

JOB SATISFACTION OF HIGH SCHOOL PRINCIPALS IN VIRGINIA

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(ABSTRACT)

High quality effective leadership for high schools is critical due to the social, political, and economic pressures placed upon public education. Due to these increasing pressures and ever higher accountability placed on principals, job satisfaction may decrease. The principal's job is complex and demanding; however, thoughtful examination of the principalship and the variables that contribute to job satisfaction can better equip school district leaders to retain principals. Researching aspects of job satisfaction is important because a job is not merely life-sustaining, but positively life-enhancing, and enriching (Darboe, 2003).

Through my associations with other principals, I see many administrators who appear to be unsatisfied in their jobs. As a result of my interests and experiences, I have conducted a study, based on a previous study completed at the middle school level by JoAnn Newby (1999), to explore job satisfaction among high school principals in Virginia. For this study 183 high school principals in Virginia responded to an internet survey using the Minnesota Satisfaction Questionnaire (MSQ) to explore the specific variables of gender, age, salary, number of assistant principals, years as principal, tenure, school socio-economic status, school size, and school accreditation status to determine which variables may or may not contribute to job satisfaction. A multiple regression was utilized to determine the relative impact that the criterion variables in predicting job satisfaction.

The findings of this study suggest that high school principals in Virginia were generally satisfied with their jobs. The principals who responded were least satisfied with their level of compensation and most satisfied with being of service to others. The step-wise multiple regression completed for this study revealed that the significant predictors of job satisfaction were the number of assistant principals and Virginia Accreditation status. Those principals whose schools were fully accredited and those principals who had three assistant principals were

significantly more satisfied than those principals whose schools were not fully accredited and those principals who had less than or more than three assistants. Results from this study are useful as they serve as a motivating force for those who are trying to gain more information about the high school principalship in Virginia.

DEDICATION

This dissertation is dedicated to my family, without whose support I could not have completed this project. For my mother, Iris, and late father, James Sr., who gave me so much and taught me the meaning of working hard. To my sister Kim, and her family, who has always been there for me and has done so much for me over the years. I especially want to dedicate this project and degree to my wife, Julie, and my children, Morgan, James, and Tara. You all have put up with me through the many days, and nights, I was away. I love you all so much.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

The principal serves as an indispensable factor in the formula for effective schools (Dwyer, Barnett, & Lee, 1987; Edmunds, 1979; Schmuck, 1993). Being a leader of an effective school is accomplished by serving and meeting the needs of various stakeholders, including parents, students, faculty, the school district hierarchy, and the community at large. Dealing with this large group of stakeholders has caused the role of the principal to become extremely complex. Add in the high-stakes Standards of Learning tests in Virginia-which are end-of-course tests to measure competency attainment-and the challenge to meet Adequate Yearly Progress under the federal guidelines, and an already complex job becomes an even greater challenge. Because of the importance of the principal in effective schools (Brandt, 1987; Cusick, 2003; English & Hill, 1990), as well as the diversity of those with a vested interest in the performance of the principal, the role of the principal continues to draw major attention in this era of accountability.

Today's principal faces the complex task of creating a school-wide vision, being an instructional leader, planning for effective professional development, guiding teachers, handling discipline, coordinating pupil transportation, and attending school events, co-curricular events, and athletic events, as well as all the other details that come with supervising a school (Goldberg, 2001; Richard, 2000). As a result of the many complex tasks, leaders of public educational programs are having difficulties filling the vacancies of the principalship. Erosion of authority to effect change, escalating expectations of accountability, a perceived lack of support, and a stressful political environment, as well as other factors, have caused high school principals either to consider leaving the field entirely or to request classroom teaching assignments (Adams, 1999).

Political issues have gained national attention as No Child Left Behind legislation has led to a politically driven accountability model. The NCLB legislation has allowed states to use new definitions, approved by the US Department of Education, for what the states mean by "adequate yearly progress" (referred to as AYP) (Robelen, 2003). Principals are being thrust into the political debate as they must also learn these new terms, learn how the terms will be applied to their schools and then devise a plan to meet adequate progress. In many cases schools that gain

adequate state accreditation fail to meet federal Adequate Yearly Progress (Robelen, 2003; Anderson, 2003). The real problem for many principals is that they are being asked to answer new questions generated by recent state and federal legislation.

Societal issues have come to the forefront of education in recent years as schools are being asked to increase emphasis on character and moral education. Add in that today's education reform goal is to "teach all students to high standards" and it is easy to see why such a principal shortage is on the horizon. In a survey of nearly 400 superintendents conducted by the Association of California School Administrators (2001), 90 % of the respondents reported a shortage in the pool of applicants for the last advertised high school principal opening. Also tied to the societal pressures is the need for principals to spend more time with parents and community agencies obtaining necessary resources for children and families (Whitaker, 2002). A principal can spend hours connecting parents with resources for troubled teens, insuring that families and students have medical, dental and vision needs met as well as provide counseling for parenting issues.

Site based management and increased autonomy have often led to principals acting more as managers and less as instructional leaders. Shrinking state budgets and less local funding have combined to make running a school with fewer funds paramount to a principal's job. Combine this autonomy with the increasing complications of the job due to changing demographics, teacher shortages, increased technology demands, and the expectations to improve standardized test scores and the job of the principal becomes even more daunting (Quinn, 2002, Schiff, 2002).

Job satisfaction is generally considered the one factor critical to those employed in any workforce, including principals. Principals typically work over 60 hours a week on administrative duties, not including student activities and special events. Principals spend a great deal of time attending to parent issues, community related tasks, discipline and facilities management (George, 2001). When principals are dissatisfied with a job they find themselves in a dilemma that can affect their entire lives. Given these many tasks, it is important to reveal what contributes to job satisfaction for high school principals.

Schultz (1982) defined job satisfaction as "The psychological disposition of people toward their work – and this involves a collection of numerous attitudes or feelings" (p. 287). Another definition stated "job satisfactions are feelings or affective responses to facets of the situation" (Smith, Kendall, & Hulin, 1969). Spector (1997) defines job satisfaction as the degree

to which people like their jobs. “It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs” (p. 2). Spector looked at job satisfaction from a global perspective; looking at job satisfaction in relation to other variables of interest. This global approach is used to find out which part of the job produces satisfaction or dissatisfaction. Weiss and Cropanzano (1996) gave emotion a greater emphasis in defining job satisfaction as an evaluative judgment about one’s job that partly, but not entirely, results from emotional experiences at work.

These definitions show that many attitudes and feelings are developed in reaction to a job, and these attitudes and feelings lead to satisfaction with the job. It is easy to see that attitudes and feelings can be easily influenced by the environment in a workplace, co-workers, superiors, and the school structure. Locke (1976) offers that job satisfaction may be viewed as the pleasurable emotional state resulting from the perception of one’s job as fulfilling or allowing the fulfillment of one’s important job values, providing these values are compatible with one’s needs. Bruce and Blackburn (1992) stated that enriched jobs contain the presences of five work dimensions: (a) task identity, (b) task significance, (c) skill variety, (d) autonomy, and (e) feedback. “The presence of these psychological states leads ultimately to: motivation, high-quality performance, low absenteeism and turnover, and high job satisfaction” (p.12). Darboe (2003) concluded her study with the following concept of job satisfaction:

This study can enrich and enhance one’s understanding that a job is not merely life-sustaining by life-enhancing, and enriching because most people continue to work even if their economic needs are met, suggesting that for most people work satisfies various needs, such as a need for individual recognition, achievement, or the pleasure derived from working with other people. (p. 84)

Significance of Satisfaction in the Principalship

For the purpose of this study it is important to examine the characteristics of the principal’s profession, and personal characteristics that affect either positively or negatively the attitudes and feelings of the contemporary high school principal’s job and lead to job satisfaction. With the many difficulties most often identified with the job of high school administrators such as: (a) 60 to 80 hour work weeks, (b) complexity of the job, (c) unending supervision of night activities, (d) minimal pay difference between top teachers and administrators, (e) high expectations, (f) federal, state and district mandates, (g) increasingly complex society, (h) vice-principal job seen as negative, and (i) difficulty in helping teachers

becoming more collaborative (Yerkes & Guaglianone, 1998) it is extremely important to identify the concepts that lead to satisfaction for high school principals. When these concepts are known then practices can be put into place that will enable superintendents and school boards to maximize job satisfaction for high school principals, thus reducing the turnover rate and making recruitment of new people for such leadership roles easier.

In his study, Schmidt (1976) suggested that school administrators relate job satisfaction to achievement and recognition and advancement; however, over the years the view has emerged that salary, good interpersonal relationships, and supervision were not related to satisfaction. Schmidt's (1976) findings are similar to a survey conducted in the corporate world by Industry Week. In the 27th annual Industry Week CEO Survey, conducted in 1998, 78 CEO's from the top publicly held manufacturing firms globally, rated the ability to grow an organization and the ability to develop people as the top two measures of job satisfaction (Stevens, 1998). Financial compensation ran a distant third in terms of very important mentions, ahead of holding a position of power and public recognition.

In a similar study conducted by MetLife Survey (2001) with public high school principals, those principals surveyed listed making a difference in lives as the number one reason for job satisfaction (29%), with being involved with students (16%) and great staff/faculty (11%) ranking second and third respectfully. In the same study principals ranked the job as too stressful (23%) as the number one reason for dissatisfaction, with not enough support from higher administration (19%) and too many non-educating responsibilities (16%) second and third in terms of job dissatisfaction (Metropolitan Life Insurance Co., 2001).

In her study, Newby (1999) found that middle school principals in Virginia were "satisfied" with their positions (p. 108). Although Newby drew this conclusion from middle school principals in 1999, today's pressures on high school principals are different from those of the middle school, with the end-of-course Virginia Standards of Learning Tests serving as a barrier to graduation and serving as the measure for school accreditation. Given the climate of high-stakes testing in Virginia, where students must pass the test in order to graduate, schools must gain full accreditation and meet federal guidelines. This dissertation adapted the Newby study by adding the accreditation status of the school as a predictor variable to explore the attitudes that are associated with job satisfaction among high school principals in Virginia.

Significance of the Study

In defining job satisfaction as the degree to which people like their jobs Spector (1997) further stated that some enjoy work and find it to be a central part of life, while others hate work and do so only because they must. Job satisfaction then can be important to those who are in an organization and those who study organizations because it allows the workers and researchers to look at aspects of job satisfaction in the organization and work to increase those aspects that lead to job satisfaction. Those who study job satisfaction in organizations do so for two reasons. Job satisfaction is relevant for all those who are interested in the subjective evaluation of working conditions such as responsibility, task variety, or communication requirements because job satisfaction is strongly caused by such conditions. Job satisfaction is also important because it is closely linked to outcome variables such as absenteeism, inefficiency, counterproductive behavior, or lack of leadership (Dormann & Zapf, 2001).

The study of job satisfaction among high school principals is important because there are aspects of the job that are highly attractive and lead to satisfaction and aspects of the job that lead to dissatisfaction. Positive aspects include the opportunity to work with a school faculty and staff to accomplish common goals, developing school culture and the ability to work with students (Malone, Sharp, & Walter, 2001). Too often in studies of principals the study looks at negative aspects of the principalship and neglects looking at what reasons make the job of running a school attractive, leading to job satisfaction.

It is important to identify which factors contribute to job satisfaction as well as those that may lead to job dissatisfaction to assure that the principalship is attractive to potential candidates and those already in leadership positions. There are many variables that have been hypothesized to be a result of job satisfaction or dissatisfaction. These include both those variables of job performance and those of demographics.

The results of this study are helpful to practicing administrators in three ways. First, it further validates or refutes the previous research on job satisfaction among high school principals. While much of the research on high school principal job satisfaction has been completed in other countries and states this study will attempt to draw comparisons to the findings in previous studies. Second, it answers the question of what variables contribute to the overall job satisfaction of high school principals in Virginia. To date no study has been focused on job satisfaction among high school principals in Virginia, thus this study will be the first to

study variables that lead to job satisfaction among this group. Third, it assists current and future administrators in making decisions regarding their working conditions in attempts to improve job satisfaction. Many teachers each year complete the requirements to be principals, but many are unsure of the benefits of being a principal. This study will assist these potential administrative candidates in determining which variables to consider when looking for a job as a principal.

The Problem

The current era of high societal, economic and political accountability as well as high-stakes testing makes the job of leading the high school as a principal extremely complex. The principal's job is influenced by the social and political pressures of the community and these pressures can lead to job dissatisfaction. The researcher investigated the overall satisfaction level of high school principals in Virginia as measured by the Minnesota Satisfaction Questionnaire (MSQ). The MSQ is based on the Theory of Work Adjustment which uses the correspondence between the work personality and the work environment as the principal reason or explanation for observed work adjustment satisfaction (Weiss, Dawis, England, & Lofquist, 1967).

The twenty dimensions of the MSQ will be used individually as a measure of the principal's job satisfaction. The researcher looked at the influence of variables: gender, age, level of education, salary level, years of experience, number of assistant principals, years in current school district, school socio-economic level, school size, and accreditation status on the principals' general satisfaction level, and their satisfaction with the twenty dimensions of the job.

Research Questions

Despite several studies of school principals' job satisfaction, this important area of study remains incomplete at the high school level. The administration work force is composed of individuals from varied backgrounds, experiences and situations. A principal's job satisfaction is an important determinant in career decisions about becoming and remaining an administrator. The purpose of this study was to investigate job satisfaction and the factors that may be related. The questions that guided this study were:

1. What is the overall general satisfaction level of high school principals in Virginia as measured by the Minnesota Satisfaction Questionnaire (MSQ)?
2. What is the satisfaction level of high school principals in Virginia according to the following demographic variables: gender, age, level of education, salary level, years

of experience, number of assistant principals, years in current school district, school socio-economic level, school size, and accreditation status?

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?
4. Which of the demographic variables of gender, age, experience, school location, school size, and accreditation status can be predictors of job satisfaction for high school principals in Virginia?

The answers to these questions can be used as information to increase principal job satisfaction and possibly recruit more principals or retain current ones. The knowledge gained could be used to improve the working conditions of principals and lead to follow up research in the field of job satisfaction among high school principals in Virginia. By improving the working conditions of principals individual schools a school district will be better served by that principal's leadership as the principal will be able to better meet the political, societal and possible economic needs of the community creating a better school for the students and community it serves.

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 purpose of this paper, high school will be defined as a school with at least grades 10 through 12. High schools in Virginia vary as to the beginning grade, but all high schools have grades 10-12 (VHSL Member Directory, 2003).

Satisfaction – “An internal indicator of correspondence; it represents the individual worker's appraisal of the extent to which the work environment fulfills his or her requirements” (Dawis & Lofquist, 1984, p. 55).

Limitations and Assumptions

As with all survey research there are several limitations to this study and using the internet produces even more than traditional mail survey (Dillman, 2000). The main limitation of this study was that both the demographic data sheet and MSQ are self-reported instruments. Because of this self-reporting, response rates are generally low, inadequate answers cannot be probed for a more specific or relevant response and if the respondents are puzzled by an item, there is no interviewer to explain the item. Additionally question order bias may also occur

because the respondent can study the whole questionnaire before answering the first question (Rossi, Wright, & Anderson, 1983). A second limitation for this study was that by conducting an internet survey there was an assumption that every administrator had readily available internet access, an accessible e-mail address, and the proper technology that is compatible with the Virginia Tech survey maker system. Thirteen of the principals contacted by letter to complete the study were not accessible by e-mail thus they were unable to complete the survey, thus limiting the response rate. A third limitation was that several principals had problems accessing the survey maker from the computers at their schools. There seemed to be some schools that the technology was not compatible with the survey maker or possibly their schools had a firewall system that did not allow them access to the Virginia Tech survey system. A fourth limitation was that this survey was only conducted in Virginia and no inferences can be drawn to other states. A final limitation of the study was that the study only dealt with the facts and aspects that the Minnesota Satisfaction Questionnaire (MSQ) was designed to measure.

Organization of the Study

This study was conducted to investigate satisfaction of Virginia High School principals. It builds on the previous work of Newby (1999). Newby surveyed middle school principals in Virginia, using the Minnesota Satisfaction Questionnaire (MSQ), which is based on the Theory of Work Adjustment. The theory of work adjustment will be discussed in detail in chapter 2.

This study is presented in five chapters. Chapter 1 includes a statement of the problem, significance of the project, limitations of study and key definitions. Chapter 2 provides a review of the related literature relative to job satisfaction and establishes the theoretical framework. Chapter 3 contains the design of this quantitative study and the method for gathering and analyzing the data on job satisfaction among high school principals in Virginia. Chapter 4 reports the findings of the study and Chapter 5 will present the summary, conclusions, discussion, and recommendations.

CHAPTER TWO

REVIEW OF THE RELATED LITERATURE

The purpose of this study was to investigate predictors of principal job satisfaction including those that are personal and those that are job related. The purpose of this literature review was to look at literature on job satisfaction, job satisfaction theories, characteristics of job satisfaction, and previous studies of job satisfaction and school personnel.

Job Satisfaction

Although no uniform definition of job satisfaction exists (Siegel & Lane, 1982); job satisfaction is generally considered to be the overall feeling that a worker has about a job. Young (1984) defined job satisfaction as “the affective reaction that employees have about their jobs” (p. 115). According to Young, job satisfaction has implications for the individual related to physical and mental health, for the organization related to the acceptance of and good performance on the job, and for society related to quantity and quality of life.

Job satisfaction was defined by Lofquist and Dawis (1969) as “the pleasurable emotional state resulting from the appraisal of the extent to which the work environment fulfills an individual’s requirement” (p. 47). Solly and Hohenshil (1986) stated “job satisfaction is defined as an attitude individuals hold about their work consisting of a general or global factor of satisfaction as well as a collection of specific factors related to sources of work reinforcement” (p. 119). According to Hoppock (1977), job satisfaction can be defined as essentially any combination of psychological, physiological, and environmental circumstances that cause a person to say, “I am satisfied with my job”. Spector (1997) stated: “Job satisfaction is simply how people feel about their jobs and different aspects of their jobs” (p. 2).

Theories of Job Satisfaction

Regardless of the authors, generally it is agreed that job satisfaction involves the attitudes, emotions, and feelings about a job, and how these attitudes, emotions and feelings affect the job and the employee’s personal life. Given the many definitions of job satisfaction, many scholars have proposed various theories of job satisfaction. These theories have been

developed, then either supported or rejected by others in the field of work motivation and behavioral research.

Today the classic theories of Maslow (1943), Herzberg (1968), and Vroom (1964) on job satisfaction are the basis for much of the modern day studies. These classic theories have served as a basis for the evolution of job satisfaction research and have served as a springboard for research inside and outside the field of education. Because these classic theories have transcended into the field of education, from a historical perspective, it is important to look at the classic theories of job satisfaction.

In their book on theories of job satisfaction, Campbell, Dunnette, Lawler, and Weik (1970) divide the present-day theories of job satisfaction into two groups, content theories which give an account of the factors that influence job satisfaction and process theories that try to give an account of the process by which variables such as expectations, needs, and values relate to the characteristics of the job to produce job satisfaction. Maslow's (1943) Needs Hierarchy Theory and its development by Herzberg into the two factor theory of job satisfaction are examples of content theory. Equity, fulfillment and Vroom's (1964) expectancy theory are examples of process theory.

Content Theories

Content theories were concerned with the specific identity of what it is within an individual or his/her environment that energizes and sustains behavior. In other words, what specific things motivate people (Campbell et al, 1970)? Maslow (1954) suggested that people are driven by unsatisfied needs that shape their behavior. He theorized that after a person has moved from a lower to a higher level of need, the higher-level needs assume less prominence since they have been adequately met. Although lower level needs may at times increase in importance as a consequence of progressing through stages of psychological development, a person tends to develop a "personality structure" in which his various needs form a hierarchical system.

Maslow (1954) and Hoppock (1935) suggested that job satisfaction and dissatisfaction share a single continuum. They reasoned that both intrinsic and extrinsic factors have the capacity to create satisfaction and dissatisfaction. Maslow described one end of this continuum as a "growth" needs and, at the other end of the continuum "deficiency" needs. Pinder (1998) describes the first set of needs as basic survival needs, which can be looked at as those needs being concerned with the avoiding of pain and discomfort and as providing primary needs such

as sex, thirst, and hunger. Pinder describes the second set of growth needs as those that express themselves in attempts by people to become all that they are capable of becoming.

Motivator/Hygiene Theory (Two-Factor Theory)

Herzberg (Herzberg, Mausner, Patterson, & Capwell, 1957; Herzberg, Mausner, Patterson, & Capwell, 2002) used Maslow's needs hierarchy to formulate the motivator/hygiene theory of employee motivation. In 1968, Herzberg wrote about the two different needs of man. The first need is the one that comes from human's animal nature – or the ingrained drive to avoid pain from the environment or the learned practices that arise as a response to the basic biological needs. The other set of needs relates to the unique characteristics of humans, the ability to achieve. It is through this achievement that a person experiences psychological growth (Gruneberg, 1976).

Herzberg also theorized that growth or motivation factors intrinsic to the job are: achievement, recognition for achievement, the work itself, responsibility, and growth for advancement (Gruneberg, 1979). He also theorized that the hygiene factors or those factors that produce dissatisfaction are: company policy and administration, supervision, interpersonal relationships, working conditions, salary, status, and security (Gruneberg).

Herzberg's two-factor theory was tested by Schmidt (1976), when he conducted a study using 74 educational administrators in Chicago. Schmidt collected data using a modification of Herzberg's interview technique and a questionnaire on characteristics of the job. Each principal was asked to think of an incident that made him feel exceptionally good or exceptionally bad about his job as an administrator, either in his present position or in previous administrative positions. Each participant was limited to four specific sequences of events: two positive and two negative. The written responses were then coded by a set of encoders.

Using an ANOVA to determine relationships, Schmidt found that achievement, recognition, and advancement, significant at the .01 level were perceived to be major determinants of his subjects' overall satisfaction. The author also reported that interpersonal relations with subordinates, policy and administration, interpersonal relations with superiors, and interpersonal relations with peers were perceived to be major determinants of overall dissatisfaction.

Process Theories

Process theories try to explain and describe the process of how behavior is energized, directed, sustained, and stopped. To explain and describe behavior these theories try to define the major variables that are important for explaining motivated people (Campbell et al, 1970). Process theorists see job satisfaction as being determined not only by the nature of the job and its context within the organization, but also by the needs, values and expectations that the individuals have in relation to their job (Gruneberg, 1979). For example some individuals have a greater need for pay and achievement than others and where a job gives no opportunity for increased pay or achievement; such individuals are likely to be more frustrated than those whose need for higher pay and achievement is less. Three sub-theories of process theory have been developed: theory based on discrepancy between what the job offers and what is expected, theory based on what an individual needs, and theory based on what the individual values.

Expectations and Equity Theory

Equity theory was most heavily influenced by James Adams and originated around 1965 (Pinder, 1998). Equity theory was based upon three main assumptions. First, that people develop beliefs about what constitutes a fair and equitable return for their contributions to their jobs. Secondly, equity theory assumes that people tend to compare what they perceive to be the exchange they have with their employers to that which they perceive co-workers have with their employers. Thirdly, equity theory holds that when people believe that their own treatment is not equitable, relative to the exchange they perceive others to be making, and they will be motivated to do something about the inequity (Pinder, 1998). For example, one employee believes that another employee makes twice as much as they do. Whether that belief results in dissatisfaction depends on their beliefs about the value of contributions they make as compared to their co-worker. People can tolerate seeing others earn more in pay and benefits if they do believe that others are contributing more in the way of inputs (Pinder, 1998).

One main criticism of equity theory is that issues of fairness and justice can be a matter of “the eye of the beholder”. There is always the possibility that what one thinks or believes is not congruent with what is actually happening. Another limitation to this theory is that it can be hard to compare one organization to another, thus this theory is localized for the person.

Reference Group Theory

Reference group theory gave rise to the thought that employees compare their inputs and outputs from his/her job to others, such as his/her friends, co-workers, and others in the industry. One can easily see this is prevalent in the field of education as teachers and administrators often compare salary and benefits between districts and states. Theorists, such as Hulin and Blood (1968) have argued that the understanding of the groups to whom the individuals relate is critical to understanding job satisfaction.

Needs/Fulfillment Theory

Fulfillment theorists believed that people's satisfaction is a function of how much of a reward or outcome they are receiving for their work. Theorists simply viewed satisfaction depending on how much of a given outcome or group of outcomes a person receives (Lawler, 1994). The weakness of this theory was that in the researchers failing to take into account the individual-difference factors of a person. The individual-difference factor is how people feel about what they receive and what outcomes they feel they should receive for their work. A person who expects to be paid more for their work is more likely to be dissatisfied than someone who feels that he is paid adequately for his work. "Individual-difference factors suggest that the fulfillment-theory approach to job satisfaction is not valid, since this approach fails to take into account differences in people's feelings about what the outcomes they should receive" (Lawler, p.83).

Theorists believed that satisfaction is determined by the differences between the actual outcomes a person receives and some other outcome level. They would say that what is received should be compared with another outcome level, and when the outcome level is below the other outcome level, dissatisfaction results (Lawler, 1994). This theory is clearly evident in teacher salaries. Teachers who feel their salaries or benefits are below the state or regional level become dissatisfied with their employer.

Vroom (1964) developed two forms of need fulfillment theory. The first model was the subtractive model which states that job satisfaction is negatively related to the degree of discrepancy between what the worker needs and the extent to which the job meets those needs. His second model is the multiplicative model in which the need for importance is taken into account by multiplying the perceived amount of need fulfillment offered by the job by the importance of the individual of that need (Gruneberg, 1979).

Work Adjustment Theory

In 1964, the first version of work adjustment theory was published by Dawis, England, and Lofquist. The theory was revised in 1968, and extended forms of the theory were published in book form in 1969 (Lofquist & Dawis, 1969). The theory of work adjustment is based on the concept of correspondence between the individual and environment (Dawis & Lofquist, 1984). This theory includes a basic assumption that the individual seeks to achieve and to maintain correspondence with the environment. While many kinds of environments exist for an individual – home, school, work, church – to which an individual must relate, achieving and maintaining correspondence with one environment may affect the correspondence with other environments. Work then represents one such environment in which one must relate. Satisfaction then indicates the correspondence between the individual and the work environment (Dawis & Lofquist, 1984).

Dawis, England and Lofquist (1964) formulated a theory of vocational psychology that was based on the idea that the individual is a responding organism. As individuals respond to their environment, their responding becomes associated with reinforcers in the environment. Dawis et al. (1964) summarized the theory of work adjustment in the following statements:

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 tenure, 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).

Looking at these seven summary statements of work adjustment it is easy to see why many researchers use this instrument when exploring aspects of job satisfaction (Chen, 2000; Genzen, 1993; Sutter, 1994; Waskiewicz, 1999). Each of the seven statements adds to the concept that individuals act, react, and come to terms with their work environment thus adjusting to the work environment.

Variables of Job Satisfaction

Some research has been completed on principals' job satisfaction and the relationship to specific characteristics. Throughout the research, little consistency is apparent in the findings. The characteristics most often examined include: age, gender, salary, number of assistant principals, experience, tenure, school socio-economic level, school size, and school accreditation status.

In 1966, Klien and Maher use Herzberg's theories to complete a study of educational level, pay, and job satisfaction. Using an attitude questionnaire, Klien and Maher, surveyed 727 first-level managers of an electronics manufacturing population. Using a simple t test, they found that there was a negative relationship between education and job satisfaction ($M=2.64$, $SD=.94$), $p<.001$.

One of the studies in education, using Herzberg's theory, was conducted by Friesen, Holdaway and Rice (1983). They surveyed 410 principals from Alberta, Canada. The principals were given a questionnaire that asked them two main questions: (a) what two factors contribute most to your overall satisfaction with the principalship? And (b) which two factors contribute most to your overall dissatisfaction with the principalship? They reported that the major characteristics of satisfaction for the principals they studied were: (a) interpersonal relationships; (b) achievement; and (c) responsibility/job autonomy. They also reported that student attitudes and performance, job challenge, recognition and status, and job importance had secondary significance in terms of satisfaction. Friesen, Holdaway and Rice also reported the highest characteristics of job dissatisfaction as: (a) relationships with parents; (b) amount of work; (c) overall constraints; (d) attitudes of society; and (e) working conditions.

Age

Age is an important variable because employees of any organization usually vary in ages thus age is often studied by researchers looking at job satisfaction. Herzberg et al. (1957) studied age relative to job satisfaction and found that job satisfaction for a younger worker starts high at the beginning of the career, declines, and then starts to rise again with increased age. The U-shaped curve result that shows the relationship between job satisfaction and age starting high, declining, and then starting to improve again were also found in a study by Kacmar and Ferris (1989)

In 1985, Penn studied selected black school administrators in Virginia using Herzberg's Motivation Hygiene Theory to identify satisfiers and dissatisfies of their job. Penn also attempted to determine if there was a relationship between age, tenure, size of pupil enrollment, and other demographic variables and job satisfaction or dissatisfaction among black administrators.

Penn used a taped phone interview to survey forty-one of the 53 possible black administrators identified for the study. He found that black school administrators identified achievement, recognition, work itself, and responsibility as significant motivators and school district policy and administration as a significant hygiene factor. Penn also found that none of the demographic factors used in the study were significantly related to the identification of motivators and hygiene factors of black administrators in Virginia. For example, salary resulted in a chi square of .188 and to be significant, a chi square of 3.84 was required. The results were similar for all demographic factors.

Other classic studies have looked at age and job satisfaction (Saleh & Otis, 1964); however more recently, Lim (1985) studied job satisfaction among educators and found that older, more experienced school administrators and teachers were more satisfied than younger, less experienced administrators and teachers. Brush, Moch, and Pooyan (1987) analyzed 19 studies that found a correlation between age and job satisfaction. Their syntheses indicated that age and job satisfaction are related and that job satisfaction increases with age.

Tenure (Years in current school district)

Tenure and age are often similar from a research perspective. If a principal has a long tenure in a district they tend to be older. Putting age aside it would be interesting to see if job satisfaction increases or decreases with length of service in one district.

Very little research has been developed that explores the relationship of tenure in a school district and job satisfaction. Brady (2001) found in her study of California principals that the length of years in current position relates to principals perceived job performance and overall job satisfaction. Brady theorized that principals who stayed in their current position the longest most likely stayed due to high job satisfaction and perceived job performance. While Brady's study did not prove this theory the study left open the possible discussion of the tenure as it relates to job satisfaction. It would be an interesting component of the proposed research to use tenure in the current position as a criterion variable as a predictor of job satisfaction.

Education Experience

Education experience is interesting as one looks at the job satisfaction of newer principals versus the job satisfaction of more experienced principals. Sutter (1994) studied secondary assistant principals, in Ohio, to determine the relationship between job satisfaction and administrative experience. He found no significant relationship between job satisfaction and experience. Bridges (1995) conducted a similar study using assistant principals and also found no relationship between experience and job satisfaction. Newby (1999) also found no significance between job satisfaction and experience level in her study of middle school principals in Virginia. The studies that have shown a significant difference between education level and job satisfaction have not been done in an education setting (Klien & Maher, 1966; Quinn, Graham, & McCullough, 1974).

Gender

Many people take for granted the idea that most people, male and female, will hold down a job for much of their lives. Gender however has long been a factor in many aspects of human existence such as child rearing, voting rights, military participation and in the workforce. Recently, technological and industrial change has played a major role in what kinds of jobs are available to both men and women. (Figart, Mutari, and Power, 2002)

Gender issues in education administration have only recently come to the forefront of research due to the increases in females in administrative positions. Virginia high schools still have a large majority of male principals at the high school level; still it would be interesting to investigate the differences between the levels of job satisfaction among male and female principals to determine which variables contribute to the job satisfaction of male and female principals. Eckhman (2002) conducted a study that suggests that in order for schools to recruit

and to retain female principals, the schools must give consideration to the role conflict, role commitment, and job satisfaction of high school female principals. Looking at this variable in Virginia will give insight to the levels of job satisfaction among Virginia female high school principals.

There have been a number of studies investigating gender differences and job satisfaction (Hulin & Smith, 1964; Poole, 1992; Vaughn-Wiles, 1987). While most studies use gender as a predictor variable, they report little or no significance as related to job satisfaction (McCann, 2002; Newby, 1999).

Salary

A person's salary is often linked to one's level of achievement and success. Hoppock (1977) suggested that a significant difference exists in the average salaries of the most satisfied and the least satisfied teachers. Those teachers who earn higher salaries were more satisfied than those who had low-income earnings. The findings of Hoppock were supported by a study conducted by Porter and Lawler (1968). They concluded that job satisfaction reflects the rewards (salary) the employees get for the type of work they do. Other classic studies suggest a positive correlation between job satisfactions and pay (Blanchflower, Oswald, & Warr, 1993; Schwab & Wallace, 1974). More recently Kim & Loadman (1994) conducted a study of 2054 practicing classroom teachers. They found that job satisfaction and pay satisfaction were significantly related. Tablature (2002) in his dissertation study found that urban, suburban, and rural principals were not satisfied with how well they are compensated, thus salary was determined to be a factor in job satisfaction. Barry (2002) reported that among 173 Michigan high school principals surveyed during the 2000-2001 school year, those principals who were paid more, were more satisfied with their work.

School Size

School size refers to the number of students enrolled in the identified school location. With an increase in school size comes more extra and co-curricular activities and thus more supervisory responsibilities and more activities to monitor. In his dissertation, Armstrong (2001) hypothesized that as school size increases, levels of job satisfaction among principal's decreases. For his study, Armstrong used a questionnaire, which he distributed to a random sample of 20 high school principals from each of four size classifications in Missouri. Bradley found that the principals of schools with student populations from 188 to 1,026 were the most satisfied with

their jobs and the principals of the schools in the largest class size (1,027 and above), were the least satisfied. For these reasons, the researcher felt that it would be an interesting component of the study to look at this topic of school size as a predictor variable for job satisfaction.

Barry (2002) conducted a survey of 173 high school principals in Michigan during the 2001-2002 school year. He reported that principals in large high schools (class A) had a higher satisfaction with promotion and overall satisfaction than those principals in smaller schools (class C).

Number of Assistant Principals

Very little documented research supports the idea that principal job satisfaction can be attributed to the number of assistant principals at the school. However, experience would tell that the more help a principal has to run the building and to assist with the operation of the school, the more likely the principal will have a higher level of job satisfaction. On the converse side, having more assistant principals can be a problem in more supervision and training of the assistant principals. In a study of principals in Virginia, two thirds of the principals who responded to the survey reported that they had neither sufficient time or personnel (i.e., assistant principals) to fulfill the mandated expectations of and instructional leader (DiPaola & Tschannen-Moran, 2003).

School Socio-Economics

For the most part, studies of job satisfaction among principals avoid the variable of school location or school socio-economic status. Instead, most studies choose to focus on issues of age, gender, and degree status. However, in a study conducted by Derlin and Schneider (1994) they surveyed 326 urban and suburban principals to determine their level of job satisfaction. They found that job satisfaction for suburban principals and location was more influential than for urban principals.

Sablatura (2002) investigated how public school principals in Texas view job satisfaction as it relates to school location. Sablatura's objective was to examine how job satisfaction is perceived and the differences of those perceptions among urban, suburban, and rural principals. He found that there were similar levels of job satisfaction among the variables of achievement, the work itself, compensation, and relationships with stakeholders. There were differences in job satisfaction in regards to advancement opportunities, supervision, recognition, responsibility, social status, and job security.

Percent of Time Spent with Students

One variable missing from the research is the idea of interaction with students. Considering that the foremost focus of any education institution is the students, it is interesting to note that most of the studies completed leave out the aspect of student interaction. In a study conducted with high school principals in Texas, principals rated enjoying contact with students and having an opportunity to impact students as the two highest positive aspects of their jobs (Malone, Sharp, & Walter, 2001). Teaching has many positive aspects, but probably the greatest aspect is helping students learn, seeing them achieve, and building lasting relationships that extend beyond the classroom (Hounshell & Griffin, 1989). Ron Clark, 2001 Disney Teacher of the Year Award winner offers these four key points in dealing with children: (a) students need structure; (b) students will work hard for you, if they like who you are as a person; (c) students like to know what is expected of them, and (d) students like to know they are cared for (Clark, 2003). If principals are expected to lead the learning and guide teachers, then it is reasonable to expect principals to help students learn and achieve, give students structure, care for the students and build relationships with students.

School Accreditation Status

More than ever in the history of education, schools are being required to meet standards and levels of accountability for educating students. Principals are being asked to know the standards, align instructional programs, know the state assessments, and analyze and disaggregate data to ensure their school meets the requirements of the state and federal government (Thomas, 2002).

In Virginia, the Virginia Standards of Learning tests and accreditation of schools as a result of the tests have given rise to a new stress on principals. Principals must not only lead the learning, but also ensure that their schools maintain test scores and make Adequate Yearly Progress, a minimum level of improvement on state assessments from year to year (Ross, 2003). The Virginia Department of Education's website offers the following guidelines for use of time under school reform. According to the website the school principal should ensure that the following indicators are in place with regards to instructional time:

- Structuring classroom instructional time to maintain an academic focus throughout the entire lesson,

- Arranging classroom instructional time to allow for a variety of instructional activities,
- Teachers planning and collaborating on instructional issues,
- Regularly monitoring the use of instructional time in classrooms,
- Using instructional time to implement specific instructional models, in certain subject areas, as prescribed by model developers,
- Minimal interruption of instructional time, and
- Pacing of the curriculum as it is taught reflects the SOL Test Blueprints and guides teachers in the use of time needed to teach concepts and skills in the SOL.

In the era of accountability principals are called upon to develop school schedules that maximize instruction. The Virginia Department of Education also offers the following guidelines for school scheduling under school reform.

- Meeting Standards Of Accreditation (SOA) requirements for length of school year, length of school day, and number of hours of instruction in core areas,
- Allocation of resources to extend learning time beyond the regular school day,
- Utilizing a school schedule that is conducive to providing intervention and remediation strategies within the school day, and
- Scheduling non-academic events to minimally impact instructional time (www.pen.k12.va.us/VDOE/Publications/schcnt.htm).

With these recommendations from the Virginia Department of Education, it is easy to see the newly increased pressure on the principals to insure that school schedules and instruction are appropriately practiced within the school. Failure to do either of these two job components most certainly will lead to a principal's dismissal.

Principals and Job Satisfaction

The six job dimensions and ten hygiene factors theorized by Herzberg (1968) have been commonly used in educational job satisfaction research; however, to this point little research has been done in the United States specifically on high school principal job satisfaction. There have been some studies completed at the secondary level in Canada, England and Australia (Friesen et al, 1983; Gunn & Holdaway, 1986). These studies do not provide much insight to this research since the education systems, the populations, and roles of the principals are different.

A study conducted by Brian Harvey and Honore France (1997), suggested that an employee can be both satisfied and unsatisfied within a specific job. They conducted a study using 53 men and 48 women in graduate-level education administration courses at the University of Victoria (Canada). Fifty of the subjects were working exclusively in administration; the others were working in a teaching/administrative role, but anticipated working full time in administration after graduate degree completion. The authors used the Manifest Needs Questionnaire (MNQ) developed by Steers and Braunstein (1976) to measure achievement, autonomy, affiliation, and dominance that education administrators express on the job and the current satisfaction that education administrators experience on the job. The data collected from the MNQ indicates interrelationships among the four need subscales and a collection of job characteristics (i.e. job performance, work attitudes, organizational attachment, leadership attributes). Obtaining satisfactory levels of internal and external consistency have made the MNQ a productive instrument for both overall personality and specific need expression on the job.

Harvey and France (1997) used correlations to measure interrelationships between subscale on the MNQ and sex, age, years of teaching experience, years of administrative experience and 23 characteristics present in the job. Not surprisingly, the authors found no significant differences (3.15 up to 3.46), $.10 < -p < .15$, in the sub-scales of gender, age, years of teaching experience. This study was limited in the respect that all the subjects surveyed were in a graduate program for educational leadership. One might expect that these subjects would be satisfied with their jobs, or they probably would not be in a graduate program.

The interesting part of the survey was that the authors reported that this group indicated an overall satisfaction was most highly related to security, freedom, and variety on the job, $p < .05$. This would be a good study to compare to a survey of high school principals in Virginia. Since the study as completed was done with a very homogenous group, it would be interesting to see if a repeat of the study with a diverse group would provide different results.

Using the Minnesota Satisfaction Questionnaire as her research instrument, Newby (1999) randomly selected 188 middle school principals in Virginia to answer the survey on job satisfaction. Newby was attempting to answer three questions: (a) what was the general level of satisfaction among middle school principals; (b) what is the satisfaction level for each of the 20 dimensions of the job measured by the Minnesota Satisfaction Questionnaire; and (c) what is the

satisfaction for each dimension according to the demographic variables: gender, age, degree, years of experience, school location, and school size.

Newby reported that middle school principals in Virginia were generally satisfied with their jobs. She reported that the mean satisfaction score was 3.65 on a scale of 1.00 (not satisfied) to 5.00 (extremely satisfied). She also reported similar results for each of the 20 dimensions measured by the MSQ.

One criticism of the Newby study was the selection method used and the lack of follow-up to gain data from nonrespondents. The author compiled data only on those surveys that were voluntarily returned. She reported that 70% of the surveys were returned, which is good for a mailed survey; however, the author gave no indication of an attempt to get the 30% non-returns. Newby seemed satisfied to draw the conclusions based on those who responded. The 30% who failed to return the survey may have made a difference in the final totals. Newby could have conducted a random sample and phone follow up to collect data from nonrespondents. Then the data for nonrespondents could be compared to the other group to see if theirs differed significantly.

A second criticism of this study was the small numbers distributions in some areas of demographics. These small numbers may have led to false significance as a result of unbalanced cells in the running of the ANOVA. For example, Newby reported that the youngest group of principals surveyed obtained the highest mean and that general satisfaction began to decline as principals reached the middle age groups. She further reports that after age 55, satisfaction began to increase again. Upon closer inspection, the youngest respondents numbered 34, and the oldest respondents numbered 10, while the middle aged group numbered 82. Newby reported this information as significant without giving any consideration that the significance can be attributed to artifact error created by unbalanced cells and not actual significance.

Sutter (1994) conducted a study of 632 secondary assistant principals employed in Ohio during the 1993-1994 school year, using The Minnesota Satisfaction Questionnaire. Sutter found that assistant principals who believed they were accomplishing much on the job reported a higher level of satisfaction compared to assistant principals who believed they were accomplishing less. Sutter also found that assistant principals who believed there would be opportunities for advancement within their school system were found to have significantly higher, $p=0.01$, levels of job satisfaction compared to those who didn't believe those opportunities existed. Also,

assistant principals who felt their talents and skills were being utilized on their job had a higher level of job satisfaction than those who did not hold this belief. Finally, Sutter reported that assistant principals who wanted to become principals were found to have significantly higher, $p=0.01$, levels of job satisfaction compared to those principals who did not aspire to be principals.

In 2000, Kuei-Lung Chen conducted a study using the MSQ in which he studied 245 assistant principals in Mississippi to determine the degree of general, intrinsic, and extrinsic job satisfaction among high school assistant principals. Chen mailed a survey to the subjects and used the results to conduct a series of ANOVA. His results showed a high degree of general, intrinsic, and extrinsic job satisfaction among the assistant principals. Compensation and workload were the only factors receiving a less than 50% satisfaction rating. Chen also reported no significant relationship in two specific variables examined in the study: (a) length of time worked as an assistant principal, and (b) school size in terms of student enrollment.

In 1990, Profitt conducted a study that tested the relationship between locus of control and job satisfaction of Appalachian principals of West Virginia, Virginia, Kentucky, and Tennessee. Profitt hypothesized that the Appalachian principals with predominately internal loci of control will have significantly higher levels of job satisfaction than those principals with external loci of control. Profitt also hypothesized that these same principals with predominantly internal loci of control would have significantly higher levels of extrinsic job satisfaction than those same principals with external loci of control.

To test these hypotheses Profitt (1990) took a random sample ($n = 333$) of the population ($N = 2,649$) and administered the Adult Nowicki-Strickland Internal-External Scale (ANSIE) to measure locus of control and the Mohrman-Cooke-Mohramn Job Satisfaction Scale. The author then used an ANOVA to test the two-directional hypotheses that guided the study. Profitt set an alpha level of 0.05 as the criterion level of significance for this study.

Profitt (1990) found a statistically significant relationship between internal loci of control and intrinsic job satisfaction of Appalachian principals in the states of West Virginia, Virginia, Kentucky, and Tennessee. Profitt also reported that female principals of the Appalachian counties experienced significantly higher levels of intrinsic job satisfaction than their male colleagues. He also reported that those same principals who made in excess of \$40,000 annually experience a high level of extrinsic job satisfaction.

The main limitation of this study is the inherent weakness of using an Internal/External locus of control (I/E) instrument. Also, Profitt chose only to correlate gender and salaries with the I/E instrument. He failed to look at age, years experience or school size. Also, Profitt grouped all principals together. He also made no differentiation in his results regarding elementary or high school. With a high concentration of female principals in the elementary school he should have reported gender as well as school level. This would have given the study a clearer picture on gender. Another limitation of this study was that the entire study was conducted in a rural setting. Although this was the design of the study, it is also a limitation since it limits the inferences that can be drawn from sample to populations other than the rural population.

Smith (1976) studied job satisfaction of Connecticut public senior high school principals as related to school location and school size. Smith's purpose for this study was to determine the level of job satisfaction among current Connecticut public senior high school principals, to determine if job satisfaction of these principals differed according to location or size of school, and to see if certain personal demographic variables could be used as predictors of principals' job satisfaction.

For his study, Smith used the Minnesota Satisfaction Questionnaire (Long Form, Adapted) and a demographic data sheet to survey 143 senior high school principals of which 93% responded ($n = 133$). Smith found that Connecticut public school senior high principals could be described as very satisfied with their jobs ($M = 77.5$, in a range of 0-100). Smith also reported that with regards to school size these same principals could be described as very satisfied with their overall job situations regardless of school size (Large school $M = 78.088$, medium school $M = 78.062$, and small school $M = 79.147$). Smith's results showed that all groups of principals unanimously ranked social service, moral values, activity, and achievement at the high end of the satisfaction continuum.

The main limitation of Smith's study was in the design itself. By limiting the study to school size and location relative to job satisfaction, Smith discovered a high level of job satisfaction and had little left to report. Additionally, when one looks at the data of 1975, the principals surveyed were a highly homogeneous group; 97% male, 95 % married, 98% white, 50% age 40 to 49, 57% Catholic. A replication of this study today probably would reveal drastically different demographic data.

Watson (1991) studied job satisfaction among secondary principals in California. Watson sent 97 secondary school principals a questionnaire. She reported that the majority of the principals (87%) were satisfied with their job, 10% were extremely satisfied with their jobs and 3% were less than satisfied. Watson also reported no significant difference for job satisfaction as related to nine independent variables: orientation, age, gender, ethnicity, salary, years as a secondary principal, schools structure, school population, and district size.

The main limitation of the Watson study was the homogeneous group in which she researched. Her sample was too small and homogeneous making it difficult to draw conclusive results: 82% male, 92% white, and 61% in the age range of 45 to 54.

Summary

The chapter two review of literature explained several historic theories of job satisfaction. Among these theories were: (a) fulfillment theory, (b) equity theory, (c) discrepancy theory, (d) two-factor theory, (e) motivator/hygiene theory, and (f) work adjustment theory. The literature review also looked at the importance of the variables: age, tenure, education experience, gender, salary, school size, number of assistant principals, school socio-economic status, and school accreditation status. Finally, various studies conducted with regards to principal satisfaction were analyzed.

CHAPTER THREE

DESIGN AND METHOD FOR GATHERING DATA

The purpose of this study was to investigate the aspects of job satisfaction of high school principals in Virginia. Further, the results from this study provided information on the relationship of some school and personal demographics of high school principals to their job satisfaction. Chapter three contains the problem statement, research questions, a description of the population, the procedure for data collection, the instrumentation and the proposed data analysis. The research design of this study is descriptive. Descriptive statistics are used to describe the sample and look for the variability among this data and to determine how closely the data are related (Leedy & Ormrod, 2001). With the principal shortage in mind, and the escalating challenges of being a principal, the main research question for this descriptive study is: Are principals satisfied with their jobs?

Research Methodologies

Subjects

The population for this study was all 302 public high school principals as identified by the Virginia High School League Directory for the 2003-2004 school year. Total number of principals who were asked to participate via e-mail was 289. Thirteen principals did not have usable e-mail addresses. The method for gathering data was a two-part survey using the internet as a means of contacting principals using the Virginia Tech survey maker. The Virginia Tech survey maker is a service provided by the university that allows students to create surveys, publicize the survey, and collect data. The data collected from this study was downloaded into SSPS files for analysis. The download was imported from the Virginia Tech survey maker as a text file which had to be recoded into usable data before the analysis.

The benefits of the internet survey for the respondents was that they controlled the questions' pace and sequence and were able to read ahead to get a picture of the overall length and context of the survey. Another benefit for the respondents of the internet survey was that respondents had the opportunity to complete the survey at their school or residence, whereas accomplishing this through mail would double the cost to the researcher. To complete the survey at home, however, the respondents had to forward the survey to their residence themselves, as the Virginia High School Directory only listed a school e-mail address. As with any self paced

survey, respondents could also answer the questions unbiased by an interviewer and respond at any time of their own choosing (Salant & Dillman, 1994).

The benefits of the internet survey for the researcher were several. First, the delivery and response time was greatly decreased. Total time to conduct this survey was not significantly reduced; only the delivery time of traditional mail and response time were reduced. The time spent preparing the survey, e-mailing the survey, and conducting the follow-up was comparable to traditionally mailed surveys (Schonlau, Fricker, & Elliott, 2002).

Secondly, the cost of conducting the research was greatly reduced. The first savings was in postage; only the first mailing had a postage cost. The original e-mail and all three of the follow-up contacts via e-mail were free from postage cost. The second savings was gained due to the designers of the MSQ only requiring the researcher to pay royalties based on the response rate. The researcher only had to pay for those surveys that were responded to, not for all e-mails sent out; thus, a large savings over traditionally mailed surveys in which each printed survey would have been a cost.

Third, the coded time for the returns was eliminated. Because the data was collected via the Virginia Tech survey maker, the return data was able to be directly downloaded into an SPSS text file. The researcher did not have to spend any time inputting the returns into the SPSS file; that step was done by the respondents via the survey maker.

To gain a high response rate, Salant & Dillman (1994) suggested that the subjects be contacted in four stages. In December 2003, all members of the population were sent a personalized, advance notice letter. The purpose of such a letter was to inform the participants that they had been selected to participate in an internet survey on job satisfaction. Two weeks later the subjects were sent a personalized e-mail. The e-mail contained a personal message and a direct link to the survey. A week after the e-mails were sent out, a follow-up e-mail was sent to all subjects who had failed to respond, requesting that they respond to the survey. For the fourth contact, two weeks after the first e-mail a letter went out, everyone who had not responded was sent another personalized letter e-mail with a direct link to the survey. Dillman (2000) suggested a final contact be made in a week or so after the fourth contact. A final e-mail was sent out just prior to the closing of the survey, allowing the principals one final opportunity to participate in the survey. Again, this e-mail contained a personal message with a direct link to the survey

maker at Virginia Tech. Dillman stated: “A special contact of this type improves the overall response rate to mail surveys” (p. 151).

After all the data was collected, it was important to determine the significance of the nonrespondents to minimize the nonresponse error. There are three acceptable methods of checking for nonresponse bias: (a) compare respondents to population, (b) compare early to late respondents, and (c) compare respondents and nonrespondents (Ary, Jacobs, & Razavieh, 2002).

The first method of comparison has the researcher compare the respondents to the population of high school principals in Virginia. To utilize this technique data, would have to be available for the entire group of principals so that a comparison could be made between the characteristics of the respondents and those of the entire population. Since this data was not available and was part of the survey itself, this method did not lend itself to this study.

A second method of accounting for non-response bias was to compare the early respondents to late respondents. Research has shown that nonrespondents are often similar to late respondents (Goldhor, 1974). Prior to the comparison, the respondents were categorized into early and late groups. Once categorized, the groups were compared to check for significant differences. If no significant differences appeared between the early and late respondents, and the late respondents were assumed to be typical of nonrespondents, then an assumption could be made that the respondents were an unbiased sample of the population being studied (Ary et al., 2002).

A third method used to deal with non-response bias was to compare the respondents to the nonrespondents. To do this a small random sample of nonrespondents (10% of the nonrespondents) were telephoned and the survey was conducted by phone. The mean responses of the nonrespondents were then compared to the respondents to determine if the groups differed significantly. If no significant differences were found when the responses of the initial respondents were compared to those of the interview sample then it could be assumed that the respondents represented an unbiased sample of the population (Ary, et. al., 2002).

For this study the second method was utilized. The total response rate of 63.3% was divided into early and late respondents. The last 10% of the respondents (18 principals) were compared to the other respondents (165 principals). The mean score for total satisfaction for the 18 late respondents was 68.56 (on a 20 to 100 scale) as compared to 69.07 for the first 163 principals who responded. Because no significant difference in mean scores was found between

the late respondents and the early respondents, it was concluded that there was likely no non-response bias in this study (Ary et al., 2002).

Instrumentation

The instrumentation for this study was a two part self-administered Web-based survey. Part one was an individual data page and part two was the Minnesota Satisfaction Questionnaire (MSQ) long form. Putting the data page first served two purposes. First, it gave the respondent easy questions to start the survey. Second, it reduced the likelihood of the respondents forgoing the demographic data if the data page had been located at the end of the survey (Dillman, 2000). It should be noted that the MSQ authors required that certain data be asked so that the MSQ designers may use the survey findings for future research. Both the demographics survey and sample questions from the MSQ can be found in Appendix A.

Individual data sheets.

An individual data sheet was used to gather data about selected characteristics of the respondents. These characteristics were based on the literature that identified these characteristics as primarily related to job satisfaction or items that would help provide a description of the subjects such as age, gender, and race. By discovering the relationships of personal characteristics and job related variables to job satisfaction, we could learn more about what actually accounts for principal's job satisfaction and how to improve their job satisfaction. These variables are listed and defined as the following:

Gender – refers to the sex of the respondent. This variable was measured by asking the respondents to select “male” or “female”

Age – refers to the length of life for each respondent. This variable was measured by asking the respondents to select their age from the following ranges: Younger than 35, 36 to 45, 46 to 55, Older than 55.

Salary – refers to the amount of compensation given to each respondent for their employment. Respondents were asked to choose their salary range from a given the following set of salary ranges: Less than \$50,000, \$50,000 to \$75,000, \$75,000 to \$100,000, More than \$100,000.

Number of assistant principals – refers to the total number of assistants the principal works with in the building. Respondents were asked to choose a number of assistant principals that work for them from zero to five or more.

Years as a principal – refers to the total years of experience as a principal. This variable was measured by asking respondents to choose from the following ranges: 1 to 3, 4 to 6, 7 to 9, 10 to 15, 15 or more.

Years in current school district – refers to the total years the respondent has spent employed in current school district. This variable was measured by asking respondents to choose from the following ranges: 1 to 3, 4 to 6, 7 to 9, 10 to 15, 15 or more.

Percentage of time spent with students – refers to the estimated time principals spend directly with students. This would include supervision, observations, or activities that put the principal in direct contact with students. This variable was measured by asking the respondents to choose from the following range: Less than 10%, 11 to 20%, 21 to 30%, 31 to 40%, 41 to 50%, more than 50%.

School socio-economic status – refers to the percent of students eligible for free and reduced price lunch in the school. This variable was measured by the respondent indicating a percentage from less than 10%, 11 to 20%, 21 to 30%, 31 to 40%, 41 to 50%, and more than 50%.

School size – refers to school enrollment. The respondents were asked to select an enrollment size from a list of ranges: Less than 400, 401 to 800, 801 to 1200, 1201 to 1600, 1601-2000, more than 2001.

School accreditation status – refers to the status given to each school by the Virginia Department of Education. The respondents selected between four choices as given by the Virginia State Department of Education based on the 2002-2003 tests: Fully Accredited, Provisionally Accredited Meets State Standards, Provisionally Accredited Needs Improvement, and Accredited with Warning (www.pen.k12.va.us/VDOE/Accountability).

Adequate Yearly Progress (AYP) – refers to the status given to each school by the state based on the federal guidelines of No Child Left Behind. The respondents selected between “yes” or “no” based on whether their school made Adequate Yearly Progress or not.

The Minnesota Satisfaction Questionnaire (MSQ).

Research data for this study was obtained through the use of the long form of the Minnesota Satisfaction Questionnaire (MSQ) (1977 revision). The MSQ is a classic research tool in job satisfaction research and has been used in many research studies (Newby, 1999, Smith, 1976, Sutter, 1994). The Work Adjustment Project of the Industrial Relations Center at the University of Minnesota developed the MSQ. The MSQ was based on the theory of work

adjustment that began in 1957 and first published in 1964 by George England, Rene Dawis, and Lloyd Lofquist (Dawis et al., 1964). It was revised in 1968 with David Weiss and revised again in 1969 and 1977. These studies that began in 1957 had two objectives: the development of diagnostic tools for assessing the work adjustment “potential” of applicants for vocational rehabilitation, and the evaluation of work adjustment outcomes (Dawis, Weiss, England, and Lofquist, 1967). The authors utilized the original instrument to collect normative data for 21 MSQ scales for 25 occupations including bookkeepers, laborers, typists, engineers, managers, and teachers (Dawis & Lofquist, 1984).

The Minnesota Satisfaction Questionnaire (MSQ), Vocational Psychology Research, the University of Minnesota, 1977 is designed to measure a level of 20 needs dimensions. The instrument contains 100 items with five items comprising each of 20 different sub-scales and is self-administered in 15 to 20 minutes. The items appear in blocks of 20 so that items for each sub-scale appear at 20 item intervals. The MSQ scales, which represent the twenty dimensions of the job, are described below (Dawis & Lofquist, 1984).

1. Ability utilization – The chance to do something that makes use of abilities
2. Achievement – The feeling of accomplishment one gets from the job
3. Activity – Being able to keep busy all the time
4. Advancement – The chances for advancement on this job
5. Authority – The chance to tell other people what to do
6. Company policies and procedures – The way company policies are implemented
7. Compensation – Feelings about pay in contrast to the amount of work completed
8. Coworkers – How one gets along with coworkers
9. Creativity – The opportunity to try one’s own methods
10. Independence – The opportunity to work autonomously
11. Moral Values – The opportunity to do things that do not run counter to one’s beliefs
12. Recognition – Being recognized for a job well done
13. Responsibility – The freedom to implement one’s judgment
14. Security – The way a job provides for steady employment
15. Social Service – Being able to do things in a service to others
16. Social Status – Having respect for the community
17. Supervision – The relationship between supervisors and employees

18. Supervision-technical – The technical quality of supervision
19. Variety – The opportunity to do different things
20. Working Conditions – Physical aspects of one’s place of employment

The MSQ is used to measure relative satisfaction to select job characteristics. The respondents were given the choice, “On my present job, this is how I feel about” And responded: Not satisfied, only slightly satisfied, satisfied, very satisfied, or extremely satisfied (Dawis & Lofquist, 1984). A five-point Likert format was used to record responses. In addition, a total satisfaction score for the instrument was computed.

Reliability

The Minnesota Satisfaction Questionnaire has undergone extensive analysis and has been found to be a reliable measure of general satisfaction (Weiss, Dawis, England, & Lofquist, 1967). Reliability is the measure to determine that if the same MSQ is applied to the same individual in the same manner, then it should yield the same value from moment to moment, provided that nothing has changed in the meantime (Guilford & Fruchter, 1978). Two measures of reliability were used: internal consistency and stability. Internal consistency was measured by using Hoyt’s method of analysis of variance, which showed a reliability coefficient for 83 % of the groups at .80 or larger and only 2.5 % lower than .70. This data suggested that the MSQ scales have internal consistency reliability (Weiss et al. 1967).

Validity

Evidence for the validity of the MSQ is derived mainly from its performing according to expectations, or its construct validity. Construct validity is the extent to which an instrument can be shown to measure the construct being studied. (Gall, Gall, & Borg, 2003). Evidence of concurrent validity of the MSQ was collected from 25 occupational groups (n = 2,955). The analysis revealed group differences were statistically significant at .001 levels for both means and variances on all 20 dimensions of the MSQ (Weiss et al., 1967).

Method of Analysis

The data analysis for this study was conducted to respond to each research question. A descriptive analysis for each variable was then completed. This descriptive analysis included means, standard deviations and a range of scores.

For each of the proposed research questions, there was a proposed method of analysis. The following paragraphs state the research question, along with the method of measurement and the method of analysis.

1. What is the general satisfaction level of high school principals in Virginia as measured by the Minnesota Satisfaction Questionnaire (MSQ)?

To answer the first research question, a frequency table was developed by summing the scores for 20 specific items on the MSQ. These 20 items were analyzed using the 5 point Likert Scale. Each respondent had five options in which to choose as a response to the items on the MSQ. The five options and the values were:

Weight	Scale Option
1	Not Satisfied
2	Slightly Satisfied
3	Satisfied
4	Very Satisfied
5	Extremely Satisfied

Using the five point scale a mean general satisfaction score for principals fell in the range of 20 to 100.

2. What is the satisfaction level of high school principals in Virginia according to the following demographic variables: gender, age, level of education, salary level, years of experience, number of assistant principals, years in current school district, time spend directly with students, school socio-economic level, school size, and accreditation status?

Each demographic variable was reported by variable category with overall job satisfaction using the same 20 specific items on the MSQ. For example, years of experience ranges were reported along with overall satisfaction for each age range. The scores reported fell between a range of 20 and 100 and was presented in table format.

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?

Using the Likert Scale, the frequency of responses for each of the 20 dimensions of the MSQ and general satisfaction of the high school principals surveyed was reported and presented in table format. Each of 20 dimensions had a number score falling between the range of 5 and 20.

4. What demographic variables would be the best predictors of job satisfaction among high school principals in Virginia?

The method of analysis for this research question was a step-wise multiple regression. By using a step-wise multiple regression, the researcher determined the extent, if any, that the independent variables played a role in explaining the level of satisfaction of principals in this study. Multiple regression is a recognized statistical procedure for determining the relationship between a criterion variable (job satisfaction) and two or more predictor variables (gender, age, degree, salary, and years of experience, school location, school size, and accreditation status). Multiple regression is a correlation statistical technique and it is one of the most widely used in educational research because it yields information about the relationships among variables (Gall, Gall & Borg, 2003).

By using a stepwise multiple regression, the researcher looked for a commonality analysis (Pedhazur, 1997). In using the stepwise regression technique, the researcher determined portions of variations that two or more independent variables explain with respect to a dependent variable (Pedhazur). In addition, the researcher explored the relationship between the independent variables and general job satisfaction.

The Statistical Package for the Social Sciences, version 11 (SPSS), was used by the researcher to perform the required calculations. The amount of variance explained by each variable and by the equation was presented.

Summary

This study was an investigation of job satisfaction of High School Principals in Virginia. The researcher further investigated the relationship of job satisfaction as it related to gender, age, level of education, salary level, years of experience, number of assistant principals, years in current school district, school socio-economic level, school size, and accreditation status. The principals who had valid e-mails (n=289) in Virginia were asked to respond to the internet survey during the winter of 2003-2004. A survey uploaded using the Virginia Tech survey maker was used to collect data that included the demographics of the principals and satisfaction levels of the principals using the Minnesota Satisfaction Questionnaire. Data was analyzed using frequency distributions, correlations, ANOVAs, and a multiple regression analysis. It is the hope of the researcher that this survey resulted in valuable information concerning high school principals in Virginia and aspects of their jobs that contribute to overall job satisfaction.

CHAPTER FOUR

FINDINGS

The purpose of this chapter is to present the findings of the analyses of data which were collected in the study of job satisfaction of high school principals in Virginia and to describe the level of satisfaction of the principals. The sections of this chapter are: (a) description of the sample, (b) MSQ Scale reliability analysis, (c) analyses and findings organized by research questions, and (d) other findings. The purpose of this study was to determine the relationship between job satisfaction and personal and professional characteristics among high school principals.

The first part of this chapter contains a report the range of scores for the MSQ rating scale followed by a description of the sample. The description of the sample is focused around a report of the frequency distribution of the demographic variables. The description of the sample also includes a correlation matrix among all demographic variable combinations. Each significant correlation between variable pairs is discussed in regard to direction and relative strength.

The second part of the chapter presents the analyses of variance and regression and findings for each of the research questions that guided this study. Each research question is stated and followed by the findings. The Statistical Package for the Social Sciences version 11.0 was used for all data analysis.

Description of Sample

For this study, 289 of the total 302 high school principals in Virginia who could be contacted via e-mail and were asked to complete a two-part survey via the use of e-mail and the internet. The survey consisted of a set of demographic questions and the 1967 Long-Form Minnesota Satisfaction Questionnaire (MSQ). Thirteen of the possible principals either did not have e-mail addresses or they did not have valid e-mail addresses.

One hundred eighty-three high school principals in Virginia responded to the survey that was conducted via the Internet and the Virginia Tech Survey Maker. The response rate for this study was 63.3 % (n = 183). Table 1 presents the description of the sample for the study by showing each demographic variable with the number (n) of respondents in each category.

The age most reported by the respondents (n = 80, 43.7%) was in the 46 to 55 age range. Seventy-one percent (n = 129) of the respondents were males; 80.9% were white. Nearly half (n

= 84, 45.9%) of the respondents reported earning between \$75,000 and \$100,000. Of the 183 respondents, 66 principals work in schools in which 25% or more of the students are on free and reduced price lunch, and 20.8% of the principals (n = 38) work in schools with a student body size of 401 to 800. Of the principals who responded 44 had two assistant principals and 45 had three assistant principals on staff at their schools. Years of experience varied with 38.3% (n = 70) of the principals having between 1 to 3 years experience, 24.6% (n = 45) having 4 to 6 years experience and (n = 52) 28.4% having 10 to 15 years experience. The breakdown of the respondents for their years of service in their current district shows the largest number of principals (n=79) have been in their district for 1 to 3 years. Forty-one and a half percent of the respondents (n = 76) reported they spend between 21 to 30% of their time with students. The next highest percentage was 11 to 20% (n = 52, 28.4%) of time spent with students. Only 7% of the respondents (n = 13) reported spending less than 10% of their time directly with students. Finally, 77 % of the respondents (n = 141) indicated that their schools were fully accredited under Virginia's Standards of Learning, while only 42 % (n = 76) reported that their school made Adequate Yearly Progress under the Federal No Child Left Behind legislation.

Table 1

Frequency Distributions for Demographic Variables (n=183)

Demographic Variable	N	Percentage
Age		
Younger than 45	51	27.9
46-55	80	43.7
Older than 55	51	27.9
Missing	1	.5
Gender		
Male	129	70.5
Female	52	38.4
Missing	2	1.1
Race		
White	148	80.9
Non-White	33	18.0

Job Satisfaction

Missing	2	1.1
Salary		
Under \$75,000	64	35.0
\$75,000-\$100,000	84	45.9
More than \$100,000	34	18.6
Missing	1	.5
Number of Assistants		
Zero or one	41	22.4
Two	44	24.0
Three	45	24.6
Four	33	18.0
Five or more	20	10.9
Total Years as a Principal		
1-3	70	38.3
4-6	45	24.6
7-9	15	8.2
10-15	52	28.4
Missing	1	.5
Years in Current District		
1-3	79	43.2
4-6	45	24.6
7-9	15	8.2
10-15	52	28.4
% of Time with Students		
Less than 10%	13	7.1
11-20%	52	28.4
21-30%	76	41.5
31-40%	20	10.9
41-50%	20	10.9
% of students on free lunch		
Less than 5%	16	8.7
5-9%	20	10.9
10-14%	31	16.9
15-19%	27	14.8
20-24%	22	12.0
Over 25%	66	36.1

Missing	1	.5
School Size		
Less than 400 students	26	14.2
401 to 800	38	20.8
801 to 1200	32	17.5
1201 to 1600	28	15.3
1601 to 2000	33	18.0
Over 2001 students	26	14.2
VA Accreditation Status		
Fully Accredited	141	77.0
Provisionally Accred. – Meets State	14	7.7
Standards		
Provisionally Accred. – Needs Improvement	23	12.6
Missing	5	2.7
AYP Status		
Yes	76	41.5
No	105	57.4
Missing	2	1.1

All possible correlations among the (dependent and independent variables) were calculated to further describe the data. The correlations indicated several significant relationships between the demographic variables. Table 2 shows the correlation matrix of the demographic variables. It should be noted that correlation does not necessarily indicate causation. When two variables are significantly correlated, the variables are known to be associated with one another, but it does not indicate that if one variable changes it causes another variable to change (Ary et al., 2002).

There is a significant positive correlation ($r = .206, p < .05$) between age and salary, age and total years as a principal, and age and total years in current district. These correlations indicated that the older principals tend to earn more in salary, have been principals longer and have been in their districts longer. There was also a significant positive correlation ($r = .872, p < .05$) between years in current district and total years as principal. This correlation indicates that principals who have been in their districts the longest also have been a principal the longest.

There is also a significant positive correlation ($p < .05$) between salary and student body size ($r = .682$) and salary and number of assistants ($r = .625$). This correlation indicated that

those principals who work in larger schools, tended to have more assistant principals. The correlation between salary and student body size indicated that those principals who work in larger schools tended to make more money.

The correlation of age and years spent in the current district ($n = .479$, $p < .05$) indicates that the principals that are older and have been in their districts a longer period of time. Salary was also positively correlated with Adequate Yearly Progress status ($r = .337$, $p < .05$). This correlation indicated that those principals who tended to make the most money tended to be working in schools that are making Adequate Yearly Progress.

There was a significant correlation ($p < .05$) between number of assistant principals and student body size ($r = .895$). This correlation indicated that the larger the school the more assistant principals assigned to the school. There is also a positive correlation ($p < .05$) between Adequate Yearly Progress and number of assistant principals ($r = .355$). This correlation indicates that those schools with more assistant principals tended not to make Adequate Yearly Progress.

Finally, there is a significant positive correlation between percentage of students on free and reduced price lunch and Virginia Accreditation Status ($r = .353$, $p < .05$). This correlation indicates that the more students on free and reduced price lunch a principal has in the school the more that school tended not to meet Virginia Accreditation or Adequate Yearly Progress.

MSQ Scale Reliability Analysis

The Minnesota Satisfaction Questionnaire (MSQ) contains 100 items that measures 20 specific dimensions of job satisfaction. The MSQ allows the researcher to measure general satisfaction by using in item from each of the twenty dimensions of the MSQ. For each statement on the MSQ, respondents were asked their level of satisfaction according to a 5-point Likert Scale: not satisfied, only slightly satisfied, satisfied, very satisfied, and extremely satisfied. The Manual for the Minnesota Satisfaction Questionnaire (Weiss, Dawis, England, & Lofquist, 1967) suggested that an internal consistency reliability coefficient be computed for the sample on which the MSQ is used. Using SPSS, Chronbach's Alpha (Ary et al., 2002) for total scale was calculated to be .97. This alpha suggests that the data collected from the MSQ for this sample has high internal consistency and reliability with this sample. This coefficient is typical of other studies where the MSQ was used (Chen, 2000).

Table 2

Correlations Among Demographic Variables

	AGE	GEN	RAC	SAL	NOA	YAP	YID	PTS	PFL	SCS	VAA	AYP
AGE	1	.081	-.114	.206**	.063	.479**	.439**	-.021	-.094	.040	-.036	.081
GEN	.081	1	.110	.075	.115	-.123	-.063	.033	.118	.086	.083	.128
RAC	-.114	.110	1	-.017	-.076	-.067	-.092	.136	.160	-.083	.159	.077
SAL	.206**	.075	-.017	1	.625*	.300**	.291**	.082	-.243	.682**	-.123	.337**
NOA	.063	.115	-.076	.625**	1	.161	.176	.003	-.011	.895**	-.070	.355**
YAP	.479**	-.123	-.067	.300**	.161	1	.872**	.084	-.072	.136	.007	.073
YID	.439**	-.063	-.092	.291**	.176	.872**	1	.073	-.064	.176	.002	.085
PTS	-.021	.033	.136	.082	-.003	.084	.073	1	.132	-.035	-.008	.102
PFL	-.094	.118	.160	.243**	-.111	-.072	-.064	.132	1	-.187	.353**	.162
SCS	.040	.086	-.083	.682**	.895**	.136	.176	-.035	-.187	1	-.167	.310**
VAA	-.036	.083	.159	-.123	.070	.007	-.002	-.008	.353**	-.167	1	.169
AYP	.081	.128	.077	.337**	.355**	.073	.085	.102	.162	.310**	.169	1

Note. GEN = gender; RAC = race; SAL = salary; NOA = number of assistant principals; YAP = years as a principal; YID = years in current district; PTS = percentage of time spent with students; PFL = percentage of student body on free and reduced price lunch; SCS = school size; VAA = Virginia accreditation status; AYP = adequate yearly progress.

** Correlation is significant at the 0.05 level

Total n = Ranges from 176 to 183 depending on missing data

Analyses and Findings Organized by Research Questions

This section contains restatements of each of the research questions that guided this study. Each question is followed by a description of the analysis used and a review of the findings for each question.

Question 1

What is the satisfaction level of high school principals in Virginia as measured by the Minnesota Satisfaction Questionnaire (MSQ)?

The scoring of the MSQ includes a scale to measure general job satisfaction. This scale uses 20 items (one from each of the twenty sub-scales), yielding a possible score ranging from 20 to 100. The items scored on the General Satisfaction scale are as follows: 24, 25, 28, 30, 35,

43, 51, 61, 66, 67, 69, 72, 74, 77, 82, 93, 96, 98, 99, 100 (Weiss, Dawis, England, & Lofquist, 1967). These questions along with the entire MSQ are presented in the Appendix A. For this study missing data in the MSQ responses was re-coded from missing to the mean response for each item. This method of re-coding missing data with the mean is a recommended method of accounting for missing data (Best & Kahn, 2003).

The general job satisfaction mean score (20 items) for high school principals in Virginia in this study was 68.69 (SD = 13.04), with scores ranging from 35.00 to 100.00, from a possible range of 20 to 100. Figure 1 shows the frequency distribution from the sample. Using the MSQ satisfaction model, the overall satisfaction level of high school principals in Virginia is considered to be satisfied according to the MSQ Manual (Weiss, Dawis, England, & Lofquist, 1967). Analysis of the quartile distribution revealed that the respondents scoring in the first quartile scored below a 60. Those respondents scoring in the second quartile scored between 67 and 60. Those respondents scoring in the third quartile scored between a 77.46 and 67. Those respondents scoring in the fourth quartile scored between a 100 and 77.46.

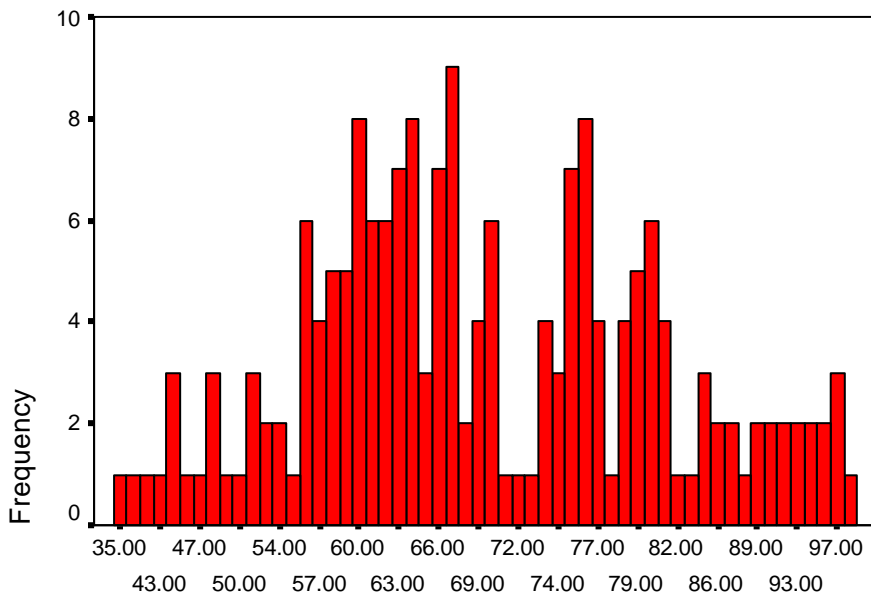


Figure 1. Frequency Distribution for Total Satisfaction.

Question 2

What is the satisfaction level of high school principals in Virginia according to the following demographic variables: gender, age, level of education, salary level, years of experience, number of assistant principals, years in current school district, school socio-economic level, school size, and accreditation status?

The MSQ general job satisfaction scale, which used one item from each of the twenty sub-scales, was used to determine the level of job satisfaction for each of the demographics used in this study. One-way ANOVA's were used to compare the mean job satisfaction scores grouped by each demographic. The range of scores for each demographic variable was between 20 and 100. Table 3 presents the results of the ANOVA analysis for personal variables and table 4 presents the results of the ANOVA analysis for professional variables. In such cases where less than ten respondents were listed in a category within the demographic variable the demographic category was combined with another category.

Personal Characteristics

Age

There was no significant difference in job satisfaction and age category of the respondents. However, high school principals younger than 45 years old had a lower satisfaction score ($M = 67.46$, $SD = 12.31$) than the average satisfaction score for all principals ($M = 68.72$, $SD = 13.07$). Principals older than 55 had a higher satisfaction score ($M = 70.92$, $SD = 14.47$) than the average satisfaction score of all high school principals.

Gender

There was no significant difference in job satisfaction for male and female high school principals in Virginia. The mean for males was 69.70 ($SD = 12.35$) and the mean for female principals was 66.05 ($SD = 14.51$).

Race

Because of the low numbers in different race categories, categories were collapsed so that respondents were placed in white and non-white categories. Results indicated that there was a significant difference ($F = 6.29$, $p = .013$) in job satisfaction between white principals and non-white principals in Virginia. Non-white principals were significantly less satisfied ($M = 63.77$, $SD = 10.42$) than white principals ($M = 69.96$, $SD = 13.29$).

Table 3

Analyses of Variance for Job Satisfaction Personal Characteristics

Variable	n	M	SD	Df	F	p
Age	182	68.72	13.07	2	1.04	.355
Younger than 45	51	67.46	12.31			
46-55	80	68.13	12.59			
Older than 55	51	70.92	14.47			
Gender	181	68.65	13.07	1	2.91	.090
Male	129	69.70	12.35			
Female	52	66.05	14.51			
Race	181	68.83	13.01	1	6.29	.013 **
White	148	69.96	13.29			
Non-white	33	63.77	10.42			

** Significant at the .05 level

n = Ranges from 181 to 182 depending on missing data

Professional Characteristics

This section will present the ANOVA results from each of the professional variables.

Salary

The level of job satisfaction was found to be significantly ($F = 3.36$, $p = .037$) related to salary category. As the salary level increased so did the level of job satisfaction. The principals making less than \$75,000 ($M = 65.24$, $SD = 11.70$) were less satisfied than those principals making more than \$100,000 ($M = 71.92$, $SD = 13.32$). A Fisher's LSD post hoc test analysis found a significant difference between those principals who make between \$50,000 and \$75,000 and those principals who make between \$75,000 and \$100,000 ($p = .024$) and those principal who make more than \$100,000 ($p = .035$).

Number of Assistant Principals

There was a significant difference ($F = 2.56$, $p = .040$) for the number of assistant principals. The principals who had zero or one assistant principal rated job satisfaction lower (M

= 65.14, SD = 12.62) than the average job satisfaction (M = 68.69, SD = 13.04). Those principals who reported they had three assistant principals rated their job satisfaction as the highest (M = 73.38, SD = 12.94). Those principals who had four assistant principals (M = 68.60, SD = 12.55) and those who had five assistant principals (M = 69.70, SD = 15.93) had less job satisfaction than those principals with three assistant principals. A post hoc test using Tukey's test found a significant difference between principals who had three assistant principals and principals who had zero or one assistant principals ($p = .027$).

Total Years as a Principal

There was no significant difference in job satisfaction with regard to the total years the respondents have been a principal. Respondents who had between 7 to 9 years of experience had a lower level of job satisfaction (M = 66.80, SD = 12.62) than the other respondents. Those principals who had 1 to 3 years of experience report a higher level of job satisfaction (M = 69.77, SD = 13.37).

Total Years in School Division

There was also no significant difference in job satisfaction with regard to years in a school district. Those respondents who had between 4 to 6 years of service with the same school district report lower levels of job satisfaction (M = 66.26, SD = 13.50) than the average score (M = 68.69, SD = 13.04) and the scale score for other levels of service.

Time Spent with Students

For this study there were no significant differences in job satisfaction for principals who spend more time with students. Those principals reporting that they spend less than 10% of their time with students had a job satisfaction lower (M = 67.61, SD = 14.31) than those principals who reported spending between 31 to 40% of their time with students (M = 72.35, SD = 13.73).

Percent of students on free and reduced price lunch

There was no significant difference in job satisfaction and percent of students on free and reduced price lunch. As the level of students on free and reduced price lunch increased the level of job satisfaction decreased. Those principals who reported a free and reduced price lunch rate of less than 5% showed greater job satisfaction (M = 77.18, SD = 15.25) than those principals who reported a percentage of free and reduced price lunch over 25% (M = 67.45, SD = 13.42).

Student body size

There was no significant difference in school size and job satisfaction. Other than the two smallest groups, less than 400 students ($M = 63.73$, $SD = 11.71$) and 401 to 800 students ($M = 66.32$, $SD = 13.38$) student body size made little difference in job satisfaction. The other groups had a job satisfaction levels that were at the average level of job satisfaction ($M = 68.69$, $SD = 13.04$).

Virginia Accreditation Status

There was a significant difference ($F = .029$, $p = .000$) in job satisfaction and Virginia Accreditation Status. Principals who reported that their schools were fully accredited under the Virginia Accreditation Standards reported a higher level of job satisfaction ($M = 70.58$, $SD = 12.45$) than those principals who were not fully accredited. Those principals whose school was provisionally accredited reported a lower level of job satisfaction ($M = 59.14$, $SD = 13.47$). A Tukey post hoc test indicated that a significant difference existed between those principals whose schools were fully accredited and those principals whose schools were provisionally accredited and needs improvement ($p = .004$) and those principals whose schools were provisionally accredited and meets state standards ($p = .016$).

Adequate Yearly Progress

There was no significant difference between those principals who reported that their schools met Adequate Yearly Progress and those that reported their school did not meet Adequate Yearly Progress. The principals who reported that their schools met Adequate Yearly Progress had a job satisfaction of $M = 68.73$, $SD = 13.06$ as compared to those who answered that their schools did not meet Adequate Yearly Progress ($M = 68.39$, $SD = 13.06$).

Question 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?

Using the Likert Scale the frequency of responses for each of the 20 dimensions (100 questions) of the MSQ and general satisfaction of the high school principals surveyed, is reported and presented in table format. See table 4. Each of 20 dimensions has a mean score falling between a possible range of 5 to 25.

The top three ranking dimensions were activity ($M = 19.02$, $SD = 3.54$), moral values ($M = 19.37$, $SD = 3.46$), and social service ($M = 19.38$, $SD = 3.77$). The high school principals in Virginia were most satisfied about doing things for others (social service), keeping busy

Table 4

Analyses of Variance for Job Satisfaction Professional Characteristics

Variable	n	M	SD	Df	F	p
Salary	182	68.53	12.91	2	3.36	.037 **
Less than \$75,000	64	65.24	11.70			
\$75,000-\$100,000	84	70.05	13.25			
More than \$100,000	34	71.00	13.32			
Number of Assistants	183	68.69	13.04	4	2.56	.040 **
Zero or one assistant	41	65.14	12.62			
Two assistants	44	66.80	11.48			
Three assistants	45	73.38	12.94			
Four assistants	33	68.60	12.55			
Five or more assistants	20	69.70	15.93			
Total Years as Principal	182	68.74	13.06	3	.540	.656
One to three years	70	69.77	13.37			
Four to six years	45	67.06	12.56			
Seven to nine years	15	66.80	12.62			
Ten to fifteen years	52	69.38	13.34			
Total Years in District	183	68.69	13.04	3	.965	.410
One to three years	79	69.87	13.22			
Four to six years	52	66.26	13.50			
Seven to nine years	12	67.41	13.07			
Ten to fifteen years	40	69.90	11.83			
Percent time with Students	181	68.76	13.10	4	.931	.447
Less than 10%	13	67.61	14.31			
11 to 20 %	52	66.93	13.03			
21 to 30 %	76	68.46	12.60			
31 to 40 %	20	72.35	13.73			
41 to 50 %	20	71.80	13.84			

Job Satisfaction

Percent of students on free/reduced price lunch	182	68.59	13.01	5	1.59	.163
Less than 5 %	16	77.18	15.25			
5 to 9 %	20	67.90	11.52			
10 to 14 %	31	68.03	10.35			
15 to 19 %	27	67.31	10.16			
20 to 24 %	22	68.79	16.49			
Over 25 %	66	67.45	13.42			
School Size	183	68.69	13.04	5	1.82	.111
Less than 400 students	26	63.73	11.71			
401 to 800	38	66.32	13.38			
801 to 1200	32	71.78	11.89			
1201 to 1600	28	70.46	14.40			
1601 to 2000	33	68.31	11.98			
More than 2001 students	26	71.88	13.87			
VA Accreditation Status	178	68.66	13.09	2	8.23	.000 *
Fully accredited	141	70.58	12.45			
Provisionally – MS	14	59.14	13.47			
Provisionally – NI	23	62.69	12.88			
AYP Status	181	68.54	13.02	1	.029	.864
Yes	76	68.73	13.06			
No	105	68.39	13.06			

Note. Provisionally – MS = provisionally accredited – meets state standards; provisionally accredited – NI = provisionally accredited – needs improvement

** Significant at the .05 level.

* Significant at the .01 level.

n = Ranges from 178 to 183 depending on missing data.

(activity), and being able to do things that did not go against their conscience (moral values) from among the choices offered in the scale

Compensation ranked at the bottom of the list of 20 dimensions ($M = 12.84$, $SD = 4.62$) indicating that the respondents were least satisfied with the amount of pay they received for the work they do from among the choices offered on this survey. For the remaining dimensions the high school principals were satisfied with those aspects of their job as indicated by the scores that range from 18.6 to 15.4.

Table 5

Rank Order of Satisfaction Scores for each MSQ Dimension (n = 183)

Dimensions	n	M	SD
Social Service	183	19.38	3.77
Moral Values	183	19.37	3.46
Activity	183	19.02	3.54
Achievement	183	18.60	3.60
Variety	183	18.43	3.38
Ability Utilization	183	18.24	4.05
Co-workers	183	17.95	3.46
Responsibility	183	17.93	3.67
Creativity	183	17.61	4.00
Working Conditions	183	17.53	4.73
Security	183	17.29	4.11
Authority	183	17.07	2.94
Supervision – Human Relations	183	16.79	5.15
Social Status	183	16.69	3.24
Supervision – Technical	183	16.64	4.63
Independence	183	16.06	3.67
Company Policies and Procedures	183	15.65	4.49
Advancement	183	15.40	4.41
Recognition	183	15.45	4.94
Compensation	183	12.84	4.62

Question 4

What demographic variables would be the best predictors of general job satisfaction among high school principals in Virginia?

The method of analysis utilized to answer this research question was a step-wise multiple regression. By using a step-wise multiple regression the researcher was able to determine the extent, if any, that the independent variables played a role in explaining the level of general

satisfaction of principals in this study. In order to complete the step-wise regression each of the categorical demographic variables with more than two categories were recoded as binary variables. This type of recoding of variables is often referred to in multiple regressions as dummy coding (Ary, Jacobs, & Razavieh, 2002). Dummy coding data allows for each category of the demographic variable to be entered in as a predictor for job satisfaction.

Upon completion of the step-wise multiple regression it was discovered that two categorical variables were significant in predicting general satisfaction among high school principals in Virginia. According to the results of the step-wise multiple regression those principals whose schools were fully accredited according to the Virginia SOL assessment standards (beta = .289) and those principals that had three assistant principals (beta = .220) had the highest level of job satisfaction. The multiple regression analysis indicated that full accreditation and number of assistant principals were the best predictors of principal satisfaction ($R=.289$, $p=.000$)

Table 6

Summary of Step-Wise Multiple Regression for Variables Predicting Job Satisfaction

Variable	B	SE B	β
Step 1			
Fully Accredited	9.149	2.332	.289
Step 2			
Fully Accredited	8.336	2.342	.263
Three Assistants	4.574	2.201	.154

Note. $R^2 = .084$ for Step 1; $\Delta R^2 = .106$

$p < .05$

Additional Findings

In addition to the responses to the survey questions some respondents sent comments regarding the study by e-mail. These comments add additional perspectives to the findings of the study. Ten of the principals who responded to the survey indicated several concerns about the

content and format of the survey. First, six of the principals thought the survey was too long and too repetitive. Many of the questions on the MSQ are similar to each other, thus they give the feel of repeating questions. One principal reported that he thought the purpose of the study was to see how long it would take someone to quit the survey once they started. Another principal quit the survey, refused to finish, and said he did not want any of his answers used because the survey was too repetitive.

Second, seven of the principals indicated that this survey did not get after the essence of job satisfaction. The principals reported that they felt the questions that this survey asked did not actually get to the specific sources of their dissatisfaction with being a high school principal. Items such as time dealing with parents, time away from the task of being a principal (i.e. central office meetings and paperwork) and special education demands are items that create the most dissatisfaction among principals, and the MSQ does not address these concerns.

Summary

Chapter four presented the data derived from the survey responses of 183 out of a possible 289 high school principals in Virginia. This was a 63.3% return rate. The data was examined to develop a comprehensive look at: (a) the demographics of the principals in Virginia, (b) the overall total level of job satisfaction, (c) the overall level of job satisfaction in relationship to the twenty dimensions of job satisfaction on the Minnesota Satisfaction Questionnaire, and (d) the relationship of demographic variables to job satisfaction for high school principals.

Data analyses indicated that the high school principals in Virginia were generally satisfied. They were most satisfied with their level of activity, their ability to serve others and their ability to do the job within their moral conscious. The principals were least satisfied with their compensation levels. When a step-wise multiple regression was completed there was a positive significant prediction relationship between the demographics of school accreditation status as well as number of assistant principals and job satisfaction. This data indicated that principals of medium sized schools with three assistant principals that are fully accredited under the Virginia guidelines are the most likely to be satisfied principals.

CHAPTER FIVE

SUMMARY, DISCUSSION, AND CONCLUSIONS

A summary of the purpose and discussion of the findings of this study are presented to open this chapter. Next conclusions and recommendations based on the analysis of the data collected from the high school principals in Virginia are presented. The study summary section outlines the research questions as well as the analysis methods for each research question. The discussion of findings section focuses on the demographics of the population studied as well as the findings for each of the research questions in relation to the literature review. The next section presents several conclusions drawn from the study. The recommendations section includes further discussion and six specific recommendations for future studies. Finally, some additional conclusions are presented to end this chapter and study.

Summary of Study

The purpose of this study was to determine the level of job satisfaction of high school principals in Virginia. In particular, the researcher investigated: (a) overall satisfaction level of high school principals; (b) the satisfaction level of high school principals in Virginia according to the following demographic variables: gender, age, salary level, years of experience, number of assistant principals, years in current school district, school socio-economic level, school size, and accreditation status; (c) the satisfaction level of high school principals in Virginia for each of the twenty dimensions of the job as measured by the Minnesota Satisfaction Questionnaire (MSQ); and (d) which demographic variables predict job satisfaction of the high school principal in Virginia. Each of the research questions was analyzed using descriptive statistics. Research questions one and three were analyzed using frequency distributions question two was analyzed using ANOVAs, and question four was analyzed using a step-wise multiple regression.

Summary of Findings

The population for this study was all high school principals in Virginia who had working e-mail addresses and were listed in the 2003-2004 school year Virginia High School League Directory who had working e-mail addresses (N=289). Of this group 183 principals responded for a return rate of 63.3%.

To answer the research questions, the Minnesota Satisfaction Questionnaire long form, consisting of 100 questions and a demographic questionnaire was loaded onto the Virginia Tech

survey maker and e-mailed to the 289 high school principals. Four follow-up e-mails were sent to the principals reminding them of the survey to increase response rate.

The demographic data collected in this study indicated that the high school principals who participated in the study were predominately white males between the ages of 46 to 55. Forty-six percent of respondents earned an average salary between \$75,000 and \$100,000 and 38% of the principals were inexperienced in their jobs having between only 1 and 3 years experience. The principals who responded also were relatively new in their districts: 43.2% have only 1 to 3 years' tenure in their current district. Forty-one percent of the principals reported that they spent between 31 to 40% of their time with students. Of the principals who responded 76.8% worked in schools that were fully accredited under the Virginia Standards of Learning, and only 41% of the principals reported that their schools met Adequate Yearly Progress.

The data from the MSQ was analyzed using a frequency distribution in order to determine the overall level of job satisfaction. The findings indicated that high school principals in Virginia were generally satisfied with their jobs as indicated by a mean general satisfaction score of 68.69, given a possible score ranging from 20 to 100 and a median score of 67.00. When placed on a five-point Likert Scale, this mean score of 3.45 ($SD = .57$) indicates a job satisfaction that falls between neutral and satisfied on the MSQ satisfaction scale. This finding was consistent with the findings of the Newby (1999) study, which this study was based on, which found that middle school principals in Virginia were satisfied with their job ($M = 3.65$, $SD = .57$). This finding is also consistent with a 2003 study of high school principals in Idaho (Brogan, 2003). Brogan surveyed 78 high school principals in Idaho using the MSQ and found that overall job satisfaction was high.

To determine the satisfaction level of high school principals in Virginia according to demographic variables a series of ANOVAs were run. One-way ANOVAs were used to compare the level of job satisfaction for each of the demographic variables.

While high school principals between the ages of 36 and 45 had somewhat lower satisfaction means than principals older than 45, there was no significant difference in job satisfaction in relation to the age of the respondents. Male and female high school principals in Virginia were satisfied with their jobs as principals. While there was no significant difference in satisfaction, the mean scores for job satisfaction for male principals ($M = 69.70$, $SD = 12.35$) was higher than mean satisfaction scores for female principals ($M = 66.05$, $SD = 14.51$). In a

similar study conducted in Idaho, Brogan (2003) reported he found significant differences: male principals enjoyed higher levels of job satisfaction than their female counterparts and more experienced principals enjoyed a higher level of job satisfaction than those with less experience.

When race categories were considered, a significant difference ($p < .05$) was found. Non-white principals in Virginia were significantly less satisfied than white principals. Salary level calculations revealed that as salary level increased so did the level of job satisfaction; these findings also revealed that a significant difference ($p < .05$) does exist between salary categories and level of job satisfaction. Principals making less than \$50,000 had a lower satisfaction mean ($M = 65.24$, $SD = 11.70$) than those principals making more than \$100,000 ($M = 71.00$, $SD = 13.32$).

There was a significant difference ($p < .05$) in levels of job satisfaction in relation to the number of assistant principals. The principals who have three assistant principals rated job satisfaction higher than those principals who reported they had two or less assistants or those principals who had four or more assistant principals.

There was no significant difference in job satisfaction with regards to the years as principal or years in the school district. The principals who had 7 to 9 years of experience as a principal had a lower level of job satisfaction than those respondents with more than 9 years and less than 7 years. Brogan (2003) reported that principals in Idaho that had the highest number of assistant principals overwhelmingly had higher levels of general job satisfaction.

This study also revealed that job satisfaction increases when the percentage of time principals spend with students increases, but not significantly. Those principals who reported that they spend less than 10% of their time with students had a job satisfaction lower than those principals who reported spending between 31 to 40% of their time with students.

Neither socio-economic status of the school, nor student body size had a significant impact on job satisfaction. As the level of students on free and reduced-price lunch increased, the level of job satisfaction decreased. Those principals who reported a free and reduced-price lunch rate of less than 5% showed a higher level of job satisfaction. The principals who worked in the two smallest school size groups - less than 400 students and 401-800 students - had lower mean scores for job satisfaction than those principals who worked in larger schools.

There was a significant difference ($p < .05$) between job satisfaction and Virginia Accreditation status. Those principals who reported that their schools were fully accredited under

the Virginia Accreditation Standards reported a significantly higher level of job satisfaction than those principals who were not fully accredited.

There was no significant difference between those principals who reported that their schools met Adequate Yearly Progress and those that reported their school did not meet Adequate Yearly Progress. This lack of significance may be the result of the school districts and public's lack of understanding of the concept of Adequate Yearly Progress. There are many components and mandates to this law and as a result of the many components the general public as well as educators do not yet fully understand this concept of meeting Adequate Yearly Progress. This is similar to the early years of Virginia Accreditation when it took the public a few years to understand the concept. It is expected that the public will learn the concepts of Adequate Yearly Progress in the next few years.

A series of frequency distributions were produced using SPSS to calculate the job satisfaction of high school principals for each of the 20 dimensions of the MSQ. The respondents tended to be more satisfied with the three dimensions of their job: (a) keeping buses (activity – $M = 19.02$, $SD = 3.54$), (b) being able to do things that do not go against their conscience (moral values – $M = 19.37$, $SD = 3.46$), and (c) doing things for others (social service – $M = 19.38$, $SD = 3.77$). Compensation ranked at the bottom of the list of 20 dimensions ($M = 12.84$, $SD = 4.62$), indicating that the respondents were least satisfied with the amount of pay they received for the work they do. Using the manual for the MSQ it was determined that high school principals in Virginia rated the remaining 16 dimensions satisfactory with regard to their jobs.

Finally a step-wise multiple regression was run indicating a significant relationship between principals' job satisfaction and the predictor variables: number of assistant principals they had working for them and meeting Virginia Accreditation Status. Those high school principals in Virginia who had three assistant principals working for them were significantly more satisfied than those principals who had two or less assistant principals and those who had four or more assistant principals. Also there was a significant relationship between principal's job satisfaction and Virginia Accreditation status. Those principals whose schools were fully accredited had a significantly higher level of job satisfaction than their counterparts at schools that were not fully accredited.

Conclusions

The following conclusions were drawn based on the findings of this study that were reported in chapter 4.

1. Of the 183 respondents, 51 of high school principals in Virginia are over the age of 55, and 30 of those principals had 10 or more years of experience as a principal. This distribution suggests that many principals are at or near retirement, and within the next four years, Virginia, like many states and regions, may face a critical need for principals. This finding is similar to the findings of the Association of California School Administrators (2001) survey, the Educational Research Service (ERS) (2000), and the Ohio Department of Education (Rayfield & Diamantes, 2003).
2. About half the principals make between \$75,000 and \$100,000, yet this was the lowest ranked aspect of the job satisfaction. This finding supports the studies of Tablature (2002) and Barry (2002), which found that principals in Texas and Michigan were not satisfied with how well they were compensated. This feeling is pervasive in most job satisfaction research within education as well. VanVoorhis (2003) conducted a meta-analysis of job satisfaction studies of school psychologists and found that school psychologist as well rate compensation as the least satisfying component of their job.
3. There was a significant relationship between job satisfaction and number of assistant principals. Because the number of assistant principals is related to school size, a correlation matrix was produced using SPSS to determine the relationships between variables. The resulting distribution indicated that while not significant when running an ANOVA, job satisfaction of high school principals in Virginia is related to school size. This finding is supported by Amy Overbay (2003) in her review of school size literature. She stated that the literature on the topic of school size suggested that schools can be too small, but also they can get too large. The finding of this study partially supports the study of Barry (2002), which held that high school principals in Michigan had higher job satisfaction in large schools than those principals in small schools.
4. This study was based on a previous study conducted with middle school principals in Virginia using the same instruments and regular mail (Newby, 1999). The previous

- study had a 70% return rate using traditional mail, compared to this study, which had a return rate of 63% using the internet and the Virginia Tech Survey Maker. This response rate is opposed to most of the literature which describes e-mail surveys as having lower response rates than mailed surveys (Fricker & Schonlau, 2002). This finding indicates that the principals in Virginia will answer internet surveys about their job satisfaction when asked to do so by a peer Virginia high school principal.
5. Virginia Accreditation Status was a significant indicator of job satisfaction, while Adequate Yearly Progress did not have a significant impact on job satisfaction. This finding would suggest that the general public and school personnel have a good understanding of the Virginia Accreditation process, thus the increased pressure on principals to have high performing schools. Since Adequate Yearly Progress is a relatively new concept (the first ratings came out in the fall of 2003), there may be less knowledge by the general public and even school officials on the implications of not meeting Adequate Yearly Progress, which may explain why principals of high schools in Virginia are not yet feeling the pressures of not meeting the benchmarks of Adequate Yearly Progress.

Recommendations

On the basis of the findings and conclusions drawn from the study, this researcher had developed five recommendations. The recommendations are as follows:

1. This study could be replicated with the use of a different survey instrument. The MSQ was designed over 25 years ago for employees in business and industry. In addition, there were several comments via e-mail from the respondents that indicated that the MSQ survey may not be as relevant to today's high school principal and the various stresses placed on principals today. These stresses include budget constraints, special education, accountability, and difficulties dealing with failing teachers (Johnson, 2004). Therefore, it is recommended that an effort be made to find a new approach to measuring job satisfaction among high school principals.
2. Although the level of job satisfaction is presently high, it is recommended that the study be replicated in four or five-year intervals to provide an opportunity to compare results over a longitudinal timeframe. This also would give time for the Adequate Yearly Progress status to evolve, thus allowing the researcher to see how job

- satisfaction changes under Virginia Accreditation standards and Adequate Yearly Progress.
3. Because compensation ranked low in the original study ($M = 2.83$, $SD = .94$) conducted by Newby (1999) with middle school principals and in this study with high school principals it is recommended that a future study be conducted involving compensation for principals of all levels in Virginia (elementary, middle and high). This study could have more impact by including a comparison of the salaries of principals in Virginia to national salaries.
 4. A study could be done using qualitative techniques such as interviewing or open-ended surveys. Such methodologies would allow the principals to provide more in-depth or unique responses that may lead to more insightful findings (Rossman & Rallis, 2003). A quantitative study could look at those items identified by respondents of this study such as special education demands, non-instructional issues, central office demands, etc. that lead to dissatisfaction.
 5. The fact that the issue of race was significant in the findings of this study and that there was enough information in the correlations of demographics indicates that the connections between race and job satisfaction among high school principals in Virginia warrants further investigation.
 6. Although encouraged by the 63.3% response rate is encouraging for an internet survey, perhaps a combination internet and traditional mailed survey would yield even greater results. Future studies should be a combination method that which includes internet contacts followed by mailed surveys.

Summary

This dissertation was a study of job satisfaction among high school principals in Virginia. There are 302 high schools in Virginia during the 2003-2004 school year of which 183 responded to the two-part survey via the internet and Virginia Tech survey maker. The survey consisted of a demographics section and the MSQ long form. To research the job satisfaction of high school principals in Virginia, the Work Adjustment Theory, developed by the Minnesota Studies in Vocational Rehabilitation was used. The MSQ is an instrument that measures satisfaction with 20 different dimensions of the work environment.

The findings of this study revealed that the high school principals in Virginia were generally satisfied with their jobs overall. In looking at the twenty dimensions of the MSQ, principals rated service to others, activity, and moral values as the most satisfying aspects of their job. At the other end of the spectrum, the principals rated compensation as the least satisfying aspect of their jobs.

In terms of demographics, there was a significant relationship between salary and job satisfaction. Those principals who made less than \$75,000 were significantly less satisfied than those principals who made more than \$75,000. This study also revealed a significant difference in number of assistant principals and job satisfaction and Virginia accreditation status and job satisfaction. Those principals who had three assistant principals were significantly more satisfied than those principals who had one or two assistants or those principals who four or more assistants. Also, those principals whose schools were fully accredited were significantly more satisfied than those principals whose schools were not fully accredited.

Other recent, similar descriptive studies by Chen (2000), Newby (1999), and Sablature (2002), using the Minnesota Satisfaction Questionnaire, revealed similar results. Chen studied job satisfaction among high school assistant principals, Newby studied job satisfaction among middle school principals in Virginia, and Tablature studied job satisfaction among all principals in Texas.

Discussion

The findings of this study on job satisfaction among high school principals in Virginia were very encouraging. The study implies that a high school principalship can be a satisfying occupation. This study suggested that if a person were to become a principal he would find job satisfaction in keeping busy and serving others. This study also suggests that a person who becomes a principal will be least satisfied with the amount of compensation they receive. While these findings are important, there are other interesting aspects of the study that were not part of the original proposal, but are worth discussion.

Although the total job satisfaction of principals in relation to the literature review was not part of this study, it was interesting to examine it. According to Herzberg's two-factor theory, growth or motivation factors intrinsic to the job lead to job satisfaction (Gruneberg, 1976). This study identified three variables as intrinsic factors according to Herzberg's theory: activity, achievement, and responsibility ranked in the top 10 of the satisfaction dimensions of the MSQ,

while two other intrinsic factors - advancement and recognition - ranked in the bottom ten. Herzberg's two-factor theory also theorizes that hygiene factors are those factors that produce dissatisfaction (Gruneberg, 1976). This study indicated that hygiene factors - working conditions, security, supervision, social status, company policies and procedures, and compensation - were the aspects of the job with which high school principals were least satisfied, all of which ranked in the bottom of the 10 MSQ dimensions ranking.

It is also the finding of this study that compensation continues to be a major issue for educators in many fields of education and with principals in particular. In a recent study of salaries published in *Scholastic Administrator*, it was reported that salaries in the Southeast, which includes Virginia are the lowest in the United States (Freeman, 2003). Because compensation was ranked low in this study and the study conducted by Newby (1999), it would be interesting to know what level of compensation would be satisfying to high school principals. It would also be interesting to know how compensation for principals compares to non-education professions.

This study also leaves many unanswered questions that the researcher can only speculate on but that can be investigated by other studies. For example, while the difference was not significant this study revealed that principals of smaller schools (less than 800 students) were less satisfied than principals of larger schools. The correlation matrix suggests that salaries are correlated with school size, but correlations do not indicate causality. One can also speculate that principals of smaller schools are located in smaller districts; thus they have much less help in the buildings, less help in central office, and are not able to offer the same program options to students that larger schools and districts can offer. The lack of help means that these principals must take on more responsibilities that are often taken by someone else in larger districts. A follow-up study for school size and job satisfaction might reveal the answers to these questions.

If over the next five years districts are expected to replace more than 60% of all principals currently working in high schools, this study and others that follow will be important for the recruitment and retention of quality principals (Peterson, 2002). Issues that this study and others have raised such as school size, a need for salary increases, and other issues such as mentoring and coaching must be put at the forefront for reform. As a principal this researcher can attest first hand to hardships of the principalship. These issues include increased accountability, increased school size, increased demands of parents, and lack of quality of

teachers. No resolution to most of these issues will ever appear, so support systems must be put in place for principals so that school districts will see an increase in the levels of satisfaction among high school principals. Only when educational institutions recognize the many demands placed on principals and put in place a support system for the principals will job satisfaction ever be increased.

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APPENDIX A
INDIVIDUAL DATA SHEET

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

2. What is your sex?
 - 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 work for you in 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 in on free and 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 student or less
 - b. 401-800 students
 - c. 801-1200 students
 - d. 1201-1600 students
 - e. 1601-2000 students
 - f. 2001-2400 students
 - g. Over 2401 students

10. What is your school's 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?
 - a. Yes
 - b. No

The Minnesota Satisfaction Questionnaire
Sample Questions

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

1 means I am **not satisfied** (this aspect of my job is much poorer than I would like it to be).

2 means I am **only slightly satisfied** (this aspect of my job is not quite what I would like it to be).

3 means I am **satisfied** (this aspect of my job is what I would like it to be).

4 means I am **very satisfied** (this aspect of my job is even better than I expected it to be).

5 means I am **extremely satisfied** (this aspect of my job is much better than I hoped it could be).

On my present job, this is how I feel about . .

For each statement circle a number.

- | | | | | | |
|--|---|---|---|---|---|
| 1. The chance to be of service of others. | 1 | 2 | 3 | 4 | 5 |
| 5. The variety in my work. | 1 | 2 | 3 | 4 | 5 |
| 10. The way my supervisor and I understand each other. | 1 | 2 | 3 | 4 | 5 |
| 15. The technical "know-how" of my supervisor. | 1 | 2 | 3 | 4 | 5 |
| 20. The chance to be active much of the time. | 1 | 2 | 3 | 4 | 5 |
| 25. The chance to do different things from time to time. | 1 | 2 | 3 | 4 | 5 |
| 30. The way my boss handles his/her employees. | 1 | 2 | 3 | 4 | 5 |
| 36. The chance to develop close friendships with my co-workers. | 1 | 2 | 3 | 4 | 5 |
| 43. Being able to do things that don't go against my conscience. | 1 | 2 | 3 | 4 | 5 |
| 50. The way my boss backs up his/her employees (w/top management). | 1 | 2 | 3 | 4 | 5 |
| 55. The way my boss delegates work to others. | 1 | 2 | 3 | 4 | 5 |
| 60. Being able to stay busy. | 1 | 2 | 3 | 4 | 5 |
| 66. The chance to tell people what to do. | 1 | 2 | 3 | 4 | 5 |
| 72. My pay and the amount of work I do. | 1 | 2 | 3 | 4 | 5 |
| 78. The way they usually tell me when I do my job well. | 1 | 2 | 3 | 4 | 5 |
| 85. The chance to do many different things on the job. | 1 | 2 | 3 | 4 | 5 |
| 91. The way layoffs and transfers are avoided in my job. | 1 | 2 | 3 | 4 | 5 |
| 94. My chances for advancement. | 1 | 2 | 3 | 4 | 5 |
| 98. The praise I get for doing a good job. | 1 | 2 | 3 | 4 | 5 |
| 100. Being able to keep busy all the time. | 1 | 2 | 3 | 4 | 5 |

Questions taken from the Manual for the Minnesota Satisfaction Questionnaire (Weiss, Dawis, England, & Lofquist, 1967)

APPENDIX B
CORRESPONDENCE

Letter to request use of the MSQ on Internet

November 18, 2003

Dr. David Weiss
Vocational Psychological Research
University of Minnesota
N657 Elliott Hall
75 East River Road
Minneapolis, MN 55455-0344

Dear Dr. Weiss

I am a graduate student at Virginia Polytechnic and State University currently working on my doctoral degree in education leadership. For my dissertation I am planning a study involving job satisfaction among high school principals in Virginia. This study will attempt to survey all 330 high school principals in Virginia; and I have proposed and my committee has approved the use of the Minnesota Satisfaction Questionnaire (long form) for the purpose of data collection, via the Virginia Tech internet survey maker.

Enclosed is the description of the study which I have proposed as well as the application to use the MSQ instrument. The application has been completed by myself and Dr. Penny Burge, my dissertation chair at Virginia Tech. I am also sending along a payment of \$54.45 for royalties as instructed by Patricia Hanson. The royalties are for the projected return rate of 50% from the internet survey.

If there is anything else that is required or if there is something I have neglected to consider please write or call me. My home phone is 540-286-2648. I have enclosed by business card in case you wish to contact me by mail or fax.

Respectfully,

James D. Stemple

First letter sent to participants in the survey to indicate upcoming e-mail

December 19, 2003

«Title» «FirstName» «LastName»
«JobTitle»
«Address1»
«City», «State» «PostalCode»

Dear «Title» «LastName»:

High school principals of Virginia, unite. I am currently the principal of North Stafford High School in Stafford County, Virginia, and I am in the process of designing a study that will aid in the collection of data to explore job satisfaction among high school principals in Virginia.

You have been selected to participate in the first-ever internet survey to identify what characteristics of the high school principal's job contribute to job satisfaction. In a week or two you will receive an e-mail from jstemple@vt.edu entitled Principals Job Satisfaction Survey. Please take 20 to 25 minutes to complete this important survey as it will yield valuable information for our profession. Your response to this e-mail is vital.

As a high school principal I realize how valuable your time is, and I appreciate your helping with this short survey. If I can be of any assistance, or if you have any questions, please feel free to contact me by phone. Once again thank you for your assistance with this study.

Sincerely,

James D. Stemple
North Stafford High School
839 Garrisonville Rd.
Stafford, VA 22554
540-658-6150

First E-Mail sent in January, 2004

Date Sent: Friday, January 09, 2004
From: jstemple@vt.edu
To:
Subject: HS Principals Survey
Message: Recently you received a letter which spoke of a survey on job satisfaction among high school principals in Virginia. The survey is part of my doctoral dissertation for Virginia Tech and I hope you will be able to help. The link to this first ever internet survey is:
<https://survey.vt.edu/survey/entry.jsp?id=1068739827066>

You only need 20 minutes to complete the survey. Thank you for your help with this very important project.

Thanks,
Jim Stemple

Second E-Mail sent in January, 2004

Date Sent: Friday, January 16, 2004
From: jstemple@vt.edu
To:
Subject: I need your help
Message: Recently you received a letter and an e-mail which spoke of a survey on job satisfaction among high school principals in Virginia and I really need your help. The survey is part of my doctoral dissertation for Virginia Tech and I hope you will be able to help. The link to this first ever internet survey is:
<https://survey.vt.edu/survey/entry.jsp?id=1068739827066>

You only need 20 minutes to complete the survey. Thank you for your help with this very important project.

Thanks,
Jim Stemple

Third E-Mail sent in January, 2004

Date Sent: Sunday, January 25, 2004
From: jstemple@vt.edu
To:
Subject: I haven't heard from you
Message: I truly need your help with a survey on job satisfaction among high school principals in Virginia. The survey is part of my doctoral dissertation for Virginia Tech and to get accurate findings on job satisfaction I need all the principals in Virginia to respond. As of today I have not heard from you and I really hope you can help me. The link to this first ever internet survey is:
<https://survey.vt.edu/survey/entry.jsp?id=1068739827066>

You only need 20 minutes to complete the survey. Thank you for your help with this very important project.

Thanks,
Jim Stemple

Fourth and final E-Mail sent in February, 2004

Date Sent: February, 2004
From: jstemple@vt.edu
To:
Subject: Final Chance to Participate in Principals Survey
Message: I wanted to send one final e-mail to invite you to participate in the Virginia High School Principals job satisfaction survey. The survey will be closing this Sunday at 1:00 PM. The survey is part of my doctoral dissertation for Virginia Tech and I really need your help. The link to this internet survey is:
<https://survey.vt.edu/survey/entry.jsp?id=1068739827066>

You only need 20 minutes to complete the survey. Thank you for your help with this very important project.

Thanks,
Jim Stemple