Middle achievement (89% – 70 % at or above grade level)	56.38	9.421	47
	High achievement (100% – 90% at or above grade level)	54.9	10.671	10
	Total	54.09	10.344	124

### Summary

The data collected yielded a low response rate with three reminder emails. Twenty-two percent of the teachers in the researched district responded to the emailed survey.

Ninety-two percent of the respondents were female with an equal distribution from teachers in grades K-2 and 3-5. The respondents perceive their schools have a high concentration

(64%) of students receiving free and/or reduced-priced lunches while 54% perceive their school is low performing. Teachers' perception of their school's racial composition was comprised mostly of African-Americans and Hispanic-Latinos.

### **Theoretical Framework**

Maslow's Hierarchy of Human Needs Theory was used as the theoretical framework to explore teachers' job satisfaction. This theory emphasizes five basic categories of human needs (a) physiological (b) safety needs (c) belongingness and love needs (d) esteem needs and (e) self-actualization needs (Maslow, 1970; Locke, 1976; and Hoy and Miskel, 2008). Overall, elementary teachers in the researched district in grades K-5 are satisfied with their job. It is the author's belief that teachers with 0-4 years of experience express lower job satisfaction due to their lower level needs not being met or the uncertainty of their needs not being met: physiological, safety, and belongingness.

The findings from this study (decreased job satisfaction in teachers with little experience) agreed with findings from other studies on teacher job satisfaction (Wild & Dawson, 1972; NCES, 1997; Hanushek et al., 2004). However, other studies (Gibson & Klein, 1970; Borman & Dowling, 2008) show that with increased teaching experience comes decreased satisfaction. As with previous inconsistent findings, the findings from this study mirror that inconsistency.

The significance for educators is to provide extra support for those less experienced teachers early on in their careers in hopes of retaining them. Weiss (1999) states new teachers, in the United States, leave the teaching profession at a high rate. In some school districts, up to 40% of the beginning teachers resign within the first two years. With increasing student enrollments, demands for teachers increase, however teacher shortages are

increasing as well due to lack of job satisfaction (Marvel et al., 2006; Grayson & Alvarez, 2008; Kearney, 2008). For beginning teachers, principals and mentors should focus their efforts on meeting teachers' lower level needs. Often times, beginning teachers are overwhelmed with the behavior management of students, time management and planning, and meeting the differentiated needs of their students. Most school districts offer some type of mentoring program for beginning teachers, but the implementation of mentee support could be the difference between a beginning teacher staying or leaving.

The significance for policy makers is to provide the monetary support to school districts that will allow them to develop programs especially for supporting the initially licensed teachers (ILTs). Efforts have to be made to develop programs that are creative, specific, and meet the needs of ILTs. Policy makers have the power to develop board policies that mandate time for teachers to meet and plan together. The establishment of Professional Learning Communities (PLC) in school districts has been a recent paradigm shift. Professional Learning Communities are teams of teachers working together for the academic success of all students. The PLC concept provides support to all teacher team members, but is truly beneficial for beginning teachers. District policy makers can mandate PLC time to occur within the instructional day. Many districts in North Carolina have adopted monthly early release days into the school calendar where students are released from school 1 to 2 hours early for teachers to have time during the school day to collaborate and plan for their students. School boards are able to create policies that permit early release of students for time for teachers.

## Summary

This study found no significant data reflecting that school variables of student racial composition, academic achievement level, and social economic status of students influenced teacher's job satisfaction as measured by a modified version of the Job Satisfaction Questionnaire. Age, as a teacher variable, showed no significant data, while a teacher's years of experience by academic achievement showed significant results with teachers having 0-4 years of experience using Bonferoni's post-hoc comparisons. Scheffé's post-hoc comparison, with the aforementioned data does not show significant results.

The significance of this study's results points to initially licensed teachers (ILTs) and supporting them. Educators, at the school level, must prioritize the support beginning teachers receive. Fortunately, beginning teacher support is a part of school improvement plans and a section on the NCTWC survey. The importance of beginning teacher support is known, but implementation of that support is the difference. Policy makers at the district level (for example School Board members) have the authority to create policies that require teacher collaboration, and beginning teacher support through mentor programs and observations. The researched district has in place a mentoring program especially for ILTs. This program provides tiered mentor support for teachers with 0-4 years of teaching experience. Mentor support is provided on a one-to-fifteen mentor to ILT ratio. This program is in its fifth year, but unfortunately due to recent budget cuts, this program will be discontinued.

The final chapter will present the conclusions drawn from the analyses of these findings. A discussion of the implications and suggestions for future studies will also be presented.

## **Chapter Five: Conclusions**

### **Introduction**

The purpose of this study was to assess whether teacher and school variables influenced teachers' job satisfaction. Since the No Child Left Behind Act of 2001, state accountability measures have tightened by requiring school districts to follow and document procedures to close the achievement gap and increase minority student achievement. Hill and Barth (2004) discuss the implications of NCLB as it relates to teacher attrition and job satisfaction and conclude that NCLB has a negative impact on teacher job satisfaction. Teacher attrition and shortages are largely due to teacher job dissatisfaction (Ingersoll, 2001, 2002). Research done by Liu and Ramsey (2008) revealed a variety of reasons for teacher job dissatisfaction. Teachers were least satisfied with work conditions and compensation; however, teachers' job satisfaction improved with years of experience. This study was conducted in the researched district where teacher turnover is high, the number of students qualifying for free and reduced-price lunches is rising, and academic achievement levels are inconsistent. This research was conducted for the purpose of exploring teachers' perceptions of job satisfaction. The author is currently a school administrator and works to keep teachers satisfied despite the given working conditions of a school. Satisfaction appears to influence teacher effectiveness which, in turn, promotes student achievement (NCES, 1997). Capable teachers have the greatest positive impact on student learning (Darling-Hammond, 2003). Hulpia and Devos (2010) examined the significance school leadership had on 1522 teachers in Belgium. Their research revealed that leadership practices influence teachers' organizational commitment which plays a role in teachers leaving or staying. Teachers' job

satisfaction reveals an impact on school leadership with implementing practices that support the needs of teachers.

This study explored factors researched for influencing teachers' job satisfaction: school and teacher demographics. The following questions are examined in this study.

1. What teacher variables (age and experience) influence their job satisfaction as measured by a Job Satisfaction Questionnaire (Balzer et al., 2000)?
2. What school variables (social economic status, academic achievement level, student racial composition) influence their satisfaction as measured by a Job Satisfaction Questionnaire (Balzer et al., 2000)?

Maslow's Hierarchy of Human Needs Theory (1943) was used as the theoretical framework to explore teachers' job satisfaction through the five basic categories of human needs (a) physiological needs like water, food and air, (b) safety needs like freedom from physical harm and economic security, (c) belongingness and love needs like positive associations with others, (d) esteem needs like self-respect and a sense of achievement, and (e) self-actualization needs like maximum self-development and accomplishment (Maslow, 1970; Locke, 1976; & Hoy & Miskel, 2008). Organizations exist to serve human needs as part of their "organizational goals." Human needs and motivations are key elements in organizations in determining how individuals behave (Hoy & Miskel, 2008). For this research, teachers rated their level of job satisfaction as it related to their needs. The population sampled was elementary teachers (Kindergarten through fifth grades) in the researched district. Seven hundred and fifteen teachers were emailed a survey (with three reminder emails) with 22% of the teachers responding.

## **Findings of the Study**

With a low response rate (22%), the findings proved to be consistent with research (Gibson & Klein, 1970; Wild & Dawson, 1972; NCES, 1997; Hanushek et al., 2004; Borman & Dowling, 2008). The influence of school variables on teachers' job satisfaction of the elementary school teachers in the researched district was not significant. The teacher variable of years of experience by academic achievement showed significant results with beginning teachers (0-4 years of experience). A teacher's age, as a variable, did not show significant results.

The demographics of the study showed 92% of the survey respondents were females, 8% were males. Forty-nine percent of the teachers surveyed were between the ages of 22 and 32, 28% of teachers were 43 and older, and 23% were between the ages of 33 and 42. Thirty-six percent of the teacher respondents had between 0-4 years of experience and 5-10 years of experience, while 27% of teachers had 11 and more years of experience. There was a fairly even distribution of teacher respondents from grades K-2 at 52% and 3-5 at 48%.

The population studied estimated 64% of students in their school receive free and reduced-price lunch while 54% categorize the level of school achievement in their school as low performing (69% of the student body are below grade level). Fifty percent of teachers estimate their school has a high concentration (60-100%) of African-American students. Fifty-eight percent of teachers estimate their school has a low percentage (25% or less) of White students. Sixty percent of teachers estimate their school has an average percentage (26-59%) of Hispanic-Latino students. Ninety-five percent of teachers estimate their school has a low concentration (25% or less) of *other* students. In painting a picture of the



perception teachers in the researched district have about their school; the majority of teachers in the researched district perceive their schools as described below.

- Low-achieving
- High minority student population mostly comprised of African-Americans and Hispanic-Latinos
- High-poverty

Research indicates that that teacher turnover is higher in schools with high-poverty, low-achieving and a high minority student population in part due to teacher job dissatisfaction (Scafidi et al., 2007; NCES, 2008; & Boyd et al., 2008).

All elementary teachers (K-5) in the researched district were emailed the Job Satisfaction Questionnaire (Balzer et al., 2000) via Zoomerang (1999) survey. Teachers received three reminder emails to complete the survey. With each reminder email, respondent numbers increased. The questionnaire displayed a Likert Scale with 90 items with answer choices displayed as 1 or 4 = disagree strongly, 2 or 3 = disagree somewhat, 3 or 2 = agree somewhat, and 4 or 1 = agree strongly. All negatively worded statements were reversed scored starting with 4 while positively worded items were scored starting with 1. This instrument is quite lengthy and did not grasp specific contextual concepts unique to the teaching profession unlike the North Carolina Teaching Working Conditions Survey (NCTWC). Although the NCTWC survey takes 30 minutes, it does measure teachers' perceptions of their school environment in the areas of a) time, b) facilities and resources, c) community support and involvement, d) managing student conduct, e) teacher leadership, f) school leadership, g) professional development, h) instructional practices and support, i) overall, j) new teacher support, k) and principal mentoring. This survey is specifically

designed for educators. The reliability of the Job Satisfaction Questionnaire has been checked by other studies and was found to have the high Cronbach's Alpha scores. These reflect that the instrument is consistently measuring the variables that are encompassed in the instrument.

The survey for this study measured job satisfaction by evaluating specific facets of a job (work itself, pay, promotion, supervision, and co-workers) then measuring job satisfaction globally. The independent variables were teachers' perceptions of school factors of SES, academic achievement, and racial composition; along with categories of teachers' age and years of experience.

### **Strengths and Weaknesses of Dependent Variable**

Lack of job satisfaction has been often cited as a major reason for teacher turnover. Over 21% of public school staff turnover in high-poverty schools while 14.2% turnover in low-poverty schools (NCES, 2008). Job satisfaction is important because capable teachers have the greatest positive impact on student learning (Darling-Hammond, 2003) and satisfaction appears to influence teacher effectiveness which, in turn, promotes student achievement (NCES, 1997). North Carolina has implemented a Teacher Working Conditions Survey (NCTWC) that measures teachers' perceptions of school working conditions bi-annually, and schools and principals are directed to use the results of this survey to make school improvements. The results of elementary teachers' job satisfaction as influenced by school variables would provide information on school conditions, teacher demographics as related to school conditions, and how improvements can be made to improve teachers' job satisfaction.

“Job satisfaction and dissatisfaction are a function of perceived relationship between what one wants from one’s job and what one perceives it as offering or entailing” (Locke, 1961, p. 316). Measuring teachers’ job satisfaction is a result from teachers rating their perceptions on any given day. Peterson and Wilson (1992) believe “true satisfaction is probably so intertwined with both intrapersonal characteristics and methodological considerations that it may never be possible to disentangle them” (p. 69). In this researcher’s experience, the timing with assessing a teacher’s job satisfaction matters--teacher morale often rides on a roller coaster throughout a school year. The survey for this study was launched in November of 2009. The NCTWC survey is traditionally launched in the springtime--8 to 9 months into the school year.

### **Strengths and Weaknesses of Independent Variables**

Teacher perceptions were used to rate the academic achievement level of the school, SES percentage of the school, and racial composition of the school for this study. It is plausible for teachers’ perceptions to be inaccurate, but not far-flung. Respondents were to identify their age range and years of experience. It is unlikely teachers falsified this information.

### **Hypotheses**

Fifteen hypotheses were tested. Hypotheses were analyzed using the F-test, set at a significance level of 0.05. The decision rule is given by rejecting the null when the F scores were greater than the critical value of F. Job satisfaction was the dependent variable with five sub-dependent variables; and the independent variables were: school characteristics (students’ race, social economic status, and school achievement) and teacher variables (age and experience).

## **Total Job Satisfaction**

### **Teachers' Factors**

Hypothesis 1 states the age of teachers' did not affect their total job satisfaction. Teachers were asked to identify themselves into an age-range category--22 and 32, 33 and 42, or 43 and above. The results were not significant and the interactional relationship with academic achievement had not significant effects. Forty-nine percent of the respondents' age ranged from 22 and 32 while 28% of teachers were 43 and older, and 23% were 33 and 42. Although research trends show high attrition rates among beginning teachers of whom we can assume are predominately in the younger age range; job satisfaction research states that with age, job satisfaction either increases or decreases respectively (NCES, 1997; Bolin 2008). Here, the data shows us that young teachers are satisfied with their job, as well as middle aged and older teachers experiencing job satisfaction.

Hypothesis 2 states the teaching experience of teachers did not affect their total job satisfaction. However, a teacher's years of teaching experience influenced overall level of job satisfaction for teachers with 0-4 years of experience. Teachers were asked to identify the category of which marked their years of experience--0-4, 5-10, or 11 and more. The mean score for teachers with 0-4 years of experience was 235 within a distribution of 222-249. For teachers with 5-10 years of experience, the mean score was 251 within a distribution of 237-265. The mean score for teachers with 11 and more years of experience was 260 within a distribution of 245-275. This indicates the job satisfaction for teachers with 0-4 years of experience is significantly lower than teachers with 11 or more years of experience. The interactional relationship of years of experience by academic achievement showed no effects. Research trends for years of experience are variable. Borman and Dowling (2008) find that

with increased teaching experience comes decreased job satisfaction, while Liu and Ramsey (2008) find that with increased teaching experience comes increased job satisfaction. Other researchers have described job satisfaction, related to experience, as a U-shape: with less experience comes low satisfaction, then with some experience comes some satisfaction, and then with more experience come less satisfaction (Hanushek, Kain, and Rivkin, 2002).

### **School Factors**

Hypothesis 3 states the school's overall academic achievement did not influence the total job satisfaction of teachers. Teachers categorized their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at the .05 level. The mean score for teachers who rated their school as low achieving with low satisfaction was 238 within a distribution of 214 to 262. Teachers who rated their school as middle achieving with middle satisfaction had a mean score of 256 within a distribution of 246 to 266. Teachers who rated their school as high achieving with high satisfaction had a mean score of 252 within a distribution of 225 to 279. Research shows that academic achievement can be a determinant of teacher attrition and job satisfaction (Boyd et al., 2005). Sometimes schools with low academic achievement have the highest turnover rates due to job dissatisfaction (Hanushek et al., 2004).

Hypothesis 4 states the school's social economic status of students did not influence the total job satisfaction of teachers. Teachers categorized their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level. The mean score for teachers who rated their school as having low SES with high satisfaction was 247 within a distribution

of 221 to 272. The mean score for teachers who rated their school as having moderate SES with middle satisfaction was 244 within a distribution of 229 to 259. The mean score for teachers who rated their school as having high SES with low satisfaction was 256 within a distribution of 233 to 279. The interactional relationship between SES and academic achievement showed no effects. Research in this area is variable as well. Loeb and Darling-Hammond state that SES is the strongest predictor of low satisfaction levels among teachers. While Kelly (2004) in contrast found job dissatisfaction no higher in schools with large low-income populations. It is true that schools with large low-income populations bring about challenges (Hanushek et al., 2004; Boyd et al., 2005).

Hypothesis 5 states the school's racial composition of students did not influence the total job satisfaction of teachers. Teachers estimated the percentage of their school's racial composition (low: 25% or less; middle: 26%-59%; high: 60%-100%) of ethnicities comprising African-Americans, Whites, Hispanic-Latinos, and Other. The results for African-American students were not significant at the .05 level. The mean score for teachers who rated their school as having a low percentage of African-American students with high satisfaction was 257 within a distribution of 234 to 280. The mean score for teachers who rated their school as having a middle percentage of African-American students with middle satisfaction was 250 within a distribution of 238 to 262. The mean score for teachers who rated their school as having a high percentage of African-American students with low satisfaction was 251 within a distribution of 234 to 268. The interactional relationship between African-American students and academic achievement showed no effects. Research trends present racial composition as affecting job satisfaction and causing teachers to move from school to school, even though they do not leave teaching (Mueller et al., 1999).

Research also stated that schools in a large urban district with higher percentages of minority students experience higher levels of teacher turnover (Guin, 2004).

For White students, the results were not significant at the .05 level as well. The mean score for teachers who rated their school as having a low percentage of White students with low satisfaction was 254 within a distribution of 231 to 277. The mean score for teachers who rated their school as having a middle percentage of White students with middle satisfaction was 250 within a distribution of 235 to 265. The mean score for teachers who rated their school as having a high percentage of White students with high satisfaction was 261 within a distribution of 240 to 281. The interactional relationship between White students and academic achievement showed no effects.

For Hispanic-Latino students, the results were not significant at the .05 level also. The mean score for teachers who rated their school as having a low percentage of Hispanic-Latino students with high satisfaction was 249 within a distribution of 237 to 261. The mean score for teachers who rated their school as having a middle percentage of Hispanic-Latino students with middle satisfaction was 241 within a distribution of 227 to 255. The mean score for teachers who rated their school as having a high percentage of Hispanic-Latino students with low satisfaction was 259 within a distribution of 237 to 281. The interactional relationship between Hispanic-Latino students and academic achievement showed no effects. There was not enough data to measure the effects of *other* students and academic achievement.

### **Sub-Factors and School Factors on Job Satisfaction**

The study examined the sub-dependent variables of job satisfaction as measured by the Job Satisfaction Questionnaire (Balzer et al., 2000) and academic achievement by economically disadvantaged students.

#### **Working Conditions**

Hypothesis 6 states the academic achievement of the school did not influence the teachers' satisfaction of the school's working conditions. Teachers categorized their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at the .05 level for working conditions. The mean score for teachers who rated their school as low achieving with low satisfaction of the school's working conditions was 51 within a distribution of 45 to 56. Teachers who rated their school as middle achieving with middle satisfaction of the school's working conditions had a mean score of 56 within a distribution of 54 to 59. Teachers who rated their school as high achieving with high satisfaction of the school's working conditions had a mean score of 54 within a distribution of 47 to 60.

Hypothesis 7 states the school's social economic status of students did not influence the views of teachers about the school's working conditions. Teachers categorized their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level for working conditions. The mean score for teachers who rated their school as having low SES with high satisfaction of the school's working conditions was 52 within a distribution of 46 to 58. The mean score for teachers who rated their school as having moderate SES with middle satisfaction of the school's working conditions was 52 within a distribution of 49 to



56. The mean score for teachers who rated their school as having high SES with low satisfaction of the school's working conditions was 56 within a distribution of 51 to 62. The interactional relationship between SES and academic achievement showed no effects.

### **Pay**

Hypothesis 8 states the academic achievement of the school did not influence the teachers' satisfaction with their pay. Teachers categorized their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at the .05 level for teachers' satisfaction with their pay. The mean score for teachers who rated their school as low achieving with low satisfaction with pay was 14 within a distribution of 12 to 17. Teachers who rated their school as middle achieving with middle satisfaction with pay had a mean score of 14 within a distribution of 13 to 15. Teachers who rated their school as high achieving with high satisfaction with pay had a mean score of 12 within a distribution of 10 to 15.

Hypothesis 9 states the school's social economic status of students did not influence the views of teachers about their pay. Teachers categorized their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level for teachers' satisfaction with their pay. The mean score for teachers who rated their school as having low SES with high satisfaction with pay was 14 within a distribution of 11 to 17. The mean score for teachers who rated their school as having moderate SES with middle satisfaction with pay was 14 within a distribution of 13 to 16. The mean score for teachers who rated their school as

having high SES with low satisfaction with pay was 12 within a distribution of 10 to 15. The interactional relationship between SES and academic achievement showed no effects.

### **Promotion**

Hypothesis 10 states the academic achievement of the school did not influence the teachers' satisfaction with their opportunities for promotion. Teachers categorized their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at the .05 level for teachers' satisfaction with their opportunities for promotion. The mean score for teachers who rated their school as low achieving with low satisfaction with their opportunities for promotion was 17 within a distribution of 13 to 21. Teachers who rated their school as middle achieving with middle satisfaction with their opportunities for promotion had a mean score of 18 within a distribution of 16 to 20. Teachers who rated their school as high achieving with high satisfaction with their opportunities for promotion had a mean score of 21 within a distribution of 16 to 24.

Hypothesis 11 states the school's social economic status of students did not influence the views of teachers about their opportunities for promotion. Teachers categorized their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level for teachers' satisfaction with their opportunities for promotion. The mean score for teachers who rated their school as having low SES with high satisfaction with their opportunities for promotion was 16 within a distribution of 12 to 20. The mean score for teachers who rated their school as having moderate SES with middle satisfaction with their opportunities for promotion was 18 within a distribution of 16 to 21. The mean score for teachers who rated

their school as having high SES with low satisfaction with their opportunities for promotion was 21 within a distribution of 17 to 24. The interactional relationship between SES and academic achievement showed no effects.

### **Co-Workers**

Hypothesis 12 states the academic achievement of the school did not influence the teachers' satisfaction with their co-workers. Teachers categorized their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at the .05 level for teachers' satisfaction with their co-workers. The mean score for teachers who rated their school as low achieving with low satisfaction with their co-workers was 54 within a distribution of 48 to 61. Teachers who rated their school as middle achieving with middle satisfaction with their co-workers had a mean score of 55 within a distribution of 53 to 58. Teachers who rated their school as high achieving with high satisfaction with their co-workers had a mean score of 51 within a distribution of 44 to 58.

Hypothesis 13 states the school's social economic status of students did not influence the views of teachers about their co-workers. Teachers categorized their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level for teachers' satisfaction with their co-workers. The mean score for teachers who rated their school as having low SES with high satisfaction with their co-workers was 55 within a distribution of 48 to 61. The mean score for teachers who rated their school as having moderate SES with middle satisfaction with their co-workers was 55 within a distribution of 51 to 59. The mean score for teachers who rated their school as having high SES with low satisfaction with their

co-workers was 51 within a distribution of 45 to 57. The interactional relationship between SES and academic achievement showed no effects.

### **Supervision**

Hypothesis 14 states the academic achievement of the school did not influence the teachers' satisfaction with their supervisors. Teachers categorized their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at the .05 level for teachers' satisfaction with their supervisors. The mean score for teachers who rated their school as low achieving with low satisfaction with their co-workers was 51 within a distribution of 45 to 56. Teachers who rated their school as middle achieving with middle satisfaction with their supervisors had a mean score of 56 within a distribution of 54 to 59. Teachers who rated their school as high achieving with high satisfaction with their supervisors had a mean score of 54 within a distribution of 47 to 60.

Hypothesis 15 states the school's social economic status of students did not influence the views of teachers about their supervisors. Teachers categorized their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The results were not significant at the .05 level for teachers' satisfaction with their supervisors. The mean score for teachers who rated their school as having low SES with high satisfaction their supervisors was 55 within a distribution of 46 to 64. The mean score for teachers who rated their school as having moderate SES with middle satisfaction with their supervisors was 58 within a distribution of 44 to 55. The mean score for teachers who rated their school as having high SES with low satisfaction with their

supervisors was 53 within a distribution of 45 to 62. The interactional relationship between SES and academic achievement showed no effects.

### **Total Job Satisfaction**

Total job satisfaction was analyzed holding constant academic achievement and social economic status of students. It is hypothesized that school factors did not influence the teachers' total job satisfaction. Teachers categorized their school's academic achievement level into one of three areas--low achieving (69% and below), middle achieving (70%-89%), and high achieving (90%-100%). The results were not significant at the .05 level for teachers' total job satisfaction. The mean score for teachers who rated their school as low achieving with low satisfaction for total job satisfaction was 49 within a distribution of 42 to 56. Teachers who rated their school as middle achieving with middle satisfaction for total job satisfaction had a mean score of 57 within a distribution of 53 to 60. Teachers who rated their school as high achieving with high satisfaction for total job satisfaction had a mean score of 58 within a distribution of 50 to 66. For SES, teachers categorized their school's SES percentage into one of three areas--low SES (39% and below), moderate SES (40%-59%), and high SES (60%-100%). The mean score for teachers who rated their school as having low SES with high satisfaction for total job satisfaction was 53 within a distribution of 45 to 60. The mean score for teachers who rated their school as having moderate SES with middle satisfaction for total job satisfaction was 52 within a distribution of 47 to 56. The mean score for teachers who rated their school as having high SES with low satisfaction for total job satisfaction was 59 within a distribution of 52 to 66. The interactional relationship between SES and academic achievement showed no effects.

## **Limitations of the Study**

This study was limited to the following four factors.

- One school district sampled. The researched district is a large urban district in North Carolina (NC). There are 115 districts in NC and this particular district is the seventh largest.
- Only elementary school teachers in grades K-5 surveyed; one school omitted. Classroom teachers have first-hand experience with the day-to-day successes and struggles in a classroom. Classroom teachers are responsible for implementing daily instructional activities that support academic growth and the teaching population is more homogeneous--teachers teach all subjects and the same subjects as opposed to the departmentalization that occurs in middle and high schools. The curriculum provides the beginnings and basic skills in reading, writing, and mathematics, as well as introductions to science, health, art, and physical education (Howey and Post, 2002). The school omitted opened in the Spring of 2009. The researcher believed surveying the teachers at this school could have skewed the results.
- Survey questions solicited teachers' perceptions.
- Low participant response rate. Twenty-two percent of K-5 teachers responded to the 90-item survey. Ninety items on a survey is quite lengthy.

With the abovementioned limitations, the value sought in this study was the relationship between teacher job satisfaction and certain school working conditions. Using data from the Schools and Staffing Surveys in 1987-88 and 1993-93, Weiss (1999) states working conditions play key roles in keeping teachers in the profession. Characteristics known as working conditions can cause dissatisfaction among teachers (Loeb, Darling-

Hammond, & Luczak, 2005). Therefore, the focus should be placed on the relationship between the social organizational aspects of the school environment and teachers' commitment.

A large urban school district in North Carolina was the sampled district, and Kindergarten through fifth grade teachers were solicited. The questionnaire petitioned for teachers' perceptions regarding their school's academic achievement, racial composition, and free and reduced-price lunch percentages.

### **Significance of Study**

Research discussed in this study shows varying levels of teacher job satisfaction as influenced by school variables and teacher demographics (Ingersoll, 2001, 2002; Hill & Barth, 2004; Grayson & Alvarez, 2008; Liu & Ramsey, 2008). With increased accountability measures and growing student enrollment, it is imperative school districts and state public instruction departments invest carefully and meticulously in public school teachers. The significance of this study for policy makers appears obvious that teachers in their beginning years of teaching need more immediate attention than teachers with five years of experience or more. Creating programs for new teacher support and setting aside funds for the development of those programs is important to prioritize. School Board members are key policy makers that can mandate certain types of support for beginning teachers. More recent support for beginning teachers in some school districts has come in the form of time. School districts have set aside time during the school day for teacher collaboration. Students are released early from school on a weekly or monthly basis for teachers to plan together. This type of teacher collaboration is important for beginning teachers since time management and planning can be areas of difficulty. Although dismissing students early from school can be

inconvenient for families, sacred time during the school day cannot be traded. Whether school boards see value in giving teachers time during the school day to collaborate or not; teachers have scheduled in their own time before or after school to get together.

Collaboration is a powerful resource that is not costly. Teachers become better teachers when they are afforded opportunities grow and learn from others. Experienced, capable teachers have the greatest positive impact on student learning (Darling-Hammond, 2003). We want to grow beginning teachers to become experienced teachers.

For educators at the school level, creating and implementing programs specifically designed for the beginning teacher will be essential to retention and recruitment. School districts have some autonomy in this area; however, aligning the vision among leaders for new teacher support would be a challenge. School leadership is at the forefront of providing support for all teachers, much less beginning teachers. It's important for school leaders to work closely with their school mentors and mentees. Monthly meetings specifically designed to provide intimate and risk free discussions support lower level needs. Allowing mentees to take time away from the school day to observe fellow colleagues in action provides affirmation and professional development. Monthly social gatherings to relax and de-stress are important for school leaders and mentors to plan. Maslow's (1943) need of belongingness and love is coupled with beginning teacher support. Teachers need to feel supported, belonging to a team, free to make minor mistakes, and feel they are growing and making improvements. School level support can be provided to meet all of the aforementioned needs. The significance of school level support is that it's all in how the support is implemented; and support implementation is unique at every school.



For researchers, qualitative studies that address the *why* behind lower satisfaction of beginning teachers goes a step further in examining the causes of lower satisfaction today. The author can assume that some reasons for teacher dissatisfaction will be repetitive. Also, with the current economic situation, many school systems are cutting back on providing certain resources to schools. Teachers are getting laid off. School budgets are being reduced and student-teacher ratios are increasing. With resources dwindling away, accountability remains the same or even increases for school systems in improvement status. Economic situations can affect teacher morale, but importance is not placed on things that cannot be changed. Job satisfaction focuses on the "...perceived relationship between what one wants from one's job and what one perceives it as offering or entailing" (Locke, 1961, p. 316). Many of the facets that measure job satisfaction for this study cannot be negotiated; for example, pay, supervision, co-workers, work itself, and promotion. Therefore, teachers go into jobs without being able to negotiate much of their new environment. Items that are negotiable are the working conditions unique to each school, and it is suggested for researchers to delve further into this arena regarding the *why* of particular working conditions.

For theory, the researcher believes that human needs are important and relevant to a person's occupational satisfaction. Defining which level of need is not being satisfied is applicable to theory and researchers, but also how to satisfy that need. Since the physiological need is a lower level need, it is recommended as a starting point.

### **Summary**

This study examined the job satisfaction of elementary school teachers in grades Kindergarten through fifth grades in the seventh largest school district in North Carolina. The

following hypothesis yielded significant results: The teaching experience of teachers did not affect their total job satisfaction. This hypothesis showed significant results for beginning teachers (0-4 years of experience). The theoretical framework used for this study, Maslow's Human Needs Theory (1943), concentrates on five basic categories of human of needs (a) physiological, (b) safety needs, (c) belongingness and love needs, (d) esteem needs, and (e) self-actualization needs (Maslow, 1970; Locke, 1976; and Hoy and Miskel, 2008). This framework plays a critical role in examining teacher job satisfaction based on met and unmet needs.

For future research, consisting of digging deeper into why beginning teachers have low satisfaction according to their needs is crucial for policy makers and educators interested in retaining and recruiting highly qualified teachers. Research across districts is important in comparing the attrition rates with satisfaction levels since there are some districts that have high teacher retention rates. Districts treat their beginning teachers differently as well offering mentor programs developed by the retention and recruitment department in that particular district.

For educators interested in researching this topic, it is recommended that neighboring districts be researched keeping the population with K-5 teachers since some teachers move to teach in near-by districts. The size of the district is important. The researched district is the seventh largest district in North Carolina; therefore, larger districts could yield more respondents with varying perceptions and responses. Emailed surveys are sufficient for quantitative data; however, this next step for this research would be qualitative data in order to look more closely into the human needs that are not being met due to low teacher job satisfaction.

## **APPENDICES**

## Permission to Use Documents

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**Appendix B:**  
**IRB Approval**

IRB Notice  
Fri, September 25, 2009 1:50:04 PM  
From: IRB <irb\_no\_reply@mailserv.grad.unc.edu>  
Add to Contacts  
To: sbass@email.unc.edu  
Cc: fbrown@email.unc.edu; cdaniel1@email.unc.edu

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A paper copy of the approval memo and any relevant documents are being mailed today.

**To:** Sandy Kay Bass Chambers  
School of Education

**From:** Behavioral IRB

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Authorized signature on behalf of IRB

**Approval Date:** 9/25/2009  
**Expiration Date of Approval:** 9/24/2010

**RE:** Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)  
**Submission Type:** Initial  
**Expedited Category:** 7.Surveys/interviews/focus groups  
**Study #:** 09-1686

**Study Title:** Job Satisfaction among Elementary School Teachers

This submission has been approved by the above IRB for the period indicated. It has been determined that the risk involved in this research is no more than minimal.

**Study Description:**

**Purpose:** To identify causes of teacher attrition in an urban school district and its relationship to teacher variables of age and experience, as well as school variables of school achievement level, social economic status, and racial composition.

**Participants:** 1300 elementary school teachers, Durham Public Schools, Durham, North Carolina.

**Procedures (methods):** Administer online survey.

**Regulatory and other findings:**

This research meets criteria for a waiver of written (signed) consent according to 45 CFR 46.117(c)(2).

### **Investigator's Responsibilities:**

Federal regulations require that all research be reviewed at least annually. It is the Principal Investigator's responsibility to submit for renewal and obtain approval before the expiration date. You may not continue any research activity beyond the expiration date without IRB approval. Failure to receive approval for continuation before the expiration date will result in automatic termination of the approval for this study on the expiration date.

When applicable, enclosed are stamped copies of approved consent documents and other recruitment materials. You must copy the stamped consent forms for use with subjects unless you have approval to do otherwise.

You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented (use the modification form at [ohre.unc.edu/forms](https://ohre.unc.edu/forms)). Any unanticipated problem involving risks to subjects or others (including adverse events reportable under UNC-Chapel Hill policy) should be reported to the IRB using the web portal at <https://irbis.unc.edu/irb>.

Researchers are reminded that additional approvals may be needed from relevant "gatekeepers" to access subjects (e.g., principals, facility directors, healthcare system).

This study was reviewed in accordance with federal regulations governing human subjects research, including those found at 45 CFR 46 (Common Rule), 45 CFR 164 (HIPAA), 21 CFR 50 & 56 (FDA), and 40 CFR 26 (EPA), where applicable.

CC:

Frank Brown, School Of Education

Crystal Daniel, (School of Education), Non-IRB Review Contact

IRB Informational Message—please do not use email REPLY to this address

## **Appendix C:**

### **Research Agreement with Durham Public Schools**



#### **Durham Public Schools**

Research, Development & Accountability (RDA)

1817 Hamlin Road Durham, NC 27704

Phone: 919.560.2205; Fax: 919.560.2067

#### **Research Agreement**

##### **BETWEEN**

Durham Public Schools (DPS) and Sandy Chambers, Principal, and Wake County Public Schools

1. **Research Title:** Job Satisfaction Among Elementary School Teachers
2. **Research Focus:** The focus of this research is the examination of the relationships between teacher and school variables impacting teacher job satisfaction in an elementary school setting.
3. **Understandings, agreements, support and resource needs.**

Research will involve:

- Twenty-seven elementary schools (Spring Valley will not participate.)
- Approximately 1,300 K-5 elementary school teachers
- **A short 5-10 minute voluntary survey** (The Job Descriptive Index Including The Job in General Scale: Modified Version) administered to participating teachers. The survey will be web-based and sent to teachers via email. A copy of the survey is included on pages 69 and 70 of the dissertation proposal submitted with the application to conduct research in Durham Public Schools. Teacher email addresses will not be provided by the Durham Public Schools Research, Development & Accountability Department. The researcher implies in the proposal that email addresses will be obtained independently “through the school district’s websites” (p. 45).
- Three weeks for response time and two reminder emails (Analysis will begin after three weeks.)
- No student, administrator, or non-school involved time
- No request for student data from Durham Public Schools
- A copy of the research findings submitted to Durham Public School by January 29, 2010.

DPS Requirements for research in schools:

- Loss of instructional time must be minimal and approved by the participating schools (principals and teachers).
- Written parental permission must be obtained for each student participating in the program. Completed parental permission forms must be electronically submitted to the DPS RDA department prior to data collection IF said data is student-identifiable. This includes EOG/C scores, discipline records, EC/LEP/FRL status, etc. if student names or ID numbers are attached.
- District approval does not constitute approval for the study to be conducted in any specific school. **Researchers must obtain written approval of principals and others involved prior to conducting research in the district.**
- When conducting research in schools, individuals shall abide by DPS standards of professional conduct and dress. Failure to do so will be cause for immediate termination of the study and retraction of research approval.
- **Student participation in the program cannot interfere with the implementation of Individualized Education Plans.** Approval for research and the continuation of the program will be withdrawn if the program interferes with the implementation of an IEP.
- **The Sr. Director of RDA may withdraw district approval at any time and for any reason.** If approval is terminated, all research and accompanying activities involving the district, the external researcher, and/or the external agency will cease in DPS.
- Within six months of research completion, a copy of the final report will be submitted at no charge to the Sr. Director of RDA. If the research is for a dissertation, an extension may be granted, but a copy of the dissertation will be required at completion. The researcher further agrees to release this report for use by DPS without remuneration.  
**Note:** DPS does not merge, compile, or collect data for external research, unless required by law or contractually based. Fees for data/reports compiled by the district for research are \$75/hr.
- **All data and databases are to remain secure at all times.** If the school district supplies extant data or a database(s), upon completion of the original dissertation, study, or research, the database(s) will be returned to the Sr. Director with no copies remaining.
  - In the event a researcher wishes to publish using extent data via analyses or methods not originally produced or approved within the study, DPS reserves the right to disallow/allow access to data for further analyses and reporting.
  - In the event a researcher wishes to publish using analyses or methods not originally produced or approved within the study, and receives DPS approval, the Sr. Director or a representative will be assigned to work with the researcher as a second author and/or consultant.
- In exchange for the cooperation of DPS, the researcher agrees to present his/her results to the district's management team and possibly provide personal feedback and a workshop to principals and others involved in the study at no cost to DPS.

4. **Contracting period.** District approval shall be granted until specified data collection has concluded OR for a maximum of one-year from the approval letter's date, whichever comes first. After one year the researcher must submit for approval a request for extension. For any research extending beyond one school year, the researcher shall submit an annual progress report along with a request for extension. No research or classes will be conducted after April 30, 2010.



5. **Monetary Terms.** Durham Public Schools will not provide any funding for the research program. All research will be conducted at no cost to DPS.

6. **Modifications.** Modifications to the terms of this agreement shall be made by mutual consent of the parties, in writing, signed and dated by all parties, prior to any changes being performed.

7. **Monitoring and Compliance.** Approved research projects will require the principal's appointment of an On-Site Research Monitor. If the terms of this agreement are not being fulfilled, the program and research may be terminated.

8. Effective date. October 1, 2009

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SIGNATURE  
Jeanette Avery  
Sr. Director of Research and  
Accountability

---

(Date)

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*Heidi S. Coleman*

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SIGNATURE  
Heidi Coleman,  
Coordinator of Grants and Program  
Evaluation

---

(Date)

---

SIGNATURE  
Primary Researcher/Program Sponsor

---

(Date)

## **Appendix D:**

### **Consent forms**

#### **Consent Form**

September, 2009

Dear Elementary Educator,

My name is Sandy Bass Chambers and I am a doctoral student at The University of North Carolina at Chapel Hill as well as a principal of an elementary school. I am writing to request your assistance. You are being contacted about participating in a research study that will examine the relationship between certain teacher variables (age and experience) and school variables (SES, school achievement level, and school racial composition) with regard to teacher job satisfaction. This research will focus on elementary teachers in the Durham Public Schools district. I understand how valuable time is for educators and would truly appreciate any time you could offer in support of this research. Completion will take no longer than **8** minutes. Everything can be completed via secure email at the link below.

Participation in this study is voluntary. If you choose to participate, you will complete a short survey and questionnaire about yourself and your current school. You may choose to skip or not respond to any questions for any reason. The information gathered will remain confidential. No teacher or school names will be used in reporting results. Returned data will be anonymous as surveys will be analyzed and email addresses discarded. Only my dissertation advisor and I will have access to the data. Approximately 700 teachers are likely to participate in this study, and the information will be collected from October 2009 to December 2009.

Thank you in advance for your cooperation. Your professional assistance is truly appreciated. If you have any questions about this study, please contact me at (919) 730-4088 or at [sbass@email.unc.edu](mailto:sbass@email.unc.edu). You may contact my advisor, Dr. Frank Brown at (919) 962-2211 or at [fbrown@email.unc.edu](mailto:fbrown@email.unc.edu).

The Behavioral Institutional Review Board (Behavioral IRB) of the University of North Carolina at Chapel Hill has approved this study. If you have questions about your rights as a research participant in this study, please contact the Behavioral IRB at (919) 962-7761 or at [aa-irb@unc.edu](mailto:aa-irb@unc.edu) and reference study number 09-1686.

Sincerely,

Sandy Bass Chambers  
Doctoral Student

By clicking on the following link and completing the attached surveys, I agree to be a participant in this research study.

**Consent Form (2 and 3)**

September, 2009

Dear Elementary Educator,

My name is Sandy Bass Chambers and I am a doctoral student at The University of North Carolina at Chapel Hill as well as a principal of an elementary school. I am writing to request your assistance. You were contacted about participating in a research study that will examine the relationship between certain teacher variables (age and experience) and school variables (SES, school achievement level, and school racial composition) with regard to teacher job satisfaction. This research will focus on elementary teachers in the Durham Public Schools district. I understand how valuable time is for educators and would truly appreciate any time you could offer in support of this research. Completion will take no longer than **8** minutes. Everything can be completed via secure email at the link below.

Participation in this study is voluntary. If you choose to participate, you will complete a short survey and questionnaire about yourself and your current school. You may choose to skip or not respond to any questions for any reason. The information gathered will remain confidential. No teacher or school names will be used in reporting results. Returned data will be anonymous as surveys will be analyzed and email addresses discarded. Only my dissertation advisor and I will have access to the data. Approximately 700 teachers are likely to participate in this study, and the information will be collected from October 2009 to December 2009.

Thank you in advance for your cooperation. Your professional assistance is truly appreciated. If you have any questions about this study, please contact me at (919) 730-4088 or at [sbass@email.unc.edu](mailto:sbass@email.unc.edu). You may contact my advisor, Dr. Frank Brown at (919) 962-2211 or at [fbrown@email.unc.edu](mailto:fbrown@email.unc.edu).

The Behavioral Institutional Review Board (Behavioral IRB) of the University of North Carolina at Chapel Hill has approved this study. If you have questions about your rights as a research participant in this study, please contact the Behavioral IRB at (919) 962-7761 or at [aa-irb@unc.edu](mailto:aa-irb@unc.edu).

Sincerely,

Sandy Bass Chambers  
Doctoral Student

By clicking on the following link and completing the attached surveys, I agree to be a participant in this research study.

## Appendix E:

### Demographic Survey and Job Satisfaction Questionnaire

***Please complete this short survey about yourself. Select the most appropriate answer for each comment. To select an answer, place the cursor over a box and click the mouse. If you make an error and select more than one answer, click on a square to undo your answer. You may only check one answer for each question.***

1. Your gender:  
☐ Male  
☐ Female
2. Your age range:  
☐ 22-32  
☐ 33-42  
☐ 43 and above
3. Total number of years of experience as a teacher:  
☐ 0-4 years (ILT)  
☐ 5-10 years (experienced)  
☐ 11+ years (career)
4. Identify your area:  
☐ K-2  
☐ 3-5  
☐ Exceptional Children, Academically and Intellectually Gifted, English as a Second Language, Reading Recovery  
☐ Media, Technology, Physical Education, Drama, Dance, Art, Foreign Language  
☐ Other \_\_\_\_\_
5. Number of years teaching at your school:  
☐ 4 years or less  
☐ 5-10 years  
☐ 11+ years

***Please complete this short survey about your school. Select the most appropriate answer for each comment. To select an answer, place the cursor over a box and click the mouse. If you make an error and select more than one answer, click on a square to undo your answer. You may only check one answer for each question.***

1. What is your estimate of the percentage of students who receive free and reduced lunch?  
☐ High (60% and above)  
☐ Moderate (59% - 40%)  
☐ Low (39% and below)

2. What is your estimate of the level of school achievement?

- ☐ High achievement (100% - 90% at or above grade level)
- ☐ Middle achievement (89% - 70% at or above grade level)
- ☐ Low achievement (69% and below grade level)

3. How would you categorize your school's overall performance level?

- ☐ Low performing school
- ☐ Average performing school
- ☐ High performing school

4. What is your estimate of the percentage of the following ethnic groups at your school?

<b>Ethnicity</b>	<b>Proportion of Students</b>		
	<b>Low 25% or less</b>	<b>Middle 26% - 59%</b>	<b>High 60% - 100%</b>
<b>White</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>African-American</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hispanic-Latino</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Other</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Job Descriptive Index and Job in General Scales (Balzer et al, 2000).**

People on Your Present Job

Think of the majority of people with whom your work or meet in connection with your work? How well does each of the following words or phrases describe your people? In the blank beside the each word or phrase, write

- 1 - Disagree strongly
- 2 - Disagree somewhat
- 3 - Agree somewhat
- 4 - Agree strongly

Job in General

Think of your job in general. All in all, what is it like most of the time? In the blank beside the each word or phrase, write

- 1 - Disagree strongly
- 2 - Disagree somewhat
- 3 - Agree somewhat
- 4 - Agree strongly

# The Job Descriptive Index

Including

# The Job in General Scale

\*\*\*\*\*

- |                          |                      |
|--------------------------|----------------------|
| ___ Stimulating          | ___ Pleasant         |
| ___ Boring               | ___ Bad              |
| ___ Slow                 | ___ Ideal            |
| ___ Helpful              | ___ Waste of time    |
| ___ Stupid               | ___ Good             |
| ___ Responsible          | ___ Undesirable      |
| ___ Fast                 | ___ Worthwhile       |
| ___ Intelligent          | ___ Worst than most  |
| ___ Easy to make enemies | ___ Acceptable       |
| ___ Talk too much        | ___ Superior         |
| ___ Smart                | ___ Better than most |
| ___ Lazy                 | ___ Disagreeable     |
| ___ Unpleasant           | ___ Makes me content |
| ___ Gossipy              | ___ Inadequate       |
| ___ Active               | ___ Excellent        |
| ___ Narrow interests     | ___ Rotten           |
| ___ Loyal                | ___ Enjoyable        |
| ___ Stubborn             | ___ Poor             |

# Modified Version

Work on Present Job	Pay	Opportunities for Promotion	Supervision
Think of the work you do at present. How well does each of the following words or phrases describe your work? In the blank beside each word or phrase, write	Think of the pay you get now. How well does each of the following words or phrases describe your pay? In the blank beside the each word or phrase, write	Think of opportunities for promotion that you have now. How well does each of the following words or phrases describe these? In the blank beside the each word or phrase, write	Think about the kind of supervision you get on your job. How well does each of the following words or phrases describe this? In the blank beside the each word or phrase, write
1 - Disagree strongly 2 - Disagree somewhat 3 - Agree somewhat 4 - Agree strongly	1 - Disagree strongly 2 - Disagree somewhat 3 - Agree somewhat 4 - Agree strongly	1 - Disagree strongly 2 - Disagree somewhat 3 - Agree somewhat 4 - Agree strongly	1 - Disagree strongly 2 - Disagree somewhat 3 - Agree somewhat 4 - Agree strongly
*****	*****	*****	*****
___ Fascinating ___ Routine ___ Satisfying ___ Boring ___ Good ___ Gives sense of accomplishment ___ Respected ___ Uncomfortable ___ Pleasant ___ Useful ___ Challenging ___ Simple ___ Repetitive ___ Creative ___ Dull ___ Uninteresting ___ Can see results ___ Use my abilities	___ Income adequate for normal expenses ___ Fair ___ Barely live on income ___ Income provides luxuries ___ Less than I deserve ___ Well paid ___ Insecure ___ Underpaid	___ Good opportunities for promotion ___ Opportunities somewhat limited ___ Promotion on ability ___ Dead-end job ___ Good chance for promotion ___ Unfair promotion policy ___ Infrequent promotions ___ Regular promotions ___ Fairly good chance for promotion	___ Asks my advice ___ Hard to please ___ Impolite ___ Praises good work ___ Tactful ___ Influential ___ Up-to-date ___ Doesn't supervise enough ___ Has favorites ___ Tells me where I stand ___ Annoying ___ Stubborn ___ Knows you well ___ Bad ___ Intelligent ___ Poor planner ___ Around when needed ___ Lazy



Table 30

*Univariate Analysis of Achievement and Teacher's Age*

<b>Between-Subjects Factors</b>			
		Value Label	N
Achievement	1	Low achievement (69% and below grade level)	67
	2	Middle achievement (89%- 70% at or above grade level)	47
	3	High achievement (100%- 90% at or above grade level)	9
Age	1	22-32	62
	2	33-42	29
	3	43 and above	32

Table 31

*Estimated Marginal Means of Achievement and Teacher's Age*

<b>Achievement * Age</b>					
Achievement	Age	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low achievement (69% and below grade level)	22-32	250.486	5.311	239.966	261.007
	33-42	226.312	8.076	210.314	242.311
	43 and above	245	8.634	227.897	262.103
Middle achievement (89%- 70% at or above grade level)	22-32	250.45	7.223	236.14	264.76
	33-42	245.75	9.325	227.277	264.223
	43 and above	264.867	8.341	248.343	281.39
High achievement (100% - 90% at or above grade level)	22-32	237.6	14.447	208.981	266.219
	33-42	265	32.304	201.006	328.994
	43 and above	278	18.651	241.053	314.947

Table 32

*Univariate Analysis of Achievement and Years of Experience*

<b>Between-Subjects Factors</b>			
		Value Label	N
Years Experience	1	0-4 years (ILT)	46
	2	5-10 years (experienced)	46
	3	11+ years (career)	32
Achievement	1	Low achievement (69% and below grade level)	67
	2	Middle achievement (89% - 70% at or above grade level)	47
	3	High achievement (100% – 90% at or above grade level)	10

Table 33

*Estimated Marginal Means of Achievement and Years of Experience*

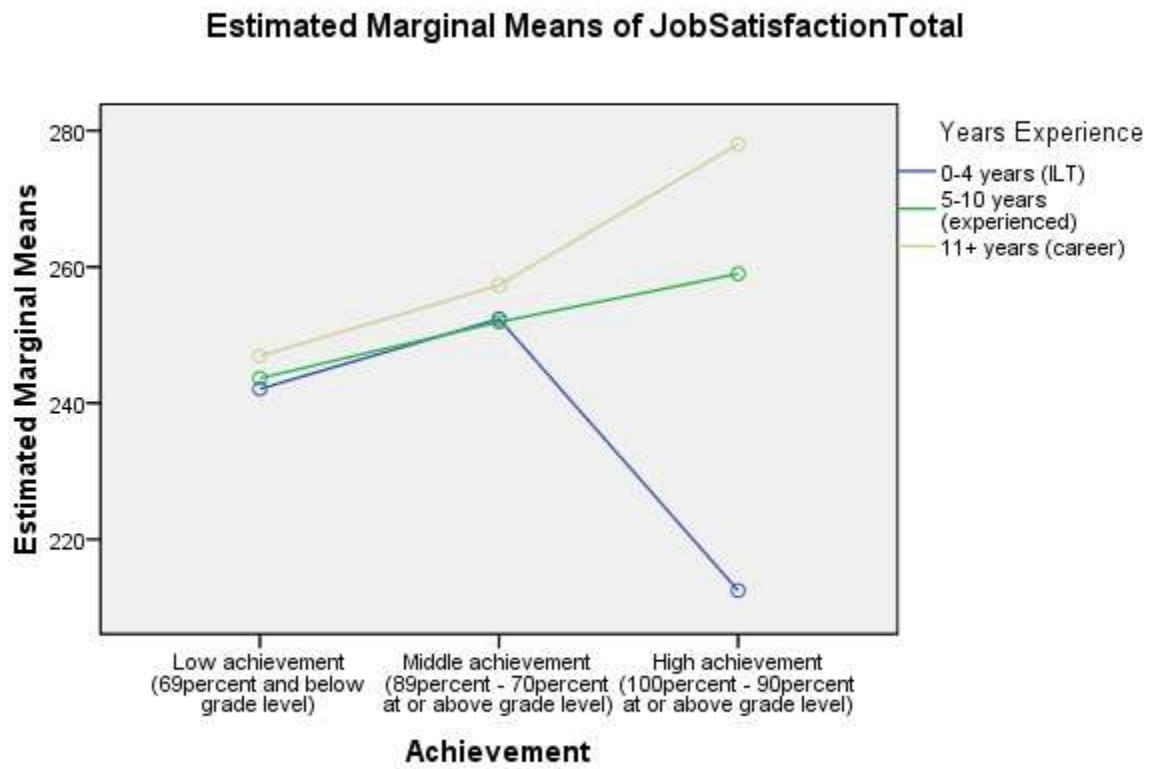


Table 34

*Univariate Analysis of Achievement and SES*

<b>Between-Subjects Factors</b>			
		Value Label	N
Reduced Lunch	1	Low (39% and below)	16
	2	Moderate (59% to 40%)	29
	3	High (60% and above)	79
Achievement	1	Low achievement (69% and below grade level)	67
	2	Middle achievement (89% - 70% at or above grade level)	47
	3	High achievement (100% - 90% at or above grade level)	10

Table 35

*Estimated Marginal Means of Achievement and SES***Reduced Lunch \* Achievement**

Reduced Lunch	Achievement	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low (39% and below)	Low achievement (69% and below grade level)	225	33.849	157.952	292.048
	Middle achievement (89% - 70% at or above grade level)	270	10.704	248.798	291.202
	High achievement (100% - 90% at or above grade level)	246	15.138	216.015	275.985
Moderate (59% to 40%)	Low achievement (69% and below grade level)	248.143	12.794	222.801	273.485
	Middle achievement (89% - 70% at or above grade level)	244.5	7.978	228.697	260.303
	High achievement (100% - 90% at or above grade level)	239.5	16.924	205.976	273.024
High (60% and above)	Low achievement (69% and below grade level)	243.339	4.407	234.61	252.068
	Middle achievement (89% - 70% at or above grade level)	254.211	7.765	238.829	269.592
	High achievement (100% - 90% at or above grade level)	273	33.849	205.952	340.048

Table 36

*Univariate Analysis of Achievement and African-American Students***Between-Subjects Factors**

		Value Label	N
African-Americans	1	Low (25% or less)	9
	2	Middle (26%- 59%)	53
	3	High (60%-100%)	62
Achievement	1	Low achievement (69% and below grade level)	67
	2	Middle achievement (89% - 70% at or above grade level)	47
	3	High achievement (100% - 90% at or above grade level)	10

Table 37

*Estimated Marginal Means of Achievement and African-American Students*

<b>African-Americans * Achievement</b>					
African-Americans	Achievement	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low (25% or less)	Low achievement (69% and below grade level)	266.5	23.77	219.416	313.584
	Middle achievement (89% - 70% at or above grade level)	273.75	16.808	240.456	307.044
	High achievement (100% - 90% at or above grade level)	231.667	19.408	193.222	270.111
Middle (26-59%)	Low achievement (69% and below grade level)	250.52	6.723	237.203	263.837
	Middle achievement (89% - 70% at or above grade level)	255.348	7.009	241.463	269.232
	High achievement (100% - 90% at or above grade level)	245.8	15.034	216.021	275.579
High (60-100%)	Low achievement (69% and below grade level)	238.075	5.315	227.547	248.603
	Middle achievement (89% - 70% at or above grade level)	248.15	7.517	233.261	263.039
	High achievement (100% - 90% at or above grade level)	268.5	23.77	221.416	315.584



Table 38

*Univariate Analysis of Achievement and White Students*

<b>Between-Subjects Factors</b>			
		Value Label	N
White	1	Low (25% or less)	71
	2	Middle (26%-59%)	40
	3	High (60%-100%)	11
Achievement	1	Low achievement (69% and below grade level)	66
	2	Middle achievement (89% - 70% at or above grade level)	46
	3	High achievement (100% - 90% at or above grade level)	10

Table 39

*Estimated Marginal Means of Achievement and White Students***White \* Achievement**

White	Achievement	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low (25% or less)	Low achievement (69% and below grade level)	241	4.538	232.01	249.99
	Middle achievement (89% - 70% at or above grade level)	249.667	8.69	232.453	266.881
	High achievement (100% - 90% at or above grade level)	273	33.655	206.33	339.67
Middle (26-59%)	Low achievement (69% and below grade level)	257.455	10.147	237.353	277.556
	Middle achievement (89% - 70% at or above grade level)	250.192	6.6	237.117	263.267
	High achievement (100% - 90% at or above grade level)	243	19.431	204.508	281.492
High (60-100%)	Low achievement (69% and below grade level)	. <sup>a</sup>	.	.	.
	Middle achievement (89% - 70% at or above grade level)	279.2	15.051	249.384	309.016
	High achievement (100% - 90% at or above grade level)	243.167	13.74	215.949	270.385

*Note.* a. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Table 40

*Univariate Analysis of Achievement and Hispanic-Latino Students*

<b>Between-Subjects Factors</b>			
		Value Label	N
Hispanic-Latino	1	Low (25% or less)	35
	2	Middle (26% - 59%)	76
	3	High (60% -100%)	13
Achievement	1	Low achievement (69% and below grade level)	67
	2	Middle achievement (89% - 70% at or above grade level)	47
	3	High achievement (100% - 90% at or above grade level)	10

Table 41

*Estimated Marginal Means of Achievement and Hispanic-Latino Students***Hispanic-Latino \* Achievement**

Hispanic-Latino	Achievement	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low (25% or less)	Low achievement (69% and below grade level)	240	10.753	218.702	261.298
	Middle achievement (89% - 70% at or above grade level)	256.167	8.015	240.292	272.041
	High achievement (100% - 90% at or above grade level)	252.429	12.852	226.973	277.884
Middle (26-59%)	Low achievement (69% and below grade level)	241.83	4.96	232.006	251.654
	Middle achievement (89% - 70% at or above grade level)	251.038	6.669	237.83	264.247
	High achievement (100% - 90% at or above grade level)	231.333	19.632	192.45	270.217
High (60-100%)	Low achievement (69% and below grade level)	255.3	10.753	234.002	276.598
	Middle achievement (89% - 70% at or above grade level)	264.333	19.632	225.45	303.217
	High achievement (100% - 90% at or above grade level)	. <sup>a</sup>	.	.	.

a. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Table 42

*Univariate Analysis for Work Satisfaction, School Achievement and SES*

<b>Between-Subjects Factors</b>			
		Value Label	N
Reduced Lunch	1	Low (39% and below)	16
	2	Moderate (59% to 40%)	29
	3	High (60% and above)	79
Achievement	1	Low achievement (69% and below grade level)	67
	2	Middle achievement (89% - 70% at or above grade level)	47
	3	High achievement (100% - 90% at or above grade level)	10

Table 43

*Estimated Marginal Means for Work Satisfaction, School Achievement and SES***Reduced Lunch \* Achievement**

Reduced Lunch	Achievement	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low (39% and below)	Low achievement (69% and below grade level)	43	8.049	27.056	58.944
	Middle achievement (89% - 70% at or above grade level)	59.6	2.545	54.558	64.642
	High achievement (100% - 90% at or above grade level)	54.8	3.6	47.67	61.93
Moderate (59% to 40%)	Low achievement (69% and below grade level)	55.429	3.042	49.402	61.455
	Middle achievement (89% - 70% at or above grade level)	55.444	1.897	51.686	59.202
	High achievement (100% - 90% at or above grade level)	47.5	4.025	39.528	55.472
High (60% and above)	Low achievement (69% and below grade level)	54.847	1.048	52.772	56.923
	Middle achievement (89% - 70% at or above grade level)	55.947	1.847	52.29	59.605
	High achievement (100% - 90% at or above grade level)	60	8.049	44.056	75.944

Table 44

*Univariate Analysis for Pay Satisfaction, School Achievement and SES*

<b>Between-Subjects Factors</b>			
		Value Label	N
Reduced Lunch	1	Low (39% and below)	16
	2	Moderate (59% to 40%)	29
	3	High (60% and above)	79
Achievement	1	Low achievement (69% and below grade level)	67
	2	Middle achievement (89% - 70% at or above grade level)	47
	3	High achievement (100% - 90% at or above grade level)	10

Table 45

*Estimated Marginal Means for Pay Satisfaction, School Achievement and SES***Reduced Lunch \* Achievement**

Reduced Lunch	Achievement	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low (39% and below)	Low achievement (69% and below grade level)	15	3.481	8.104	21.896
	Middle achievement (89% - 70% at or above grade level)	15.3	1.101	13.119	17.481
	High achievement (100% - 90% at or above grade level)	13.2	1.557	10.116	16.284
Moderate (59% to 40%)	Low achievement (69% and below grade level)	15.429	1.316	12.822	18.035
	Middle achievement (89% - 70% at or above grade level)	14.278	0.821	12.652	15.903
	High achievement (100% - 90% at or above grade level)	14.75	1.741	11.302	18.198
High (60% and above)	Low achievement (69% and below grade level)	14.475	0.453	13.577	15.372
	Middle achievement (89% - 70% at or above grade level)	13.316	0.799	11.734	14.898
	High achievement (100% - 90% at or above grade level)	11	3.481	4.104	17.896



Table 46

*Univariate Analysis for Promotion Satisfaction, School Achievement and SES*

<b>Between-Subjects Factors</b>			
		Value Label	N
Reduced	1	Low (39% and below)	16
	2	Moderate (59% to 40%)	29
Lunch	3	High (60% and above)	79
	1	Low achievement (69% and below grade level)	67
Achievement	2	Middle achievement (89% - 70% at or above grade level)	47
	3	High achievement (100% - 90% at or above grade level)	10

Table 47

*Estimated Marginal Means for Promotion Satisfaction, School Achievement and SES***Reduced Lunch \* Achievement**

Reduced Lunch	Achievement	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low (39% and below)	Low achievement (69% and below grade level)	13	5.212	2.677	23.323
	Middle achievement (89% - 70% at or above grade level)	18.1	1.648	14.836	21.364
	High achievement (100% - 90% at or above grade level)	17.6	2.331	12.983	22.217
Moderate (59% to 40%)	Low achievement (69% and below grade level)	19.429	1.97	15.527	23.33
	Middle achievement (89% - 70% at or above grade level)	18.444	1.228	16.011	20.878
	High achievement (100% - 90% at or above grade level)	18.25	2.606	13.088	23.412
High (60% and above)	Low achievement (69% and below grade level)	20.203	0.678	18.859	21.547
	Middle achievement (89% - 70% at or above grade level)	19.053	1.196	16.684	21.421
	High achievement (100% - 90% at or above grade level)	25	5.212	14.677	35.323

Table 48

*Univariate Analysis for Supervision Satisfaction, School Achievement and SES*

<b>Between-Subjects Factors</b>			
		Value Label	N
Reduced Lunch	1	Low (39% and below)	16
	2	Moderate (59% to 40%)	29
	3	High (60% and above)	79
Achievement	1	Low achievement (69% and below grade level)	67
	2	Middle achievement (89% - 70% at or above grade level)	47
	3	High achievement (100% - 90% at or above grade level)	10

Table 49

*Estimated Marginal Means for Supervision Satisfaction, School Achievement and SES***Reduced Lunch \* Achievement**

Reduced Lunch	Achievement	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low (39% and below)	Low achievement (69% and below grade level)	54	12.262	29.711	78.289
	Middle achievement (89% - 70% at or above grade level)	58.6	3.878	50.919	66.281
	High achievement (100% - 90% at or above grade level)	53.6	5.484	42.738	64.462
Moderate (59% to 40%)	Low achievement (69% and below grade level)	48.571	4.635	39.391	57.752
	Middle achievement (89% - 70% at or above grade level)	49.333	2.89	43.608	55.058
	High achievement (100% - 90% at or above grade level)	53.25	6.131	41.106	65.394
High (60% and above)	Low achievement (69% and below grade level)	49.847	1.596	46.685	53.01
	Middle achievement (89% - 70% at or above grade level)	52.895	2.813	47.322	58.467
	High achievement (100% - 90% at or above grade level)	59	12.262	34.711	83.289

Table 50

*Univariate Analysis for Co-worker Satisfaction, School Achievement and SES*

<b>Between-Subjects Factors</b>			
		Value Label	N
Reduced Lunch	1	Low (39% and below)	16
	2	Moderate (59% to 40%)	29
	3	High (60% and above)	79
Achievement	1	Low achievement (69% and below grade level)	67
	2	Middle achievement (89% - 70% at or above grade level)	47
	3	High achievement (100% - 90% at or above grade level)	10

Table 51

*Estimated Marginal Means for Co-workers Satisfaction, School Achievement and SES***Reduced Lunch \* Achievement**

Reduced Lunch	Achievement	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low (39% and below)	Low achievement (69% and below grade level)	57	8.727	39.714	74.286
	Middle achievement (89% - 70% at or above grade level)	57.6	2.76	52.134	63.066
	High achievement (100% - 90% at or above grade level)	51	3.903	43.27	58.73
Moderate (59% to 40%)	Low achievement (69% and below grade level)	56.286	3.298	49.752	62.819
	Middle achievement (89% - 70% at or above grade level)	53.889	2.057	49.815	57.963
	High achievement (100% - 90% at or above grade level)	55.75	4.363	47.107	64.393
High (60% and above)	Low achievement (69% and below grade level)	51.525	1.136	49.275	53.776
	Middle achievement (89% - 70% at or above grade level)	55.842	2.002	51.877	59.808
	High achievement (100% - 90% at or above grade level)	48	8.727	30.714	65.286

Table 52

*Univariate Analysis for Total Job Satisfaction, School Achievement and SES*

<b>Between-Subjects Factors</b>			
		Value Label	N
Reduced Lunch	1	Low (39% and below)	16
	2	Moderate (59% to 40%)	29
	3	High (60% and above)	79
Achievement	1	Low achievement (69% and below grade level)	67
	2	Middle achievement (89% - 70% at or above grade level)	47
	3	High achievement (100% - 90% at or above grade level)	10

Table 53

*Estimated Marginal Means for Total Satisfaction, School Achievement and SES***Reduced Lunch \* Achievement**

Reduced Lunch	Achievement	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low (39% and below)	Low achievement (69% and below grade level)	43	10.168	22.859	63.141
	Middle achievement (89% - 70% at or above grade level)	60.8	3.215	54.431	67.169
	High achievement (100% - 90% at or above grade level)	55.8	4.547	46.793	64.807
Moderate (59% to 40%)	Low achievement (69% and below grade level)	53	3.843	45.388	60.612
	Middle achievement (89% - 70% at or above grade level)	53.111	2.397	48.364	57.858
	High achievement (100% - 90% at or above grade level)	50	5.084	39.93	60.07
High (60% and above)	Low achievement (69% and below grade level)	52.441	1.324	49.819	55.063
	Middle achievement (89% - 70% at or above grade level)	57.158	2.333	52.537	61.778
	High achievement (100% - 90% at or above grade level)	70	10.168	49.859	90.141



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