DETERMINING FACTORS THAT INFLUENCE HIGH SCHOOL PRINCIPAL TURNOVER OVER A FIVE YEAR PERIOD

Rebecca Replogle Sheppard, B.S., M.Ed.

Dissertation Prepared for the Degree of

DOCTOR OF EDUCATION

UNIVERSITY OF NORTH TEXAS

May 2010

APPROVED:

Jimmy K. Byrd, Major Professor
Colleen M. Eddy, Minor Professor
Jane B. Huffman, Committee Member
Nancy Nelson, Chair, Department of Teacher Education and Administration
Jerry R. Thomas, Dean of the College of Education
Michael Monticino, Dean of the Robert B. Toulouse School of Graduate Studies

Sheppard, Rebecca Replogle. Determining factors that influence high school principal turnover over a five year period. Doctor of Education (Educational Administration), May 2010, 106 pp., 15 tables, 4 illustrations, references, 89 titles.

The purpose of this study was to determine the effects of salary, compensation and benefits, accountability, job stress, increased instructional responsibilities, changes in student demographics, lack of support, politics, advancement opportunities and promotion on tenure and turnover among high school principals in the state of Texas. The participants in the study included 60 Texas high school principals who left a high school principalship for a different high school principalship within the past 5 years. The participants completed the Texas Principal Survey and data were analyzed using binary logistic regression.

The data indicated that salary, compensation and benefits was a significant factor in predicting an increase in the odds of principal turnover for principals who had been in their prior principalship 5 or more years over principals who had been in their prior principalship less than 5 years. Additionally, advancement opportunities was a significant factor in predicting a decrease in the odds of principal turnover for principals who had been in their prior principalship 5 or more years over principals who had been in their prior principalship less than 5 years.

Responses from an open ended question asking principals why they left their prior principalship suggested that principals left for reasons including new challenges, lack of support and family. The results of this study support the need for continued research in the area of principal turnover and provide insight to district superintendents, school boards and principals.

Copyright 2010

by

Rebecca Replogle Sheppard

ACKNOWLEDGEMENTS

The completion of this dissertation was a difficult journey – one in which the reward was not the completion of the dissertation, but the reward was all that was learned along the way. This journey would not have been completed without the support of many people. First, I would like to thank my husband, David, for his encouragement and patience during this process. I could never have completed this dissertation without his support. Next, I would like to thank my son, Chris, who was completing his Ph.D. during the same time and was always willing to listen and provide support and inspiration during the frustrating times.

I would like to thank Dr. Jimmy Byrd, my committee chairman, for continually pushing me and challenging me to produce a higher quality dissertation. I would also like to thank Dr. Jane Huffman and Dr. Colleen Eddy for providing constructive comments, guidance and support. I would like to acknowledge Celia McCall and other members of the CIRA lab for their assistance with the statistics portion of the dissertation.

I would also like to acknowledge my parents and step parents, Jim and Mary Lou Replogle and Devona and Chuck Dollar for the encouragement and support they have provided me throughout my life. They have all been very influential parts of my life.

I never could have completed this journey without the support of my friends. They were always there to lift me up and lend a sympathetic ear. They provided encouragement and pushed me to continue. Finally, I would like to acknowledge the staff of DeSoto High School and Ruby Young Elementary who supported me throughout this process.

TABLE OF CONTENTS

LIST OF TABLES

Page

LIST OF FIGURES

CHAPTER I

INTRODUCTION

The shortage of principals in the United States has caused nationwide concern (National Association of Secondary School Principals (NAASP), 2000). Within the next decade approximately 40% of the current principals will retire (NASSP, 2002). In addition, the minimum expectation for principal retention is approximately three years with 52% of principals leaving during that time (Fuller, Orr & Young, 2009). Principal retention is also a concern for the state of Texas. In Texas, 52.2% of principals left their principalship within a three year period from 2004 to 2007 with the highest turnover at the high school level of 60.7%. From 1996 to 2008, the average tenure for high school principals in Texas was 3.83 years (Young and Fuller, 2009).

The issue of high school principal turnover is important as increasing numbers of research studies demonstrate that principals have an impact on teachers, schools and student achievement (Leithwood & Jantzi, 2000; Hallenger & Heck, 1998). As principal turnover increases, teacher turnover increases (Fuller, Young, & Baker, 2007). In short, teacher turnover has a negative and independent impact on student achievement (Fuller, Young & Baker, 2007; Levy, Field & Jablonski, 2007). While principal turnover indirectly impacts student achievement, principal stability is necessary to foster positive working conditions and trusting relationships. School reform strategies rely on the fostering of small learning communities among students and staff. Time is needed for these learning communities to mature and for principals to develop strong interpersonal relationships. More succinctly, as evidenced by Fuller et al. (2007) who found that school improvement requires time, principals must maintain their position for a minimum

of five years after the implementation of large scale change for the change to be successful; therefore, retaining a principal for a minimum of 5 years is crucial to school improvement (Fullan,1991).

The changing role of the principalship may be a leading factor in the rise of principal turnover (Whaley, Cox & Cox, 2002). According to Goldman (1966), principals in early public schools were mainly responsible for bookkeeping and clerical duties. Since its conception over 100 years ago, the duties of the principal have become more diverse and complicated. The principalship has evolved through the stages of school master, head teacher, teacher principal, building principal, supervising principal to instructional leader (Weiss, 1992).

Reports including *A Nation at Risk: The Imperative for Educational Reform in 1983* and the 1986 Carnegie report, *A Nation Prepared: Teachers for the Twenty-First Century,* challenged principals to become strong effective leaders for school reform. The urgency of these reports called for the school principal to affect the climate and culture of the school, become a change agent, empower others, and motivate students and staff. The principal of today must juggle the complex role of a building manager and instructional leader (Institute for Educational Leadership, 2000). As a building manager, the principal must address personnel, discipline students, keep the hallways safe, order supplies, take care of bus and cafeteria issues and comply with district and state mandates. As an instructional leader, the principal must be involved in improving teaching and learning on the campus.

The role of the principal as an instructional leader combined with other factors including accountability, workload, job stress and demographic changes in students

contribute to the increase in principal turnover rates and lack of qualified replacements (National Conference of State Legislatures, 2002). While there is evidence that the length of tenure among principals impacts schools, virtually no study has determined the factors that impact principal turnover. Therefore, the purpose of this study is to determine if a relationship exists between job related factors and the length of tenure and turnover of high school principals.

Theoretical Framework

Theories of motivation help explain what energizes and channels a person's behavior and also what sustains or terminates behaviors. Theories of motivation utilize two basic approaches, content and process, to answer questions about human behavior (Konnert & Augenstein, 1995). Content theories are based on the premise that things within us generate motivation such as specific needs, motives, expectancies, incentives, goals, and reinforcers (Hanson, 2003, Konnert & Augenstein, 1995). Content theories also suggest that we are driven by deficits we feel in basic and learned needs. Once the deficits are fulfilled, we move on to other needs (Hanson, 2003). Process theories explore how behavior is initiated, channeled, sustained and terminated and suggest the importance of understanding motivation as a cognitive process – that people make choices that energize, sustain or terminate their behavior (Hanson, 2003, Konnert & Augenstein, 1995). Administrators and superintendents who understand human behavior and motivation as they relate to job satisfaction will be more effective in maximizing human potential and making positive differences in the climate of the schools (Webb & Norton, 2003).

In the early 1940s, Abraham Maslow began developing his theories of motivation. The main premise of his theory is that human behavior is determined by biological, cultural, and situational conditions or needs (Maslow, 1954). From the lowest to highest needs, these needs are physiological, security, social, self-esteem, and self-actualization. Needs that shape the motivation for individuals to act are dependent upon the state of these conditions or the level in which the person currently exists. According to Maslow (1954), a need is a potential motivator until it is at least partially met. As a need is met, it becomes ineffective as a motivator and the next need on the hierarchy becomes the motivator.

In 1957, Frederick Herzberg and three of his colleagues conducted a study on job satisfaction (Herzberg, Mausener, Patterson, & Capwell, 1957). From this study, they proposed a theory regarding job factors that motivate employees and hygiene factors that affect dissatisfaction. Herzberg's (1968) motivation theory is one of the early content theories from which newer theories of motivation have been based. Such theories attempt to explain factors that motivate individuals by identifying and satisfying individuals needs and desires and the goals pursued to satisfy these desires (Ball, 2003). Herzberg's theory on motivation and job satisfaction has been widely used to examine job satisfaction and employee turnover; therefore, it is employed in the current study to examine the factors that influence high school principal turnover.

Additional Motivation Theories

From 1927 through 1932, Mayo, Roethlisberger and Dickson began studies based on a human relations approach. From their studies, they concluded that workers tended to act as members of informal groups rather than individuals. Their studies also

indicated that nonmonetary rewards were important in increasing productivity and that worker's reactions to rewards and standards occurred for a group and not just individuals (Mayo, 1933).

Porter and Lawler (1968) proposed the Lawler-Porter model of extrinsic and intrinsic work motivation. Porter and Lawler promoted restructuring the work environment so that good performance would lead to both extrinsic and intrinsic rewards, which in turn would produce job satisfaction and decrease turnover in the workplace.

Motivation theory as it relates to high school principal turnover was examined in this study. Hygiene factors related to the job context, such as salary, policy, support, changes in students and time requirements were explored. Motivators that relate to the job such as workload and accountability were examined. Other factors, including job stress and support from staff, parents and students which relate to Maslow's hierarchy of needs were considered.

Background

Few researchers have explored the issue of principal turnover. Akiba and Reichardt (2004) examined the career paths taken by principals who left their principalships. For principals who left their positions for a different principalship within or outside the district, Akiba and Reichardt explored the relationship of predictor variables on attrition and found a significant relationship between attrition and reading test scores. Lower achievement scores predicted higher attrition of female principals. Similarly, a study by Partlow (2007) investigated the relationships of building enrollment, student attendance, pupil-teacher ratio, teacher attendance, student mobility, student

achievement in math and reading and superintendent turnover to principal turnover. Partlow found that only math test scores were statistically significant in predicting turnover. As student achievement increased, principal turnover decreased.

Gates, Ringel, Santibanez, Ghosh-Dastidar, and Brown (2006) sought to identify school level or individual factors that impacted the probability that the principal would either leave his job for a different job within the system, remain a principal at the same school or remain a principal but change schools or districts. Experience was found to be a significant predictor of the probability of principals changing jobs or leaving the profession in North Carolina. Gates et al. (2006) also found that Hispanic principals were more likely to change schools or positions.

During interviews with 12 principals who had voluntarily left their principalship, Johnson (2005) found that 3 of the principals had no intention of leaving their positions until a better opportunity arose and the remaining 9 principals were unsatisfied with their current positions and sought other alternatives. Johnson also discovered that several factors, including workload, bureaucracy, discipline and irate parents were contributors to the principals' dissatisfaction with their current position.

In addition to voluntary turnover of principals, a percentage of principals leave their jobs involuntarily each year (Davis, 1997). Failure to communicate and lack of ability to make good judgments and decisions were cited by superintendents as major reasons why principals were terminated. Principals also failed when they were unable to build trust and confidence among parents and teachers by attempting to please everyone.

In summary, prior research indicates that achievement is a significant predictor of principal turnover. Higher achievement scores lead to higher retention rates and lower achievement scores lead to higher principal turnover. Experience was also found to be a significant predictor of principal turnover. In addition, several factors including discipline, bureaucracy, and workload can lead to job dissatisfaction.

Statement of the Problem

Much research has been conducted on teacher turnover while little research has been conducted on principal turnover. Within the next decade, approximately 40% of current principals will retire, creating a nationwide principal shortage (NASSP, 2002). In addition, the high school principal turnover rate from 2004 to 2007 in the state of Texas was 60.7% with an average tenure of 3.83 years (Young & Fuller, 2009). Increasing numbers of research studies suggest that principals have an impact on teachers, schools and student achievement (Leithwood & Jantzi, 2000; Prestine & Nelson, 2005). Further, evidence suggests that principals must remain in a school for 5 years to impact change (Fullan, 1991). Additionally, there are financial costs related to principal turnover in terms of recruiting and training new principals as well as indirect costs related to teacher turnover and decreased achievement (Fuller & Young, 2009). Studies indicate that principal retention rates are influenced by the level of achievement in the schools (Fuller & Young, 2009; Partlow, 2007; Akiba & Reichardt, 2004).

This research adds to the literature base by addressing specific job related factors and their relationship to high school principal tenure and turnover. Results from the study provide information to school superintendents and school boards to assist them in decreasing principal turnover.

Purpose and Research Questions

The purpose of this study was to determine the effects of factors including salary, compensation and benefits, accountability, job stress, increased instructional responsibilities, changes in student demographics, lack of support, politics, advancement opportunities and promotion on tenure and turnover of high school principals in the state of Texas. The research question that guided this study was:

What are the factors that contribute to the length of tenure and turnover among high school principals in Texas public schools?

Significance of Study

Some ways in which the education profession will benefit from the results of this study are included in the following discussion. First, the results of the study will provide information to superintendents and school boards who are attempting to reduce the percentage or frequency of high school principal turnover in their district by identifying factors that influence turnover. Information gained by the study can be used to bring about changes in the expectations of the role of the high school principal (Pounder & Crow, 1993).

Factors identified in the study can be used to assist districts in developing stronger leadership development programs for high school principals (Zeliner, Ward, McNamara, Gideon, Camacho & Edgewood, 2002). By identifying factors that influence high school principal turnover, districts can provide more specific training to high school principals to help them cope with the factors that they cannot control and help them to become more proficient in the factors they can control. Finally, the results can be used by university principal preparation programs and other certification agencies to help

better prepare principal candidates, specifically in the areas of time management and job delegation (Pounder & Crow, 1993).

Limitations and Delimitations

Limitations

"Limitations are the built-in limits of the method you use to explore your question" (Bryant, 2004, p 59). The limitations of this study are:

1. The time between the principals' current principal position and their prior position may have limited their recollection of the circumstances that influenced their decision to leave their prior position.
2. The research may have been limited by the self reporting nature of the data collection. Participants may have minimalized or embellished their responses.

Delimitations

"Delimitations are the factors that prevent you from claiming that your findings are true for all people in all time and places" (Bryant, 2004, p.57). The delimitations of this study are:

1. The principals in this study were limited to high school principals in Texas; therefore, principals serving Grades Pre Kindergarten through Grade 8 were not included. Principals outside the state of Texas were also not included in this study.
2. This study surveyed high school principals who had been in the high school principalship for at least 5 years in Texas and who had changed principal positions during this 5 year period. Therefore principals who retired, left the

profession, promoted to a position outside the principalship or became a principal within the past 5 years were not included in the study.

3. A database from the Texas Education Agency was accessed to determine which Texas high school principals had been in the principalship from at least the 2004-2005 school year through the 2008-2009 school year. Therefore, principals who left the principalship in Texas between 2004 through 2009 to accept a principalship in a different state were not included in the study.

Definition of Terms

- Factors- variables or occurrences that may contribute to or have an influence on principal turnover.
- Principal - school administrator: the head administrator of a school, especially a grade school or high school (MSN Encarta, 2009).
- Public high school – state funded educational organization containing grades 9-12 or 10-12 that provides free education.
- Tenure – the length of time in the position of principal in a single school.
- Turnover – the number of principals who leave the school and are replaced.

Organization of the Study

Chapter I served as an introduction to this study to identify the factors that influence high school principal turnover. Due to increasing pressures and demands placed on the current role of the principal, a study of these factors could provide valuable information to superintendents, universities and other principal certification agencies. Chapter II provides a literature review which includes motivation theory and motivating factors related to turnover and a review of national and international research studies.

Chapter III includes a restatement of the research question and definitions of specific terms related to the research question. The research method and design are discussed. Chapter III contains 4 tables. Chapter IV presents the results of the study and includes 4 figures and 11 tables. Chapter V summarizes and discusses the results and offers suggestions for future studies.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The principal of today is faced with complex challenges of being the instructional leader, creating a school wide vision, planning effective staff developments, hiring and mentoring teachers, handling discipline, attending school events and many other details associated with supervising a school (Richard, 2000). Additional roles of the principal include: staff motivator, evaluator, fund raiser, business manager, counselor and student role model (Whaley, Cox & Cox, 2002). In addition, today's principal is responsible for meeting and implementing curricular mandates to assure that all students achieve high standards on high stakes assessments as well as meeting additional requirements of No Child Left Behind (NCLB) ACT (Cushing, Kerrins, & Johnstone, 2003). The changing role of the principalship may be a leading factor in the rise of principal turnover (Whaley, Cox & Cox, 2002).

Motivation Theory

Retention and productivity of workers is a function of how well the worker is motivated. The findings and research of Maslow (1954) and Herzberg et al. (1957) provide the basis for much of the work in the field of human motivation. The work of Maslow and Herzberg is among the first to record the factors leading to job satisfaction and motivation (Lord, 2002). Additional theories of motivation evolved by adding components to these early theories. One such model, called the Lawler-Porter model expanded earlier models and contains intrinsic and extrinsic intervening variables (Porter & Lawler, 1968). Administrators and superintendents who understand human

behavior and motivation and how human behavior and motivation relate to job satisfaction are more effective in maximizing human potential and making positive differences in the climate of the schools (Webb & Norton, 2003). Workers who are happy and satisfied with their jobs are less likely to leave; therefore, motivation theory can be used to explain why workers leave their jobs.

Maslow's Hierarchy of Needs and Motivation Theory

The main premise of Maslow's theory is that human behavior is determined by cultural, biological, and situational conditions or needs and that job satisfaction can be explained through a hierarchy of needs (Maslow, 1954). Maslow developed his theory of motivation primarily through clinical observations. From the lowest to highest needs, the needs are physiological, safety, social, self-esteem and self-actualization. The first level, physiological, includes basic survival needs such as food, shelter, sex, sleep and water. The second level consists of physical safety and financial security which includes the protection of job security and the protection from illness, danger and economic disaster. The third level, social needs, consists of needs that include love, friendship belonging and acceptance by peers. Maslow describes the fourth level as the need for approval and recognition of work and the need for self esteem, such as achievement, independence and self confidence. The final level in Maslow's hierarchy, self-actualization, includes self-development, autonomy and self-direction. Needs that shape the motivation for individuals to act are dependent upon the state of these conditions or the level in which the person currently exists. According to Maslow (1954), a need is a potential motivator until it is at least partially met. As a need is met, it becomes ineffective as a motivator and the next need on the hierarchy becomes the motivator.

Hawthorne Studies

Until the late 1930s, it was assumed that the major factors behind employee morale and motivation were physical working conditions and wages (Hanson, 2003). During the period from 1935 to 1950, a shift in emphasis to a concern for human relations was observed, in which the major assumption was that the fulfillment of employee psychological and social needs motivated employees to work more productively (Guthrie & Reed, 1991). The human relations approach stressed the importance of human variables such as attitudes, feelings and the organization's social climate. These variables became apparent in the Hawthorne studies, which were conducted by Mayo, Roethlisberger and Dickson from 1927 through 1932.

Initially, the purpose of the Hawthorne Studies was to examine whether or not worker productivity could be improved through increased illumination in the work area. The results of the study indicated that production increased and decreased without direct relation to the intensity of the illumination (Mayo, 1933). Mayo and his colleagues conducted related experiments regarding changes in working conditions such as room temperature and the length of breaks and found similar results. Mayo and his colleagues concluded that increases in the workers' productivity were a function of human factors and not a function of the variables they manipulated. It also became evident in the study that the employees responded to the attention they received and to the novelty of the study (Mayo, 1933, Roethlisberger & Dickson, 1939). Mayo and his colleagues concluded that psychological and social factors significantly affect morale and productivity, and managers or supervisors who understand employees' beliefs, needs, and expectations will be more successful in motivating them.

The most significant findings from the Hawthorne Studies included the discovery that workers tend to act as members of informal groups rather than individuals. The Hawthorne Studies demonstrated that group norms were as or more important than administrative norms; that nonmonetary rewards were important in increasing productivity and that reaction to rewards and standards occurs for a group, not just individuals. An additional finding from the Hawthorne studies was that leaders who awarded equal attention to task performance and consideration such as respect, trust, concern and friendship were more effective as measured by worker satisfaction.

Herzberg's Theory of Work and Motivation

Herzberg, Manser and Snyderman (1959) conducted a study using 203 randomly selected engineers and accountants. Participants were interviewed and asked to recount a time when they felt good and bad about their jobs and why they felt that way. Through these interviews, Herzberg developed a two factor theory of motivation which questioned whether different types of factors were responsible for bringing about job dissatisfaction and satisfaction. According to Herzberg et al., two types of factors affect motivation: hygiene factors and motivators. Hygiene factors motivate workers when they are absent but have no perceived effect when present. They are things that when taken away, workers take steps to get them back. Examples of hygiene factors include decent working conditions, pay, security, benefits, policies and administration, and interpersonal relationships. These factors are considered extrinsic motivators and are related to the environment in which the job takes place or the factors surrounding the job itself.

Motivators, according to Herzberg et al., are factors whose presence motivates and leads to job satisfaction. Their absence does not cause any particular job dissatisfaction; however their absence fails to motivate the worker. These factors focus on the job itself and are intrinsic to the worker. Herzberg et al. maintained that achievement and recognition on the job, the work, job responsibilities and job advancement were the most important factors in increasing job satisfaction. In comparison, hygiene factors determine dissatisfaction and motivators determine satisfaction. These two scales are independent and a worker can rate high on both. Because Herzberg's theory has been widely used to examine job satisfaction, it should be useful in the discussion of job satisfaction and principal turnover as identified in this study.

The Lawler-Porter Model

In 1968, Porter and Lawler proposed the Lawler-Porter model of extrinsic and intrinsic work motivation. The Lawler-Porter model is cyclical and contains explicit intervening variables which incorporate extrinsic and intrinsic motivation. Lawler and Porter (1968) contend that extrinsic motivation requires a channeling between an activity and consequences such as verbal or tangible rewards; therefore, satisfaction comes from the extrinsic consequences to which the activity leads rather than the activity itself. Intrinsic motivation involves people performing an activity because they find the activity interesting and gain satisfaction from the activity itself. Porter and Lawler (1968) promoted a restructuring of the work environment so that good performance would lead to both extrinsic and intrinsic rewards, which in turn would produce job satisfaction and decrease turnover in the workplace. The restructuring of the jobs included making jobs more intrinsically

rewarding by enlarging jobs to make jobs more interesting and by rewarding effective performance through extrinsic rewards such as promotions or higher pay.

Motivation theory as it relates to high school principal tenure and turnover will be discussed further in this study. Factors related to high school turnover including salary, benefits and compensation, demographic changes in students, lack of support and advancement opportunities will be addressed.

Leadership and Factors Related to Turnover

Leaders who awarded equal attention to task performance and consideration such as respect, trust, concern and friendship were more effective as measured by worker satisfaction (Mayo, 1933, Roethlisberger & Dickson, 1939). The leadership of a school principal impacts the climate of the school, which in turn indirectly impacts school achievement (Norton, 2002). Taylor and Tashakkori (1994) studied data from students and teachers regarding school climate and found that school leadership was a major factor in determining school climate. Additional studies over the years reinforced the fact that healthy school climate positively impacts school achievement (Bulach & Malone, 1994; Winter & Sweeney, 1994; Paredes & Frazer, 1992). Exemplary schools have effective leaders who engage all stakeholders; students, teachers, parents and other staff members in school wide school reform that is effective and maintained over time. However, despite the need for strong leaders, principal turnover and a lack of qualified replacements appear to be increasing. Multiple expectations and the changing role of the principal may be deterring prospective leaders (NCSL, 2002). Scarpa (2005) states, “the problems related to attracting and retaining qualified administrators are problems

related to difficult work conditions, a lack of incentives, and an unmanageable range of responsibilities" (p.27).

Several factors have aided in changing the role of the principal as well as causing challenges to the principalship. These factors include salary, compensation and benefits, accountability, time requirements, job stress, increased instructional responsibilities, changes in student demographics, lack of support from parents, students and central administration and politics (NCSL, 2002).

Salaries

The second level of Maslow's hierarchy of needs (1954) contends that the need for financial security must be met before people can move to the next level. The difference in pay for a beginning principal and an experienced teacher is slim or nonexistent (Cushing et al., 2003). When principal salaries are calculated on a daily or hourly basis, there is often not a great difference between a principal's pay and a teacher's pay, considering the number of hours a principal typically works in a day compared to a teacher's hours (Yerkes & Guaglianone, 1998). In looking at Herzberg's theory (1968), salary is not a motivator; however individuals will be dissatisfied with their job if they believe they are not paid fairly.

Increased Accountability

More emphasis has been placed on the role of the principal as an instructional leader, data analyst and curriculum developer. Legislation such as the No Child Left Behind Act (NCLB) has broadened the role of the principal by implementing assessments and standards for schools thus making school administration more accountable for the performance of their students. The principal is expected to know

and implement best practices for increasing student learning (Whaley, Cox & Cox, 2002). Although principals are held accountable for the scores of their school, principals typically have little control over instructional programs, hiring and budgets (Archer, 2003). Many administrators feel overrun by high expectations of the school district and community, the complexity of the job and the workload (Yerkes & Guaglianone, 1998). The emergence of high stakes testing and the expectations derived from high stakes testing may contribute to job dissatisfaction. Dissatisfaction, as explained by Herzberg (1968) is a hygiene factor which in turn can lead to turnover in the workplace.

Time Requirement and Increased Instructional Responsibilities

An additional hygiene factor (Herzberg, 1968), the amount of time principals spend on the job, appears to be increasing. High School principals reported spending an average of 62 hours a week on the job while elementary principals reported spending an average of 52 hours per week at work (Magnuson, 2002). Long work hours, extended summer contracts and after school responsibilities often take principals away from home causing a toll on the principals' personal lives (Kerrins, Cushing & Johnstone, 2001). Unending supervision of afterschool and evening activities contribute to the increase in the number of hours principals work, particularly at the high school level (Yerkes & Guaglianone, 1998).

Job Stress

Job stress for principals comes from many different areas including high accountability demands, public criticism and legal requirements. Physical security is the second level of Maslow's hierarchy (1954).This stress can lead to health issues such as high blood pressure and weight gain (Cushing et al., 2003). Mountains of paperwork

created by district and state demands consume significant amounts of a principal's time thus adding to the stress of the principal (Yerkes & Guaglianone, 1998). An additional stressor is the blame placed on the principal if reform demands and other targets are not met (Cushing et al., 2003). Many principals feel that the stress caused by the increasing demands of the job is not worth having the job (Hertling, 2001).

Changes in Student Demographics

Schools across the nation face increased pressures of providing an adequate education to students who are more economically, linguistically, racially and developmentally more diverse than in the past (Whaley, Cox & Cox, 2002). When comparing socioeconomic status, race, family needs and academic needs, no two schools have the same demographics or student population. Every school is unique; therefore every principal faces a unique set of challenges and must be equipped with the skills and knowledge for all students to be successful (Loeser, 2008). The fourth level of Maslow's hierarchy (1954) includes the need for self esteem, such as achievement, independence and confidence.

Lack of Support

Principals want and need respect from others (Hopkins, 2003). Maslow describes the fourth level of his hierarchy of needs is the need for approval and recognition of work. Supporting this theory, Hertling (2001) maintained that lack of support from parents and community along with negative comments from students and media contribute to the lack of principal retention. Principals feel that they receive little support from central administration which in turn causes them to feel unappreciated and alone (Nakamura & Samuals, 2000; Bell, 2001). Mayo and his colleagues contend that

psychological and social factors significantly affect morale and productivity, and supervisors who understand employees' beliefs, needs, and expectations will be more successful in motivating them.

Bureaucracy, State Policies and Unfunded Mandates

Autonomy is among the highest level of needs in Maslow's hierarchy (1954). A study conducted by Public Agenda (2001) found that bureaucracy and lack of autonomy obstruct the principal's ability to run schools effectively. Principals surveyed reported that they needed more autonomy in rewarding good teachers and eliminating bad teachers. More and more mandates are being enacted, yet adequate funding often does not accompany the mandate (Whaley, Cox & Cox 2002). Principals must be able to manage money and budgets effectively in order to meet state policies and mandates. Public Agenda (2001) cited that 18% of superintendents and 13 % of principals reported that funding is such a critical problem that only minimal progress could be achieved in implementing unfunded mandates. Seventy-three percent of administrators and 72 % of principals reported that progress could be made in carrying out unfunded mandates, although lack of funding was a problem. Herzburg et al. (1957) identified policies as hygiene issues which can cause frustration to employees if they are unclear, unnecessary or if not everyone is expected to follow them.

Research Studies Related to Principal Turnover

In reviewing prior studies, Akiba and Reichardt (2004) examined the attrition of elementary school principals and assistant principals from 1999 to 2001 using Colorado state data. Specifically, age-specific attrition rates by gender, race and conditional factors associated with the attrition of elementary school leaders were explored.

The data, collected from the Colorado Department of Education, included information on 714 principals and assistant principals from 94 districts in 694 elementary schools. In order to examine the age group specific attrition rates by gender and race, Akiba and Reichardt (2004) compared the attrition rates of minority, non minority, male and female by 7 age categories; 35 or younger, 36 to 40, 41 to 45, 45 to 50, 51 to 55, 56 to 60 and 60 and above. For age 35 or younger, Akiba and Reichardt found that minority participants had higher attrition rates at 40% compared to non-minority participants at 20% and participants who were female had higher attrition rates at 30% than male participants 23%. Likewise, for ages 56 to 60, minority participants had higher attrition rates at 35% compared to non-minority participants at 18% and female participants had higher attrition rates at 40% compared to male participants at approximately 18%. Akiba and Reichardt conjectured that the higher female attrition rate for ages 35 and younger was associated with the likelihood of younger females leaving their positions to raise families and that higher attrition rates for female and minorities in the 56 to 60 age group indicate that females and minorities retire earlier than male and non minority leaders. According to Herzberg et al. (1957), “The phenomenon of aging pervades all of man’s activities. The role we play and the status we enjoy are often determined by age” (p. 5).

Akiba and Reichardt (2004) also examined the career paths taken by the participants who left their positions between 1999 and 2000 and between 2000 and 2001. Between 1999 and 2000, 8% of the participants left their leadership positions or moved to other states, 5% moved to schools in other districts while 13% moved to different schools within the same district. Between 2000 and 2001, 9% of the

participants left their leadership positions, 4% moved to schools in a different district and 10% moved to schools within the same district.

While examining predictors for school leader attrition, Akiba and Reichardt, (2006) utilized multiple logistic regression analysis with movement as the dichotomous dependent variable. Independent variables included demographic and professional characteristics (ethnicity, age and education levels), working conditions (poverty level, percentage of minority students, school size, school location, instructional expenditures per student and administrative expenditures per student), school achievement, and alternative opportunities and labor markets (salary difference, number of administrative positions and labor markets within regions of Colorado). The predictors were analyzed separately for males and females.

In the area of demographic and professional characteristics, Akiba and Reichardt found that female leaders with a masters or specialist degree were less likely to move to other schools than leaders holding a bachelors degree (B = -.737, p < .10), suggesting that females with a masters degree had reached the highest level of Maslow's hierarchy (Maslow, 1954). For working conditions, Akiba and Reichardt discovered that male and female leaders were more likely to leave large schools than middle size schools (B = .794, p < .10 and B = .924, p < .01). In examining school achievement, Akiba and Reichardt found that female leaders were 1.4 times more likely to change positions than males based on the Colorado Student Assessment Program for 4th grade reading and writing scores. Finally, male and female participants receiving large increases in their salary were more likely to change positions.

Similarly, Partlow (2007) conducted a study exploring possible relationships of 8 contextual variables and principal turnover. Seven of the contextual variables were organizational variables: building enrollment, student attendance, pupil-teacher ratio, teacher attendance, student mobility and student achievement in math and reading. Superintendent turnover was considered a school district variable. The variables were extrinsic in nature and related to factors relating to the job (Herzberg, 1959).The purpose of Partlow's study was to examine the 8 variables in regards to principal turnover frequency. Partlow defined principal turnover frequency as "the change of a principal as well as the frequency with which this occurs" (p.15) or simply stated, the number of principals in the building during a specified period of time.

Partlow (2007) analyzed 7 years of school data, from 1997 to 2003 using a proportional, stratified, random sampling procedure to select 109 elementary schools in southwest Ohio. To predict principal turnover frequency from the 8 variables, a multiple stepwise regression equation was used. Partlow's findings indicated that of the 8 variables only student test scores in fourth grade math ($R^2 = .067$, $F(1, 88) = 6.37$, $p < .05$) were statistically significant in prediction of principal turnover rate.

In 2007, Papa conducted a multivariate analysis to examine the determinants of principal retention by studying the impact of salary, school characteristics and principal traits on principal retention. Participants were divided into 2 categories: interdistrict, which included newly hired non-urban principals who were either retained for at least 4 years or became a principal of a different school outside the district within the 4 years or within-district which included newly hired urban principals who were either retained for

at least 4 years or became a principal of a different school within the district within the 4 years.

The results from the interdistrict multivariate analysis indicated that principals hired from within the district who had less than 5 years of district experience were 60.8% (p = .01) less likely to be retained than principals hired with at least 5 years of district experience. Results also indicated that the predicted probability of retaining a principal hired from within the district with less than 5 years of district experience was 84.8% compared to 91.3% for principals hired from outside the district and 93.4% for principals hired from outside the district with at least 5 years of district experience. Papa concluded that the issue for retention was not an insider versus outsider issue but an insider with little district experience versus the remaining principals.

The results from Papa's study (2007) also indicated that the likelihood of retention or non retention increased by 8.1% as a result of a $1000 increase in salary associated with the retention or non retention. The same retention or non retention decreased as the percentage of student enrollment, non-white students, LEP and uncertified teachers increased within the school. Papa concluded that schools with lower percentages of nonwhite students, LEP students, higher student enrollment, or uncertified teachers and schools offering higher salaries were more desirable to principals, all else equal.

The results from Papa's multivariate within-district analysis were similar to the results from the interdistrict analysis. The likelihood of retention or non-retention increased by 11.9% as a result of a $1000 increase in salary and decreased as the percentage of non-white students increased. Papa concluded that policy initiatives

aimed at providing funding to increase salaries for principals in disadvantaged schools could compensate for the disparities between schools. This finding supports Herzberg's theory (1968) which indicated that salary is not a motivator; however individuals will be dissatisfied with their job if they believe they are not paid fairly.

Herzberg et al., (1959) maintained that the work itself and job responsibilities were among the most important factors relating to job satisfaction; therefore, attention should be given to roles and responsibilities of jobs. The roles and responsibilities of school principals are often treated as duties that all principals should do which creates an overstated portrait of the principal's job suggesting that if principals are to succeed, they should take on an array of responsibilities (Portin, Schneider, DeArmond, Gundlach & Washington University, 2003). Portin et al. (2003) examined what principals actually do by studying the core roles for all principals regardless of the type of school, how these roles differ among public, charter, magnet and private schools and how training programs address the job demands. Through interviews and school visits, the study team drew five major conclusions:

> 1. The core of the principal's job is diagnosing his or her particular school's needs and, given the resources and talents available, deciding how to meet them.
>
> 2. Regardless of school type-elementary or secondary or public or private-schools need leadership in seven critical areas: instructional, cultural, managerial, human resources, strategic, external development and micro political.
>
> 3. Principals are responsible for ensuring that leadership happens in all seven critical areas, but they do not have to provide it. Principals can be "one-man" bands, leaders of jazz combos, or orchestra conductors.
>
> 4. Governance matters, and a school's governance structure affects the ways key leadership functions are performed.
>
> 5. Principals learn by doing. However trained, most principals think they learned the skills they need "on the job." (p. 4,5)

Further, Gates et al. (2006) used administrative data from Illinois and North Carolina from 1987-88 through 2000-01 to study principal mobility and turnover. A longitudinal event history approach was used to examine the relationship between individual characteristics and the school in which they worked. During the time period examined, the principal turnover rate in Illinois was 14% and the turnover rate in North Carolina was 18%.

In order to better understand principal turnover and mobility, Gates et al. used multivariate analyses of the career transitions of school principals and a multinomial logit modeling approach. In the study, the researchers were seeking to identify school level or individual factors that would affect the probability that the principal would either leave his job for a different job within the system, remain a principal in the same school, or remain a principal but change schools. Many variables were studied were extrinsic variables (Herzberg, 1959), including education/experience, gender, race, quality of the undergraduate institution, region or urbanicity, and school characteristics.

In examining education and experience, Gates et al. found no effect on the probability of principals leaving the system or changing schools. In Illinois, principals with a master's degree were less likely to change positions within the state system than principals without an advanced degree ($B = .06$, $p < .05$). Experience was found to be a significant predictor for all transitions; dropping out of the principalship, changing schools and changing positions in Illinois and for the probability of changing schools or dropping out in North Carolina. In Illinois, for experience, negative relationships were found for the probability of changing schools or changing positions, suggesting that very young or very old principals were least likely to change schools or positions. In the area

of gender in Illinois, Gates et al. found that on average female principals were 2.9% more likely to leave the system and change positions than men (2.1%), however; the results were not statistically significant.

In Illinois, a strong positive effect was found among Hispanic principals on the probability of changing schools ($B = .26$, $p < .05$) and changing positions ($B = .27$, $p < .05$) but not on leaving the system. No significant effects were found among black principals or the quality of the undergraduate institution.

Gates et al. found that in Illinois, principals in urban areas of Chicago were less likely ($B = .47$, $p < .05$) than principals in rural areas to leave the system but in urban areas not including Chicago no statistical difference was found. A higher probability of principals changing schools was found for urban areas of Chicago ($B = .22$, $p < .05$) but lower probability was noted in the suburban areas of Chicago compared to rural areas. The probability of changing positions was found to be higher for principals in rural areas than for principals in the urban or suburban areas of Chicago. In North Carolina, a small increase was found in the likelihood of principals in urban areas leaving the system ($B = .28$, $p < .05$) and in changing schools and a small decrease was noted in the likelihood of urban and non urban principals moving to non-principal positions.

The racial makeup of the students was a significant factor of the probability of principals changing schools or positions. The percent of non-White students showed a positive relationship to principals changing schools or positions in Illinois and North Carolina. In North Carolina, schools with 0% minority had an average principal turnover rate of 14% compared to 24% for schools with 100% minority students. For Illinois, the percentiles were not as high, with a 13% turnover rate for schools with 0% minority

population and 16% for schools with 100% minority population. In Illinois, principals that were the same race as the majority of their student population showed greater job stability (B = .29, p < .01). School size in Illinois indicated a negative relationship to the probability of principals leaving with each of the outcomes suggesting that larger schools have a greater degree of principal stability than small schools. In North Carolina, school size indicated a negative relationship for principals changing schools but no relationship to other types of moves.

Finally, Johnson (2005) studied the experiences of 12 principals who had voluntarily terminated their principalship. She applied the process of role exit (Ebaugh,1998) to her study. This process contains four stages:

- First doubts – when the individual begins questioning staying in his current job. This may lead to feelings of dissatisfaction.
- Seeking alternatives- when the individual begins comparing his current role with other possible roles
- The turning point – when the person decides that it is no longer an option to stay in his current role
- Creating the ex-role –the individual combines the expectations and norms of old and new roles to create a consistent sense of self

Johnson (2006) found that nine of the principals were unsatisfied with their job and sought other alternatives. Four of the exiters entered the principalship hoping to help and influence the students but came up against many barriers which prevented them from doing so. Three principals wanted to assist teachers with professional development but found that their workload prevented them from providing instructional leadership. Of the remaining two principals, one felt that the principalship took too much of an emotional and physical toll; the other had family matters to contend with. The exited principals also cited cultural issues, workload, bureaucracy, student discipline,

and irate parents as contributing factors to their job dissatisfaction. Four of the nine principals recalled a specific turning point which influenced their decision to quit. For one, the turning point occurred when, after two years of work, the staff voted down a curriculum change. Other principals cited lack of support by their supervisors as their turning point. The remaining 3 exiters were satisfied in their positions and had no intentions of leaving until a better opportunity presented itself.

In order to reduce turnover, Johnson (2006) suggested that districts should reduce the isolation principals feel when faced with challenges, reduce the principal's workload, provide effective leadership training and reduce the difference between the accountability level expected by the principals and the lack of influence they have over the factors that impact school success. Similar suggestions were made by Lawler-Porter (1968) for restructuring the workplace in order to provide a balance between intrinsic and extrinsic rewards.

In examining principal turnover, approximately 5% of principals leave their jobs involuntarily each year, although few studies have been conducted in this area (Davis, 1997). A study in California asked superintendents to rank the top five reasons why principals are fired (Davis, 1998). The most common response was a failure of principals to communicate in a manner that would build positive relationships with parents, students, colleagues and teachers. The second most common response by superintendents was a failure of principals to make good judgments and decisions that display a comprehensive understanding of school problems and issues. Superintendents cited the inability of principals to build a strong base of support among parents, community and teachers as the third most common reason that principals fail.

The failure of the principal to manage diverse political demands and pressure placed on the school by community or school members was also cited by superintendents. Finally, superintendents felt that principals fail when they are unable to build trust and confidence among teachers and parents.

Similar to the United States, New Zealand began experiencing principal turnover in their rural areas after the Tomorrow's Schools educational reform was put in place (Whittall & New Zealand, 2002). Between the years of 1990 and 2000, Whittall collected data from a sample of 50 small rural primary schools. These schools had a total of 179 principals during the 10 year period with small rural schools (0 - 50 students) averaging 5.06 principals over the 10 year period, medium rural schools (51 – 100 students) averaging 3.09 principals over the 10 year period and larger rural schools (101 - 150 students) averaging 3.09 principals over the 10 year period with the total average number of years for principal tenure averaging 2.36 years. Data collected from the study included the number of principal transitions for each school in the study, the departing principal's destinations and the reason for the departure using interviews, observations, and other information obtained by associates. The data from the analysis of the departing principal's destination and the reason for the departure revealed that a small number (19 or 14.17%) of principals were seeking promotions while 27 principals or 20.14% were seeking other careers. Schools which were located near larger cities had lower transitions, but the transitions increased proportionately as the distance from the cities increased from 8 principal appointments for schools located near the center of town to 17 principal appointments for schools located in rural towns. In addition, conflict

(13 or 14%) and workload (33 or 36%) were significant factors for principals leaving the principalship.

Additionally, Fraser and Brock (2006) conducted a study on principal retention among Catholic school principals in New South Wales, Australia. Similar to Herzberg's Theory of Motivation which identified factors that caused satisfaction and dissatisfaction in the workplace, Fraser and Brock were concerned first with identifying the incentives or disincentives as they related to attracting and retaining quality principals. The purpose of the study was to determine from the principals the type of environment that allows for job satisfaction and the circumstances that would continue to attract the principals to the job.

Fraser and Brock randomly selected 47 elementary and secondary principals to participate in the study. Twenty principals agreed to participate and 17 principals agreed to an additional telephone interview. A qualitative study was conducted using narrative surveys and structured interviews based on themes which emerged from the surveys. The following themes emerged from the analysis of the data:

- Factors that encourage job retention
- Drawbacks of the principal's role
- Factors that prompted a change of schools
- The ideal principal position (p. 431)

In examining the factors that encouraged job retention, the data revealed that financial security was a significant factor, particularly for male principals. The need for financial security is consistent with level 2 of Maslow's hierarchy of needs (1954). Lack of other opportunities within the Catholic schools was cited as a major reason for this. Other factors included the principal's commitment to Catholic education, commitment to the church, commitment to learning and teaching and the continuing challenges of the

job. Male principals also indicated that having a vision or plan for the school was another factor that contributed to their desire to stay in the principalship.

In the theme of drawbacks to the principal's role, these principals indicated that disincentives to the job included a sense of isolation, insufficient pay and compensation, stress, issues with staff, demanding and dissatisfied parents, and unrealistic expectations from supervisors. Sense of isolation included isolation from the staff due to their position and isolation from their family due to night and daytime commitments. Stress was generated mainly by non-educational tasks and responsibilities which consumed much of the principal's time. Principals also indicated that salary and compensation were not equated with the role. Parent demands, lack of their support on educational issues and threat of litigation were reported as major disincentives. Although the data did not indicate that these disincentives caused principals to leave their job, the continued presence of the disincentives may discourage teachers from aspiring to become administrators.

Principals in this study reported changing schools because they no longer felt satisfied in their current position. Other principals sited challenges of a new position or a sense of renewal as incentives for changing schools. In some cases, principals left for family or personal reasons.

The data indicated that the ideal job situation for a Catholic school principal favored more support by higher authorities in the areas of special needs children, legal liabilities, conflicts with unions and unprofessional staff. Principals indicated a need for recognitions for a job well done and clearly defined expectations for the principal's role.

Summary

Chapter II provided a review of the literature that included an overview of motivation theory and leadership, as well as factors relating to principal turnover. National and international studies were included in the review.

As evidenced in Chapter II, factors such as increased accountability, time requirements and workload, salaries, job stress, policies, changes in student demographics and lack of principal support contribute to the changing role of the principal and principal turnover. These factors show a close relationship to the hygiene factors and motivators identified by Herzberg as being contributors to job satisfaction or dissatisfaction.

Principal turnover negatively affects teacher quality, teacher retention and student achievement (Miller, 2009). Principal stability is critical for developing positive working relationships and implementing change in schools (Fuller et al., 2008). In response to principal turnover and lack of qualified applicants, school superintendents and school boards are seeking options that will assist in retaining school principals. This study strives to identify factors that can be used to predict principal turnover.

CHAPTER III

METHODOLOGY

The purpose of this study was to explore factors that contribute to the length of tenure among high school principals in Texas public schools. Chapter 3 presents the participant's demographic and background information, participant selection process and the research method and design. Further, the data collection instrument and procedures for data collection are described. Finally, this chapter provides a summary of the data analysis process. The research question that guided this study was:

What are the factors that contribute to the length of tenure and turnover among high school principals in Texas public schools?

Participants

The sample consisted of 60 participants. This sample size was considered small based on the "rules of thumb" as set forth by Thorndike and cited in Peng, So, Stage, and St. John, (2002). Thorndike's rules include using 50 participants plus the square of the number of variables. Applying the "rules of thumb" to this study, the suggested sample size for this study should be approximately 150 participants.

The participant demographics included 43 (71.7%) males and 17 (28.3%) females as presented in Table 1. These percentages are representative of the gender breakdown for high school principals in the state of Texas from 2006 – 2009 as obtained through the Texas Education Agency which reported 69% male and 31% female. Forty-three (71.7%) of the participants were White, 6 (10%) were African American, 7 (11.7%) were Spanish American, 1 (1.7%) was Asian American while 3 (5%) were classified as "other." The ethnic breakdown for high school principals from

2006 – 2009 according to information provided by the Texas Education Agency was: 74% White, 9.4% African American, 15.3% Hispanic, 0.1% Asian and 0.4% American Indian which indicates that the ethnicity of the participants in the study were similar to those for the state of Texas. The participants were initially divided into two groups to provide further insight into the difference in the relationship between the independent variables and the length of tenure in the job. Group 1 consisted of high school principals who had been in their prior high school principalship 1 to 4 years before moving to a new principalship. Four years were used as the cut point for Group 1 based on prior research which indicated that 3.83 years was the average years of tenure for high school principals in Texas (Young & Fuller, 2009). Group 2 consisted of high school principals who had been in their prior high school principalship 5 to 15 years before moving to a new high school principalship. The demographic make-up of Group 1 and Group 2 were similar as indicted in Table 1.

The chi square of 11.27 ($p < .01$), as displayed in Table 1, for all participants in the area of gender indicated that the participants were not evenly distributed. There were significantly greater proportions of males than females. Similarly, the chi square of 102.00 in the area of ethnicity demonstrated that the participants were not evenly distributed among the 5 ethnic groups included in the study. There were a significantly larger proportion of White participants in comparison to the remaining race categories.

Table 1

Demographics of the Sample

			Freq	%	Valid %	Cm %	χ^2	*p*
Gender	All participants	male	43	71.7	71.7	71.7	11.27	.001
		female	17	28.3	28.3	100.0		
	Group 1	male	22	71.0	71.0	71.0		
		female	9	29.0	29.0	100.0		
	Group 2	Male	21	72.4	72.4	72.4		
		female	8	27.6	27.6	100.0		
Ethnicity	All participants	White	43	71.7	71.7	71.7	102.00	.001
		African American	6	10.0	10.0	81.7		
		Spanish American	7	11.7	11.7	93.3		
		Asian American	1	1.7	1.7	95.0		
		other	3	5.0	5.0	100.0		
	Group 1	White	20	64.5	64.5	64.5		
		African American	4	12.9	12.9	77.4		
		Spanish American	5	16.1	16.1	93.5		
		Asian American	1	3.2	3.2	96.8		
		other	1	3.2	3.2	100.0		
	Group 2	White	23	79.3	79.3	79.3		
		African American	2	6.9	6.9	86.2		
		Spanish American	2	6.9	6.9	93.1		
		other	2	6.9	6.9	100.0		

Background information regarding age and number of years in the principalship is presented in Table 2. The current age of all participants ranged from 33 to 66 years with an average of 49.37 (*SD* = 7.09) years of age. The ages in which the participants became principals ranged from 25 to 55 years with an average age of 38.37 (*SD* = 6.43). The participant's current ages and ages in which participants in Group1 and Group 2 became principals were similar.

The number of years that all participants worked in their current job ranged from 1 to 4 years, with an average mean of 2.35 (*SD* = 1.15). An average mean of 5.37 (*SD* = 3.38) with a range of 1 to 15 years was indicated as the number of years that the participants worked at their prior high school principalship before moving to a different high school principalship. The average number of years for Group 1 and Group 2 for their prior and current principalships is reported in Table 2.

Table 2

Age and Number of Years in the High School Principalship

		N	Min.	Max.	Mean	*sd*	x^2	*p*
All participants	age became principal	60	25	55	38.37	6.43	34.400	.060
	current age	60	33	66	49.37	7.09	26.667	.320
	years prior campus	60	1	15	5.37	3.38	31.867	.001
	years current campus	60	1	4	2.35	1.15	2.00	.572
Group 1	age became principal	31	25	55	38.55	6.71		
	current age	31	33	61	47.42	7.27		
	years prior campus	31	1	4	2.97	1.08		
	years current campus	31	1	4	2.39	1.09		
Group 2	age became principal	29	28	51	38.17	6.24		
	current age	29	39	66	51.45	6.37		
	years prior campus	29	5	15	7.93	3.10		
	years current campus	29	1	4	2.31	1.23		

As indicated in Table 3, the highest degree earned by all participants ranged from a masters degree to a Ph.D. Sixteen or 26.7% of the participants held a master's degree, 33 or 55% held a master's degree plus additional hours, 10 or 16.7% held an Ed.D., and 1 or 1.7% held a Ph.D. In Group 1, 11 or 35.5% held a masters degree, compared to 5 or 17.2% in Group 2. Thirty-three or 55% of Group 1 held a master's degree plus additional graduate hours compared to 15 or 51.6% of Group 2. In Group 1, 4 or 12.9% of the participants held an Ed.D and 6 or 20.7% in Group 2 held an Ed.D. No participants in the 1 to 5 year group held a Ph.D. compared to 1 participant in the Group 2.

Two or 3.3% of the participants had no license or certification and 58 or 96.7% of the participants held a permanent professional license. A traditional administrative preparatory program was completed by 58 or 96.7% of the participants while a district alternate program was completed by 2 or 3.3% of the participants. Twenty nine or 93.5% of the participants in Group 1 completed a traditional preparatory program and 2 or 6.5% of the participants completed a district alternative program. All of the participants in Group 2 completed a traditional administrative preparatory program.

Table 3

Educational Background, *n=60*

			Freq	%	Cumulative %	x^2	*p*
Education Level	All participants	Master's	16	26.7	26.7	36.400	.000
		Master's Plus	33	55.0	81.7		
		Ed.D	10	16.7	98.3		
		Ph.D.	1	1.7	100.0		
	Group 1	Master's	11	35.5	35.5		
		Master's Plus	16	51.6	87.1		
		Ed.D	4	12.9	100.0		
	Group 2	Master's	5	17.2	17.2		
		Master's Plus	17	58.6	75.9		
		Ed.D	6	20.7	96.6		
		Ph.D.	1	3.4	100.0		
Certification	All participants	no license or certification	2	3.3	3.3	56.267	.000
		Permanent professional license	58	96.7	100.0		
	Group 1	no license or certification	1	3.2	3.2		
		Permanent professional license	30	96.8	100.0		
	Group 2	no license or certification	1	3.4	3.4		
		Permanent professional license	28	96.6	100.0		
Leadership Program	All participants	traditional prep program	58	96.7	96.7	56.267	.000
		district alternate certification program	2	3.3	100.0		
	Group 1	traditional prep program	29	93.5	93.5		
		district alternate certification program	2	6.5	100.0		
	Group 2	traditional prep program	29	100.0	100.0		

The information displayed in Table 4 indicated that 2 of the participants or 3.3% worked 30 to 40 hours per week in their prior job, 8 or 13.3% worked 40 to 50 hours per week in their prior job, 25 or 41.7% worked 50 to 60 hours per week in their prior job while 25 or 41.7% worked 60+ hours per week in their prior job. In Group 1, no participants reported working 30-40 hours per week in their prior principalship compared to 1 or 3.4% in Group 2. Four or 12.9% of the participants reported working 40 to 50 hours in Group 1 compared to 4 or 13.8% of the Group 2 who reported working 40 to 50 hours per week at their prior principalship. In Group 1, 15 or 48.4% participants reported working 50 to 60 hours per week at their prior principalship while 9 or 31% from Group 2 reported working 50 to 60 hours per week at their prior principalship. Twelve or 38.7% of the participants in Group 1 reported working 60+ hours per week in their prior positions compared to 15 or 51.7% of Group 2. The resulting cross tabulation between Group 1 and Group 2 for number of hours worked at the prior position returned a chi-square of 2.770 ($p > .05$) suggesting that the number of hours worked among the 2 groups was similar. The number of hours worked by the participants in their current position was similar to the number of hours the participants worked in their prior position.

Table 4

Other Background Information

		# of hours worked	Frequency	%	Cumulative Percent	x^2	*d*
Prior hours worked	All participants	30 - 40	2	3.3	3.3	31.333	.000
		40 - 50	8	13.3	16.7		
		50 - 60	25	41.7	58.3		
		60+	25	41.7	100.0		
	1 to 4 yrs					2.770	.427
		40 - 50	4	12.9	12.9		
		50 - 60	15	48.4	61.3		
		60+	12	38.7	100.0		
	5 to 15 yrs	30 - 40	1	3.4	3.4		
		40 - 50	4	13.8	17.2		
		50 - 60	9	31.0	48.3		
		60+	15	51.7	100.0		
Current hours worked	All participants	30 - 40	1	1.7	1.7	27.867	.000
		40 - 50	8	13.3	15.0		
		50 - 60	24	40.0	55.0		
		60+	27	45.0	100.0		
	1 to 4 yrs	40 - 50	4	12.9	12.9	6.258	.044
		50 - 60	12	38.7	51.6		
		60+	15	48.4	100.0		
	5 to 15 yrs	30 - 40	2	6.9	6.9		
		40 - 50	4	13.8	20.7		
		50 - 60	13	44.8	65.5		
		60+	10	34.5	100.0		

Procedure

The participants were selected from a database obtained from the Texas Education Agency which listed the district, school and principal for each Texas public school district. The database, which included current and archived years, was utilized to track the principal's employment status over the past 5 years from the 2004-2005 school year to the 2008-09 school year. Ninety-nine high school principals in Texas which were currently serving as principals in a different high school than 5 years prior were sent the Texas Principal Survey requesting information about the principals and

their current and past positions (Appendix A). Each participant's e-mail address was entered into a database and participants received the survey electronically through Survey Monkey which is a web-based survey tool found at www.surveymonkey.com that allowed the participants to easily and quickly complete and submit the survey online. The data that were obtained through the electronic survey were input into a computer statistics program; Statistical Package for School Sciences (SPSS) Version 17.0. Data collected from the Texas Principal's Survey were utilized to determine the extent in which the factors included in the study motivated principals to leave their prior job. Responses from the open ended questions were categorized into themes by 3 educators independently and then analyzed to determine the salient reasons that principals left their prior position. Responses from the open ended questions were also analyzed to gain additional information from the high school principals regarding the least and most rewarding part of being a principal and why they became a principal. The inter-rater reliability was .94.

A consent notice was included in the email (Appendix B). Data was handled confidentially and no school name or principals' were used in the process. A key that linked participant information to their coded responses was developed using a Microsoft Excel spreadsheet; that key was destroyed once data collection was completed. No identifying information was included in any dissemination of data. Sixty (60.6%) of the identified principals responded to the survey. In order to solicit responses to the survey, principals who had not responded were sent the survey 4 times over a two week period. At that point, all principals who had not responded were contacted by phone requesting

their participation. The survey was then sent 2 more times in attempts to gain additional responses.

Research Method and Design

This study used a mixed method design to determine the motivating factors that impacted high school principal turnover and tenure. Qualitative research was used to "explain, and gain insight and understanding of phenomena through intensive collection of narrative data" (Gay, 1996, p. 214). Quantitative research was used to "explain, predict and/or control phenomena through focused collection of numerical data" (Gay, 1996, p. 214). The Texas Principal Survey, which was adapted from the Texas Superintendent Survey developed by Byrd, Drews and Johnson (2006) was used. Factors included in the survey are based on Herzberg's (1968) hygiene factors and motivators as they relate to job satisfaction or dissatisfaction and Maslow's hierarchy of needs (1954) as well as those identified in the literature review as influencing factors on principal turnover or job satisfaction. The factors include salary, accountability, hours, job stress, increased instructional responsibilities, changes in student demographics, lack of support, politics, advancement opportunities and promotion.

Dependent Variable

The dependent variable utilized in this study of high school principals was the length of tenure. Tenure is defined as the length of time in the position of principal in a single school. Principals were asked to report the number of years they served in their current positions during the timeframe of the survey. The principal is defined as the "school administrator: the head administrator of a school, especially a grade school or high school" (MSN Encarta, 2009). In this study, the dependent variable was

dichotomous, meaning the dependent variable had two values (Hinkle, 2003). The two values for the dependent variable were 0 and 1.The value of 0 was assigned principals who were in their prior high school position 1 to 4 years before moving to a different high school principalship, referred to as Group 1, and a value of 1 was assigned to principals who were in their prior high school principalship 5 to 15 year before moving to a different high school principalship, referred to as Group 2. For the purposes of this study, the dependent variable was referred to as “turnover.”

Independent Variables

Independent variables included motivating factors identified as possible influences of principal tenure such as salary, benefits and compensation, accountability, hours, job stress, increased instructional responsibilities, changes in student demographics, lack of support, politics, advancement opportunities and promotion.

Instrumentation

The instrument used in this study was the 3-part self-administered Texas Principal Survey (TPS). A self administered survey is a survey completed by participants in the absence of an investigator (Mitchell & Jolley, 2004). The TPS was adapted from the Texas Superintendent Survey (TSS), which was developed by Byrd, Drews and Johnson (2006). Additional items on the questionnaire were developed based upon a thorough review of the literature. In the development phase a group of university professors and current, nonparticipating principals reviewed the survey and made suggestions that enhanced content validity. This group consisted of 5 principals and 3 university professors. Four members were males and 4 were females. One male held a Ph.D. and 2 of the females held an Ed.D. The remaining members of the group

held an M.Ed. The adapted and revised TPS was piloted by 105 principals in Texas who did not participate in the study to determine validity and reliability.

The first part of the survey was designed to gather background information about the following: 2008 accountability rating, age of principal, ethnicity, gender, salary range, level of education, certification and preparation program. The second section contained questions pertaining to the principalship including how prepared the participants were for the principalship, the principal's career aspirations, influences on the principal's decision to become a principal, and how many years the participants served in their current position. A 5 point Likert scale ranging from 1 = *no influence*, 2 = *of little influence*, 3 = *moderately influential*, 4 = i*nfluential* and 5= *very influential* was utilized in Section 2 requesting participants to rate the influence of factors on their decision to become a principal. The third section of the survey requested information about the principal's prior principal position. This information included the number of years at the principal's prior positions, size and location of prior school, and factors which motivated the principal to change schools. A 4 point Likert scale was used for participants to rate the influence of the factors on their decision to change schools. The scale ranged from 1 = *not at all*, 2 = *very little*, 3 = *to some extent*, and 4 = *to a great extent*. Similar to the interviews conducted by Herzberg et al., 4 open-ended questions were included in this study in order to gain information regarding the least rewarding and most rewarding part of being a principal, why participants became a principal and why participants left their prior principalship.

Data Analysis

Quantitative

Descriptive statistics and binary logistic regression were utilized to examine the data from the quantitative section of the survey. Descriptive statistics were used to present simple quantitative descriptions of the data. Logistic regression contends with the relationships among the variables, with one predictor being the dichotomous dependent variable while the other variables are independent or predictor variables (Huck, 2000) Binary logistic regression was utilized to predict the probability of the outcome for each of the predictor variables or in this study the probability that a principal left their prior position due to each variable.

Qualitative

A qualitative study uses non-numerical data to answer a research question, typically through interviews, written responses, records, pictures or observed behavior (Christensen, 2001). Qualitative research, defined broadly, means "any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification" (Strauss & Corbin, 1990, p. 17) and instead, the type of research that produces findings derived from real-world settings where the "phenomenon of interest unfold naturally" (Patton, 2001, p. 39). For the qualitative portion of the survey, open ended questions were utilized which asked the principal why they became a principal, the most and least rewarding part of becoming a principal and why they left their prior position. The responses gathered from each principal were analyzed for themes or patterns.

The responses were categorized by 3 educators for inter-rater reliability. The educators were provided a brief training over the process and were provided an example. The educators categorized the themes independently, then were brought together to gain consensus on differing themes. While obtaining consensus among raters increases the likelihood of yielding credible findings, the interpretations from the educators might differ from the authentic interpretations of the participants from the study; therefore the analysis of the data may contain subjective bias (Morse, 1997). The themes were then given a code and the educators categorized the responses into the themes by coding the responses to the appropriate theme. Inter-rater reliability was .94.

Summary

The purpose of Chapter III was to discuss the methods utilized to determine motivating factors associated with principal tenure and turnover. In sum, for selecting participants, generating data and analyzing data, the following steps were taken:

1. Participants were selected utilizing a Texas state database containing current and archived employment status.
2. Descriptive statistics were used to generate data regarding demographic and background information with reference to the participants.
3. Data were gathered utilizing the edited and revised TPS and manipulated through SPSS.
4. Data were analyzed through a mixed method design using binary logistic regression and open ended questions.

CHAPTER IV

ANALYSIS

The purpose of the present study was to determine factors that impact tenure and turnover of high school principals in the state of Texas. This study examined the effects of 10 variables on principal turnover during a 5 year period. Univariate analysis was utilized to describe the 10 variables. A point bi-serial correlation was conducted to determine the strength of the relationship between each of the variables included in the study. Ratings by participants on the variables were reported and a *t*-test for independent samples was conducted to determine mean differences. Binary logistic regression was the mode of analysis used in this study. Eleven tables and 4 figures are included in Chapter IV.

Univariate and Bivarate Analysis

Univariate Analysis

Univariate analysis was utilized to describe each predictor variable. Table 5 provides descriptive statistics for the variables examined in the study. Among the variables examined, the largest means were associated with advancement opportunities with a mean of 2.55 (*SD* = 1.20) and salary and compensation with a mean of 2.37 (*SD* = 1.12). Demographic and economic changes in students had the lowest average mean of 1.62 (*SD* = 0.83) suggesting changes in students had the least amount of influence on principal turnover in relation to the remaining variables. Skewness and kurtosis indicate how the distribution of the variables deviates from a normal distribution (Park, 2008). Values of zero indicate normal distribution of data for kurtosis and skewness. As the data move farther away from zero, the data are more likely to be farther away from the normal distribution. A normal skew is symmetrical and the values of the mean,

median and mode are the same (Gay, 1996). Skewness and kurtosis values within the range of -2 to +2 are considered acceptable (Huck, 2001). As indicated in Table 5, the kurtosis and skewness values are all within the -2 to +2 range, therefore all variables were determined to be normally distributed.

Table 5

Descriptive Statistics of Study Variables

	N	Mean	*SD*	Skewness	Kurtosis
Salary, comp., benefits	60	2.37	1.12	.046	-1.392
Accountability	60	1.87	.89	.715	-.360
Hours	60	1.70	.85	.971	.054
Job stress	60	2.03	1.09	.747	-.725
Inc. inst. Resp.	60	1.92	.96	.762	-.405
Changes in student demographics	60	1.62	.83	1.204	.702
Lack of support	60	2.05	1.17	.687	-1.048
Politics	60	2.22	1.25	.327	-1.581
Advancement opportunities	60	2.55	1.20	-.091	-1.532
Promotion	60	2.30	1.28	.213	-1.683

Predictor Variable Ratings

Participants were asked to rate the predictor variables from the TPS on the extent in which the variables motivated the participants to leave their prior position. As discussed in Chapter 3, the ratings ranged from 1 to 4. The results are reported in Appendix C. For the variable salary, compensation and benefits, the mean score was 2.23 (*SD* = 0.96) for the participants in Group 1 and a 2.52 (*SD* = 1.27) for the participants in Group 2. Salary, compensation and benefits had the highest mean score for Group 2 among the variables rated, which suggests that salary, compensation and benefits had a greater influence over the participant's decision to leave their prior position than the remaining variables for Group 2. The mean reported for accountability

was 2.10 (*SD* = 0.98) for Group 1 compared to 1.62 (*SD* = 0.73) for the Group 2. The mean results regarding the number of hours worked was similar for both groups with a mean of 1.77 (*SD* = 0.92) for Group 1 and a mean of 1.62 (*SD* = 0.78) for Group 2. The average rating for job stress among Group 1 was 2.23 (*SD* = 1.20) compared to 1.83 (*SD* = 0.93) among Group 2. The mean for increased instructional responsibilities was 2.02 (*SD* = 1.08) for the participants in Group 1 and 1.79 (*SD* = 0.82) for the participants in Group 2. The participants in both groups rated changes in student demographics the lowest as to the extent in which it motivated the participants to change positions with a mean of 1.68 (*SD* = 0.83) for Group 1 and 1.55 (*SD* = 0.83) for Group 2 which suggests that changes in student demographics had the least influence on the participant's decision to leave their prior position. Lack of support had a mean of 2.39 (*SD* = 1.28) for Group 1 and a lower mean for Group 2 at 1.69 (*SD* = 0.93). The variable politics had a mean of 2.45 (*SD* = 1.23) for Group 1 and a mean of 1.97 (*SD* = 1.24) for Group 2. The participants in Group 1 rated advancement opportunities the highest with a mean of 2.97 (*SD* = 1.26), suggesting that advancement opportunities had a greater influence on the participant's decision to leave their prior position than the other variables rated for group 1. For Group 2, the mean was 2.10 (*SD* = 1.08) for the variable advancement opportunities. Promotion returned a mean of 2.55 (*SD* = 1.26) for Group 1 and 2.03 (*SD* = 1.27) for Group 2.

A crosstab with a Pearson chi-square test was used to determine the relationship between the 10 predictor variables and the dichotomous variable, turnover. The purpose of a Pearson chi-square test is to analyze categorical or dichotomous data (Gall et al., 1996). As indicated in Appendix C, 3 of the predictor variables, salary,

compensation and benefits, promotion and advancement opportunities, returned *p* values less than .05. The remaining predictor variables had *p* values greater than .05 and therefore could have been excluded in the logistic regression analysis. However, they were included in the model based on theoretical and practical considerations (Norŭsis, 2006).

Bivariate Analysis

A point bi-serial correlation analysis was conducted to determine the strength of relationship between each of the variables included in the study. Point bi-serial correlations are employed when one variable is dichotomous and a second variable is continuous. Point bi-serial values range between -1.00 to +1.00 (Varma, nd.). A value close to 0 indicates that there is no relationship between the two variables while values closer to +1 and -1 indicate a strong positive (+1) or strong inverse (-1) relationship. In the current study, point bi-serial values ranged from -.227 to +.363. The results displayed in Table 6 show that statistically significant correlations ranged from *rpb* = .269 ($p < .05$) between turnover and accountability and *rpb* = .300 ($p < .05$) between turnover and lack of support to *rpb* = .363 ($p < .05$) between turnover and advancement opportunities. A desirable point bi-serial correlation is +.20 and up, which indicates that the statistically significant correlations are good, but considered small. The effect size, which is calculated by squaring the rpb for turnover and accountability was .072, indicating that accountability explained approximately 7% of the variance in principal turnover. The effect size for turnover and lack of support was .09, indicating that lack of support explained approximately 9% of the variance in principal turnover. For turnover and advancement opportunities, the effect size was .131, indicating that advancement

opportunities explained 13% of the variance in principal turnover. Effect sizes ranging between 1% and 8% are considered small sized effects, effect sizes ranging between 9% and 24% are considered medium sized effects while effect sizes above 25% are considered high (Valentine & Cooper, 2003).

Table 6

Point Bi-Serial Correlations for the Ten Predictor Variables and the Dichotomous Variable

	S	A	H	JS	IR	C	LS	P	AD	PR	T
Salary (S)	1.00										
Accountability (A)	.203	1.00									
Hours spent (H)	.082	.237	1.00								
Job stress (JS)	-.121	.214	.469**	1.00							
Inc. inst. resp. (IR)	.108	.461**	.363**	.424**	1.00						
changes in student dem. (C)	-.010	.344**	.075	.335**	.301**	1.00					
lack of support (LS)	-.208	.185	.254	.557**	.154	.283*	1.00				
Politics (P)	-.227	.118	.206	.568**	.255*	.263*	.653**	1.00			
Advancement opportunities (AD)	.289*	.434*	.082	-.001	.290*	-.109	-.020	-.058	1.00		
Promotion (PR)	.383**	.273	.224	.056	.186	.130	.203	.190	. 620**	1.00	
Turnover (T)	.131	.269*	-.091	.184	.125	.077	.300*	.196	.363*	.202	1.00

N = 60; *p < .05 (two-tailed); **p < .01 (two-tailed)

Independent Samples t-test

A *t*-test for independent samples was conducted to determine if statistically significant mean differences existed between Group 1 and Group 2 for each of the 10 variables. As indicated in Appendix C and Table 7, there was a significant difference in the scores for Group 1 (M = 2.10, SD = 0.98) and Group 2 (M = 1.62, SD = 0.73) for the variable accountability; $t(58) = 2.127$, $p = .038$. For the variable lack of support, there was a significant mean difference in the scores of Group 1 (M = 2.39, SD = .1.28) and Group 2 (M = 1.69, SD = 0.93); $t(54.683) = 2.423$, $p = .019$. The mean difference for the variable advancement opportunities for Group 1 (M = 2.92, SD = 1.17) and Group 2 (M = 2.10, SD = 1.08) was significant t (58) = 2.969, $p = .004$. No statistically significant mean difference was found for the remaining 7 variables. The statistically significant mean difference for the variables accountability, lack of support and advancement opportunities suggests that these variables had a greater than expected influence on the Group 1 participant's decision to leave their prior principalship. A plausible explanation for the results would be that the participants in Group 1 had not yet satisfied level 4 esteem needs on Maslow's hierarchy of needs and were still seeking attention, recognition and autonomy.

Table 7

Independent Samples t-test

	t-test for Equality of Means						
	t	*df*	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Salary, compensation and benefits	-.998	51.908	.323	-.29	.29	-.88	.29
accountability	2.127	58	.038	.48	.22	2.80E-02	.92
hours spent	.696	58	.489	.15	.22	-.29	.59
job stress	1.428	58	.159	.40	.28	-.16	.96
Increased instructional responsibilities	.962	58	.340	.24	.25	-.26	.74
changes in students	.586	58	.560	.13	.21	-.30	.55
Lack of Support	2.423	54.683	.019	.70	.29	.12	1.27
politics	1.522	58	.133	.49	.32	-.15	1.13
Advancement opportunities	2.969	58	.004	.86	.29	.28	1.45
Promotion	1.574	58	.121	.51	.33	-.14	1.17

Logistic Regression

A binary logistic regression model was used to predict or explain the discrete outcome from a set of predictor variables and a dichotomous variable (Tabachnick & Fidell, 2000). Logistic regression contends with the relationships among the variables, with the dichotomous predictor being the dependent variables while the other variables are independent or predictor variables (Huck, 2000).

The null model included 60 cases. In the null model, the percentage of cases predicted correctly was 51.7%. In the full model, which included the predictor variables, the overall accuracy increased to 78.3% with 80.6% of Group 1 and 75.9% of Group 2 predicted accurately, as reported in Table 8. The data indicate that the model classified 78.3% of the cases correctly. However; as noted by Norŭsis (2006):

> The percentage of cases correctly classified is a poor indicator of model fit, since It does not necessarily depend on how well a model fits. It ignores the actual probability values, replacing them with a cutoff value. It's also possible to add a highly significant variable to the model and have the correct classification rate decrease. (p. 344)

Table 8 assessed the performance of the model by cross tabulating the observed response categories with the predicted response categories. The observed column indicates the number of participants from Group 1 and Group 2 that are observed in the dependent variable. The predicted column indicates the predicted values of the dependent variable (Group 1 or Group 2) based on the full logistic regression model (Annotated Stata Output: Logistic Regression). The sensitivity for the participants was high, with 25 out of 31 participants from Group 1 predicted correctly with a sensitivity of 80.6% [25 / (25 + 6)]. The sensitivity refers to the proportion of actual events that are correctly identified as such (Peng, Lee & Ingersoll, 2002). The specificity was also high,

with 22 out of 29 or 75.9% [22 / (7 + 25)] of the participants in Group 2 predicted correctly. The specificity refers to the proportion of nonevents correctly identified as such (Peng et al. 2002). The false positive was low at 21.88% [7 / (7 + 25)], which measures the proportion of observations misclassified as events (Group1) over all those classified as events. The false negative was also low 21.42% [6 / (6 + 22)], which measures the proportion of observations misclassified as non events (Group 2) over those classified as nonevents. The overall correction prediction was 78.3% which was an improvement over the 57.7% prediction in the null model.

Table 8

The Observed and Predicted Frequencies for Principal Turnover by Logistic Regression

Observed	Predicted		Predictive %
	Group 1	Group 2	
Group 1	25	6	80.6
Group 2	7	22	75.9
Overall Percentage			78.3

a The cut value is .500

Overall Model Evaluation

The Hosmer and Lemeshow test of goodness-of-fit is used to test the null hypothesis that there are no differences between the observed values and the predicted values (Hair et al., 2006; Norusis, 2006). The chi square of 10.651 (df = 8, p = .222) as shown in Table 9 suggested a failure to reject the null hypothesis indicating that the model was an acceptable fit.

Statistical Tests of Individual Predictors

A Wald statistic was used to measure each variable. The ratio of the coefficient (*B*) to *S.E.*, squared, equals the Wald statistic (Center for Family and Demographic Research, 2006). If the Wald statistic is less than .05, then the parameter is useful to the model.

As indicated in Table 9, two of the ten predictor variables were statistically significant: salary, compensation and benefits and advancement opportunities. The remaining 8 variables were not statistically significant ($p > .05$). Salary, compensation and benefits was found to be a significant predictor variable for principal turnover with $p = .045$. The *Exp(B)* or odds ratio of 2.14, which is an exponentiation of the *B* coefficient, was used to predict the change in odds for a unit increase in salary, benefits and compensation. When *Exp(B)* is greater than 1, increasing values of the variable salary, benefits and compensation correspond to increasing odds of the occurrence of turnover (Center of Family and Demographic Research, 2006). The odds of participants from Group 2 leaving their principalship due to salary was 2.14 (*Exp(B)* = 2.14) times more than for participants in group 1. This can also be interpreted as a one-unit change in salary, compensation and benefits would increase the odds of principal turnover by a multiple of 2.14 or 114% (*Exp(B* -1 x 100 or 2.139 - 1 x 100) for principals in Group 2 over principals in Group 1 (Pampel, 2000). In examining the 95% confidence interval, the risk of turnover due to salary, compensation and benefits ranged from 1.019 to 4.490 times greater for participants in Group 2 than Group 1. With 95% confidence, a one-unit change in the predictor variable salary, compensation and benefits would increase the odds of principal turnover, holding all other predictor variable constant

(Garson, 2006a). Herzberg (1959) theory provides a plausible explanation for this result in that salary is a hygiene factor. Hygiene factors can cause dissatisfaction; therefore, if participants in Group 2 did not feel that they were provided appropriate raises or compensated well for their work the longer they remained in their position, the participants would become dissatisfied with their salary and seek positions with higher salaries.

The variable advancement opportunities was statistically significant (p = .041). When *Exp(B)* is less than 1, increasing values of the variable correspond to decreasing odds of the event's occurrence (Center of Family and Demographic Research, 2006). A one unit change in advancement opportunities would decrease the odds of principal turnover by a multiple of .44 (*Exp(B)* = .441) or 56% (.441 - 1 x 100) for principals in Group 2 over principals in Group 1. In examining the 95% confidence interval the risk of turnover due to advancement opportunities for Group 2 was .20 to .97 times less than Group 1. With 95% confidence a one-unit change in the value of the independent variable advancement opportunities would decrease the odds of the principal turnover, holding all other independent variables constant (Garson, 2006a). A plausible explanation for this result would be that participants from Group 2 had reached level 5 (self-actualization) of Maslow's hierarchy and were self-fulfilled in their position, whereas participants from Group 1 were on level 4 (esteem) and felt they had not yet achieved their potential.

Table 9

Variables in the Equation

	B	*SE*	Wald	*df*	Sig.	*Exp(B)*	95.0% C.I. for EXP(B)	
Predictor							Lower	Upper
Salary	.760	.378	4.034	1	.045	2.139	1.019	4.490
Accountability	-.590	.531	1.236	1	.266	.554	.196	1.569
Hours	-.011	.466	.001	1	.981	.989	.397	2.467
Job Stress	-.149	.437	.117	1	.733	.861	.365	2.030
Instructional Responsibilities	.247	.430	.331	1	.565	1.281	.551	2.978
Changes in Students	-.118	.508	.054	1	.816	.889	.329	2.405
Lack of Support	-.671	.393	2.907	1	.088	.511	.237	1.105
Politics	.021	.349	.003	1	.953	1.021	.515	2.023
Advancement opportunities	-.818	.399	4.196	1	.041	.441	.202	.965
Promotion	-.332	.362	.841	1	.359	.718	.353	1.458
Goodness of Fit Test			x^2	*df*	*p*			
Hosmer & Lemeshow			10.651	8	.222			

Additional Factors Related to Participants

Factors Influencing Participant Career Choice

Participants were asked to rate the following factors on the extent in which the factors influenced them to become principals: compensation, influence the direction of the school, make a difference in the lives of students and prestige. A 5-point Likert scale was used with 1 = *no influence*, 2 = *of little influence*, 3 = *moderately influential*, 4 = influential and 5 = *very influential*.

The participants in Group 1 and Group 2 rated the factor to make a difference in the lives of students the highest with a mean average of 4.55 (*SD* = 0.57) and 4.76 (*SD* = 0.44) respectively as indicated in Table 10. Both Group 1 and Group 2 rated this factor between “influential” and “very influential” with all participants in Group 1 rating it as either a 4 or 5. The next highest rating for both groups was to influence the direction

of the school. Group 1 rated this factor between “influential” and “very influential” with a mean average of 4.23 (*SD* = 0.80). The participants in the Group 2 rated this factor slightly lower between “moderately influential” and “influential” with a mean average of 3.86 (*SD* = 0.92). Group 1 rated compensation slightly higher than Group 2 with average means of 3.16 (*SD* = 1.13) and 2.86 (*SD* = 1.16) respectively.

The lowest rating for both groups was prestige. The Group 1 rated this factor between “no influence” and “of little influence” with a mean average of 1.90 (*SD* = 0.83). Group 2 rated prestige between “of little influence” and “moderately influential” with an average mean of 2.28 (*SD* = 0.92).

Table 10

Factors Influencing Participant Career Choice

		N	Min	Max	Mean	Std. Deviation
Group 1	compensation	31	1	5	3.16	1.13
	influence direction of school	31	2	5	4.23	.80
	make different in lives	31	3	5	4.55	.57
	prestige	31	1	4	1.90	.83
Group 2	compensation	29	1	5	2.86	1.16
	influence direction of school	29	1	5	3.86	.92
	make different in lives	29	4	5	4.76	.44
	prestige	29	1	4	2.28	.92

A *t*-test for independent samples was conducted to determine any significant mean differences between Group 1 and Group 2. As indicated in Table 11, no significant mean differences were found at ($p < .05$).

Table 11

Independent Samples t-test – *Career Choice*

	t-test for Equality of Means						
	t	*df*	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
compensation	1.014	58	.315	.30	.30	-.29	.89
influence direction of school	1.638	58	.107	.36	.22	-8.08E-02	.81
Make difference in lives	-1.615	55.901	.112	-.21	.13	-.47	5.05E-02
prestige	-1.647	58	.105	-.37	.23	-.83	8.03E-02

Principal Preparedness

Participants were asked how prepared they were for the pincipalship. In the area of preparedness, 17 or 28.3% of the participants felt they were very prepared by their certification programs for the principalship, 30 or 50% felt prepared for the principalship, 11 or 18.3% felt somewhat prepared and 2 participants or 3.3% felt unprepared as reported in Table 12. In Group 1, 7 or 22.6% of the principals felt very prepared for the principalship compared to 10 or 34.5% of Group 2. Fourteen or 45.2% of the principals in Group 1 felt prepared and 16 or 55.2% of Group 2 felt prepared. In Group 1, 9 or 29% of the group felt somewhat prepared and 2 or 6.9% of Group 2 felt somewhat prepared. Both groups 1 and 2 contained one participant who did not feel prepared by their certification program for the principalship. Chi squares of 36.4, 56.267 and 27.600 for all participants for education level, certification, leadership programs,

and principal preparedness indicated that the frequencies are not normally distributed across the categories.

Table 12

Principal Preparedness

			Freq	%	Cumulative %	x^2	*p*
Preparedness	All participants	very prepared	17	28.3	28.3	27.600	.000
		prepared	30	50.0	78.3		
		somewhat prepared	11	18.3	96.7		
		not prepared	2	3.3	100.0		
	1 to 4	very prepared	7	22.6	22.6		
		prepared	14	45.2	67.7		
		somewhat prepared	9	29.0	96.8		
		not prepared	1	3.2	100.0		
	Group 2	very prepared	10	34.5	34.5		
		prepared	16	55.2	89.7		
		somewhat prepared	2	6.9	96.6		
		not prepared	1	3.4	100.0		

Movement to a School Within or Outside Prior School District

As reported in Table 13, 44 or 73% of the participants moved to a new high school principalship outside their prior district. Sixteen or 26.7% of the participants moved to a new high school principalship within the same district as their prior high school principalship. The chi square of 13.067 suggests that this is not a normal distribution. Results were similar for participants in Group 1 and Group 2. It could be surmised that high school principals are more likely to leave their prior principalship for high schools within a different district than their prior principalship.

Table 13

Movement to a school within or outside prior school district

		Frequency	%	Valid Percent	Cumulative Percent	x^2	*p*
All Participants	Moved to a different district	44	73.3	73.3	73.3	13.067	.000
	Moved within the same district	16	26.7	26.7	100.0		
	Total participants	60	100.0	100.0			
Group 1	Moved to a different district	23	74.2	74.2	74.2		
	Moved within the same district	8	25.8	25.8	100.0		
	Total participants	31	100.0	100.0			
Group 2	Moved to a different district	21	72.4	72.4	72.4		
	Moved within the same district	8	27.6	27.6	100.0		
	Total participants	29	100.0	100.0			

Size of Previous School

Table 14 represents a breakdown of the size of the previous schools of the participants. Twenty one or 35% of the participants left a 5A school, 16 or 26.7% left a 4A school, 12 or 20% left a 1A school while only 7 or 11.7% left a 3A school and 4 or 6.7% left a 2A school. For Group 1, the highest percentage of movement came from participants in 5A schools with 13 or 42.9%, compared to 8 or 27.6% from Group 2 suggesting that participants are more likely to leave a 5A school within the first 4 years

of the high school principalship. The chi-square of 15.500 ($p < .01$) suggests that the distribution of high school principals changing schools is not normally distributed among the school sizes.

Table 14

Size of previous school

	School Size	Frequency	Percent	Valid Percent	Cumulative Percent	x^2	p
All Participants	5A	21	35.0	35.0	35.0	15.500	.004
	4A	16	26.7	26.7	61.7		
	3A	7	11.7	11.7	73.3		
	2A	4	6.7	6.7	80.0		
	1A	12	20.0	20.0	100.0		
	Total	60	100.0	100.0			
Group 1	5A	13	41.9	41.9	41.9		
	4A	6	19.4	19.4	61.3		
	3A	4	12.9	12.9	74.2		
	2A	1	3.2	3.2	77.4		
	1A	7	22.6	22.6	100.0		
	Total	31	100.0	100.0			
Group 2	5A	8	27.6	27.6	27.6		
	4A	10	34.5	34.5	62.1		
	3A	3	10.3	10.3	72.4		
	2A	3	10.3	10.3	82.8		
	1A	5	17.2	17.2	100.0		
	Total	29	100.0	100.0			

Hired from Within or Outside the District for Prior Principalship

Participants were asked whether they were hired from inside the district or outside the district in their prior high school principalship. For all participants, the responses were similar with 28 or 48% hired from within the district for their prior principalship and 31 or 51.7% hired from outside the district for their prior principalship as indicated in Table 15. However; when comparing Group 1 and Group 2, the results differed. For Group 1, the number of high school principals hired from within the district in their prior principalship was 11 or 35.5 % compared to 18 or 62.1% from Group 2.

The number of high school principals hired from outside the district for Group 1 was 20 or 64.5% compared to 11 or 37.9% from Group 2. The findings suggest that participants hired from outside the district are more likely to change high school principal positions within the first 4 years of the principalship whereas principals hired from within the district are more likely to change high school principal positions during or after 5 years in the position. The chi-square of 0.067 ($p > .05$) implies that the distribution between participants hired from within or outside the district is a normal distribution.

Table 15

Hired from within or outside the district for prior principalship

		Frequency	Percent	Valid Percent	Cumulative Percent	x^2	p
All participants	Hired from within	29	48.3	48.3	48.3	.067	.797
	Hired from outside	31	51.7	51.7	100.0		
	Total	60	100.0	100.0			
Group 1	Hired from within	11	35.5	35.5	35.5		
	Hired from outside	20	64.5	64.5	100.0		
	Total	31	100.0	100.0			
Group 2	Hired from within	18	62.1	62.1	62.1		
	Hired from outside	11	37.9	37.9	100.0		
	Total	29	100.0	100.0			

Open Ended Responses

The TPS contained 4 open ended questions in which the participants were asked to respond:

1. Why did you become a principal?
2. What is the least rewarding part of being a principal?
3. What is the most rewarding part of being a principal?
4. Why did you leave your prior position?

Question 1

For the question, “Why did you become a principal?” responses were categorized into the following themes: to impact students, to impact the campus, promoted or encouraged, personal and to impact community. The total number of responses from the 60 participants was 71 as some participants included more than one response. Figure 1 displays the results from the participant responses.

The theme with the highest response was to impact students with 32 responses or 45%. Responses included making a difference in student’s lives, inspiring students, being a role model for students and helping students. The theme with the next highest number of responses was to impact the campus with 18 or 25%. The desire to lead, to impact the school and to change the school were included in the responses for this theme.

Twelve or 17% of the participants responded that they were promoted, encouraged or forced into the position. Eight percent or 6 responses were categorized into the theme of personal. Personal responses included servant leadership, salary, time with family and personal achievement. The theme with the lowest number of responses was to impact the community with 3 or 4% of the responses.

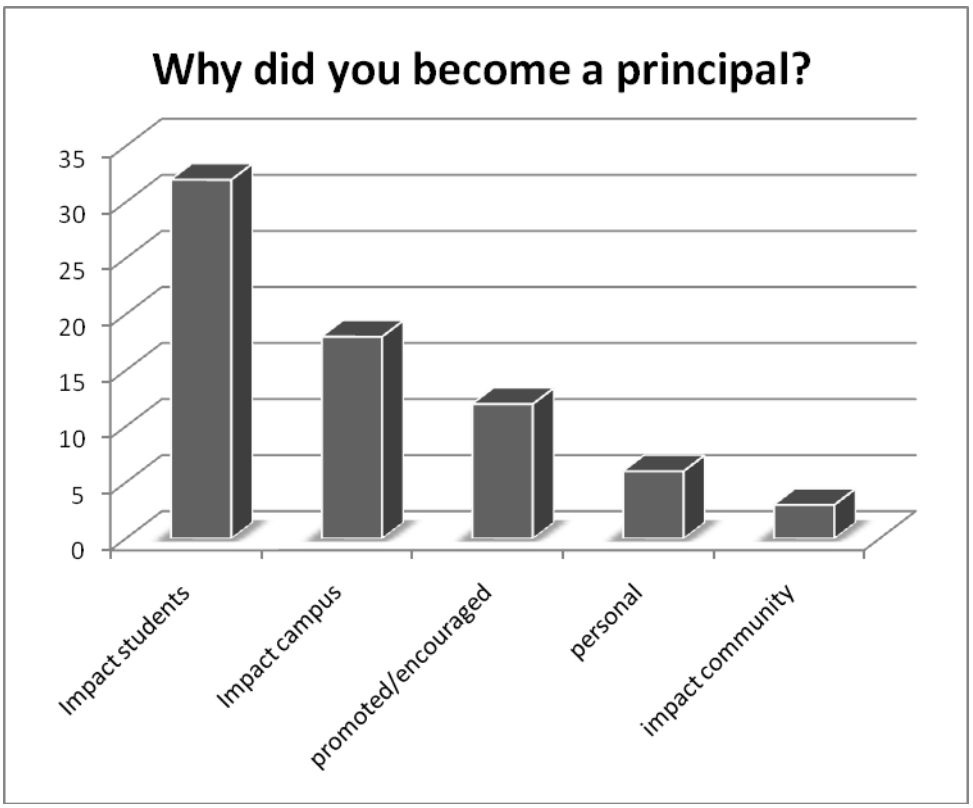

Figure 1. Why did you become a principal?

Question 2

For the open ended question, “What is the least rewarding part of being a principal?” 6 themes emerged from the 76 responses: job stressors, parent issues, issues with other adults, politics and lack of support, testing and accountability, and student issues. Twenty-one or 28% participants responded that job stressors such as time requirements, long meetings and emotional stress were the least rewarding parts of being a principal.

Parent issues including irate parents, cheerleader parents and uncaring parents comprised 14 or 18% of the total responses as displayed in Figure 2. Thirteen or 17% of the responses were categorized as issues with other adults. Responses included terminating staff, dealing with difficult adults and lack of commitment by adults.

The theme politics and lack of support contained 13 or 17% of the responses. Responses included politics from central administration, politics from the state and lack of support from central administration. Eight or 11% of the responses were classified in the theme testing and accountability. Responses included pressure to perform well on the TAKS test and pressure of meeting state and national mandates. The theme with the lowest number of responses was student issues with 7 or 9%. Discipline issues and students not graduating were among the responses in this theme.

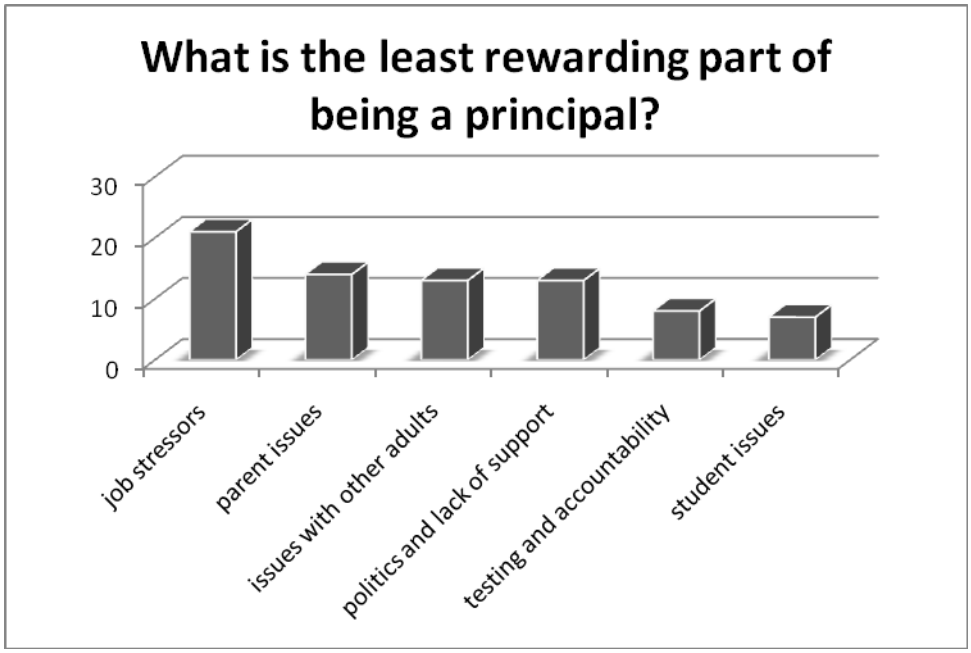

Figure 2. Least rewarding part of being a principal?

Question 3

Participants were asked "What is the most rewarding part of being a principal?" The 76 responses for this question were categorized into 4 themes: students or student success, teacher or teacher success, broker campus change and other relationships and are displayed in Figure 3. The theme with the largest number of responses was students or student success with 51 or 77% of the responses categorized into this

theme. Responses included watching students succeed, seeing students make positive changes and working with students.

The theme with the second highest number of responses was teachers or teacher success with 18 or 24% of the responses. Watching teachers succeed and grow were included in the responses. Five or 7% of the responses were categorized into the theme of brokering change with responses including watching visions become realities and changing the culture of the campus. The theme with the least amount of responses was other relationships with 2 or 3% of the responses. Responses included relationships with other administrators and relationships with people at work.

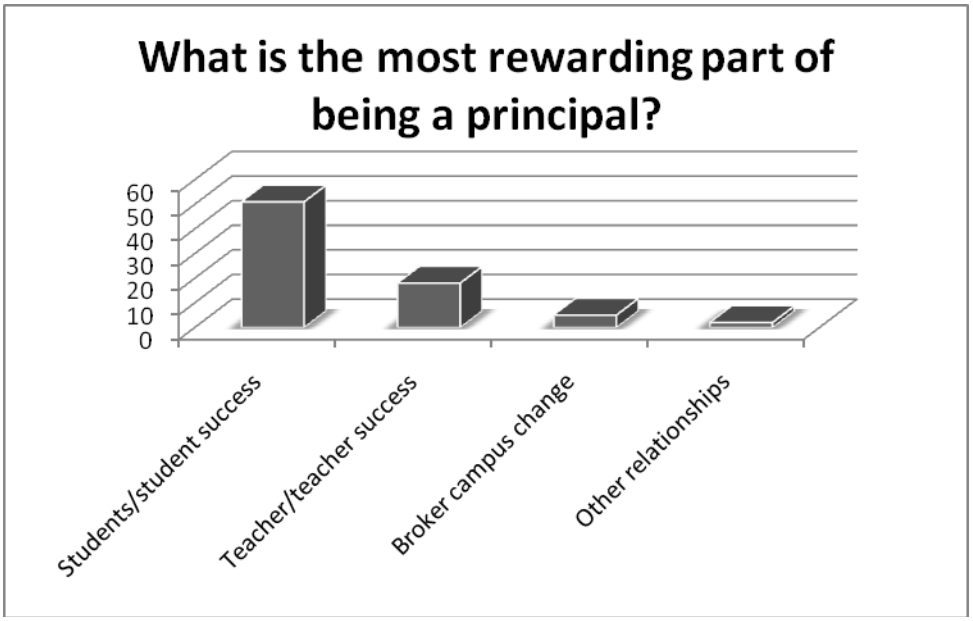

Figure 3. Most rewarding part of being a principal?

Question 4

When participants were asked why they left their prior position, the following themes emerged: new challenges, lack of support, family reasons, advancement or promotion, reassigned, salary and personal and are displayed in Figure 4. The theme with the highest number of responses was new challenges with 23 or 31% of the 74

responses. Moving to larger districts and change were among the reasons given by the participants.

The theme with the next highest responses was lack of support with 15 or 20% of the responses. Among the reasons given by the respondents were: lack of support by the superintendent, lack of support by central administration and changes in the school board.

The theme, family reasons, was comprised of 10 or 14% of the responses. Responses included being closer to family or home, work in the community in which they lived and that the change was better for their own children. Nine or 12% of the responses were categorized into the theme of personal. Responses in this theme included leaving to pursue a degree in higher education, pressures and campus closure. One respondent stated accountability and testing as the reason for leaving.

The theme, promotion, included 8 or 11% of the responses. Responses included that respondents were recruited or promoted. Five or 7% of the responses were categorized into the theme salary. The theme with the fewest responses was reassignment while 4 or 5% of the respondents stated that they were reassigned.

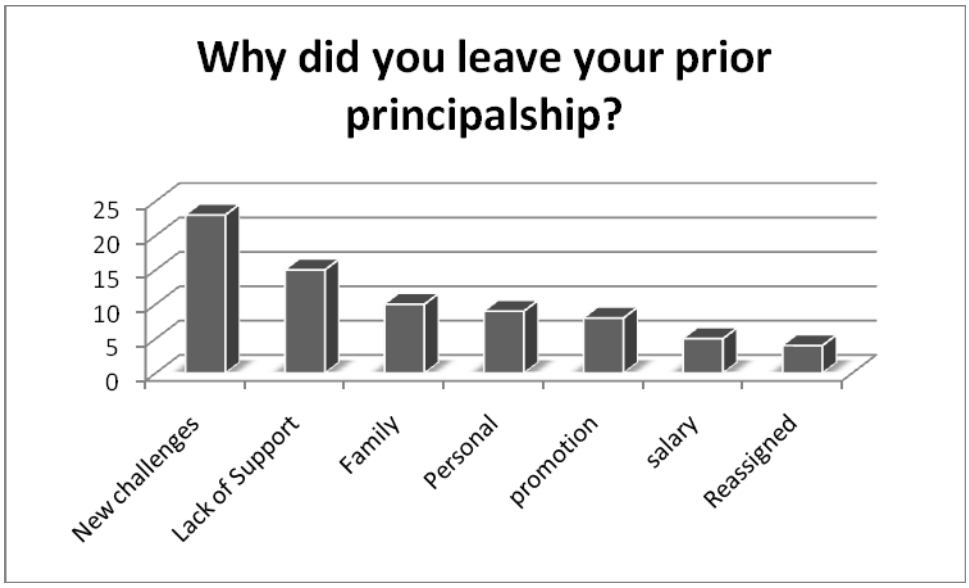

Figure 4. Why did you leave your prior position?

Summary

This study examined the effects of 10 independent variables on predicting high school principal turnover. The 10 variables along with the dependent or dichotomous variable, turnover, were analyzed using Binary Logistic Regression. Two of the 10 variables proved to have a statistically significant effect on high school principal turnover.

Analysis on salary, compensation and benefits indicated that as the ratings increased, so did the odds of high school principal turnover; therefore, salary, compensation and benefits was a statistically significant predictor of turnover for both Group 2 and Group 1. Analysis on advancement opportunities indicated that as the ratings increased, the odds of high school principal turnover decreased indicating that advancement opportunities was a statistically significant predictor of high school principal turnover for both Group 1 and Group 2. The longer the principals remained in

the high school principalship, the odds decreased that the principal would leave their principalship.

Responses from the opened ended questions suggested that participants became principals to impact the students, campus and community in addition to salary, personal reasons and promotion. Participants reported that the least rewarding part of being a principal was handling issues with parents, students, staff and other adults. Also lack of support, politics, and job stressors were also cited as the least rewarding part of being a principal. Student and teacher success, brokering change and developing relationships were cited as the most rewarding part of being a principal by the participants. Participants reported leaving their prior position for change or promotion, lack of support, family, personal reasons, salary and reassignment.

CHAPTER V

FINDINGS, DISCUSSION AND RECOMMENDATIONS

The purpose of the present study was to determine factors that impact tenure and turnover of high school principals in the state of Texas. The factors included in the study were salary, compensation and benefits, accountability, job stress, increased instructional responsibilities, changes in student demographics, lack of support, politics, advancement opportunities and promotion. This study also analyzed the results of four open ended questions.

Chapter V summarizes the findings of the study. Relevant implications and conclusions are drawn based on these findings. Additionally, recommendations for future research are based on these findings and are centered around the following research question:

What are the factors that contribute to the length of tenure among high school principals in Texas public schools?

Findings and Discussion

The results from the logistic regression analysis indicated that the factor salary, compensation and benefits was a statistically significant predictor of high school principal turnover. As demonstrated by this study, the odds of high school principal turnover due to salary were 2.14 times more likely for participants in who had remained in their principalship for 5 or more years than for participant who remained in their principalship for less than 5 years.This finding suggests that the longer a high school principal remains in a principalship, the more likely the principal is to leave due to salary.

The results obtained for salary, benefits and compensation were similar to the results found in prior studies, namely Akiba and Reichardt (2004), Frazer and Brock (2006) and Papa (2007). Akiba and Reichardt (2004) found that male and female participants receiving large increases in their salaries were more likely to move to a different school. Papa (2007) concluded that the likelihood of interdistrict principal retention or non retention increased by 8.1% as a result of a $1000 increase in salary and the likelihood of within district principal retention or non retention increased by 11.5% as a result of $1000 increase in pay. In other words, if the principal received the pay increase in their current job, the retention rate increased 8.1%. If the principal was offered the pay increase through changing positions within the district or out of the district, then non retention or turnover increased 8.1%

The finding of salary, compensation and benefits as a predictor for high school principal turnover is relevant to the theoretical framework of motivation theory. Herzberg et al. (1968) concluded that salary was not a motivator; however, individuals become dissatisfied with their jobs if not paid fairly. According to Herzberg (1968b), administrators must make sure that employee salaries are sufficient, if not, then employees will leave the organization. Supporting the Herzberg's theory, findings by Fraser and Brock (2006) revealed that financial security was a significant factor for job retention. The pay difference for a beginning principal and an experienced teacher is slim or nonexistent. When principal salaries are calculated on a daily or hourly basis, there is often not a great difference between principal pay and teacher pay, considering the number of hours a principal typically works in a day compared to teacher hours (Cushing et al., 2003; Yerkes & Guaglianone, 1998), thus creating job dissatisfaction.

Financial security is at the second level of Maslow's hierarchy of needs (1954). According to Maslow, needs must be met one level before an individual can move to the next level. The finding of salary, compensation and benefits for a predictor of high school principal turnover would suggest that principals were on the second level of Maslow's hierarchy of needs. However, since salary, compensation and benefits increased the odds of turnover the longer the participants remained in their prior high school principalship, it could be surmised the participants were at a higher level on Maslow's hierarchy and were satisfied with their positions but were enticed to leave by higher salaries.

In order to address the problem of high school principal turnover due to salary, benefits and compensation, one implication for decreasing the odds of high school turnover due to salary would be for district superintendents and school boards to ensure that high school principal salaries in their school district are comparable to high school principal salaries in the area and throughout the state. In addition, superintendents and school boards should have clear policies related to salaries, benefits and pay raises.

The results from this study also indicated that the factor advancement opportunities was a significant factor in predicting high school principal turnover. As demonstrated in this study, the odds of high school principal turnover due to advancement opportunities were .44 less likely for participants in Group 2 than for participant in Group 1. This finding suggests that the opportunity for advancement is a better predictor for high school principal turnover for principals in the early years of their principalship and that advancement opportunities becomes less of a predictor of turnover the longer the participants remained in their prior high school principalship.

Few studies have considered advancement opportunities as related to principal turnover. The finding of advancement opportunities as it relates to high school principal turnover is relevant to the theoretical framework of motivation theory. Herzberg et al. (1959) maintained that opportunities for job advancement and growth were important motivators in increasing job satisfaction. Herzberg et al. contended that individuals have a psychological need to grow and that this need is fulfilled by opportunities that lead to growth. Herzberg et al. maintained that workers should be placed in situations where they can achieve and be recognized for their achievement and responsibilities so that they can grow and advance.

Advancement is among level 4, esteem needs and level 5, self actualization of Maslow's hierarchy of needs (1954). Maslow contends that providing opportunities for advancement and job titles that indicate that employees have achieved a high level of status within the organization are means of satisfying employee esteem needs. Additionally, providing growth opportunities assist in satisfying self-actualization needs. The finding from this study that the odds of high school principal turnover decreased due to advancement opportunities the longer the principal remained in their position could be explained through Maslow's hierarchy. It could be surmised that high school principals who stay in the principalship for 5 years or longer have reached level 5 of Maslow's hierarchy and have satisfied their self actualization needs and are comfortable in their position as a building principal. Alternately, it could be surmised that high school principals who leave their positions within the first 4 years of employment are still trying to reach level 4 of Maslow's hierarchy and do not feel that they have reached their full potential. Additionally, it could be conjectured that if a principal desires advancement,

they will work toward that advancement early in their career and seek changes in their careers that will ultimately lead to the advancement.

To address the issue of high school principal turnover due to advancement opportunities district superintendents should provide training and development opportunities within the district that will allow high school principals to advance. It should be noted that this is a short term solution to high school principal turnover. If districts train and develop principals for advancement, then it could be assumed that they will eventually leave the principalship for advancement.

Participants were requested to respond to 4 open ended questions. For the open ended question asking why participants became principals, responses were categorized into 6 themes: to impact students, to impact the campus, promoted or encouraged, salary, personal and to impact the community. The theme with the highest response was to impact students with thirty-two or 45% of the responses. The next highest theme was to impact the campus with 8 or 25% of the responses. These two themes are closely related as they involve serving and impacting others and support Maslow's hierarchy of needs. It could be surmised that participants reporting impacting students and impacting campus as to why they became a principal are on level 3 of Maslow's hierarchy and are attempting to meet relationship and belonging needs or it could be conjectured that participants are on level 4 or 5 of Maslow's hierarchy and are attempting to meet esteem needs or have already reached self-actualization. Newer models of Maslow's hierarchy include additional levels although Maslow never recognized these levels. The 8th level, transcendence, incorporates helping others

achieve self-actualization. It is possible that principals responding to impact students and campus are on the 8th level.

When participants were asked to report the least rewarding part of being a principal, approximately 14 or 28% of the respondents cited job stressors such as paperwork, meetings and hours as the least rewarding part of being a principal. The themes parent issues, issues with other adults and politics and bureaucracy were evenly distributed with 18% and 17% of the responses categorized into these themes. The remaining responses were categorized into the themes of lack of support, testing and accountability and student issues. According to Herzberg (1959) responses such as politics, lack of support, working with parents and other adults, and conditions of the job itself such as hours and paperwork are hygiene factors, which much be addressed in order to create an environment where job satisfaction and motivation are possible. In relation to high school principal turnover and job satisfaction, possible implications for school superintendents and school board members would be to ensure that policies are easily understood, fair and applied equally. Also, meetings and paperwork should be concise and to the point. High school principals should receive training in time management and learn which jobs can be delegated to other employees within the school.

Fifty-one percent of the respondents cited students or student success as the most rewarding part of being a principal while 24% of the responses were categorized into the theme of teachers or teacher success. The remaining responses were categorized into the themes of brokering campus change and relationships with other adults. These responses support Herzberg's theory (1959) that principals feel that the

work itself is important and meaningful. These responses are considered motivators; therefore, their presence motivates and leads to job satisfaction but their absence does not particularly cause job dissatisfaction. Intrinsic responses including student and teacher success would suggest that participants had reached level 5 on Maslow's hierarchy (1954). By recognizing and sharing success stories of the principals, superintendents and school boards could increase the satisfaction of the high school principals in relationship to their job.

For the open ended question asking why participants left their prior position, the theme with the highest percentage of responses was change. This response included the need for change, new challenges and moving to a larger district. Thirty one percent or 23 out of 74 responses were categorized into this theme. This response supports the theoretical framework of motivation theory. Herzberg et al. (1959) maintained workers were satisfied when they were being adequately challenged. Maslow (1954) contended that self-actualization needs may be satisfied by assigning interesting and challenging work. Other themes emerging from the responses for this question included lack of support, family, personal, promotion, reassignment and salary. Note that only 5 or 7% of the respondents reported salary as a response to why they left their prior principalship. This result conflicts with the results in this study from logistic regression which found salary, compensation and benefits to be a significant predictor of turnover. This difference could be explained by the fact that a Likert scale was used for rating salary as to the extent in which it motivated participants to leave their principalship and not a rank, therefore allowing participants to rate any of the variables included in the study high, low or the same. For the open ended question, most participants provided only

one response suggesting that they provided the response that had the most influence on leaving their prior principalship.

In order to address the problem of high school principal turnover based on the responses from this question, superintendents and school boards should seek ways of adequately challenging school principals and provide timely feedback to principals on how they are doing. However; superintendents should be cautious not to overload principals with challenges that are too difficult or time consuming.

Recommendations for Future Research

While the results from this study supported prior research and added new data to the study of principal turnover, these results possess limitations. The data from this study was limited to the state of Texas. While it can be surmised that these results could be applied to other states that are similar to Texas caution should be taken in applying these results to states with different characteristics and demographics from Texas. Additional studies are recommended utilizing data from other states.

Second, data from this study was limited to high school principals. Studies focusing on elementary or middle school principals may produce different results. Therefore it is suggested the additional studies be conducted utilizing data from elementary and middle schools.

The sample size for this study was small. Only 99 high school principals in Texas met the qualifications for inclusion in the study, with approximately 60% completing the TPS. Although it can be assumed that the sample was representative of high school principals, different results could be obtained by utilizing a larger sample size. It is suggested that the study be duplicated utilizing a larger sample size.

Achievement was not included in this study as related to student test scores. Prior research studies by Parlow (2007) and Akiba and Reichardt (2004) indicated a relationship between achievement and principal turnover. This study could be repeated adding the Texas Assessment of Knowledge and Skills (TAKS) as an independent variable to determine the effect of student test scores in Texas on high school principal turnover.

Finally, the survey included only high school principals who moved from one high school principalship to a different high school principalship. Therefore, high school principals who left the principalship for positions other than high school principal positions or left to pursue other career opportunities outside of education were not included in the survey. Studies focusing on high school principals who left the principalship for other positions or for career opportunities are likely to produce different results and could add to the current literature on principal turnover.

Conclusion

In summary, only salary and advancement opportunities were statistically significant predictors of high school principal turnover among the 10 variables included in the study. Of the open ended responses asking why participants became a principal, impacting students, campus and community were among the themes of the categorized responses. Job stressors, issues with parents and other adults, politics, and lack of support were among the least rewarding part of being a principal while student and teacher success were among the highest responses of the most rewarding part of being a principal. Of the 8 themes from the open ended question asking why principals left their prior position, the theme with the largest percentage or responses was change.

Other themes included lack of support, family, personal, promotion, reassignment and salary. Theories of motivation were used to explain the results and responses to the study. Recommendations for future research were discussed.

APPENDIX A

TEXAS PRINCIPAL SURVEY

Texas Principal Survey

1.

Background Information

Your participation in this survey is voluntary and you may choose to end your participation at any time. In addition, your answers are confidential as your name or school will not be used in the research paper and there are no foreseeable risks to you for your participation in the survey. The researcher will have access to the key that links participant information to their coded responses; that key will be destroyed once the data collection is complete. Data will be reported in the aggregate and not attributed directly to one person.

* 1. School accountability rating for the 2007-2008 school year:

◯ Exemplary ◯ Recognized ◯ Acceptable ◯ Academically Unacceptable

* 2. Your current age:

* 3. Age at which you first became a principal:

* 4. Including this year, how many total years have you served as a principal?

* 5. What was your primary teaching area of certification prior to becoming a principal?

6. Ethnicity:

- ☐ White
- ☐ African American
- ☐ Spanish-American
- ☐ Asian-American
- ☐ Native American
- ☐ Other

* 7. Sex

◯ Male ◯ Female

Texas Principal Survey

* 8. Salary Range:

- ◯ less than $60,000
- ◯ $60,000 to $64,999
- ◯ $65,000 to $69,999
- ◯ $70,000 to $74,999
- ◯ $75,000 to $79,999
- ◯ $80,000 to $84,999
- ◯ $85,000 to $89,999
- ◯ $90,000 to $94,999
- ◯ $95,000 to $99,999
- ◯ $100,000 and over

* 9. Highest level of education:

◯ Bachelor's Plus ◯ Master's ◯ Master's Plus ◯ Ed.D. ◯ Ph.D.

* 10. From where did you receive your principal's certification? (University name and state)

11. What building level/school leader certification/license do you hold?

- ◯ I do not hold a license or certification for a school leader or principal position.
- ◯ Permanent professional license (including 5 year and lifetime).
- ◯ Temporary certificate to allow employment as a building leader.

12. Which best describes your formal leadership preparation program?

- ☐ A traditional preparation program from an institution of higher education.
- ☐ An alternative certification program through the district.
- ☐ An alternative certification progrm offered by an agency or organization (non-district/non-university).
- ☐ Other

13. What is your current campus level?

- ☐ Elementary
- ☐ Intermediate
- ☐ Middle School
- ☐ Junior High
- ☐ Freshman Campus
- ☐ High School 9-12
- ☐ High School 10-12
- ☐ High School 7-12
- ☐ other

Other (please specify)

Texas Principal Survey

2. Principalship

* 1. How prepared do you feel you were for the principalship when receiving your principal certification?

- [ ] Very prepared
- [ ] Prepared
- [ ] Somewhat prepared
- [ ] Not Prepared

* 2. What are your career aspirations beyond your current position?

- ◯ Another principal position in a different district
- ◯ Another principal position in your current district
- ◯ Teaching in higher education
- ◯ Position at central administration
- ◯ Career outside the educational field
- ◯ other

Other (please specify)

3. Rate the following in terms of their influence on your decision to become a principal.

	No influence	Of little influence	Moderately influential	Influential	Very influential
Compensation	◯	◯	◯	◯	◯
Ability to influence direction of the school	◯	◯	◯	◯	◯
Opportunity to make a difference in student's lives	◯	◯	◯	◯	◯
Prestige of the position	◯	◯	◯	◯	◯

* 4. Why did you become a principal?

* 5. Including this year, how many years have you served as principal at your current campus?

Texas Principal Survey

* 6. How many hours a week do you currently work as an administrator?

- [ ] 20-30
- [ ] 30-40
- [ ] 40-50
- [ ] 50-60
- [ ] 60+

* 7. Have you worked outside of the state of Texas as a principal?

- [ ] yes
- [ ] no

* 8. What is the most rewarding or best part of the principalship?

* 9. What is the least rewarding or worst part of the principalship?

Texas Principal Survey

3. Prior school information

Please complete this section if you have ever served as a principal at a campus other than your current campus.

1. How many years did you serve as principal at your previous school?

2. What was the size of your previous school?

- ◯ 5A
- ◯ 4A
- ◯ 3A
- ◯ 2A
- ◯ 1A

3. Was your previous school in a different district than your current school?

- ◯ yes
- ◯ no

4. What was your prior campus level?

- ◯ Elementary
- ◯ Intermediate
- ◯ Middle School
- ◯ Junior High
- ◯ Freshman Campus
- ◯ High School 9-12
- ◯ High School 10-12
- ◯ High School 7-12
- ◯ other

Other (please specify)

5. How many hours per week did you work as an administrator at your prior position?

- ☐ 20-30
- ☐ 30-40
- ☐ 40-50
- ☐ 50-60
- ☐ 60+

6. At your previous school, were you hired from:

- ☐ within the district
- ☐ outside the district

Texas Principal Survey

7. Please rate the following factors as to the degree in which they motivated you to change schools

	Not at all	Very little	To some extent	To a great extent
Salary,compensation and benefits	◯	◯	◯	◯
Greater demand for accountability	◯	◯	◯	◯
Number of hours spent on school related activities before, during and after school	◯	◯	◯	◯
Job Stress	◯	◯	◯	◯
Increased instructional responsibilities and workload	◯	◯	◯	◯
Changes in students (economical, linguistical, racial and developmental)	◯	◯	◯	◯
Lack of support from parents, students and administration	◯	◯	◯	◯
Increased politics in the profession	◯	◯	◯	◯
Opportunity for advancement	◯	◯	◯	◯
Current job is a promotion over previous position	◯	◯	◯	◯
Involuntarily left position	◯	◯	◯	◯

8. Why did you leave your previous principalship?

APPENDIX B

CONSENT NOTICE

Consent Notice

Dear Colleague,
I am writing to request your participation in a research study of factors influencing principal turnover and retention which I am conducting as a part of my dissertation for my doctorate degree at The University of North Texas. You are being invited to participate because you have been identified as a high school principal in Texas. If you are not currently a high school principal in Texas, please send me a return email at bsheppard@desotoisd.org so that I can remove your name from the list.

The survey is available online at the link listed below, and we request that you complete the survey by [date]:
http://www.surveymonkey
If you would prefer a hard copy of the survey, please email Becky Sheppard at (bsheppard@desotoisd.org), and one will be emailed to you.

While we encourage you to participate so that we can have a complete picture of that factors that influence principal turnover and retention, your participation is voluntary and you may choose to end your participation at any time. In addition, your answers on the survey will be confidential and there are no foreseeable risks to you for your participation in the study. The researcher will have access to the key that links participant information to their coded responses; that key will be destroyed once data collection is complete. No identifying information will be included in any dissemination of data. Data will be reported in the aggregate and not attributed directly to one person. The survey will take less than 10 minutes to complete.

This research project has been reviewed and approved by the UNT Institutional Review Board (IRB). Contact the UNT IRB at 940-565-3940 with any questions regarding your rights as a research subject.

If you have questions about this study, please contact Becky Sheppard at 972-741-5773 or email me at bsheppard@desotoisd.org. The faculty sponsor for this study is Dr. Jimmy Byrd, UNT Asst. Professor for the Department of Teacher Education and Administration. Contact information for Dr. Jimmy Byrd is 940-565-2940 or jbyrd@unt.edu.

Thank you,

Becky Sheppard
(Principal Investigator)
The University of North Texas

Becky Sheppard
Ruby Young Elementary
DeSoto, TX 75115
Principal

APPROVED BY THE UNT IRB
DATE: 2/18/09
BB

APPENDIX C

PARTICIPANT'S RATINGS OF MOTIVATING FACTORS AND PEARSON CHI-SQUARES

Predictor Variable			Frequency	%	Mean	*SD*	Chi-Square	Significance
							8.038	.045
		not at all	9	29.0	2.23	.96		
	1 to 4 years	Very little	8	25.8				
Salary		To some extent	12	38.7				
		To a great extent	2	6.5				
		not at all	10	34.5	2.52	1.27		
	5 to 15 years	Very little	3	10.3				
		To some extent	7	24.1				
		To a great extent	9	31.0				
							4.804	.224
		not at all	10	32.3	2.10	.98		
	1 to 4 years	Very little	11	35.5				
Accountability		To some extent	7	22.6				
		To a great extent	3	9.7				
		not at all	15	51.7	1.62	.73		
	5 to 15 years	Very little	10	34.5				
		To some extent	4	13.8				
							2.301	.512
		not at all	15	48.4	1.77	.92		
	1 to 4 years	Very little	10	32.3				
		To some extent	4	12.9				
Hours		To a great extent	2	6.5				
		not at all	16	55.2	1.62	.78		
	5 to 15 years	Very little	8	27.6				
		To some extent	5	17.2				
							4.372	.187
	1 to 4 years	not at all	11	35.5	2.23	1.20		
Job Stress		Very little	10	32.3				

		To some extent	2	6.5				
		To a great extent	8	25.8				
		not at all	13	44.8	1.83	.93		
	5 to 15 years	Very little	10	34.5				
		To some extent	4	13.8				
		To a great extent	2	6.9				
.							6.781	.224
		not at all	12	38.7	2.02	1.08		
	1 to 4 years	Very little	11	35.5				
		To some extent	3	9.7				
Inc. inst. Resp		To a great extent	5	16.1				
		not at all	13	44.8	1.79	.82		
	5 to 15 years	Very little	9	31.0				
		To some extent	7	24.1				
							.724	.868
		not at all	16	51.6	1.68	.83		
	1 to 4 years	Very little	10	32.3				
		To some extent	4	12.9				
		To a great extent	1	3.2				
Changes in Students		not at all	18	62.1	1.55	.83		
		Very little	7	24.1				
	5 to 15 years	To some extent	3	10.3				
		To a great extent	1	3.4				
Lack of Support							6.266	.099
		not at all	11	35.5	2.39	1.28		
	1 to 4 years	Very little	7	22.6				
		To some extent	3	9.7				
		To a great extent	10	32.3				
	5 to 15 years	not at all	16	55.2	1.69	.93		
		Very little	8	27.6				

		To some extent	3	10.3				
		To a great extent	2	6.9				
							6.470	.091
			10	32.3	2.45	1.23		
	1 to 4 years	Very little	6	19.4				
		To some extent	6	19.4				
Politics		To a great extent	9	29.0				
		not at all	17	58.6	1.97	1.24		
		Very little	1	3.4				
	5 to 15 years	To some extent	6	20.7				
		To a great extent	5	17.2				
							9.529	.023
		not at all	6	19.4	2.97	1.17		
	1 to 4 years	Very little	3	9.7				
		To some extent	8	25.8				
Advancement opportunities		To a great extent	14	45.2				
		not at all	11	37.9	2.10	1.08		
	5 to 15 years	Very little	8	27.6				
		To some extent	6	20.7				
		To a great extent	4	13.8				
Promotion							8.809	.032
	1 to 4 years	not at all	11	35.5	2.55	1.26		
		Very little	1	3.2				
		To some extent	10	32.3				
		To a great extent	9	29.0				
	5 to 15 years	not at all	15	51.7	2.03	1.27		
		Very little	5	17.2				
		To some extent	2	6.9				
		To a great extent	7	24.1				

REFERENCES

Akiba, M., & Reichhardt, R. (2004, April 24). What predicts the mobility of elementary? school leaders? An analysis of longitudinal data in Colorado, *Education Policy Analysis Archives, 12*(18). Retrieved February 14, 2010 from http//epaa.asu.edu/epaa/v12n18/.

Annotated SPSS output; Logistic Regression. UCLA: Academic Technology Services, Statistical Consulting Group. Retrieved February 1, 2010 from http://www.ats.ucla.edu/stat/spss/output/logistic.htm

Archer, J. (2003, April 16). Study finds good supply of principals, but not for all types of school. *Education Week, 22*(31*),* 7. Retrieved January 11, 2008 from MasterFILE Premier database.

Archer, J. (2003, June 4). Debate heating up on how to lure top-notch principals. *Education Week, 22*(39), 1. Retrieved January 11, 2008, from MasterFILE Premier database.

Ball, J. (2003). *Understanding Herzberg's motivation theory*. Retrieved December 1, 2008 from http://www.accaglobal.com/students/publications/student_accountant/archive/2003/40/1010721

Bell, E. (2001). *Schools' principal shortage: Fewer teachers want the job's growing challenges*. Retrieved January 9, 2008 from SFGate.com.

Bryant, M. T. (2004). *The portable dissertation advisor*. Thousand Oaks, CA: Corwin Press.

Byrd, J., Drews, C., & Johnson, C. (2006). Factors impacting superintendent turnover: Lessons from the field. *NCPEA Education Leadership Review*, 7(2), 11. Retrieved January 11, 2008 from http://enx.org/content/m14507/1.1/

Bulach, C.R., & Malone, B. (1994). The relationship of school climate to the implementation of school reform. *ERS Spectrum, 12*(4), 3-8

Christensen, L.B. (2001). *Experimental methodology* (8th ed.). Needham Heights, Massachusetts: Allyn & Bacon.

Cushing, K., Kerrins, J., & Johnstone, T. (2003, May). Disappearing principals. *Leadership, 32*(5), *28*. Retrieved January 11, 2008 from MasterFILE Premier database.

Davis, S. (1997, November). The principal's paradox: Remaining secure in a precarious position. *NASSP Bulletin*, *81*(592), 73. Retrieved March 2, 2008, from Academic Search Complete database.

Davis, S. (1998, January 1). Why do principals get fired? *Principal*, *28*, 34. (ERIC Document Reproduction Service No. EJ575246) Retrieved March 22, 2008, from ERIC database.

Epstein, J. (n.d.). School/family/community partnerships: caring for the children we share. *Phi Delta Kappan*, *76*, 701-712. Retrieved February 3, 2009, from Readers Guide Abstracts database.

Fraser, J., & Brock, B. (2006, June). Catholic school principal job satisfaction: Keys to retention and recruitment. *Catholic Education: A Journal of Inquiry & Practice*, *9*(4), 425-440. Retrieved December 3, 2008, from Academic Search Complete database.

Fuller, E.J., Orr, M.T., & Young, M.D. (2008, March). The revolving door of the principalship. *IMPLICATIONS from UCEA*, 1-2. Retrieved November 20, 2009 from http://www.ucea.org/storage/implications/ImplicationsMar2008.pdf

Fuller, E.J., Young, M.D., & Baker, B. (2007. April). *The relationship between principal characteristics, principal turnover, teacher quality, and student achievement*. Presented at the annual meeting of the University Council of Educational Administration, Alexandria, VA.

Fuller, E.J. & Young, M.D. (2009, Summer). *Tenure and retention of newly hired principals in Texas. Texas High School Project*. Retrieved February 15, 2010 from http://www.ucea.org/storage/principal/IB%201_Principal%20Tenure%20and%20Retention%20in%20Texas%20of%20Newly%20Hired%20Principals_10_8_09.pdf

Fullan, M. (1991). *The new meaning of educational change*. New York: Teachers College Press.

Gall, M.D., Gall, J.P. & Borg, W.R. (2003). *Educational research an introduction* (7th ed.). Boston: Allyn and Bacon.

Garson, G. D. (2006). *Correlation.* Raleigh: North Carolina State University. Retrieved March 14, 2009 from http://www2.chass.ncsu.edu/garson/pa765/correl.htm

Gates, S., Ringel, J., Santibanez, L., Guarino, C., Ghosh-Dastidar, B., & Brown, A. (2006, June). Mobility and turnover among school principals. *Economics of Education Review, 25*(3), *289-302*. Retrieved December 13, 2007 from www.sciencedirect.com

Gay, L. R. (1996). *Educational research* (5th ed.). Edgewood Cliffs, New Jersey: Merrill

Goldman, S. (1966). *The school principal.* New York: Center for Applied Research in Education.

Guthrie, J. W., & Reed, R. J. (1991). *Educational administrations and policy* (2nd ed.). Needham Heights, MA: Allyn and Bacon.

Hair J. F., Anderson, R. E., Tatham, R. l., & Black, W. C. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River: Prentice-Hall.

Hallinger, P., & Heck, R. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness & School Improvement*, *9*(2), 157. Retrieved from Academic Search Complete database.

Hanson, E. M. (2003). *Educational administration and organization* (5th ed.). New York: Pearson Educational Inc.

Hertling, E. (2001). Retaining principals. *Eric Digest, 147.* (ERIC Document Reproduction Service No. ED454567). Retrieved December 18, 2007 from ERIC Database.

Herzberg, F. (1968a, January-February). One more time. How do you motivate employees? *Harvard Business Review*, 54-62.

Herzberg, F. (1968ab). *Work and the nature of man*. London: Crosby

Herzberg, F., Mausener, B., Patterson, R. O., & Capwell, D. F. (1957). *Job attitude: Review of research and opinion*. Pittsburgh, PA: Psychological Services of Pittsburgh.

Herzberg, F., Mausener, B., & Snyderman, B. (1959). *The motivation to work.* New York: John Wiley & Sons.

Hinkle, D., Wiersma, W., & Jurs, S. (2003). *Applied statistics for the behavioral sciences*. (5th ed.). Boston, MA: Houghton Mifflin Company.

Hopkins, G. (2003). *From the principal files: The principal shortage – why doesn't anyone want the job*? Retrieved January 11, 2008 from www. Educationworld.com/a_admin/admin/admin197.shtml.

Huck, S. (2000). *Reading statistics and research* (3rd ed). New York: Longman.

Institute for Educational Leadership. (2000). *Leadership for student learning: Reinventing the principalship.* A report of the Task Force on the Principalship. Washington, D.C.: IEL. Retrieved May 19, 2009 from http://www.iel.org/programs/21st/reports/principal.pdf

Johnson, L. (2005). Why principals quit: There are many reasons why principals voluntarily leave the positions they worked so hard to earn. *Principal, 84*(3), 21-23..

Kerrins, J., Cushing, K., & Johnstone, T. (2001). Anticipated vacancies, hiring practices, and new principal competencies in school district in the state of California, 1997-2003. *Educational Leadership and Administration: Teaching and Program Development, 13,* 73-87.

Konnert, M. W., & Augenstein, J. J. (1995). *The school superintendency: Leading education into the 21st century.* Lancaster, Pennsylvania: Technomic Publishing, Inc.

Leithwood, K., & Jantzi, D. (2000) Principal and teacher leader effects: A replication. *School Leadership and Management*, *20*(4), 415 – 434. Retrieved January 10, 2010 from http://libproxy.library.unt.edu:2055/ehost/pdf?vid=8&hid=13&sid=1dcfde60-9cd2-4f97-8b39-455d6ab7414a%40sessionmgr13

Levy, A., Fields, E., & Jablonski, E. (2006).*Overview of research: What we know and don't know about the consequences of science and math teacher turnover*. Paper presented at the NCTAF Symposium on the Scope and Consequences of K-12 Science Mathematics Teacher Turnover.

Loeser, J. (2008). School leadership. *Great Neck Publishing*, 1-7. Retrieved February 1, 2009, from Research Starters - Education database.

Lord, M. (2002, January 28). Teaching America. *U.S. News & World Report*, *132*(3), 28. Retrieved December 3, 2008, from Academic Search Complete database.

Magnuson, P. (2002). Erase stress. *Communicator*, *12*, 1-2.

Maslow, A. H. (1954). *Motivation and personality*. New York: Harper & Brothers.

Mayo, E. (1933). *The human problems of an industrial civilization.* New York: Macmillan.

Miller, A. (2009). *Principal turnover, student achievement and teacher retention.* Retrieved March 1, 2009 from http://www.ers.princeton.edu/Miller.pdf

Mitchell, M., & Jolley, J. (2004). *Research design explained* (5th ed.). Belmont, CA: Wadsworth/Thompson.

Morse, J. M. (1997). Perfectly healthy, but dead; The myth of inter-rater reliability. *Qualitative Health Research*, *7*(4), 445-447.

MSN Encarta (2009). *Dictionary.* Retrieved February 4, 2009 from http://encarta.msn.com/dictionary_/principal.html

Nakamura, D., & Samuels, C. A. (2000). In schools, changes at the top: Area faces shortages of new principals. *The Washington Post*, p. A01.

National Association of Secondary School Principals (2000, December). *The principal shortage.* Retrieved January 5, 2010 from http://www.principals.org/Portals/0/Content/26771.pdf

National Association of Secondary School Principals. (2002). *The principal*. Retrieved January 5, 2010 from http://www.principals.org/Content.aspx?topic=47100

National Commission on Excellence in Education (NCEE) (1983). *A nation at risk: The importance of educational reform*. Retrieved September 1, 2008 from http://www.ed.gov/pubs/NatAtRisk/index.html

National Conference of State Legislatures. (2002, January 1). *The role of school leadership in improving student achievement.* (ERIC Document Reproduction Service No. ED479288). Retrieved January 11, 2008 from ERIC database.

Northwest Regional Educational Laboratory. (2003). *Building trust with schools and diverse families* [Electronic Version]. Office of Planning and Service Coordination. U. S. Department of Education (Contract – ED-01-CO-0013. Portland OR; NWREL. Retrieved March 23, 2008 from http://www.nwrel.org/request/2003dec/trust.pdf.

Norton, M. (2002). Let's keep our quality school principals on the job. *High School Journal, 86*(2), *50*. Retrieved December 13, 2007 from MasterFILE Premier database.

Norušis, M. J. (2005). *SPSS 14.0 guide to data analysis*. Upper Saddle River, NJ: Prentice Hall.

Papa Jr. F. (2007). Why do principals change schools? A multivariate analysis of principal retention. *Leadership & Policy in Schools, 6*(3), 267-290. Retrieved March 6, 2010 from Academic Search Complete.

Park, Hun Myoung. 2008. *Univariate analysis and normality test using SAS, Stata, and SPSS*. Working Paper. The University Information Technology Services (UITS) Center for Statistical and Mathematical Computing, Indiana University. Retrieved February 10, 2010 from http://www.indiana.edu/~statmath/stat/all/normality/index.html

Paredes, V., & Frazer, L. (1992). *School climate in AISD.* Austin, TX; Independent School District, Office of Research and Evaluation.

Partlow, M. (2007). Contextual factors related to elementary principal turnover. *Planning and Changing, 38*(1/2), 60-76. Retrieved December 13, 2007 from Education Research Complete database.

Patton, M. Q. (2001). *Qualitative evaluation and research methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Peng, C., Lee, K., & Ingersoll, G. (2002). An introduction to logistic regression analysis and reporting. *Journal of Educational Research*, *96*(1), 3. Retrieved September 10, 2009 from MasterFILE Premier database.

Porter, L. W., & Lawler, E. E. III. (1968). *Managerial attitudes and performance*. Homewood, IL: Irwin-Dorsey.

Portin, B. (2004, April). The roles that principals play. *Educational Leadership*, *61*(7), 14-18. Retrieved January 29, 2008, from Academic Search Complete Database.

Portin, B., Schneider, P., DeArmond, M., Gundlach, L., & Washington Univ. (2003, September 1). *Making sense of leading schools: A study of school principalship*. (ERIC Document Reproduction Service No. ED481977). Retrieved January 29, 2008, from ERIC clearinghouse.

Pounder, D., & Crow, G. (2005, May). Sustaining the pipeline of school administrators. *Educational Leadership*, *62*(8), 56-60. Retrieved January 21, 2008, from Education Research Complete database.

Pulbic Agenda. (2001, November). *Politics and bureaucracy not lack of funding are chief irritants for superintendents and principals*. Retrieved February 19, 2010 from http://www.publicagenda.org/

Rhodes, C., & Brundrett, M. (2006, July). The identification, development, succession and retention of leadership talent in contextually different primary schools: a case study located within the English West Midlands. *School Leadership & Management*, *26*(3), 269-287. Retrieved January 21, 2008, from Academic Search Complete database.

Richard, A. (2000). Panel calls for fresh look at duties facing principals. *Education Week,* November 1, 1-5. Retrieved January 6, 2008 from www.edweek.org

Roethlisberger, F. & Dickson, W. (1939). *Management and the worker.* Cambridge, MA: Harvard University Press.

Scarpa, S. (2005). Principals need more guidance for success. *District Administration*, *21*(5), 17.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory*

Procedures and techniques. Newbury Park, CA: Sage Publications, Inc.

Tabachnick, B., & Fidel, L. (2000). *Using multivariate statistics* (4th ed.).Boston, MA: Allyn and Bacon.

Task Force on Teaching As a Profession. (1986). *A nation prepared: Teaching for the 21st Century*. New York: Carnegie Forum on Education and the Economy.

Taylor, D.L., & Tashakkori, A. (1994). *Predicting teacher's sense of efficacy and job satisfaction using school climate and participatory decision making.* Paper presented at the annual meeting of the Southwest Research Association, San Antonio, Texas.

Texas Education Agency. (2008). *Academic Excellence Indicator System reports.* Retrieved December 16, 2008 from http://ritter.tea.state.tx.us/perfreport/aeis/2008/state.html

Valentine, J. C., & Cooper, H. (2003). *Effect size substantive interpretation guidelines: Issues in the interpretation of effect sizes*. Washington, DC: What Works Clearinghouse. Retrieved January 15, 2010 from http://ies.ed.gov/ncee/wwc/pdf/essig.pdf

Webb, L.D., & Norton, M.S. (2003). *Human resources administration: Personnel issues and needs in education.* Upper Saddle River, New Jersey: Pearson Education. Inc.

Weiss, M. (1992, December). Reducing poverty. *Current*, Retrieved December 3, 2008, from Academic Search Complete database.

Whaley, Cox, J., & Cox, C. (2002). *Developing the effective teacher, hiring, evaluation, and retention practices for the school administrator.* Gaithersburg, Maryland: Aspen Publications.

Whittall, M., New Zealand. (2002, May 1). *Principal retention and patterns in a cross-section of New Zealand rural school*, May 1990-May 2000. (ERIC Document Reproduction Service No. ED466895). Retrieved December 13, 2007 from ERIC database.

Winter, J.S., & Sweeney, J. (1994). Improving school climate: Administrators are the key. *NASSP Bulletin*, *73*, 65-69.

Yerkes, D., & Guaglianone, C. (1998, January 1). Where have all the high school administrators gone?. *Thrust for Educational Leadership 28,* 10-14. (Eric Document Reproduction Service No. EJ575255). Retrieved December 18, 2007 from ERIC database.

Young, M., & Fuller, E. (2009, April). *Tenure and retention of newly hired principals in Texas.* Paper presented for the annual meeting of the American Education Research Association. Retrieved February 15, 2009 from http://www.ucea.org/storage/principal/AERA%202009_Principal%20Tenure%20and%20Retention%20in%20Texas%20of%20Newly%20Hired%20Principals.pdf

Zellner, L., Ward, S., McNamara, P., Gideon, B., Camacho, S., & Edgewood, S. (2002), *The loneliest job in town: Sculpting the recruitment and retention of the principal.* (ERIC Document Reproduction Service No. ED468348). Retrieved December 18, 2007 from ERIC database.