JOB SATISFACTION OF HIGH SCHOOL PRINCIPALS IN THE COMMONWEALTH OF VIRGINIA

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Studies have shown that effective principals are a key ingredient to high performing schools. Studies also indicate that a shortage of effective administrators is looming and some contend that the shortage is here (Daresh & Capasso, 2002). Johnson and Holdaway, 1991 report that it is important to study job satisfaction for many reasons. They also contend that one of the reasons it is important to study job satisfaction is that job satisfaction is related to absenteeism as well as staff turnover.

One way to address the shortage of effective administrators is to continually assess the job satisfaction of administrators to determine which aspects of the job affect satisfaction. In this study, the researcher examined the job satisfaction of high school principals in the Commonwealth of Virginia in 2008. A replication of procedures used by Dr. James Stemple in 2004 provided the opportunity to compare results with Stemple’s study to determine if the job satisfaction of high school principals has changed since 2004. Dr. Stemple’s study was one of the first studies to assess job satisfaction after the implementation of the accountability movement.
However, federal accountability including Adequate Yearly Progress has risen considerably since Stemple’s 2004 study. In 2004, a pass rate of 65% for reading and 63% for math was required in order for a school to make AYP. During the 2008-2009 school year the required passing rate is 81% for reading and 79% for math. This study assessed job satisfaction of high school principals through the lens of the federal and state accountability movements.
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CHAPTER I
INTRODUCTION TO THE STUDY

Job satisfaction is how people feel about their jobs in general and how they feel about specific aspects of their jobs. “It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs” (Spector, 1997, p.2). The study of job satisfaction is common in many organizations, including education. Organizations concerned with employee well-being, humanitarian, as well as increased productivity, pragmatic, may initiate a study of employee job satisfaction.

Regardless of whether the reason for examining job satisfaction is humanitarian or pragmatic, the study of job satisfaction can be approached in two ways (Herzberg, Mausner, & Snyderman, 1959). First, one may view job satisfaction as a general, overall feeling about a job. This approach is useful in investigating demographic variables. Second, a facet approach may be used and job satisfaction may be approached as specific feelings or attitudes about certain aspects or facets of the job. The overall approach is used if one wishes to determine the end result of whether employees are generally satisfied or dissatisfied. A facet approach is used when one seeks to find out specifically which parts of the job cause satisfaction or dissatisfaction (Herzberg et al., 1959).

Historical Perspective

Studies of job satisfaction can be traced back to those conducted in the early 1900’s by Frederick Taylor and Elton Mayo. Taylor’s study at Bethlehem steelworks involved redesigning equipment and selecting the right workers for the job, resulting in an increase in production. A study conducted by Elton Mayo at the Hawthorne plant of the Western Electric Company studied the effect of light on productivity. He found that production increased even if the light was
reduced to moonlight. This finding was explained as the individuals increased production because they were in an experimental situation. Now, when subjects improve production because of the experimental situation, it is known as the Hawthorne effect (as cited in Gruneberg, 1979).

In the 1930’s Hoppock was one of the first to use survey methods and attitude scales to examine job satisfaction (Gruneberg, 1979). These were primarily studies of industry workers and approached job satisfaction as an overall, general attitude.

In 1952, Katz and Kahn conducted the first studies which considered job satisfaction in relation to factor analysis. These were the first studies to approach job satisfaction from a facet approach rather than a general, overall assessment. The researchers found four relevant dimensions of job satisfaction: satisfaction with supervision, satisfaction with the job, satisfaction with the company, and satisfaction with mobility as cited in Wernimont, 1964. At this time employee’s attitudes regarding factors of a job were scored on a continuum with satisfaction and dissatisfaction at opposite ends.

The researcher illustrates the continuum in the following:

![Continuum of Job Satisfaction](image)

*Figure 1. Continuum of Job Satisfaction*
In 1959, Herzberg et al. conducted a study which examined the factors affecting the way workers felt on the job, resulting attitudes toward the job, and effects of the attitudes on performance. Approximately 200 accountants and engineers from nine companies in the Pittsburgh area participated. Each participant was asked to explain a time when they felt exceptionally good or exceptionally bad about their job. This technique is known as the critical incident technique. The researchers concluded that job satisfaction and dissatisfaction were not caused by the same factors (Herzberg et al., 1959). Herzberg’s study, along with most other studies since that time consider job satisfaction utilizing this conceptual framework.

Statement of the Problem

“Over the past quarter century, significant changes have been reshaping the role of the building level administrator” (Barrack & Shortt, 2001, p.1). The responsibilities of the principal continue to expand. The managerial responsibilities of the principal are expanding as principals report increasing paperwork loads. Principals are also spending more time coping with student behavior problems. Additionally, email which is an effective venue of communication between administrators, teachers, and parents, has also added a significant demand on the principal’s time. While being an effective manager used to be good enough, principals are now expected to be instructional leaders, maintain school safety, and insure special education services are delivered appropriately.

Not only have the principal’s managerial tasks expanded but principals are expected to be instructional leaders, insuring all students meet high standards and insuring that the challenges of students with disabilities are met (Di Paola & Tschannen-Moran, 2001). With the ever increasing demands of federal mandates such as No Child Left Behind and Adequate Yearly
Progress principals can no longer be merely effective managers. Before the age of accountability, principals were expected to insure a well disciplined student body and organized, efficient school operations. Principals are still expected to effectively manage the school but are also now thrust into the role of instructional leader. Public school principals must be versed in the routine workings of the school such as building issues as well as the details of standards, objectives, and curricula for a variety of subjects.

Principals are expected to be teacher leaders; to provide a vision for their school; and inspire faculty and staff to work toward that vision. A Mid-continent Research for Education and Learning (McREL) study by Marzano, McNulty, and Walters identified 21 responsibilities of a school leader. According to this meta-analysis, each of these 21 behaviors has a statistically significant relationship with student achievement. These responsibilities reflect the wide and varied duties that fall upon the high school principal (Marzano et al., 2005).

Along with serving as instructional leader, the principal must insure the safety of students and staff. With recent tragedies, school safety is more important than ever. The principal is charged with enforcing new sets of school security and developing protocols that insure students and parents that the school is a safe environment (Di Paola & Tschannen-Moran, 2001).

During the last three decades, federal mandates have expanded services to students with disabilities. Section 504 of the Rehabilitation Act and the Americans with Disabilities Act have increased demands on principals as they strive to accommodate individual student needs (Di Paola & Tschannen-Moran, 2001). Successful implementation of programs to meet the requirements of the Americans with Disabilities Act and school safety, along with increased accountability from federal mandates require principals to hire and supervise more people,
enforce new policies, and expand services. But while principals’ new responsibilities increase, the principal’s role in other areas has not been reduced (Di Paola & Tschannen-Moran, 2001).

The increasing demands and responsibilities placed on high school principals are illustrated by Richford and Fortune in the following:

To be effective, high school principals require authority commensurate with their duties and responsibilities. They must maintain good interpersonal relations with parents, teachers, students and other administrators as well as with community leaders and social service personnel. As society becomes more complex and diverse, education along with other social institutions, must respond to accountability and efficiency concerns (Richford & Fortune, 2001, p.17).

**Significance of the Study**

Principal satisfaction and retention are important issues in education. (Marzano, McNulty, and Walters, 2005) suggest that the leadership of the school could be considered the single most important aspect of effective school reform. Though leadership does not rest with a single individual, no one other than the principal can easily assume the role of the leader of a reform effort. “The principal’s role is important” (Marzano et al., 2005, p. 174). “Research studies strongly support the fact that the leadership of the school principal impacts directly on the climate of the school and, in turn, on student achievement” (Norton, 2002, p. 50).

With increased demands to be an effective manager as well as an instructional leader, along with the constantly changing roles of the principal, fewer qualified people are being attracted to the position. (Norton, 2002). This is compounded by the fact that more and more qualified principals are leaving the field. “Increasing demands upon the work life of the
principal, low salary levels, time constraints, lack of parent and community support and lack of respect are among the reasons that principals are leaving the position” (Norton, 2002, p. 50).

Not only are current principals leaving the field, but the number of aspiring principals is dwindling as well. “Owing to difficult and challenging times, the position of school administrator appears less appealing to other educators. High school principalships have attracted fewer aspirants in recent years and are viewed by many as burnout positions” (Gmelch and Gates, 1997, p. 146). Johnson and Holdaway (1991) state, “Furthermore, calls for educational and administrative accountability and features of the modern work and social environment have been associated with growing frustration and stress and declining quality of work life; so efforts to understand job satisfaction have become ever more necessary” (p. 51).

“National statistics relating to principal turnover and dwindling supplies of qualified replacements show clearly that principal turnover has reached crisis proportions” (Norton, 2002, p. 50). “The ‘graying’ of school administrators as well as the increased responsibility and accountability of administrative roles has created increased numbers of administrative vacancies nationwide” (Di Paola and Tschannen-Moran, 2001, p.4). They go on to say, “…. the recruitment and retention of qualified and certified administrators is one of the greatest challenges confronting school divisions in Virginia and across the nation” (p. 4). Lovely (2004) agrees, “In the wake of looming retirements, diminishing applicant pools, declining employee loyalty, and budget-induced downsizing, survival depends upon holding on to the leaders you already have” (p. 99).

Research shows that principals are a critical element in effective schools and student achievement (Marzano et al., 2005). Studies also show that principal turnover is increasing and there is a lack of qualified candidates to fill these positions. Some contend that one of the
reasons for the lack of interest in the principalship is an unintended consequence of educational reform policies (Gronn & Rawlings-Sanaei, 2003). “Since satisfaction is related to turnover, those people who are most highly dissatisfied are also most likely to leave” (Lawler, 1994, p. 182).

**Purpose**

This study investigated the overall satisfaction level of public high school principals in the Commonwealth of Virginia as measured by the Minnesota Satisfaction Questionnaire (MSQ). This instrument measures twenty dimensions of job satisfaction. This study also investigated the influence of personal and professional demographic variables such as gender, age, salary level, years of experience, number of assistant principals, years in current school district, school socioeconomic level, school size, school accreditation status and Adequate Yearly Progress. Additionally, this study investigated public high school principals’ overall satisfaction in relation to the twenty dimensions of the job as measured by the Minnesota Satisfaction Questionnaire. It is critical to understand which components of the principalship affect job satisfaction. With this understanding, we will be equipped to retain and recruit highly effective administrators. This study provides important data regarding the job satisfaction of high school principals as the federal mandates of No Child Left Behind as well as state and local mandates for accountability increase.

**Justification for the Study**

If public schools are to compete with the oftentimes more lucrative private industry for the best and brightest leaders, they must be aware of the intricacies of the job of principal. It is important to understand which aspects of the principalship are most enjoyed and which aspects are least enjoyed by administrators. With this knowledge, mentoring programs can be tailored to
address the aspects of the principalship which lead to principals’ satisfaction. As a result, these mentoring programs will likely be more effective and successful. Human resource departments may also find the results of this study useful. It is critical that the human resources department understands the key components of the high school principalship and how these varying roles contribute to job satisfaction. With successful mentoring programs and a knowledgeable human resources department, public schools are more likely to attract and retain the most effective administrators.

Due to the ever-increasing demands on the principal, it is important to continually assess the job satisfaction of principals. Stemple, 2004 recommended replicating his study every four to five years to provide an opportunity for comparison of results over a longitudinal timeframe. As stated by Dr. Stemple, this will provide the researcher an opportunity to examine changes in job satisfaction with relation to Virginia Accreditation standards and Federal Adequate Yearly Progress requirements.

Research Questions

The overarching research question that guided this study is: What is the general level of satisfaction of current public high school principals in the Commonwealth of Virginia as measured by the Minnesota Satisfaction Questionnaire?

Additional research questions:

1. What is the satisfaction level of public high school principals in Virginia according to the following variables: gender, age, salary level, years of experience, number of assistant principals, years in current school district, school socioeconomic level, school size, and accreditation status?
2. What is the satisfaction level of public high school principals in Virginia for each of the twenty dimensions of the job as measured by the MSQ?

3. Based on the demographic variables of accreditation status and Adequate Yearly Progress (AYP), what is the general job satisfaction level of high school principals in Virginia?

Definitions of Key Terms

Principal – “The individual identified as the chief building level administrator in the school” (Long, 1989, p.12).

High School – for the purposes of this study, a high school will be considered a public school with at least grades 10 – 12.

Job Satisfaction – “is simply how people feel about their jobs and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs” (Spector, 1997, p.2).

Limitations and Assumptions

The limitations of this study are listed below:

1. This study was limited to principals in the Commonwealth of Virginia; therefore, generalizations to principals in the rest of the country or world may not be considered.

2. The study was also limited to those principals who chose to respond to the survey.

3. This study relied on principals to self-report demographic variables along with truthful and thoughtful responses to the MSQ.

Organization of the Study

This study investigated the job satisfaction of public high school principals in the Commonwealth of Virginia. Procedures replicated a 2004 study by Dr. James Stemple. This
allowed the researcher to compare the results of this 2008 study to the results of Dr. Stemple’s 2004 study through the lens of the accountability movement. This study is organized into five chapters. Chapter one is the introductory chapter and includes a statement of the problem as well as guiding questions. The purpose of the study, the significance of the study, definitions of key terms, and limitations of the study will also be found in chapter one. Chapter two contains a review of literature relating to job satisfaction and the accountability movement. The Theory of Work Adjustment on which the MSQ is based is explained here as well. Chapter three provides the methodology including the design of the study. Chapter four reports the findings and chapter five includes the summary, findings, implications for practice, conclusions, and recommendations for further study.
CHAPTER TWO

REVIEW OF LITERATURE

The purpose of this study was to investigate the job satisfaction of public high school principals in the Commonwealth of Virginia, including both personal and job related characteristics. The purpose of the literature review was to examine literature relating to job satisfaction. Though the topic of job satisfaction is much broader, this literature review focused on defining job satisfaction, job satisfaction theories, facets of job satisfaction, measurements of job satisfaction, and the accountability movement. This chapter is divided into five major sections: 1) definitions of job satisfaction; 2) theories of job satisfaction; 3) variables of job satisfaction; 3) job satisfaction scales, 4) increasing accountability and 5) a summary of previous studies relating to job satisfaction and public school personnel.

Defining Job Satisfaction

A review of the literature reveals a general agreement among researchers regarding the definition of job satisfaction. Job satisfaction is generally considered how a worker feels about his job. Hoppock (1935) defined job satisfaction as the individual’s feelings about his job. More specifically, Hoppock goes on to define job satisfaction as “any combination of psychological, physiological, and environmental circumstances that causes a person truthfully to say, ‘I am satisfied with my job’” (p. 47). According to Spector, “Job satisfaction is simply how people feel about their jobs and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs” (p. 2). Locke (1976) defines job satisfaction as “the pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences (p. 1300). Lofquist & Dawis, (1969) defined job satisfaction as “the pleasurable
emotional state resulting from the appraisal of the extent to which the work environment fulfills an individual’s requirement” (p. 47).

Theories of Job Satisfaction

Lunenburg and Ornstein (2000) suggest that theories of job satisfaction can be divided into two categories, content and process. Content theories suggest that all workers have the same set of basic needs. Therefore, the theory prescribes desired characteristics to be present in jobs. Process theories, on the other hand, stress that each individual has different needs. These theories focus on the mental processes that create these differences.

Content Theories

Content theory includes both traditional and two-factor theories of motivation. Traditional theory states that job satisfaction rests on a continuum. Good working conditions and complete job satisfaction are at one end of the continuum while bad working conditions and complete dissatisfaction rest at the other. This theory suggests that all workers’ attitudes toward their job and job satisfaction fall somewhere on this continuum (Gruneberg, 1976; Mischkind, 1967). Three prominent theorists who subscribed to the concept of content theory are Robert Hoppock (1935), Abraham Maslow (1954), and Frederick Herzberg (1959).

Traditional Theory

Hoppock, who made one of the first attempts to measure job satisfaction, contended that if a certain factor caused satisfaction, the absence of the factor would cause dissatisfaction. Likewise, lower amounts of the factor would lead to decreased satisfaction. Hoppock also contended that there was a zone of neutrality in which the individual was neither satisfied nor dissatisfied. One may consider this theory a horizontal continuum with satisfaction on the far right and dissatisfaction on the far left. Individuals’ feelings about specific facets of their jobs
may fall anywhere along the continuum, including the middle of the line indicating neutrality and neither satisfaction nor dissatisfaction (Hoppock, 1935).

Similar to Hoppock, Maslow’s Hierarchy of Needs theorized that satisfaction could be conceptualized as a pyramid with five distinct horizontal levels. It suggested that all human needs could be placed in one of these five categories or levels in the pyramid. The basic needs, and the lowest level in the pyramid, consist of physiological necessities such as water, food, and shelter. The next level consists of physical safety and financial security. The third level includes love and acceptance of others. The fourth level consists of recognition by others. The top level in the pyramid consists of self actualization. Self actualization, according to Maslow, includes self development and autonomy. Maslow maintained that the lower level needs had to be met before the individual could be motivated to achieve the next level (Maslow, 1954).

Two-Factor Theory

Contrary to the traditionalists’ beliefs of a continuum of satisfaction, Herzberg offered a two factor theory of job satisfaction. This theory resulted from his research concerning job attitudes and motivation in which he conducted semi-structured interviews with over 200 engineers and accountants. From their responses, Herzberg identified two distinctly different sets of factors. He contended that job satisfaction consists of both satisfiers (motivators) and dissatisfiers (hygienes) (Herzberg et al., 1959).

Job satisfiers or motivators are intrinsic to the employee and increase feelings of happiness. The motivators which are primarily responsible for job satisfaction consist of recognition, achievement, advancement, responsibility, and the work itself. Dissatisfiers or hygiene factors are extrinsic and consist of the environment of the work. The factors of company policy and administration, technical aspects of supervision, salary, interpersonal relations, and working
conditions cause dissatisfaction. These two sets of job facets are mutually exclusive (Herzberg et al., 1959). These motivators and hygienes are listed in Table 1.

Process Theories

While content theories focus on a prescription for characteristics that need to be present in a job, process theories focus on the individuality of the worker. Process theory seeks to understand the cognitive processes responsible for the varying needs of the individual worker. Important process theories include equity theory; reference group, needs/fulfillment, and work adjustment theory.

Equity Theory

Equity theory originated around 1965. This theory suggests job satisfaction may be affected by the difference between what the worker expects and what they actually receive from the employer. An important component of this theory contends that the worker has a preconceived notion of what they should receive for their efforts (Adams, 1965). It also contends that workers will look to coworkers to compare rewards. This theory assumes that one integral cognitive process involves the worker observing the effort others are exerting toward their work and the rewards that follow this effort. This is driven by our need for fairness and equity (Adams, 1965).

Reference Group Theory

Reference group theory is much like equity theory in that it suggests that employees compare themselves to their co-workers regarding effort exerted on the job and rewards received. It is important to understand that employees compare themselves to others. The results of these comparisons will likely affect job satisfaction (Hulin & Blood, 1968).
Motivators and Hygienes

<table>
<thead>
<tr>
<th>Motivators (Satisfiers)</th>
<th>Hygienes (Dissatisfiers)</th>
</tr>
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<tbody>
<tr>
<td>Responsibility</td>
<td>Supervision</td>
</tr>
<tr>
<td>Recognition</td>
<td>Salary</td>
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<tr>
<td>Promotion</td>
<td>Work environment</td>
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<tr>
<td>Achievement</td>
<td>Company policies</td>
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<tr>
<td>Intrinsic aspects of the job</td>
<td>Relationship with colleagues</td>
</tr>
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</table>

Fulfillment Theory

The needs/fulfillment theory states that job satisfaction will be determined in part by how much of a reward they receive for their work. What this theory failed to include however, is the individual differences regarding how people feel about what they receive as well as the worker’s preconceived notion regarding what they should receive. One example of this in education may be the well-documented dissatisfaction with educators’ salaries when compared with other professions requiring similar preparation (Vroom, 1995).

Vroom (1964) developed two models of need fulfillment theory, subtractive and multiplicative. The subtractive model suggests that job satisfaction is dependent on the difference between the worker’s needs and the degree to which the job fills those needs. The multiplicative model includes the worker’s need for importance. In this model, the perceived degree to which a job meets the worker’s needs is multiplied by the importance of the need to the
worker (Vroom, 1964). Since that time Vroom has stated that when explaining the differences in the effort people give their jobs, we have focused too much on extrinsic factors and failed to recognize individual differences (Vroom, 1995).

**Work Adjustment Theory**

Another process theory and the theory on which this study will be based is the work adjustment theory. The study of work adjustment originally focused on resolving problems related to work such as employee morale, work motivation, and worker productivity. With no integrating theory, the results of these studies were reported in isolation. The theory of work adjustment was offered as one overarching framework to allow systemic inquiry into the study of work adjustment (Dawis & Lofquist, 1984). The theory was a result of research in the Work Adjustment Project at the University of Minnesota. After reviewing the literature Scott, Dawis, England, and Lofquist realized that an integrating theory was needed for the study of work adjustment.

In 1964, Dawis, England, and Lofquist published the first version of the theory of work adjustment. Since that time, the theory has been extended and modified in a subsequent publication in 1969 as well as in several journal articles. In relation to work, correspondence is described as the worker fulfilling the requirements of the job and the job fulfilling the requirements or needs of the worker. The work adjustment theory is based on the belief that the worker is a responding organism. As such, the worker constantly interacts with the environment. Environments may include work, home, and school and interactions in one environment may affect interactions in another. Weiss claimed that the interactions of the worker to the environment are based on how the worker’s abilities relate to the abilities required to perform a specific task combined with the worker’s needs in relation to the rewards available in the
workplace (Dawis & Lofquist, 1981). The researcher of this study illustrates the framework of the work adjustment theory below:

![Diagram](image)

**Figure 2. Illustration of the Theory of Work Adjustment**

The following statements were provided by Dawis et al. (1964) to summarize the theory of work adjustment.

1. Work is conceptualized as an interaction between an individual and a work environment.
2. The work environment requires that certain tasks be performed, and the individual brings skills to perform the tasks.
3. In exchange, the individual requires compensation for work performance and certain preferred conditions, such as a safe and comfortable place to work.
4. The environment and the individual must continue to meet each other’s requirements for the interaction to be maintained. The degree to which the requirements of both are met may be called correspondence.

5. Work adjustment is the process of achieving and maintaining correspondence. Work adjustment is indicated by the satisfaction of the individual with the work environment and by the satisfaction of the work environment with the individual, by the individual’s satisfaction.

6. Satisfaction and satisfactoriness result in the employee staying in the position for a longer period of time, the principal indicator of work adjustment.

7. Work personalities and work environments can be described in terms of structure and style variables that are measured on the same dimensions (p. 9-10).

The theory of work adjustment has guided many studies of job satisfaction in the field of education (Newby, 1999; Waskiewicz, 1999; Chen, 2000; Stemple, 2004; Bowling, 2007; Bane, 2006, McQueen, 2007). These researchers agree that individuals are responding organisms who interact with their environments, thus the theory of work adjustment is an effective means of studying job satisfaction.

**Variables of Job Satisfaction**

Most researchers agree that certain variables should be considered when examining job satisfaction (Graham and Messner, 1998; Eckman, 2002; Brogan, 2003; Wheelis, 2005; Monroe, 2007). The following variables will be considered when assessing overall job satisfaction as well as satisfaction with various facets of the job.

Age, time spent in the current position, and educational experience are most often considered to be interrelated. Usually, time spent in the current position and educational experience increase
as age increases. Older workers typically have more time in the current position than younger workers and they typically have more experience in the field of education. This is not always the case. Bedeian, Farris, & Kacmar (1992) state that age and time spent in the current position are two distinct variables leading to different outcomes. However, Stemple, 2004, found a positive correlation between age and salary, age and total years as principal, and age and total years in current district. These correlations suggest that older principals tend to have higher salaries, have been principals longer and have more tenure.

Herzberg theorized that job satisfaction in relation to age was curvilinear in nature. However, others have contended that age and job satisfaction are linear. (Hulin & Smith, 1964; Clark, Oswald, & Warr, 1996) A study by Newby (1999) indicated results that agreed with Herzberg’s curvilinear theory. She found that younger and older principals reported being more satisfied with their jobs than middle aged principals. Bowling (2007) replicated Dr. Newby’s study and found principals less than 35 years old to be more satisfied with their jobs than older principals. Bowling’s study also reported principals with seven to nine years of experience were significantly more satisfied than those with more or less years of experience. This study considered job satisfaction in relation to the principal’s age as well as in relation to the number of years a principal has been in the district.

Findings regarding gender of the worker and job satisfaction often contradict themselves. (Hulin & Smith, 1965) state that findings generally suggest women are less satisfied with their jobs because they are placed on lower level jobs with lower pay rates and with fewer opportunities for promotions. Also, males working in industry are meeting societal expectations concerning appropriate roles for men and women. Women working in industry however may not feel they are meeting societal expectations. Women who are married or who have children may
also feel role conflict when working outside the home. Eckman (2002) found that many female principals experience role conflict with the competing demands of home and work. While the majority of instructional positions are filled with females, most principalships are held by males. It is important to continue to assess job satisfaction in relation to gender as more females enter the principalship.

Clark (1997) states that job satisfaction may generally be higher for females because traditionally females did not have access to certain jobs. Women’s expectations for jobs tend to be lower than males, thus satisfaction with the job is generally higher. The number of female principals continues to rise, still high schools in Virginia are led predominantly by males. According to Eckman (2002) female principals’ perception of role conflict was inversely and significantly related to job satisfaction. Therefore, as female principals felt the increasing demands of home, spouse, and children, their job satisfaction was significantly decreased. This will likely be an important component to the study as federal and state accountability continue to demand more and more of the principal’s time.

“Satisfaction with pay, as with the attainment of any valued outcome, is likely to be a function of several different processes” (fa, Fraser, Treasure & Cochran, 1987, p. 544). Berkowitz et al. found that satisfaction with pay is usually a combination of factors including equity, material benefits, and intrinsic job satisfaction. Herzberg’s two factor theory stated that compensation served only as a dissatisfier. Several studies including Newby (1999) and Graham & Messner (1998) found that principals were less satisfied with compensation than with most other aspects of the job. “It is clear that individuals who believe they are inequitably paid are dissatisfied with their job” (Locke, 1976).
Larger schools bring greater demands to the principal. By default, larger schools will have additional extracurricular demands and activities that must be supervised by an administrator. Additionally, as the number of faculty, staff, and students increase so do issues and concerns regarding each of these groups. Surprisingly, Newby (1999) reported that principals of large schools were slightly more satisfied than principals of small or mid-sized schools. However, Graham & Messner (1998) reported that principals in mid-sized schools reported higher overall satisfaction than principals of small or large schools.

The number of assistant principals is directly related to school size. Typically, school divisions allocate the number of assistant principals based on student enrollment. Interestingly though, Stemple found that the number of assistant principals was one of the two best predictors of job satisfaction.

The socioeconomic status of a school is becoming increasingly more important as the demands of No Child Left Behind continue to rise. One of the sub groups considered in NCLB is economically disadvantaged. As such, schools with predominantly low socioeconomic students may struggle to meet benchmarks. Additionally, schools with small percentages of low socioeconomic students and historically high overall pass rates may find themselves struggling to meet the demands of AYP within subgroups.

It is important to remember why most educators entered the profession in the first place. Classroom teachers report that one of the reasons that they would not pursue administration is the belief that they would lose contact with the students. Stemple’s 2004 study revealed that job satisfaction increased when the percentage of time principals spend with children increases. Though this finding was not significant, it is important to compare the time spent with students and job satisfaction as principals face ever-increasing demands on their time.
Stemple also reported that principals of schools that were fully accredited under the Virginia Accreditation Standards reported significantly higher satisfaction than principals of non-accredited schools. It is important to note Virginia accreditation standards have not changed since Stemple’s study was conducted. However, federally required benchmarks for meeting Adequate Yearly Progress have continued to rise. It was of interest to assess whether or not accreditation and AYP affect the job satisfaction of principals.

*Job Satisfaction Scales*

Traditionally, job satisfaction is measured by conducting interviews or asking participants to respond to questionnaires. Questionnaires can easily be used with a large number of people and their results are relatively easy to quantify. Interviews, on the other hand, may be more time consuming but provide richer, in depth information as respondents are allowed to elaborate on responses (Spector, 1997). There is a vast array of approaches to assessing job satisfaction. Likewise, a number of instruments used to measure job satisfaction can also be found. This section of this literature review will give an overview of the approaches to measuring job satisfaction and existing satisfaction scales. Three of the most commonly used satisfaction scales will then be discussed.

According to Spector (1997) there are many advantages to assessing job satisfaction using one of the existing job satisfaction scales: first, many of the scales cover the major facets of job satisfaction; second, most of the scales provide norms to allow for comparison and interpretation; third, many existing scales exhibit both reliability and construct validity insuring the facets of job satisfaction will be measured consistently; and last, using one of the existing scales, rather than developing one of your own, saves both time and money.
Job satisfaction may be measured as a global feeling about a job or more specifically how the worker feels about various aspects of the job. This approach is used to find out which parts of the job cause satisfaction or dissatisfaction. Spector identifies two general satisfaction scales: the Job in General Scale and the Michigan Organization Assessment Questionnaire satisfaction subscale. He goes on to identify scales that measure job satisfaction using a facet approach: the Job Satisfaction Survey (JSS), the Job Descriptive Index (JDI), the Minnesota Satisfaction Questionnaire (MSQ), and the Job Diagnostic Survey (JDS).

The Job Satisfaction Survey (JSS) was developed by Paul E. Spector to assess overall satisfaction as well as satisfaction with various facets of the job. The JSS consists of 36 items and response choices on a six point scale range from strongly disagree to strongly agree. This satisfaction scale targets the following nine facets of job satisfaction: pay, promotion, benefits, supervision, contingent rewards, operating procedures, coworkers, nature of work, and communication. This instrument is provided free for noncommercial and educational research. Spector who developed the instrument, reports that it is not only the most popular job satisfaction scale, but also easy to modify and has well-documented reliability and validity (Spector, 1997).

The Job Descriptive Index (JDI) has been used for more than 40 years is also one of the most widely used measures of job satisfaction (DeMeuse, 1985; Zedeck, 1987). It contains a total of 72 items. An abridged version of the JDI is also available; it contains a total of 25 items. Both the abridged and non-abridged versions measure five aspects of job satisfaction: present job, present pay, opportunities for promotion, supervision, and coworkers. This instrument is frequently combined with the Job in General scale which was developed to measure overall job satisfaction.
Table 2. Measurements of Job Satisfaction

<table>
<thead>
<tr>
<th>Name of Instrument</th>
<th>Type</th>
<th>Specifics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job in General Scale (JIG)</td>
<td>General Job Satisfaction</td>
<td>Good for overall assessment of job satisfaction</td>
</tr>
<tr>
<td>Michigan Organizational Assessment Questionnaire Subscale</td>
<td>General Job Satisfaction</td>
<td>Contains a three item overall satisfaction subscale; good for use in longer questionnaires; established reliability and validity</td>
</tr>
<tr>
<td>Job Satisfaction Survey (JSS)</td>
<td>Facet Approach</td>
<td>Most popular; easy to modify; well documented reliability and validity</td>
</tr>
<tr>
<td>Job Descriptive Index (JDI)</td>
<td>Facet Approach</td>
<td>Limited to five facets</td>
</tr>
<tr>
<td>Minnesota Satisfaction Questionnaire (MSQ)</td>
<td>Facet Approach</td>
<td>Facets are more specific than the JSS or the JDI</td>
</tr>
<tr>
<td>Job Diagnostic Survey</td>
<td>Facet Approach</td>
<td>Studies the effects of job characteristics</td>
</tr>
</tbody>
</table>

The Minnesota Satisfaction Questionnaire developed in 1967 by Weiss, Dawis, England, and Lofquist is widely used to assess job satisfaction. The MSQ is appropriate for individuals who read at a fifth grade level or higher. The long form requires 15 to 20 minutes to complete while the short form takes approximately five minutes to complete. There are three versions of this instrument. There are two versions of the long form: a 1977 version and a 1967 version. The 1977 version, originally copyrighted in 1963, uses a five choice response scale with “neither satisfied nor dissatisfied” being the middle choice. A ceiling effect resulted with most answers
positively skewed to “satisfied” or “very satisfied.” The 1967 version replaced the neutral choice with “satisfied” and added “very satisfied” and “extremely satisfied” to the list of responses. This resulted in more symmetrically distributed responses. The 1967 version is recommended for prediction studies.

*The Accountability Movement*

“We conclude that declines in educational performance are in large part the result of disturbing inadequacies in the way the educational process itself is often conducted” (U.S. National Commission on Excellence in Education, 1983, p. 1). With this statement modern educational reform surged forward. In 1981, T.H. Bell, Secretary of Education for the U.S. Department of Education created the National Commission on Excellence in Education. He directed this commission to present a report on the quality of education in America. In 1983, *A Nation at Risk: The Imperative for Educational Reform* was submitted. Several key findings were highlighted in this report. The committee suggested that the American public school curriculum was too broad and no longer had a central purpose. Next, expectations regarding level of knowledge, abilities, and skills graduates should possess were far below other countries. Likewise, the committee suggested that the time students spent in school and time spent outside of school completing school work was also far below other industrialized nations. Last, the committee reported that not enough qualified candidates were being attracted to the teaching field and that the professional working life of current teachers was unacceptable. The first wave of current education reform was initiated by the publication of this disturbing report. There seemed to be a consensus from the committee that public education within the K-12 environment was in dire straits (U.S. National Commission on Excellence in Education, 1983).
One of the biggest changes stemming from A Nation at Risk was the movement to standardize our public education system. These efforts included more systematic standardized testing, more strenuous graduation requirements, more regular testing, and increased preparation for standardized tests. Additionally, many states implemented merit pay programs (U.S. National Commission on Excellence in Education, 1983).

Another significant reform came in January 2002 when President George W. Bush signed the No Child Left Behind Act of 2001 (NCLB) into law. NCLB requires states to conduct annual testing in reading and math. Each state must also set yearly benchmarks or goals. These benchmarks must increase progressively upward until reaching 100 percent passing by the year 2014. The yearly benchmarks established by the Virginia Board of Education are known as Annual Measurable Objectives (AMOs). The annual measureable objectives for the Commonwealth of Virginia are outlined below.

<table>
<thead>
<tr>
<th>AYP: ANNUAL MEASURABLE OBJECTIVES FOR READING</th>
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<tbody>
<tr>
<td>60.7</td>
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<table>
<thead>
<tr>
<th>AYP: ANNUAL MEASURABLE OBJECTIVES FOR MATHEMATICS</th>
</tr>
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<tr>
<td>58.4</td>
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*Figure 3. AYP Benchmarks,* [http://www.doe.virginia.gov/VDOE/nclb/](http://www.doe.virginia.gov/VDOE/nclb/)
No Child Left Behind also incorporates the following mandates:

- NCLB requires annual testing in grades 3-8 and at least once in high school to measure student progress in reading and mathematics.
- NCLB requires all students to be proficient in reading and mathematics by 2013-2014.
- NCLB requires schools, school divisions, and states to meet annual objectives for Adequate Yearly Progress (AYP) for student performance on statewide tests in reading and mathematics.
- NCLB requires the identification of states, schools and school divisions making and not making AYP (http://www.doe.virginia.gov/VDOE/nclb/)
- It is important to note that in order to make AYP, states must meet or exceed 29 benchmarks. The benchmarks include participation in testing, achievement in reading and mathematics, and attendance or science (at the elementary and middle school level) or graduation at the high school level. Not only must the overall pass rate for the school meet the benchmark in each identified area, but the pass rate for each subgroup must meet the benchmark as well. NCLB identifies the following subgroups: African American, Asian, Caucasian, Hispanic, Limited English Proficiency student, and students with disabilities, and economically disadvantaged students. If a school or school division fails to meet any one of these 29 benchmarks, the school or school division does not make AYP (http://www.doe.virginia.gov/VDOE/nclb/)

A Title I school is a school that receives federal funds to assist economically disadvantaged students to succeed academically (http://www.doe.virginia.gov/VDOE/nclb/). If a Title I school fails to meet AYP, the school is required to implement a two-year improvement plan. If the school does not make AYP in the same subject area for two consecutive years, the school is
required to notify parents and offer them an opportunity to transfer to an accredited school. If the school does not make AYP for a third consecutive year, the school must notify parents, continue to offer school choice, and supplemental educational services. Additionally, school divisions are required to take corrective action, which may include replacing school staff, implementing new curriculum, or extending the school year or school day. A fourth consecutive year of failing to make AYP must result in the school division developing a restructuring plan. A fifth consecutive year will result in one of the following: reopen the school as a charter school, replace all or most of the staff, turn the management of the school over to a private firm, or other major restructuring.

A non-Title I school that does not meet AYP is not subject to NCLB sanctions. In Virginia, schools that do not meet AYP for three consecutive years are required to continue to analyze data and implement corrective actions as dictated by the school division. If a school division fails to make AYP for two consecutive years, the division is required to develop and implement improvement plans within three months of identification (http://www.doe.virginia.gov/VDOE/nclb/). The Commonwealth of Virginia’s accountability system consists of two components. Schools must comply with the rigorous academic demands of No Child Left Behind, successfully making each of the 29 benchmarks yearly. Schools that meet all 29 benchmarks have met Adequate Yearly Progress in compliance with NCLB. In addition, schools must also meet state accreditation requirements. A school’s accreditation status is primarily based upon overall student achievement in the core areas of English, math, science, and social studies. In secondary schools, students must achieve at least a 70 percent pass rate on the Standards of Learning tests in order to meet accreditation standards.
Schools that meet these criteria are considered fully accredited. Schools whose pass rates fall below 70 percent are considered Accredited with Warning. These schools must undergo extensive academic reviews, implement research-based instructional strategies, and must also craft a school improvement plan. A school may be considered Accredited with Warning for no more than three years. If a school fails to achieve a 70 percent pass rate in each of the four core subject areas for four consecutive years, it is denied accreditation. If a school is considered Accreditation Denied, the local school board is required to submit a corrective action plan to the state Board of Education. This corrective action plan should outline the steps that will be taken to improve student achievement. Additionally, schools denied accreditation must provide to stakeholders a written notice of the accreditation status, a copy of the corrective action plan, and an opportunity to comment on the action plan.

The NCLB benchmark for both reading and math was raised to above 70% passing for the 2006-2007 school year. Therefore, since that year, if a Virginia school made AYP, it was accredited as well. However, a Virginia school can achieve state accreditation without fulfilling the requirements to make AYP (http://www.doe.virginia.gov/VDOE/nclb/). Many authors would agree that the scope and number of mandates demand precious time and money that should be spent educating the children (Johnson, 2004).

*Principals and Job Satisfaction*

Over the years many researchers have addressed the topic of job satisfaction and education. One study was conducted by Dr. JoeAnn in Virginia during the 1998-1999 school year. The purpose of Newby’s study was to assess job satisfaction of middle school principals in Virginia as measured by the Minnesota Satisfaction Questionnaire (MSQ) 1967 long form. A
total of 188 middle school principals in Virginia were asked to participate in the study. Participants were asked to provide demographic information including gender, age, experience, degree, school location and school population.

There were several significant findings from her study. A general satisfaction score for middle school principals was calculated to a mean of 3.65 (SD = .57). This indicates that principals were satisfied (3.00-3.99). The mean score for the 20 dimensions measured on the MSQ ranged from (2.00-2.99) to (4.00-4.99) slightly satisfied to very satisfied.

In addition Newby found females were significantly more satisfied with activity and variety than males; younger and older principals were significantly more satisfied with activity than middle aged principals. Principals with Education Specialist degrees were significantly more satisfied with achievement than doctorate and masters degreed principals. Principals from suburban schools were significantly more satisfied with compensation, supervision, and working conditions than urban and rural principals. Principals of large schools were significantly more satisfied with general satisfaction, advancement, and security than principals from small schools.

Findings revealed that being of service to others was the highest contributor to overall satisfaction. Compensation contributed least to overall satisfaction. Findings showed that principals in suburban schools were more satisfied with compensation than urban and rural principals. Also, compensation, supervision, and working conditions contributed to the high satisfaction of suburban principals. Principals from large schools were highly satisfied with advancement, supervision, and security. Last, findings from this study indicate that females like to be busy doing a variety of different tasks, more so than males. This study has been replicated numerous times.
One such replication was conducted by Dr. James Stemple in the 2003-2004 school year. This study investigated the job satisfaction of high school principals in the Commonwealth of Virginia. Like Newby, Dr. Stemple used the Minnesota Satisfaction Questionnaire to analyze the 20 components of job satisfaction as measured by the MSQ. This replication was updated to include federal and state accountability mandates such as No Child Left Behind and state accreditation.

Dr. Stemple sent the MSQ (1977 long form) to 183 high school principals via electronic mail. Statistical techniques included descriptive statistics, correlations, analysis of variance and multiple regressions. The study found that high school principals were generally satisfied. High school principals were most satisfied with level of activity, ability to serve, and ability to do the job within their moral conscience. High school principals were least satisfied with compensation. Highest scores of satisfaction came from principals of medium sized, fully accredited schools that met AYP, who had three assistant principals. Males reported slightly higher overall satisfaction scores than females. Recommendations provided at the end of this study included replicating the study every four or five years to monitor effects of the accountability movement.

Five conclusions were drawn from this study. First, many principals are at or near retirement which may indicate a shortage of qualified candidates for the principalship in the near future. Second, although about half of the respondents reported earnings of $75,000 to $100,000, compensation was rated as the lowest contributor to job satisfaction. Third, there was a significant relationship between job satisfaction and number of assistant principals. The number of assistant principals is directly related to school size. The researcher found that job satisfaction of Virginia high school principals is related to school size. Fourth, principals in
Virginia will respond to Internet surveys when asked by a fellow Virginia high school principal. Last, accreditation status was a significant indicator of job satisfaction while adequate yearly progress was not.

A third study was conducted by Waskiewicz to identify variables that explain job satisfaction of secondary assistant principals. Four hundred assistant principals were selected from the 1996 National Association of Secondary School Principals. Dr. Waskiewicz mailed the short form of the MSQ along with a questionnaire he designed. From the 291 responses, he reported that assistant principals in Virginia are marginally satisfied with their jobs. He further stated that he found many of the variables he thought would impact job satisfaction such as age, compensation, and opportunity for advancement had no significant bearing on job satisfaction. Supervisor relations were the only variable that had a significant effect on intrinsic, extrinsic, and general job satisfaction.

Another examination of principals and job satisfaction was conducted by Ellen Eckman during the 1998-1999 school year. Eckman’s study examined the experiences of female public high school principals in Illinois, Minnesota, and Wisconsin to determine the impact of role conflict, role commitment, and job satisfaction on women in the high school principalship. This mixed methods study combined quantitative and qualitative components through survey and interview techniques. Three established surveys were mailed to 237 female high school principals. One hundred sixty-four of these were returned.

The findings described the demographics of high school female principals as 90.5% White; 67.9% married, 74% had children with 58.3% of these having children still living at home. The mean age for female high school principals was 47.7 years of age. Dr. Eckman reported that female high school principals were moderately satisfied with their job. Many
female principals were faced with competing interests of home and work. The study also revealed the importance of female mentors.

Five conclusions were drawn from this study. There were a disproportionately low number of female principals with only 15.2% female principals and 48.5 female teachers at the high school level. Next, there is a growing shortage of qualified candidates for the high school principalship. One expectation of the high school principalship that needs to be examined is the extensive time demand. Also, to attract more women to the principalship, a better understanding of the multiple demands and expectations of women’s lives is needed. Last, mentoring is a key factor in enabling women to become principals. Several themes emerged in the study of exclusively female principals that were not examined in other studies. The competing interests of home and work were a significant factor in the job satisfaction of female principals.

A more recent study was conducted by Dr. Daniel Bowling in 2007. Dr. Bowling replicated Dr. Newby’s 1999 study to investigate the satisfaction level of public middle school principals in Virginia. The MSQ (1967 long form) was used to determine the levels of job satisfaction for the 20 dimensions of the job. There were three primary purposes in this study:

1) conduct a general assessment of the job satisfaction levels of middle school principals in Virginia
2) determine the specific job dimensions that contribute to job satisfaction
3) determine the influence of demographic variables on job satisfaction.

Results of the study showed that the general satisfaction of middle school principals increased since Newby’s study. Males still reported slightly higher satisfaction scores than females. Not surprisingly, principals of accredited schools who met AYP standards reported the highest satisfaction scores.
Eight conclusions were drawn from this study. First, participating principals were very satisfied with their roles. Second, the location of a principal’s school is important. Principals in suburban schools were most highly satisfied. Third, age is important in job satisfaction. Principals 35 years of age and younger reported the highest levels of job satisfaction. Fourth, gender also plays a role in the job satisfaction of high school principals with males reporting a statistically significantly higher level of satisfaction than females. Principals with an education specialist degree reported statistically significantly higher levels of satisfaction than principals with lower or higher degrees. Fifth, principals with seven to nine years of experience reported statistically significantly higher levels of satisfaction than principals with more or fewer years of experience. Sixth, school population was also a statistically significant component with principals of schools with 1,000 or more students reporting higher satisfaction than principals of smaller schools. Last, accreditation and adequate yearly progress had no statistically significant bearing on job satisfaction.

Brogan (2003) studied the job satisfaction of high school principals in Idaho. He mailed the MSQ (short form) along with a demographic questionnaire to 128 high school principals. Demographic data included gender, years in current position, highest degree held, ethnicity, and number of assistant principals. Dr. Brogan used a multiple regression to analyze the data. Findings indicated that males tended to have slightly higher overall satisfaction than females. Principals with more tenure had slightly higher job satisfaction than less experienced principals. Last, principals with the highest number of assistant principals reported higher satisfaction.

Wheelis (2005) conducted a study of job satisfaction of principals in Louisiana. Dr. Wheelis mailed 1,328 elementary, middle, and high school principals the MSQ (short form) along with a questionnaire. The questionnaire consisted of three demographic questions and
three open-ended questions. An analysis of variance was conducted and findings demonstrated that there were no significant differences in intrinsic, extrinsic, or general satisfaction. Sixty-four percent of respondents identified their greatest source of satisfaction was from the students and the chance to work with the students. A study of elementary school principals in Central Virginia also revealed that principals indicated overall satisfaction with their jobs (McQueen, 2008).

An even more recent study was conducted in 2006-2007 in Arizona by Dr. Gerrick Monroe. The purpose of his study was to determine the administrative stress and job satisfaction levels of Arizona high school principals. In Dr. Monroe’s study, subjects were randomly selected from the target population of all Arizona public high school principals. A survey, which included the Administrative Stress Index (ASI) and the Job Satisfaction Survey (JSS), was sent to 100 randomly selected principals. Fifty-five of these principals responded. A follow-up interview was conducted with nine of the 55 respondents. The researcher asked subjects to provide one item of demographic data, their years of experience as a high school principal. Of the 55 principals who responded 21 had one to three years of experience; 24 had four to nine years of experience; and ten had ten or more years of experience.

The online survey consisted of the Administrative Stress Index (ASI) and the Job Satisfaction Survey (JSS). Both of these instruments have been tested for reliability and validity. The ASI was created from stress logs completed by administrators. The ASI was then piloted for validity and clarity. After revision and a second pilot test, the final instrument was created. The 36 items in the JSS are strongly correlated with the subscales of the Job Descriptive Index. The questions in the JSS were reviewed by professors at Northern Arizona University as well as former principals to determine clarity; revisions were made based on the feedback.
The results of this study indicated that high school principals report the following: excessive workload and difficulty in complying with federal, state, and district policies. The most satisfying parts of the job included working with their co-workers, working with students and parents, and leading positive changes at the school. The most dissatisfying elements of their work included excessive workload, bureaucratic obstacles, and too much time at work. Both quantitative and qualitative data suggested that there is no difference in job stress and job satisfaction levels of inexperienced and experienced high school principals in Arizona.

Summary

This chapter reviewed literature associated with job satisfaction and the accountability movement within education. Theories of job satisfaction were explained. These theories included both content and process theories. Among the content theories presented were: (a) traditional theory and (b) two-factor theory. Among the process theories discussed were (a) equity theory, (b) fulfillment theory and (c) adjustment theory. The literature review then considered variables associated with job satisfaction: age, gender, salary, school size, number of assistant principals, school socioeconomic status, school accreditation status and Adequate Yearly Progress. Next, a brief historical account of the accountability movement in education was presented. Finally, various job satisfaction studies were discussed. Three major themes were repeated throughout these studies on job satisfaction of public school principals. So far, these researchers agree on several points. First, male principals are generally more satisfied with the principalship than females. At least one study suggests that this is due to competing interests of home and work. Second, compensation was identified as a source of dissatisfaction in the majority of studies. One study did however indicate that principals from suburban schools were more satisfied with compensation than principals from urban or rural locations. Third, location
is an important factor in the job satisfaction of principals. Principals from suburban schools reported higher overall job satisfaction than principals from urban or rural schools.
CHAPTER 3
METHODOLOGY AND DESIGN FOR DATA COLLECTION

This descriptive study was designed to examine job satisfaction of public high school principals in the Commonwealth of Virginia. This is the third study in a series of studies examining job satisfaction of public school principals in Virginia. The design of this study replicates the procedures used in a 2004 study conducted by Dr. James Stemple on the satisfaction levels of high school principals in Virginia. Dr. Stemple’s study replicated Dr. JoeAnn Newby’s 1999 study of the satisfaction of middle school principals in Virginia. Dr. Stemple was the first to consider the influence of accountability in relation to principals’ job satisfaction in Virginia. The genesis for this study was a recommendation from Dr. Stemple that the study is replicated every four to five years in order to compare results over a longitudinal timeframe. This allowed the researcher to investigate whether or not levels of job satisfaction of high school principals changed under Virginia Accreditation standards and Adequate Yearly Progress. This chapter presents the research questions, the selection and description of the participants, explanation of the research instrument, data collection techniques, and statistical treatment of data.

Research Questions

This study was designed to answer the following research questions:

Question 1:

What is the general level of satisfaction of current public high school principals in the Commonwealth of Virginia as measured by the Minnesota Satisfaction Questionnaire?
Question 2:

What is the satisfaction level of public high school principals in Virginia according to the following variables: gender, age, salary level, years of experience, number of assistant principals, years in current school district, school socioeconomic level, and school size?

Question 3:

What is the satisfaction level of public high school principals in Virginia for each of the twenty dimensions of the job as measured by the MSQ?

Question 4:

Based on the demographic variables of accreditation status and Adequate Yearly Progress (AYP), what is the general job satisfaction level of high school principals in Virginia?

The Population

The population for this study included all public high school principals in the Commonwealth of Virginia. Names and email addresses for all public high school principals were obtained from the Virginia High School League.

Instrumentation

The research instrument consisted of two parts: both the individual data sheet and the Minnesota Satisfaction Questionnaire (1977 long form) were distributed electronically via Survey Monkey. The individual data sheet was used to gather information regarding selected demographic characteristics and also allowed the researcher to compare overall job satisfaction to selected demographic characteristics. These demographic characteristics are listed below:
Gender: refers to the gender of the participant. Respondents were asked to select “male” or “female”.

Age: refers to the number of years the participant has been alive. Respondents were asked to select the appropriate age range.

Salary: refers to the monetary compensation the participant receives yearly in exchange for the work performed. Respondents were asked to choose from the appropriate salary range.

Number of assistant principals: refers to the number of assistant principals who are assigned to work at the participant’s school. Respondents were asked to choose the number of assistant principals currently working at their school.

Years as a principal: refers to the number of years the participant has been a principal at any level and at any location. Respondents were asked to choose, from a given range, the appropriate number of years he or she has worked as a principal.

Years in current school district: refers to the number of years the participant has worked, in any capacity, in the current school district. This variable was measured by asking respondents to choose the appropriate number of years they have worked in the current school district from a given range.

Percentage of time spent with students: refers to the percentage of time the principal spends in contact with students on a daily basis. Respondents were asked to choose from identified ranges of time.

School socio-economic status: refers to the percentage of students currently enrolled in the school who receive free or reduced lunch. This variable was assessed by asking respondents to choose from a predetermined range of percentages ranging from 0 to 100.
School size: refers to school enrollment. Respondents were asked to identify the number of students currently enrolled in their school by selecting from a given range.

School accreditation status: refers to the overall pass rates on the reading and math portions of the Virginia SOL tests. Respondents were asked to select from the following to describe their schools’ accreditation ratings: yes or no.

Adequate Yearly Progress: refers to 29 indicators, as identified in the federal mandate, No Child Left Behind, that must be met in order to be identified as “making Adequate Yearly Progress.” Respondents were asked to choose from the following to describe their schools designation regarding Adequate Yearly Progress: yes or no.

In addition to the demographic questions, principals were asked to choose from the following to describe their job satisfaction in the last five years: increased, decreased, or remained the same. They were then asked to rank the top five influences on their job satisfaction in the last five years using the following choices:

_____ No Child Left Behind
_____ Relationships with Parents
_____ Student Behavior
_____ Adequate Yearly Progress
_____ State Accreditation

_____ Personal Issues
_____ Other (please list)

The Minnesota Satisfaction Questionnaire (MSQ)

This study utilized the long form of the Minnesota Satisfaction Questionnaire (1977 revision). The MSQ measures the employee’s satisfaction with his or her job. This instrument is self-administered in approximately 15-20 minutes and contains 5 items for each of the 20 job dimensions for a total of 100 items. Each item has five possible responses including very
dissatisfied, dissatisfied, neutral, satisfied, and very satisfied. The theory of work adjustment, on which the MSQ is based, has identified a list of twenty components relevant to both the work environment (needs) as well as relevant to the individual in the work environment (reinforcers). These twenty components can then be organized into six value groups for individuals and six reinforcement groups for jobs. These 20 needs-reinforcers grouped into the six value groups are listed below: (Dawis & Lofquist, 1981)

Achievement

Ability utilization- makes use of one’s abilities

Achievement- gives a feeling of accomplishment

Comfort

Activity-provides opportunities to be busy all the time

Independence-working alone at times

Variety-doing something different every day

Compensation- pay compares well with others

Security- steady employment

Working conditions-good environment in which to work

Altruism

Co-workers- friends at work

Moral values-compatible with my moral beliefs

Social service- assisting other people

Status

Advancement-opportunity to move to a higher position

Recognition-recognized for good work
Authority - opportunity to tell other people what to do

Social status - being respected by the community

Safety

Company policies and practices - company administers its policies

Supervision - human relations - immediate supervisor supports the workers

Supervision - technical - workers are trained well

Autonomy

Creativity - opportunity to try out your own ideas

Responsibility - making decisions on your own

“Research is always dependent on measurement” (Ary et al., 1996, p. 262). There are two characteristics of measurement in research, reliability and validity. Reliability is the extent to which the measuring device is consistent in measuring whatever it measures. A measuring device is reliable if the scores made by an individual remain nearly the same in repeated measurements (Pedhazur & Schmelkin, 1991).

Two measures were used to test for reliability in the MSQ, internal consistency and stability. Internal consistency refers to whether all the items in a test are measuring the same thing (Ary et al., 1996). Hoyt reliability coefficients ranged from .97 to a low of .59. Of the 567 Hoyt reliability coefficients less than 3% were lower than .70 however 83% were .80 or higher. This suggests that the MSQ has internal consistency (Weiss et al. 1967).

Stability tells us whether we can generalize from the score a person receives on one occasion to a score the person would receive on another occasion (Ary et al., 1996). Stability also assumes that the characteristic measured remains constant. Therefore, a characteristic such as mood would not have a high stability coefficient. Additionally, stability assumes that enough
time has passed between measures so that scores will not be influenced by memory or practice effect (McMillan & Schumacher, 2001). Scores testing for stability of the MSQ were collected at the one week and one year intervals. The one week stability coefficients ranged from .66-.91 with a median coefficient of .83 and general satisfaction at .89. The one year stability coefficients ranged from .35 to .71 with a median coefficient of .61 and general satisfaction at .70 (Weiss et al. 1967).

Construct validity refers to the extent to which a measuring device is consistent in measuring whatever it is supposed to measure. A construct refers to something that cannot be measured directly. A theory, for example, cannot be measured; however, behaviors associated with the construct can be measured. Construct validation is the extent to which a test measures a theoretical concept (Ary et al., 1996). To test the construct validity, 25 occupational groups were identified to test for differences in levels of expressed gratification. An analysis of variance and Bartlett’s test of homogeneity of variance was performed (Weiss et al., 1967). Results for the tests were statistically significant indicating construct validity.

Data Collection Procedures

With permission from the Institutional Review Board at Virginia Tech, all materials were emailed to participants via Survey Monkey using the email addresses from the Virginia High School League Directory. The use of the Internet survey allowed respondents to respond to the survey unbiased by an interviewer and at any time of their choosing (Salant & Dillman, 1994). A four step data collection method was employed.

1. An introductory email was sent to encourage participation. The first paragraph of the introductory email was designed to do two things: explain what the study is about and convince
the respondent that the study is useful (Dillman, 1978). This email included the purpose of the study and encouragement to participate.

2. Two weeks after the initial invitation was sent a reminder email was distributed to encourage participation. Again, the purpose of the study was explained along with a reiteration of the importance of each person’s participation.

3. The second invitation was distributed just before the December holiday break. Therefore, no more reminders were distributed until after the break was over. Survey Monkey has the ability to identify which participants have responded as well as those who have failed to respond. With this information a third reminder email was distributed to those who have not yet responded.

4. After the third invitation, some prospective participants were contacted individually and asked to participate. Principals were very receptive; oftentimes volunteering to contact their peers to encourage participation.

Data were collected through Survey Monkey. These data were then coded as necessary and imported into SPSS. Confidentiality is crucial when conducting surveys via the Internet. When subjects are recruited online and data are collected confidentiality requires that data is transmitted via a secure server; server log files listing identifiable data; and secure protection of the information during the study as well as removal of the records upon completion of the study (Nosek, Banaji, & Greenwald, 2002). Although respondents were not recruited online, the Institutional Review Board (IRB) as well as APA requires that reasonable precautions are taken to protect information (American Psychological Association, 2003). All data were stored on my personal laptop in order to insure confidentiality. All data were destroyed upon defense of this dissertation.
Non-response

Dillman (2000) states, “non-response error occurs if a significant number of people in the survey sample do not respond to the questionnaire and have different characteristics from those who do respond, when these characteristics are important to the study” (p. 10). There are some steps that can be taken to reduce non-response error. It is important to emphasize the usefulness and the importance of each person’s participation. Contacting prospective participants through multiple reminders also reduces non-response. In order to proactively address non-response error, both of these methods were employed in this study.

After all data were collected it was important to minimize non-response error by determining significance of non-respondents. According to McMillan and Schumacher, if the sample is 200 or more and the return rate is at least 70 percent, the non-respondents will probably not affect the results. They go on to say that there are two acceptable methods for checking for non-response bias. First, the researcher can somehow obtain a random sample of the non-respondents and interview them. Their responses could then be compared to those who completed the online survey. If it isn’t possible to interview the non-respondents then McMillan and Shumacher suggest that the researcher should compare the demographics of non-respondents to respondents. If the demographics are different then this should be noted in the discussion and interpretation of results.

Another method of checking for non-response error is offered by Ary, Jacob, & Razavieh. In this method, the researcher compares the early respondents to the late respondents. The last 10 percent of respondents were considered late respondents and their results were compared with the early respondents to determine whether or not there was a difference in
responses. This method was used to check for non-response error in this study. This replicated the manner in which Dr. Stemple accounted for non-response error in his 2004 study.

Statistical Analysis

The primary objectives of this study were: (1) the assessment of the general job satisfaction of Virginia public high school principals, (2) the assessment of the general job satisfaction of Virginia public high school principals according to the demographic variables of gender, age, salary level, years of experience, number of assistant principals, years in current school district, school socioeconomic level, and school size, (3) the assessment of general job satisfaction of Virginia public high school principals for each of the twenty dimensions as measured by the MSQ, and (4) a determination of the influence of accreditation status and Adequate Yearly Progress on job satisfaction. A data analysis was conducted to respond to each research question. A descriptive analysis for each variable was then completed. The descriptive analysis included means, standard deviations, and a range of scores. Below is a list of each research question along with the method of analysis:

The overarching research question that guided this study was:

1. What is the general level of satisfaction of current public high school principals in the Commonwealth of Virginia as measured by the Minnesota Satisfaction Questionnaire? The MSQ manual identifies 20 items, one from each of the 20 dimensions, to measure general job satisfaction. Each item uses a five point scale, meaning scores can range from 20-100. From these 20 identified questions, the general job satisfaction mean score for high school principals in Virginia was determined.
These data are presented in a frequency table illustrating general mean satisfaction scores. According to McMillan, 2004, frequency distributions are a systematic arrangement of individual measures from lowest to highest. From a frequency distribution it is possible to examine the general shape of the distribution. The researcher can determine whether they are distributed evenly or tend to cluster, and where the clusters occur.

A histogram was used to represent these results as recommended by Ary et al., 1996. A histogram is similar to a bar graph; in a histogram, however, the adjacent bars touch. The absence of the space between the bars suggests that the scale between the scores continues. Histograms are recommended for plotting a small range of interval or ratio scores (Ott & Longnecker, 2001).

Each respondent had five options from which to choose when answering the MSQ items. The five options were weighted as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Scale Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Extremely Dissatisfied</td>
</tr>
<tr>
<td>2</td>
<td>Dissatisfied</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
</tr>
<tr>
<td>4</td>
<td>Satisfied</td>
</tr>
<tr>
<td>5</td>
<td>Extremely Satisfied</td>
</tr>
</tbody>
</table>

The scores for the 20 specific items on the MSQ were summed. Using the five point Likert Scale, scores could range from 20 to 100. The frequency of responses for each of the twenty dimensions of the MSQ and the general satisfaction as reported by respondents are presented in table format. Scores are displayed in a frequency table as well as a histogram.

2. What is the satisfaction level of high school principals in Virginia according to the following variables: gender, age, salary level, years of experience, number of assistant principals,
years in current school district, school socioeconomic level, school size? A one-way ANOVA was used to compare the mean job satisfaction scores grouped by each demographic. To answer this question, the researcher used the same 20 specific items from the MSQ and reported overall job satisfaction as related to each demographic variable. Results are presented in a table format.

An Analysis of Variance (ANOVA) is defined as a procedure for determining whether significant differences exist in an experiment that contains two or more conditions (Heiman, 2001). An ANOVA was used to analyze the data in relation to the first three questions. An ANOVA was the statistical method of choice because it demonstrates the relationships between the dependent and the independent variables when the independent variable has more than two conditions. For the purposes of this study the dependent variable is job satisfaction and the independent variables are demographic variables and job dimensions as measured by the MSQ.

Analysis of variance (ANOVA) is one of the most used statistical techniques in research. There are two underlying reasons for this. The ANOVA deals with differences between or among sample means but unlike the t-test there is no limit on the number of means. Also, the ANOVA also allows the researcher to consider two or more independent variables simultaneously while examining the individual effects of each variable separately (Howell, 2007). This information is presented in a frequency table that includes the number of participants, mean, standard deviation and frequency.

3. What is the satisfaction level of high school principals in Virginia for each of the twenty dimensions of the job as measured by the MSQ?

To report these data mean scores were used to compare job satisfaction for each dimension. Each dimension on the MSQ is represented by five items, for a score ranging from 5 to 25. These data are presented in a table including number, mean, and standard deviation of each of the 20 dimensions of the MSQ.
4. Based on the demographic variables of accreditation status and Adequate Yearly Progress (AYP), what is the general job satisfaction level of high school principals in Virginia? The researcher used an ANOVA to analyze the independent variables of accreditation status and AYP in relation to overall job satisfaction.

Summary

The intent of this study was to provide descriptive information regarding the job satisfaction of public high school principals in the Commonwealth of Virginia. Comparisons were made between current levels of job satisfaction and levels of job satisfaction in Stemple’s 2004 study to identify trends and provide longitudinal data on job satisfaction in relation to the increasing state and federal accountability in education. Further, this study investigated the relationship of job satisfaction as it is related to gender, age, salary level, years of experience, number of assistant, principals, years in current school district, school socioeconomic level, and school size. A demographic survey and the MSQ were distributed via email and responses collected using Survey Monkey. Data were analyzed using frequency distributions and ANOVAs. Chapter three provides a detailed description of the methods, selection and description of the participants, explanation of the research instrument, data collection techniques, and the statistical treatment of the data. It is the researcher’s intent that this study resulted in important information regarding the job satisfaction of public high school principals in Virginia.
CHAPTER FOUR
ANALYSIS OF DATA

The purpose of this chapter is to present the analysis of data that were collected from the study of job satisfaction of public high school principals in the Commonwealth of Virginia and to describe the level of job satisfaction of the principals. The sections of this chapter include: (a) description of the sample; (b) data analyses presented by research questions; and (c) a brief summary of data analyses

Description of the Sample

Using the Virginia Department of Education Website, 302 public high schools were identified as having at least grades 10-12. Of the identified 302 public high school principals, 297 had working email addresses listed with the Virginia High School League. Five of the 302 Virginia public high school principals did not have valid email addresses. Each of these remaining 297 principals were contacted via Survey Monkey and asked to complete a two-part survey. Eleven of the remaining 297 principals had previously opted-out of participating in surveys distributed via Survey Monkey. Thus there were 286 potential respondents to the two part survey. The first part of the survey included 13 demographic questions and the second part included the 1977 long form of the Minnesota Satisfaction Questionnaire. One hundred and sixty-nine high school principals responded, for a response rate of 59% (n=169). According to Krejcie and Morgan (1970) this is an adequate response rate for .05 significance for a population of 286.

The demographic data indicated that most respondents were males between the ages of 35 and 55. Seventy-two percent of respondents were male and 57.9% of respondents were between the ages of 35 and 55. Forty-eight percent of principals who participated earned
between $75,000 and $100,000 per year. More than half of the participants had been with their current school district for more than 15 years; however, 36.3% of respondents were relatively inexperienced, serving only 1-3 years as principal. Twenty-eight percent of the principals who responded reported spending between 21 and 31 percent of their time with students. Twenty-three percent of respondents were principals from schools with enrollments ranging from 1201-1600 students. While 37% of principals were from schools with greater than 25% economically disadvantaged students. Ninety-nine percent of responding principals were from schools who were fully accredited and 83.3% of these schools also met Adequate Yearly Progress. These data are illustrated in the frequency distribution in Table 3. Respondents to this study from fully accredited schools as well as schools that made AYP were reflective of the percentage of high schools in Virginia that met state accreditation standards and who made AYP.

**MSQ Scale Reliability Analysis**

The Minnesota Satisfaction Questionnaire consists of 100 items which measure 20 dimensions of job satisfaction. Additionally, the researcher may obtain a general satisfaction score by using one item from each of the twenty dimensions of the MSQ. Respondents replied to each statement on the MSQ by choosing from a 5-point Likert Scale: very dissatisfied, dissatisfied, neutral, satisfied, and very satisfied. Weiss, Dawis, England, and Lofquist (1967) suggest that an internal consistency reliability coefficient be calculated for the sample. The Statistical Package for the Social Sciences (SPSS) was used to compute the Chronbach’s Alpha test of internal consistency on the 20 dimensions of job satisfaction measured by the MSQ. Chronbach’s Alpha for total scale was determined to be .91. Results are displayed in Table 4. This alpha indicates that there is high internal consistency and reliability with this sample. This coefficient compares to (Stemple .97, Bowling .95 and Newby .95).
Table 3

*Frequency Distributions for Demographic Variables (n=169)*

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger than 35</td>
<td>5</td>
<td>3.0</td>
</tr>
<tr>
<td>36-45</td>
<td>65</td>
<td>38.7</td>
</tr>
<tr>
<td>46-55</td>
<td>63</td>
<td>37.5</td>
</tr>
<tr>
<td>Older than 55</td>
<td>32</td>
<td>19.0</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>118</td>
<td>70.2</td>
</tr>
<tr>
<td>Female</td>
<td>42</td>
<td>25.0</td>
</tr>
<tr>
<td>Missing</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Salary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under $50,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$50,000- $75,000</td>
<td>18</td>
<td>10.7</td>
</tr>
<tr>
<td>$75,000-$100,000</td>
<td>80</td>
<td>47.6</td>
</tr>
<tr>
<td>More than $100,000</td>
<td>67</td>
<td>39.9</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>Number of Assistant Principals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------</td>
<td>----</td>
</tr>
<tr>
<td>None</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>One</td>
<td>34</td>
<td>20.2</td>
</tr>
<tr>
<td>Two</td>
<td>27</td>
<td>16.1</td>
</tr>
<tr>
<td>Three</td>
<td>53</td>
<td>31.5</td>
</tr>
<tr>
<td>Four</td>
<td>32</td>
<td>19.0</td>
</tr>
<tr>
<td>Five or more</td>
<td>15</td>
<td>8.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Years as a Principal</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>58</td>
<td>34.5</td>
</tr>
<tr>
<td>4-6</td>
<td>45</td>
<td>26.8</td>
</tr>
<tr>
<td>7-9</td>
<td>26</td>
<td>15.5</td>
</tr>
<tr>
<td>10-15</td>
<td>22</td>
<td>13.1</td>
</tr>
<tr>
<td>More than 15</td>
<td>9</td>
<td>5.4</td>
</tr>
<tr>
<td>Missing</td>
<td>8</td>
<td>4.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years in Current District</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>26</td>
<td>15.5</td>
</tr>
<tr>
<td>5-10</td>
<td>25</td>
<td>14.9</td>
</tr>
<tr>
<td>11-15</td>
<td>25</td>
<td>14.9</td>
</tr>
<tr>
<td>More than 15</td>
<td>83</td>
<td>49.4</td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>5.4</td>
</tr>
<tr>
<td>% of Time with Students</td>
<td>Count</td>
<td>Percentage</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Less than 10%</td>
<td>12</td>
<td>7.1</td>
</tr>
<tr>
<td>11-20%</td>
<td>35</td>
<td>20.8</td>
</tr>
<tr>
<td>21-30%</td>
<td>47</td>
<td>28.0</td>
</tr>
<tr>
<td>31-40%</td>
<td>33</td>
<td>19.6</td>
</tr>
<tr>
<td>41-50%</td>
<td>21</td>
<td>12.5</td>
</tr>
<tr>
<td>More than 50%</td>
<td>16</td>
<td>9.5</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>2.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of students on free lunch</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5%</td>
<td>13</td>
<td>7.7</td>
</tr>
<tr>
<td>5-9%</td>
<td>15</td>
<td>8.9</td>
</tr>
<tr>
<td>10-14%</td>
<td>26</td>
<td>15.5</td>
</tr>
<tr>
<td>15-19%</td>
<td>30</td>
<td>17.9</td>
</tr>
<tr>
<td>20-24%</td>
<td>19</td>
<td>11.3</td>
</tr>
<tr>
<td>Over 25%</td>
<td>61</td>
<td>36.3</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>2.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School Size</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 400 students</td>
<td>18</td>
<td>10.7</td>
</tr>
<tr>
<td>401-800</td>
<td>34</td>
<td>20.2</td>
</tr>
<tr>
<td>801-1200</td>
<td>24</td>
<td>14.3</td>
</tr>
<tr>
<td>1201-1600</td>
<td>38</td>
<td>22.6</td>
</tr>
<tr>
<td>1602-2000</td>
<td>26</td>
<td>15.5</td>
</tr>
<tr>
<td>2001-2400</td>
<td>15</td>
<td>8.9</td>
</tr>
</tbody>
</table>
Data Analysis Organized by Research Questions

This section contains a review of the overarching research question that guided this study along with the three additional research questions. Each question is followed by a description of the analysis used along with a review of the data assessment.

Question 1

What is the general level of satisfaction of current public high school principals in the Commonwealth of Virginia as measured by the Minnesota Satisfaction Questionnaire?
The MSQ provides a scale to measure general job satisfaction. One question from each of the 20 identified dimensions of job satisfaction was used to determine the general job satisfaction. Weiss et al. determined that the 20 questions to be used to measure general job satisfaction are as follows: 24, 25, 28, 30, 35, 43, 51, 61, 66, 67, 69, 72, 74, 77, 82, 93, 96, 98, 99, and 100. For this study, missing responses were re-coded to the mean response for each item. According to Pedhauzer (1991) re-coding missing data to the mean is a recommended method of accounting for missing data.

Each respondent had five options from which to choose when answering the MSQ items. The five options were weighted as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Scale Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Extremely Dissatisfied</td>
</tr>
<tr>
<td>2</td>
<td>Dissatisfied</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
</tr>
<tr>
<td>4</td>
<td>Satisfied</td>
</tr>
<tr>
<td>5</td>
<td>Extremely Satisfied</td>
</tr>
</tbody>
</table>

Scores ranged from 58-100 with a possible range of 20 – 100. The calculated mean score for participants was $M = 78.16$ with a standard deviation of $SD = 9.1$ ($n = 169$). According to
the MSQ manual, the overall satisfaction for high school principals in Virginia is considered to be satisfied (Weiss et al., 1967). These results are comparable to Brogan’s 2003 study of high school principals in Idaho as well as Wheelis’ 2005 study of elementary, middle, and high school principals in Louisiana M = 80.94, SD = 11.03. Results are displayed in the histogram in Figure 4.

**Question 2**

What is the satisfaction level of public high school principals in Virginia according to the following variables: gender, age, level, salary level, years of experience, number of assistant principals, years in current school district, school socioeconomic level, and school size?

The general job satisfaction level was determined for each of the demographic variables by using the MSQ general job satisfaction scale. One-way ANOVAs were used to compare the mean job satisfaction scores grouped by each demographic variable. Table 5 displays the results of the ANOVA data analysis for the personal demographic variables of age and gender. Table 6 displays the results of the professional demographic variables of salary, number of assistant principals, total years as a principal, total years in the division, time spent with students, and percentage of students receiving free or reduced lunch.

*Personal Characteristics*

*Age*

There was no statistically significant difference in job satisfaction based on the principal’s age. Principals whose age ranged from 46-55 indicated slightly higher satisfaction (M=3.95, SD=.442) than their counterparts of different ages.
Gender

There was also no statistically significant difference in job satisfaction based on gender. Female principals indicated slightly higher job satisfaction (M=3.96, SD=.500) than male principals (M=3.89, SD=.443). Personal demographic information along with satisfaction scores can be found in Table 5.

*Figure 4. Frequency Distribution for Total Satisfaction.*
Table 5

Analyses of Variance for Job Satisfaction: Personal Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>164</td>
<td>3.90</td>
<td>.457</td>
<td>3</td>
<td>.488</td>
<td>.691</td>
</tr>
<tr>
<td>Younger than 35</td>
<td>5</td>
<td>3.87</td>
<td>.51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36-45</td>
<td>64</td>
<td>3.85</td>
<td>.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46-55</td>
<td>63</td>
<td>3.95</td>
<td>.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Older than 55</td>
<td>32</td>
<td>3.91</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>159</td>
<td>3.91</td>
<td>.457</td>
<td>1</td>
<td>.669</td>
<td>.415</td>
</tr>
<tr>
<td>Male</td>
<td>118</td>
<td>3.89</td>
<td>.443</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>41</td>
<td>3.96</td>
<td>.500</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Professional Characteristics

This section presents the results of the ANOVA data analysis for professional characteristics. Professional demographic information along with scores can be found in Table 6.

Salary

There was no statistically significant difference in job satisfaction as related to salary. Principals earning $50,000 - $75,000 (M=3.84, SD=.53) and those earning more than $100,000 (M=3.86, SD=.446) reported slightly less satisfaction than those earning $75,000-$100,000 (M=3.94, SD=.449).
Table 6.  
*Analysis of Variance for Job Satisfaction: Professional Characteristics*

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>164</td>
<td>3.90</td>
<td>.457</td>
<td></td>
<td>.770</td>
<td>.465</td>
</tr>
<tr>
<td>$50,000- $75,000</td>
<td>17</td>
<td>3.84</td>
<td>.535</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$75,000-$100,000</td>
<td>80</td>
<td>3.94</td>
<td>.449</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than $100,000</td>
<td>67</td>
<td>3.86</td>
<td>.446</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Assistant Principals</td>
<td>160</td>
<td>3.90</td>
<td>.460</td>
<td>4</td>
<td>.724</td>
<td>.577</td>
</tr>
<tr>
<td>One</td>
<td>34</td>
<td>3.97</td>
<td>.452</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two</td>
<td>27</td>
<td>3.97</td>
<td>.466</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three</td>
<td>53</td>
<td>3.90</td>
<td>.455</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four</td>
<td>31</td>
<td>3.81</td>
<td>.453</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Five or more</td>
<td>15</td>
<td>3.84</td>
<td>.512</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Years as a Principal</td>
<td>159</td>
<td>3.90</td>
<td>.456</td>
<td>4</td>
<td>.768</td>
<td>.547</td>
</tr>
<tr>
<td>1-3</td>
<td>57</td>
<td>3.91</td>
<td>.423</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-6</td>
<td>45</td>
<td>3.81</td>
<td>.527</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-9</td>
<td>26</td>
<td>3.92</td>
<td>.416</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-15</td>
<td>22</td>
<td>4.01</td>
<td>.444</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 15</td>
<td>9</td>
<td>3.87</td>
<td>.430</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years in Current District</td>
<td>159</td>
<td>3.90</td>
<td>.461</td>
<td>3</td>
<td>1.00</td>
<td>.392</td>
</tr>
<tr>
<td>1-4</td>
<td>26</td>
<td>3.99</td>
<td>.487</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10</td>
<td>25</td>
<td>3.88</td>
<td>.399</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-15</td>
<td>25</td>
<td>3.99</td>
<td>.537</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Time with Students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>More than 15</td>
<td>83</td>
<td>3.85</td>
<td>.446</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 10%</td>
<td>12</td>
<td>3.61</td>
<td>.615</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-20%</td>
<td>35</td>
<td>3.98</td>
<td>.384</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-30%</td>
<td>46</td>
<td>3.94</td>
<td>.446</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-40%</td>
<td>33</td>
<td>3.81</td>
<td>.475</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>41-50%</td>
<td>21</td>
<td>3.89</td>
<td>.402</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>More than 50%</td>
<td>16</td>
<td>4.06</td>
<td>.424</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of students on free lunch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5%</td>
<td>13</td>
<td>3.87</td>
<td>.523</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-9%</td>
<td>14</td>
<td>3.72</td>
<td>.498</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10-14%</td>
<td>26</td>
<td>4.02</td>
<td>.450</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-19%</td>
<td>30</td>
<td>3.95</td>
<td>.360</td>
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<td></td>
<td></td>
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<tr>
<td>20-24%</td>
<td>19</td>
<td>3.66</td>
<td>.470</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 25%</td>
<td>61</td>
<td>3.96</td>
<td>.448</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 400 students</td>
<td>18</td>
<td>3.93</td>
<td>.495</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>401-800</td>
<td>34</td>
<td>4.01</td>
<td>.400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>801-1200</td>
<td>24</td>
<td>3.80</td>
<td>.396</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1201-1600</td>
<td>38</td>
<td>3.93</td>
<td>.489</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1602-2000</td>
<td>25</td>
<td>3.82</td>
<td>.415</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2400</td>
<td>15</td>
<td>4.00</td>
<td>.571</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 2400 students</td>
<td>10</td>
<td>3.67</td>
<td>.455</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Number of Assistant Principals

There was no statistically significant difference in the number of assistant principals. Principals with one or two assistant principals reported slightly higher satisfaction (M=3.97, SD=.452 and M=3.97, SD=.466) respectively than principals with three or more assistant principals.

Total Years as Principal

There was no statistically significant difference in the total years as principal. Principals with 10-15 years of experience reported slightly higher job satisfaction (M=4.01, SD=.444) than principals with fewer or more years of experience.

Total Years in the School Division

There was also no statistically significant difference in the number of years the principal served in the school district. Principals who served more than 15 years reported slightly lower job satisfaction (M=3.85, SD=.446) than those who served fewer years in their division.

Time Spent with Students

There was no statistically significant difference in the amount of time the principal spends with students. This category referred to the percentage of time the principal spends in contact with students on a daily basis. Principals who spent more than 50% of their time with students did report slightly higher satisfaction (M=4.06, SD=.424) than their counterparts who spent less time with students.

Percent of students on free and reduced price lunch

There was no statistically significant difference in overall job satisfaction based upon the percent of students receiving free or reduced lunch. Principals of schools with 20%-25% of
socio economically disadvantaged students reported the lowest level of overall satisfaction
(M=3.66, SD=.470).

**Question 3**

What is the satisfaction level of public high school principals in Virginia for each of the twenty
dimensions of the job as measured by the MSQ?

A mean score and standard deviation for each of the 20 dimensions of the Minnesota
Satisfaction Questionnaire was determined. Each of the twenty dimensions has a mean score
within the possible range of 1-5. Principals reported the highest levels of satisfaction with social
service, achievement, and activity. Lowest levels of satisfaction were reported in the areas of
authority, independence, and compensation respectively. These results are displayed in rank
order in Table 7.

**Question 4**

Based on the demographic variables of accreditation status and Adequate Yearly Progress
(AYP), what is the general job satisfaction level of high school principals in Virginia? The
general job satisfaction level was determined for the demographic variables of accreditation
status and Adequate Yearly Progress. The mean job satisfaction scores were grouped by each of
the two demographic variables and compared using ANOVAs. Results from the ANOVA data
analyses are displayed in Table 8.
Table 7

*Rank Order of Each Dimension of Job Satisfaction*

<table>
<thead>
<tr>
<th>Dimension</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Service</td>
<td>169</td>
<td>4.36</td>
<td>.563</td>
</tr>
<tr>
<td>Achievement</td>
<td>169</td>
<td>4.24</td>
<td>.733</td>
</tr>
<tr>
<td>Activity</td>
<td>169</td>
<td>4.20</td>
<td>.627</td>
</tr>
<tr>
<td>Responsibility</td>
<td>169</td>
<td>4.19</td>
<td>.631</td>
</tr>
<tr>
<td>Security</td>
<td>169</td>
<td>4.15</td>
<td>.706</td>
</tr>
<tr>
<td>Variety</td>
<td>169</td>
<td>4.12</td>
<td>.612</td>
</tr>
<tr>
<td>Moral Values</td>
<td>169</td>
<td>4.11</td>
<td>.664</td>
</tr>
<tr>
<td>Ability Utilization</td>
<td>169</td>
<td>4.09</td>
<td>.698</td>
</tr>
<tr>
<td>Co-workers</td>
<td>169</td>
<td>3.99</td>
<td>.675</td>
</tr>
<tr>
<td>Creativity</td>
<td>169</td>
<td>3.99</td>
<td>.731</td>
</tr>
<tr>
<td>Supervision: Technical</td>
<td>169</td>
<td>3.92</td>
<td>.884</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>169</td>
<td>3.85</td>
<td>.904</td>
</tr>
<tr>
<td>Supervision: Human Relation</td>
<td>169</td>
<td>3.75</td>
<td>.945</td>
</tr>
<tr>
<td>Social Status</td>
<td>169</td>
<td>3.74</td>
<td>.945</td>
</tr>
<tr>
<td>Advancement</td>
<td>169</td>
<td>3.74</td>
<td>.813</td>
</tr>
<tr>
<td>Recognition</td>
<td>169</td>
<td>3.57</td>
<td>.874</td>
</tr>
<tr>
<td>Company Policy and Procedures</td>
<td>169</td>
<td>3.56</td>
<td>.826</td>
</tr>
<tr>
<td>Authority</td>
<td>169</td>
<td>3.55</td>
<td>.605</td>
</tr>
<tr>
<td>Independence</td>
<td>169</td>
<td>3.55</td>
<td>.663</td>
</tr>
<tr>
<td>Compensation</td>
<td>169</td>
<td>3.40</td>
<td>1.01</td>
</tr>
</tbody>
</table>
Table 8

*General Satisfaction and Demographics (Accreditation and AYP)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accreditation Status</td>
<td>164</td>
<td>3.90</td>
<td>.458</td>
<td>1</td>
<td>.223</td>
</tr>
<tr>
<td>Fully Accredited</td>
<td>162</td>
<td>4.26</td>
<td>.155</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisionally Accredited: Meets State Standards</td>
<td>2</td>
<td>3.90</td>
<td>.457</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequate Yearly Progress</td>
<td>163</td>
<td>3.90</td>
<td>.457</td>
<td>1</td>
<td>.223</td>
</tr>
<tr>
<td>Yes</td>
<td>139</td>
<td>3.91</td>
<td>.464</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>24</td>
<td>3.86</td>
<td>.420</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Virginia Accreditation Status**

There was no statistically significant difference in the job satisfaction of principals of schools who were fully accredited (M=4.26, SD=.155) and schools who were accredited with warning under Virginia Accreditation Standards (M=3.90, SD=.458).

**Adequate Yearly Progress**

There was also no statistically significant difference between principals whose school met Adequate Yearly Progress (M=3.91, SD=.464) and principals whose schools did not meet Adequate Yearly Progress (M=3.86, SD=.420). Although no statistical significance was found regarding AYP and overall satisfaction, principals who reported decreased job satisfaction in the last five years identified AYP most often as one of the top five contributors to decreased job satisfaction. These same principals identified NCLB as the second most influential factor for their decreased job satisfaction.
Principals who reported that their job satisfaction has increased in the last five years ranked relationships with parents most often as one of the top five influences for their increased job satisfaction. These same principals reported student behavior as the second most influential factor with AYP ranked as the fourth and NCLB as the fifth most influential factors. Likewise, principals who reported that their job satisfaction had remained the same in the last five years ranked relationships with parents as first, with student behavior ranked second. AYP was listed as third most influential with NCLB ranked fourth. Results can be found in Table 9. Eighty-three percent of principals who responded to this survey were from schools that made AYP. Similarly, eighty-four percent of high school principals across the state of Virginia are from schools that made AYP.

Summary

This chapter presented information gathered from a two-part survey. Demographic information from the Individual Data Sheet along with the Minnesota Satisfaction Questionnaire was collected from 169 participants and analyzed. Results from these analyses provided information regarding (a) the demographics of the high school principal in Virginia, (b) the overall level of job satisfaction, (c) the level of job satisfaction as related to the 20 dimensions of job satisfaction identified by the Minnesota Satisfaction Questionnaire, and (d) the overall job satisfaction of high school principals in Virginia as related to the demographics of accreditation and Adequate Yearly Progress.

These analyses indicated that high school principals in the Commonwealth of Virginia are generally satisfied. The overall mean score for satisfaction was 78.19 on a scale of 20-100. On the Likert scale this score was 3.86. This score was slightly higher than Stemple’s 2004
study which found an overall mean satisfaction score of 3.45. Public high school principals in Virginia are most satisfied with social service, achievement, and activity. These findings are consistent with earlier studies (Newby, 1999, Stemple, 2004, Bowling, 2007). In addition to school personnel, mental health professionals such as school counselors also rate social service as the highest dimension affecting satisfaction (Bane, 2006). Respondents reported being least satisfied with authority, independence, and compensation. As in previous studies, compensation had the lowest mean score of the twenty dimensions (Newby, 1999, Stemple, 2004, Bowling, 2007).

Results also indicate no significant difference in job satisfaction among principals regardless of accreditation or Adequate Yearly Progress status. Although no statistically significant difference regarding accreditation status or AYP and overall job satisfaction was found, principals who indicated that their job satisfaction had decreased in the last five years identified AYP and NCLB as the two most influential factors in the change in job satisfaction.
Stemple’s 2004 study found a significant difference in accreditation status and overall job satisfaction but no difference regarding AYP or NCLB and job satisfaction.
CHAPTER FIVE

SUMMARY, DISCUSSION, AND CONCLUSIONS

This chapter begins with a summary of the study. Following the summary of the study, a summary of the findings is presented. The second part of the chapter will present implications for practice along with recommendations for further study. Following will be a discussion as well as reflections on the findings. The third and final section contains the summary of the chapter.

Summary of the Study

The purpose of this study was to determine the level of job satisfaction of public high school principals in the Commonwealth of Virginia. Specifically, the researcher investigated (a) the overall satisfaction level of public high school principals in the Commonwealth of Virginia; (b) the satisfaction level of public high school principals in Virginia according to the following demographic variables: age, gender, salary level, years of experience as a principal, number of assistant principals, years in current school district, school socioeconomic level, and school size; (c) the satisfaction level of public high school principals in Virginia for each of the twenty dimensions measured by the Minnesota Satisfaction Questionnaire; (d) the overall satisfaction level of public high school principals as related to the demographic variables of accreditation status and Adequate Yearly Progress. Each of these questions was analyzed using descriptive statistics including frequency distributions, and ANOVAs.

Findings

The following conclusions were drawn based on the data reported in chapter 4.

1. Since 2004, job satisfaction levels have increased for public high school principals in Virginia. This study found an overall satisfaction mean score of
3.86 on a five-point Likert scale. Stemple (2004) found a mean score of 3.45. Both mean scores indicate that high school principals are generally satisfied with the score being closer to satisfied than to neutral. This is consistent with Newby (1999) who found an overall satisfaction score of 3.65 for middle school principals.

2. The majority of high school principals are between the ages of 35 and 55. Of the 169 respondents 57.8% were between the ages of 35 and 55. These data are consistent with Stemple’s 2004 study which reported over half of his respondents were 55 and older and therefore at or near retirement age. Stemple conjectured that many of these principals would be retiring in the next 4 years. With 57.8% of this study’s respondents being between the ages of 35 and 55 the researcher concludes that many of the participants in Stemple’s study have, in fact, retired and been replaced by younger principals.

3. Compensation received the lowest satisfaction rating. The majority of high school principals reported earning $75,000 or more, however satisfaction with compensation received the lowest satisfaction rating. Principals reported being least satisfied with how their pay compares with the pay of others in similar jobs. This supports the findings of Stemple (2004), Brogan (2003), and Bowling (2007).

4. The percentage of students who receive free or reduced lunch does not significantly affect the overall job satisfaction level of the principal. Despite ever-increasing benchmarks for sub-groups including socioeconomically disadvantaged students, this study found no significance regarding the
percentage of socioeconomically disadvantaged students and the principal’s overall job satisfaction.

5. High school principals receive a feeling of accomplishment through helping others. The two dimensions reported with the highest levels of satisfaction were achievement (M=4.24, SD=.733) and social service (M=4.36, SD=.563). Achievement is defined by the MSQ as giving a feeling of accomplishment and social service is defined as the having the opportunity to help others.

6. Principals enjoy the high level of activity and opportunity to be busy in a high school setting. High school principals indicated activity (M=4.20, SD=.627) as the dimension receiving the third highest satisfaction rating.

7. Principals feel they are not given authority commensurate with the level of responsibility. Other than compensation, the lowest levels of satisfaction were indicated with regards to authority (M=3.55, SD=.605) and independence (M=3.55, SD=.663). Newby (1999) and Stemple (2004) also found that independence received the next to lowest rating in satisfaction. In 1999 and 2004 principals indicated that opportunity for advancement was the third lowest rated dimension. The results of this study indicate that principals are now less satisfied with authority than opportunity for advancement.

8. Gender, years of experience, number of assistant principals, years in the current school districts and school size have no impact on high school principals’ level of job satisfaction. This study found no significant difference in job satisfaction among these groups.
Female principals reported a slightly higher level of job satisfaction (M=3.96, SD=.500) than their male counterparts (M= 3.89, SD=.443). Female principals also indicate a higher level of satisfaction with achievement (M=4.47, SD=.612) than the male respondents (M=4.19, SD=.772). This is contrary to Stemple’s 2004 study which indicated a slightly higher level of satisfaction for male principals. Likewise, Brogan’s 2003 study of high school principals in Idaho revealed male principals were significantly more satisfied than female principals.

There was no significant difference in school size or the number of assistant principals. Principals with four or more assistant principals reported the lowest levels of overall job satisfaction (M=3.81, SD=.453). Stemple (2004) found that principals with three assistant principals were significantly more satisfied than those with fewer or more assistant principals. This finding is contrary to Brogan’s (2003) study which found that principals with more assistant principals were overwhelmingly more satisfied than those with fewer assistant principals.

There was no significant difference in job satisfaction with regards to the number of years the respondent served as principal, nor the number of years the respondent had worked in his or her current school district. Findings indicated that principals with more than 15 years of experience were least satisfied with security (M=3.77, SD=.971) as well as compensation (M=3.11, SD=1.05). Principals who had served their current school district for 5-10
years were less satisfied with compensation (M=2.84, SD=1.01) than their counterparts who had more or less years with their current school districts.

9. State accreditation and Adequate Yearly Progress have not significantly affected high school principals’ level of job satisfaction. Principals who reported that their satisfaction with the principalship has increased in the last five years indicated the most significant factors for increased satisfaction were relationships with parents and student behavior. Adequate Yearly Progress was the third most listed factor. This suggests that the increasing demands of the accountability movement are not affecting the job satisfaction of public high school principals in the Commonwealth of Virginia. When overall satisfaction was compared with regards to accreditation status and Adequate Yearly Progress there was no significant difference in principals of schools who were fully accredited (M=4.26, SD=.155) and schools who were accredited with warning under Virginia Accreditation Standards (M=3.90, SD=.458). Likewise, there was no significant difference between principals whose school met Adequate Yearly Progress (M=3.91, SD=.464) and principals whose schools did not meet Adequate Yearly Progress (M=3.86, SD=.420). Although no statistical significance was found regarding AYP and overall satisfaction, those principals who reported decreased job satisfaction in the last five years identified AYP most often as one of the top five contributors to decreased job satisfaction. These same principals identified NCLB as the second most influential factor for their decreased job satisfaction.
Implications for Practitioners

This study provides important information for understanding the job satisfaction of public high school principals in the Commonwealth of Virginia. This information will assist state and local officials in developing and enhancing mentoring programs for principals leading to greater retention of effective principals. This understanding will also be useful to human resources departments as they seek to attract the most qualified principals to lead our schools.

1. State and local officials need to continually assess the job satisfaction of principals in order to maintain a high level of satisfaction. This study indicates that participants reported being satisfied in their positions as high school principals. It is important that state and local officials continue to monitor the overall job satisfaction of high school principals as well as job satisfaction in relation of dimensions of the job.

2. School boards need to insure principals’ pay is competitive nationally. Increased compensation may prevent the loss of qualified principals to more lucrative professions. High school principals are least satisfied with compensation. The findings from this study indicated that compensation was the lowest of the 20 job satisfaction dimensions.

3. The majority of high school principals who participated in this study were between the ages of 35-55. This indicates that recently retired principals are being replaced by younger principals. Division based professional development programs should be tailored to meet the needs and develop the capacity of young administrators.

4. Mentoring programs should be developed to assist future and current administrators in becoming more effective. These programs may offer training in developing
relationships and forging partnerships with parents and students. Increased partnerships and positive parent and student involvement will further enhance the job satisfaction of high school principals. The programs should also provide awareness of various community outreach programs to better equip principals to provide assistance to their school population.

5. Division leaders should implement procedures and programs that provide greater reliance on site-based management. Superintendents should consider strategies and initiatives to increase principals’ perception of authority in order to further increase job satisfaction. One such facilitation could be a greater reliance on site-based management.

6. High school principals should consider the time demands of a high school principalship and whether or not they are effectively balancing these demands with the demands of their personal lives. Although high school principals ranked activity as the third highest dimension of job satisfaction, the high school principalship is extremely time-demanding. The high school principalship is both mentally and physically challenging. Principals must meet the needs of students, parents, faculty and staff, central office, and the superintendent. This involves high-stakes decisions regarding academics, curriculum, discipline, and athletics. High school principals must also meet grueling demands of after-school activities. It has been pointed out that the high school principalship is a burn-out position (Gmelch and Gates, 1997). Female principals also report a large degree of role conflict as they work to balance the demands of home and work (Eckman, 2002).
7. Human resources departments should not consider years of experience or years in current school district when selecting potential candidates to serve as high school principals. This study found that these professional demographic indicators do not influence the overall job satisfaction of the high school principal.

8. Those who oppose increased accountability such as state accreditation and Adequate Yearly Progress should not tout the job satisfaction of high school principals as a reason to eliminate federal or state accountability initiatives. This study found that state and accreditation and Adequate Yearly Progress do not significantly affect the job satisfaction of high school principals.

Recommendations for Further Study

On the basis of the findings and conclusions drawn from the study, five recommendations have been developed. The recommendations follow:

1. This study could be done using qualitative or mixed methods research methodology. This would allow the researcher to investigate job satisfaction using in-depth information and rich data from interviews and focus groups.

2. This study has been conducted using both middle and high school principals in Virginia. Additionally, a study of job satisfaction and elementary school principals in Central Virginia has been conducted, but no study of job satisfaction of elementary principals in the Commonwealth of Virginia has been completed. A study of the job satisfaction of elementary principals in Virginia should be conducted to allow for a more comprehensive understanding of the job satisfaction of principals in Virginia.
3. This study could be replicated using a different survey instrument. The MSQ was originally designed to measure job satisfaction in business and industry. Some participants noted concerns regarding the length and repetitious nature of the questions. Several also commented that the survey does not address specific concerns of education and principals.

4. A comparative study including elementary, middle, and high school principals could be conducted. This study would increase knowledge of the job satisfaction and the principalship in the Commonwealth of Virginia.

5. This study could be replicated in four to five years to investigate whether or not the job satisfaction of public high school principals continues to increase. This will become increasingly important as the benchmarks approach 100% and the impact of safe harbor is lessened.

Discussion

The purpose of this study was to determine the level of job satisfaction of public high school principals in the Commonwealth of Virginia. The population for this study included all public high school principals in the Commonwealth of Virginia who had emails listed in the Virginia High School League Directory for the 2008-2009 school year. Of the 302 principals listed, five emails were returned as undeliverable and eleven had previously opted out of participating in Survey Monkey. From the 286 emails originally sent, 169 ultimately responded for a return rate of 59%. The work adjustment theory was used to research the job satisfaction of public high school principals in the Commonwealth of Virginia. The Minnesota Satisfaction Questionnaire (1977 revision) developed by the Minnesota Studies in Vocational Rehabilitation
based on the work adjustment theory was used. The MSQ measures the employee’s satisfaction with his or her job based on 20 dimensions of job satisfaction.

The findings of this study suggest that public high school principals in the Commonwealth of Virginia are generally satisfied with their jobs. Principals reported the highest areas of satisfaction as social service, achievement, and activity. The lowest areas of satisfaction were authority, independence, and compensation. As in studies by Newby (1999), Chen (2000), and Stemple (2004) compensation was the lowest ranked dimension of satisfaction.

**Reflections**

The findings from this study indicate that even as the accountability increases and the benchmarks for Adequate Yearly Progress continue to rise, so does the job satisfaction of public high school principals in the Commonwealth of Virginia. This positive correlation, of course, does not indicate causation. The rise in job satisfaction may be attributed to several factors. The researcher believes that many in the field of education welcomed greater accountability. As such, the No Child Left Behind mandate to achieve in all sub groups has been embraced by educators including principals. Principals may feel greater overall job satisfaction in knowing that they are meeting the challenges put forth in this federal legislation.

Secondly, the majority of respondents to this survey were between the ages of 35 – 55. Perhaps, the younger principals are more adept with technology and data driven decision making. These principals new to the profession may have received more recent training in being an instructional leader. These skills would make it easier to navigate the requirements of aligning curriculum and objectives, meeting benchmarks and the like.

The increase in the overall job satisfaction of public high school principals speaks to the resiliency of those who choose the profession. Time and time again, principals indicate that their
greatest satisfaction comes from social service. Men and women who choose to lead schools have a desire to serve. Despite increased paperwork or the pressure of Standards of Learning scores, principals still find satisfaction in serving the students and parents of their communities. This explains why those principals who indicated increased job satisfaction or no change in job satisfaction in the last five years attributed their satisfaction to interactions with parents and student behavior. Principals remain dedicated to educating students.

This study also leaves some unanswered questions. First, this study found that job satisfaction increased for public high school principals while AYP benchmarks continue to rise. What role then, if any, does No Child Left Behind play in the job satisfaction of high school principals? It would be interesting to investigate more specifically the direct and indirect effects of the accountability movement on the job satisfaction of high school principals. Second, compensation is consistently the lowest ranked dimension of job satisfaction Stemple (2004), Newby (1999). Although the Virginia Department of Education reports that the average budgeted salary for fiscal year 2009 is 92,174, a 3.56 percent increase from 2008, satisfaction with compensation remains low. It is important to reveal what level of compensation would lead principals to rate compensation at a higher level. It is also important to find out how the current level of compensation compares with similar professions.

**Summary**

This chapter discussed the results of this study including statistically significant findings. The purpose of this study was to examine the job satisfaction of public high school principals in the Commonwealth of Virginia. This research replicated the procedures used in a 2004 study conducted by Dr. James Stemple. The data indicated that public high school principals in the
Commonwealth of Virginia are generally satisfied with their jobs. Based on the results of the study, the researcher provided recommendations for future research. Next a general discussion of findings was presented followed by reflections.
References


Appendix A

Individual Information Sheet

1. What is your age?
   a. Younger than 35
   b. 36-45
   c. 46-55
   d. Older than 55

2. What is your gender?
   a. Male
   b. Female

3. What is your salary range?
   a. Less than $50,000
   b. $50,000-$75,000
   c. $75,000-$100,000
   d. More than $100,000

4. How many assistant principals are assigned to your school?
   a. 0
   b. 1
   c. 2
   d. 3
   e. 4
   f. 5 or more

5. How many years have you been a high school principal?
   a. 1-3
   b. 4-6
   c. 7-9
   d. 10-15
   e. 15 or more
6. How many years have you been with your current school district?
   a. 1-4
   b. 5-10
   c. 11-15
   d. More than 15

7. What percentage of time spent do you spend directly with students?
   a. Less than 10%
   b. 11-20%
   c. 21-30%
   d. 31-40%
   e. 41-50%
   f. More than 50%

8. What percentage of your student body is on free or reduced price lunch?
   a. Less than 5%
   b. 5%-9%
   c. 10%-15%
   d. 15%-20%
   e. 20%-25%
   f. Over 25%

9. What is the size of your school?
   a. 400 students or less
   b. 401-800
   c. 801-1200
   d. 1201-1600
   e. 1601-2000
   f. 2001-2400
   g. Over 2400 students

10. What is your Virginia accreditation status?
    a. Fully accredited
    b. Provisionally accredited; meets state standards
    c. Provisionally accredited; needs improvement
    d. Accredited with warning
11. Did your school make Adequate Yearly Progress under No Child Left Behind for the 2007-2008 school year?
   a. yes
   b. no

12. In the last five years my job satisfaction has
   a. increased
   b. decreased
   c. remained the same

13. Rank the top five items that have influenced your level of job satisfaction in the last five years:

   _____ No Child Left Behind
   _____ Relationships with Parents
   _____ Student Behavior
   _____ Adequate Yearly Progress
   _____ State Accreditation

   _____ Personal Issues
   _____ Other (please list)
   _____
   _____
   _____
   _____
Appendix B

Minnesota Satisfaction Questionnaire

Sample Questions

Ask yourself: How satisfied am I with this aspect of my job?

- **Very Sat.** means I am very satisfied with this aspect of my job.
- **Sat.** means I am satisfied with this aspect of my job.
- **N** means I can’t decide whether I am satisfied or not with this aspect of my job.
- **Dissat.** means I am dissatisfied with this aspect of my job.
- **Very Dissat.** means I am very dissatisfied with this aspect of my job.

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<tr>
<td>1.</td>
<td>The chance to be of service to others.</td>
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<td>5.</td>
<td>The variety in my work.</td>
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<td>10.</td>
<td>The way my supervisor and I understand each other.</td>
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<td>15.</td>
<td>The technical “know-how” of my supervisor.</td>
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<td>20.</td>
<td>The chance to be active much of the time.</td>
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<td>25.</td>
<td>The chance to do different things from time to time.</td>
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<td>30.</td>
<td>The way my supervisor handles his/her employees.</td>
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<td>36.</td>
<td>The chance to develop close friendships with my co-workers.</td>
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<td>43.</td>
<td>Being able to do things that don’t go against my conscience.</td>
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<td>50.</td>
<td>The way my supervisor backs up his/her employees (with top management).</td>
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<td>60.</td>
<td>Being able to stay busy.</td>
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<td>66.</td>
<td>The chance to tell people what to do.</td>
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<td>72.</td>
<td>My pay and the amount of work I do.</td>
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<td>Sample questions used with permission from the Manual for the Minnesota Satisfaction Questionnaire (Weiss, Dawis, England, &amp; Lofquist, 1967)</td>
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<td>78. The way they usually tell me when I do my job well.</td>
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<td>85. The chance to do many different things on the job.</td>
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<td>91. The way layoffs and transfers are avoided in my job.</td>
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<td>94. The chance for advancement.</td>
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<td>98. The praise I get for doing a good job.</td>
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<td>100. Being able to keep busy all the time.</td>
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Appendix C

First Invitation sent December 4, 2008

To: [Email]
From: srbrown@vt.edu

Subject: Job Satisfaction of High School Principals

Body: My name is Sandra Brown; I am an assistant principal at Frank W. Cox High School in Virginia Beach and a doctoral student at Virginia Tech. I am in the process of conducting a study of the job satisfaction of public high school principals in Virginia.

Your input is crucial to the success of this study. Below, you will find a link to the survey instrument. Please take approximately 15 minutes to complete this survey as it will yield important information for our human resources departments as well as our division-based mentoring programs. It is my hope that this study will also add to the understanding and appreciation of our craft.

https://www.surveymonkey.com/s.aspx

I realize how valuable your time is and appreciate your assistance with this important study. To show my gratitude, I will include the names of all respondents in a drawing for a 3 day-2 night vacation at the beautiful Virginia Beach Resort Hotel on the Chesapeake Bay. Our first 100 respondents will also be included in a drawing for a $50.00 Olive Garden gift certificate.

If you have any questions, please do not hesitate to contact me. As always, many thanks to you for your help with this important endeavor.

Respectfully,

Sandra R. Brown
Frank W. Cox High School
Appendix D

Second Invitation sent December 11, 2008

To: [Email]
From: srbrown@vt.edu

Subject: Job Satisfaction of High School Principals in Virginia

Body: Dear High School Principals,

As you recall, you received an email from me last week with a link to a survey. It is my belief, the results of this survey will provide important information that can continue to inform our profession and capture the challenges which face high school principals in the Commonwealth. All answers are, of course, completely confidential and no individual or school system will be identified.

As promised, the first 100 respondents were entered into a drawing for a $50.00 Olive Garden gift card. I am pleased to announce that the winner of the gift card is Dr. Susan Bechtol, principal of Churchland High School in Portsmouth, Virginia. Congratulations! Thanks to all who have become an integral part of this study.

To show my gratitude for your time during this busy season, I would like to offer a second drawing for a $40.00 Applebees gift card to next 100 participants who are able to respond to the survey by Friday, December 19.

Below, please find a link to this survey: https://www.surveymonkey.com/s.aspx
This link is uniquely tied to this survey and your email address. Please do not forward this message.

Also, please remember, all who participate in the survey will be entered into a drawing for a 3 day/2 night stay at the Virginia Beach Resort Hotel on the beautiful Chesapeake Bay.

Many thanks to you for your assistance in this important matter.

Happy Holidays!

Sandi
Appendix E

Third and Final Invitation sent January 6, 2009

To: [Email]
From: srbrown@vt.edu

Subject: Job Satisfaction of High School Principals

Body:

Happy New Year!

As you recall, I am an assistant principal at Frank W. Cox High School in Virginia Beach and a doctoral student at Virginia Tech. You received an email from me before the holidays with a link to a job satisfaction survey. It has been reported to me that completion of this survey takes only 10 minutes. It is my belief that the results of this survey will provide important information regarding our profession. I would be happy to share with you the results of this study upon completion if you desire. All answers are, of course, completely confidential and no individual or school system will be identified.

As promised, a drawing for a $40.00 Applebees gift card was awarded to Mr. Ricky Skeens, principal at George Wythe High School in Wytheville, VA. Congratulations!

I am ever so close to receiving the required number of responses allowing me to continue my research. Please consider responding to this brief survey. The next 40 respondents will become eligible for a $35.00 Barnes and Noble gift card. Also, as you will recall, all who participate in the survey will be entered into a drawing for a 3 day/2 night stay at the Virginia Beach Resort Hotel on the beautiful Chesapeake Bay.

Below, please find a link to this survey:
https://www.surveymonkey.com/s.aspx

This link is uniquely tied to this survey and your email address. Please do not forward this message. Again, many thanks to you for your assistance in this study.

Sandi Brown
https://www.surveymonkey.com/optout.aspx
Appendix F

Institutional Review Board Approval

MEMORANDUM

TO: Travis W. Twiford
    Sandra Brown

FROM: David M. Moore

SUBJECT: IRB Exempt Approval: “Job Satisfaction of Public High School Principals in the Commonwealth of Virginia”, IRB # 08-622

I have reviewed your request to the IRB for exemption for the above referenced project. The research falls within the exempt status. Approval is granted effective as of October 17, 2008.

As an investigator of human subjects, your responsibilities include the following:

1. Report promptly proposed changes in the research protocol. The proposed changes must not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subjects.
2. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.
Appendix G

Request for Permission to use the MSQ

Sandra R. Brown
1409 Watersedge Drive
Virginia Beach, Virginia 23452
(757) 498-6636

October 22, 2008

Dr. David Weiss
Vocational Psychological Research
University of Minnesota
N612 Elliott Hall
75 East River Road
Minneapolis, MN 55455-0344

Dear Dr. Weiss,

I am currently working on my doctoral degree in Educational Leadership and Policy Studies through Virginia Polytechnic and State University. I am planning to conduct a study of all high school principals in the Commonwealth of Virginia. This study will include all 310 public high school principals in Virginia. My committee has approved the use of the Minnesota Satisfaction Questionnaire (1977 long form) in order to collect the required data. Surveys will be emailed electronically via SurveyMonkey.

Enclosed, please find a description of my study, along with the application to use the instrument, and qualification form. As you can see on the qualification form, Dr. Travis Twiford, chairman of my committee, will oversee this study. Enclosed also is a check for $65.07 for royalties for use of the instrument. The royalties are for an anticipated return rate of 50% for the internet survey.

If you need any additional information, please do not hesitate to let me know. I can be reached via phone at 757-572-6636 or email at srbrown@vt.edu. Thank you again for your assistance with this important matter.

Respectfully,

Sandra R. Brown
Appendix H

Permission to Use the MSQ

October 23, 2008

Sandra R Brown
1409 Watersedge Dr
Virginia Beach, VA 23452

Dear Sandra R Brown:

We are pleased to grant you permission to use 155 of the Minnesota Satisfaction Questionnaire 1977 short form on a secure web site as your research project as you requested.

Please note that each copy that you make must include the following copyright statement:

Copyright 1977, Vocational Psychology Research
University of Minnesota. Reproduced by permission.

Vocational Psychology Research is currently in the process of revising the MSQ manual and it is very important that we receive copies of your research study results in order to construct new norm tables. Therefore, we would appreciate receiving a copy of your results including 1) Demographic data of respondents, including age, education level, occupation and job tenure; and 2) response statistics including, scale means, standard deviations, reliability coefficients, and standard errors of measurement.

Your providing this information will be an important and valuable contribution to the new MSQ manual. If you have any questions concerning this request, please feel free to call us at 612-625-1367.

Sincerely,

[Signature]

Dr. David J. Weiss, Director
Vocational Psychology Research
Appendix I

Training in Human Subjects Protection Certificate