

TEACHER ATTRITION: THE RELATIONSHIP BETWEEN TEACHERS' STRESS
AND THEIR INTENTIONS TO LEAVE THEIR CURRENT POSITIONS

by

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ABSTRACT

This research study used a quantitative, correlational method to examine the relationship between teachers' stress levels and their intentions to leave their current positions at the end of the school year, in the next three years, and in the next five years. The Teacher Stress Inventory (TSI) was used to measure teachers' stress levels and a Likert-type scale was used to measure teachers' intentions to leave their current positions. The surveys were distributed to 2000 Nebraska public school teachers who were randomly selected from a list of 21,751 teachers. Based on the data obtained in the study, higher stress levels were associated with stronger intentions of teachers to leave their current positions relative to 25 of the 33 correlations.

DEDICATION

This dissertation is dedicated to my loving and supportive wife Melissa D. Hasty and sons Charles E. and Richard E. Hasty. It is also dedicated to my parents Robert E. and Patricia A. Hasty for their encouragement and support. These individuals provided the inspiration necessary to successfully complete my doctoral journey.

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CHAPTER 1: INTRODUCTION

A national education crisis has been created by the lack of qualified teachers employed in the profession (Madsen & Hancock, 2002; Zepeda, 2006). Although the number of certified teachers is adequate (Retention Problems, 2005), the number of certified teachers willing to enter the teaching field is not sufficient to meet the needs of the student population (Gursky, 2000/2001). Furthermore, of the teachers who do enter the field of teaching, some leave the profession before retirement age (Kelly, 2004). Historically, educators have devoted much attention to teacher recruitment (Sargent, 2003), but they must also focus on reasons for attrition that may inform strategies to increase teacher retention (Ingersoll & Smith, 2003).

This chapter includes an overview of the research problem of attrition, the study purpose, significance to leadership and future research, nature of the study, research questions, hypotheses, and conceptual framework. Definitions of key terms, assumptions, limitations, delimitations, and the scope of the study are also included. The chapter concludes with a summary of key points previously identified.

Background

The Federal Government has identified improvement of educational quality as a top priority for nearly all levels of education (Reschovsky & Imazeki, 2003). The No Child Left Behind Act of 2001 (2002), known as NCLB, was enacted to ensure that all children in the United States receive a quality education and make adequate yearly progress. One key requirement of the legislation is that all school districts employ highly qualified teachers by the end of the 2005-2006 school year. To be considered highly qualified, a teacher must meet state certification and licensing requirements including,

but not limited to, earning a bachelor's degree in the subject taught or demonstration of knowledge in the subject taught. This mandate is important because teacher quality can significantly impact adequate yearly progress (AYP) and other areas of student performance (NCLB, 2002; U.S. Department of Education, 2002). Likewise, Kaplan and Owings (2004) set forth teacher quality as a primary determinant of student achievement.

Unfortunately, the shortage of qualified teachers in nearly all subject areas (Fore, Martin, & Bender, 2002) has significantly challenged the capacity of both elementary and secondary teachers to provide a quality education for all students (Madsen & Hancock, 2002). Although the number of available teachers increases annually, a shortage still exists, because many potential teachers do not enter the field and many current teachers leave prematurely (Watlington, Shockely, Earley, Huie, Morris, & Lieberman, 2004). In order to address the growing demands for accountability, it is estimated that over 200,000 new teachers will be needed annually for the next 10 years (Howard, 2003).

Attrition is a primary factor contributing to the teacher shortage in the United States (Dove, 2004). Due to teacher attrition, there has been a decrease in the number of highly qualified teachers in all schools (Renard, 2003). Many teachers leave the profession within their first few years (Inman & Marlow, 2004). In fact, approximately 30% of new teachers leave the profession within three years, while almost 50% leave within the first five years (Walsh & Carroll, 2005).

In Nebraska, "50 percent of new teachers leave the profession during their first five years of teaching; in suburban and rural districts 30-40 percent flee the profession during their first five years" (Nebraska State Education Association, n.d., ¶ 5).

Continuous turnover impacts teacher quality and decreases the ability of school districts

to meet the yearly progress requirements established in NCLB (Kaplan & Owings, 2004). To address the issue, educators may need to reexamine current practices for hiring and keeping quality teachers.

Accordingly, a greater focus on teacher recruitment would be beneficial for school districts (Grant, 2001). Common recruitment efforts include newspaper advertisements, job fairs, college recruiting (Sargent, 2003), scholarships (Watlington et al., 2004), incentive pay, and tuition assistance (Morice & Murray, 2003). A plethora of technological resources are available for improving recruitment of highly qualified teachers including software, national applicant databases, virtual brochures, online advertisements, and web-based applications (Grant, 2001).

Because teacher turnover can negatively impact student achievement and the school climate, additional time and energy should also be focused on retention (Ingersoll & Smith, 2003). Chevalier and Dolton (2004) suggested wages, workload, and work hours are reasons teachers leave, with the average teacher workweek being 52 hours. Perhaps, attention to these concerns may increase the likelihood teachers will choose to stay in the profession. Further research that identifies other reasons for teacher attrition may inform the development of additional strategies for increasing retention (Holloway, 2003).

Stress may be one factor contributing to teacher attrition (Mearns & Cain, 2003; Larwood & Paje, 2004), as teaching is a profession latent with stress (Brown, Ralph, & Brember, 2002). Based on the work of Cannon (as cited in Richmond, 2007), Selye (1956), and Lazarus (1966), it is apparent that the effects of teacher stress may be manifested in physical, psychological, and behavioral ways such as alcohol abuse,

absenteeism, and destructive relationships (Myburgh & Poggenpoel, 2002).

Consequently, teachers' stress-related behaviors may negatively impact the learning experiences and achievement of students (Kaplan & Owings, 2004). The relationship between teacher attrition and stress is, therefore, worthy of greater exploration.

There are numerous negative effects of attrition, including the aforementioned impact on student performance (Howard, 2003). School districts are also faced with additional costs related to administrative time, staff development, mentoring, and recruitment (Kelley, 2004). Total costs of attrition for individual states range from approximately \$8.5 million to \$505 million annually (Alliance for Excellent Education, 2005). There may also be indirect costs of attrition, such as lower teacher morale and less organizational cohesiveness (Ingersoll & Smith, 2004), which may not be easily quantifiable (Dove, 2004).

Many legislators and educational leaders realize teacher quality is an important factor in the improvement of educational quality (Allen, 2002). Thus, keeping quality teachers should be a primary concern for nearly all educational leaders (Darling-Hammond, 2003). Renard (2003) suggested identification of reasons for teacher attrition may inform the development of strategies for retaining highly qualified teachers. This study will explore teacher attrition via the relationship between teachers' stress and their intentions to leave their current positions.

Problem Statement

Teacher retention has been an area of concern in education for nearly 40 years (Tye & O'Brien, 2002), because teachers leave the profession at a faster rate than they are recruited (Watlington et al., 2004). Many novice teachers leave the profession within

their first few years of teaching (Inman & Marlow, 2004), and many experienced teachers leave the profession for reasons other than retirement (Ingersoll, 2003). As a result, teacher attrition has become a primary concern for educational stakeholders (Walsh & Carroll, 2005).

The present rate of attrition makes it difficult to maintain high teacher quality required by NCLB (Pittinsky, 2005). While there may be a number of factors affecting teachers' intentions to stay in or leave the profession, stress may be one factor that increases the likelihood of attrition (Larwood & Paje, 2004). This quantitative, correlational study utilized a survey design to examine the relationship between Nebraska teachers' stress levels and intentions to leave their current positions at the end of the school year, within the next three years, and within the next five years, respectively.

Purpose Statement

The purpose of this quantitative, correlational study was to examine the relationship between Nebraska public school teachers' stress levels and their intentions to leave their current positions. The Teacher Stress Inventory (TSI) and a Likert-type scale were used. A quantitative, correlational study is appropriate for exploring relationships between independent and dependent variables (Creswell, 2005; Neuman, 2003).

The independent variables in the study were Nebraska public school teachers' stress levels. Stress may be defined as the emotional and physical responses of individuals as they acclimate to their environments (Nassiri, 2005). Stress levels were measured using the TSI developed by Fimian (1988).

The dependent variables were Nebraska public school teachers' intentions to leave their current positions. Intentions to leave were measured using a Likert-type scale.

The results assisted the researcher in determining whether teachers who planned to leave their current positions rated their stress levels higher than those who planned to stay.

Significance of the Study

Over the last four decades, teacher turnover has been a dilemma in education (Tye & O'Brien, 2002). Approximately 250,000 teachers leave the profession annually (Dove, 2004). Madsen and Hancock (2002) purported the magnitude of the shortage has widespread implications for educators throughout the nation.

Potential consequences of teacher attrition include a lack of teacher quality (Pittinsky, 2005) and a negative impact on student achievement (Ingersoll & Smith, 2003). Hence, recruitment and retention of highly qualified teachers is essential for reducing attrition and enhancing school improvement efforts (Howard, 2003). Research regarding potential factors related to teacher attrition, such as stress, may be beneficial for identifying strategies to recruit and retain quality teachers.

Significance of the Study to Leadership

With the advent of the No Child Left Behind Act, educational leaders have been charged with continuously improving student achievement (Kaplan & Owings, 2004). Minimizing the significance of continuous improvement for all students may lead to sanctions via NCLB (2002) and place educational leaders in jeopardy of losing their jobs. Darling-Hammond and Youngs (2002) suggested teacher quality has the greatest impact on student achievement. Thus, educational leaders must remain abreast of factors that may influence teachers' intentions to stay in, or leave, the profession.

There are a variety of factors that influence teacher attrition (Certo & Fox, 2002). Additional research in education is needed to identify factors that may influence teacher

attrition (Hancock, 2003). Research regarding reasons for teacher attrition in the 21st Century may assist educational leaders in more effectively addressing the needs of teachers, increasing the likelihood that high quality teachers remain in the classroom, and improving student achievement. This study examined the relationship between teachers' stress levels and intentions to leave their current positions at the end of the school year, in the next three years, and in the next five years, respectively.

Significance of the Study to Future Research

The teacher shortage is one of the most challenging issues in education (Houchins, Shippen, & Cattret, 2004). Attrition is a primary factor impacting the need for additional teachers (Justice, Greiner, & Anderson, 2003). Schlichte, Yssel, and Merbler (2005) contend the teacher attrition problem has come to the forefront in education.

Throughout the United States, attrition of new and experienced teachers is a challenge for educational stakeholders (Buckley, Schneider, & Shang, 2005; Greiner & Smith, 2006). "Both the quantity and quality of the teaching workforce is impacted by the persistent deficit of teachers" (Houchins, Shippen, & Cattret, 2004, p. 374). The reputation of educational organizations and the quality of the programs they provide may also be affected by teacher turnover (Dee, 2004).

As a result, school districts are seeking solutions to the teacher shortage (Scheib, 2006). Rather than merely focusing on recruitment, potential solutions need to focus on retention of highly qualified teachers to improve instructional effectiveness and enhance student achievement (Smith & Smith, 2006). Solutions should also focus on teachers' reasons for leaving the profession. If educators are intent on improving student

achievement, they must develop a systematic approach to addressing the issue of teacher attrition (Justice, Greiner, & Anderson, 2003).

Research regarding teacher retention is well documented in literature, due to the relevance of teacher retention to educational stakeholders and society (Buckley, Schneider, & Shang, 2005). Nonetheless, teacher retention continues to be a difficult issue to resolve (Kaff, 2004). Some research on retention arises from the notion that stress may influence teachers' intentions to leave the profession (Greiner & Smith, 2006), yet research designed to characterize teachers who exit has been inconclusive (Addi-Raccah, 2005). This study contributed to the current body of research regarding teacher stress and attrition, as well as laid a foundation for additional research that may inform educational policy decisions at the local, state, and national levels.

Nature of the Study

Stress has been identified as one factor that may lead to teacher attrition (Larwood & Paje, 2004; Mearns & Cain, 2003). This quantitative, correlational study examined public school teachers' stress levels and intentions to leave their current positions at the end of the school year, in the next three years, and in the next five years, respectively. When considering various research methods, including qualitative, quantitative and mixed methods, a quantitative approach is appropriate for determining the relationship between independent variables and dependent variables (Creswell, 2005).

In this study, the independent variables were Nebraska public school teachers' stress levels and the dependent variables were teachers' intentions to leave their current positions at the end of the school year, within the next three years, and within the next five years, respectively. Due to exploration of the relationship between independent

variables and dependent variables, a quantitative approach adequately addressed the goals of the study. This quantitative study utilized a correlational research design to accurately depict the relationship between the independent and dependent variables. The correlational design accomplished the goals of the study by using the (TSI), developed by Fimian, to identify teachers' stress levels, as well as Likert-type questions to determine teachers' intentions to leave their current positions at the end of the school year, within the next three years, and within the next five years. To appropriately explain the relationship between the independent and dependent variables, the data were analyzed using descriptive statistics and inferential statistics.

Research Questions/Hypotheses

Stress may influence teachers' intentions to leave the profession within the first three years or the first five years. This research investigated the following questions: To what extent do teachers' stress levels relate to their intentions to leave their current positions at the end of the school year? To what extent do teachers' stress levels relate to their intentions to leave their current positions within the next three years? To what extent do teachers' stress levels relate to their intentions to leave their current positions within the next five years? This study explored the relationship between teachers' stress levels and their intentions to leave their current positions at the end of the school year, in the next three years, and in the next five years. Participants were also given an opportunity to provide responses regarding factors that may influence their intentions to leave including, but not limited to, inadequate pay, unsafe working conditions, lack of administrative support, increased workload, and/or parental demands.

The first null hypothesis is that higher stress is associated with stronger intentions of teachers to leave their current positions at the end of the school year. The second null hypothesis is that higher stress is associated with stronger intentions of teachers to leave their current positions within the next three years. The third null hypothesis is that higher stress is associated with stronger intentions of teachers to leave their current positions within the next five years.

The first alternative hypothesis is that higher stress is associated with stronger intentions of teachers to leave their current positions at the end of the school year. The second alternative hypothesis is that higher stress is associated with stronger intentions of teachers to leave their current positions within the next three years. The third alternative hypothesis is that higher stress is associated with stronger intentions of teachers to leave their current positions within the next five years. These associations were studied relative to the total stress score, as well as the five sources of stress and the five manifestations of stress identified in the TSI.

Conceptual Framework

The current shortage of qualified teachers has created a national predicament in education (Fore et al., 2002). Over the last fifty years, the shortage has become progressively worse (Cochran-Smith, 2004). The pool of available teachers seems to increase annually, but these gains are offset by a larger group of teachers that are leaving the profession (Watlington et al., 2004). In the United States, although there are six million people who possess teaching credentials, only three million are actually teaching (Retention Problems, 2005). Thousands of teachers leave their current positions annually (Kelly, 2004), with Dove (2004) putting the number at approximately 250,000 per year.

The teacher shortage is a multifaceted issue with many potential causes and solutions (Howard, 2003). Some reasons for teachers leaving the profession include, but are not limited to, a career change, inadequate compensation, dismissal, raising a family, or retirement (Alliance for Excellent Education, 2005). Some attrition may be unavoidable, but much of the attrition may be related to undesirable working conditions (National Commission on Teaching and America's Future, 2003; Plash & Piotrowski, 2006). Consequently, the teaching field seems to suffer from a higher attrition rate than other professions (Dove, 2004). Annual teacher turnover appears to be approximately 5% higher than turnover in non-teaching positions (Ingersoll, 2002b).

Stress is identified as a potential risk for teachers and may be one factor contributing to teacher attrition and the related shortage (Larwood & Paje, 2004; Mearns & Cain, 2003). Since teachers are exposed to a myriad of potential stressors, they may be susceptible to stress overload (Stein & Cutler, 2002). While stress is present in other occupations, teachers appear to experience greater stress than workers in other occupations (Travers & Cooper, as cited in Jepson & Forrest, 2006).

The ongoing concern regarding teacher stress and its potential effects on students has inspired research on the topic (Williams & Gersch, 2004). For the latter part of the 20th Century and the beginning of the 21st Century, researchers have focused greater attention to teacher stress (Nagel & Brown, 2003). Further research that examines potential effects of teacher stress may enhance the development of strategies for mitigating teacher stress and attrition.

Teacher Attrition

The teacher shortage is a multifaceted issue with many potential causes and solutions (Howard, 2003), and it may not be easily resolved. Nonetheless, attrition appears to be the primary reason for the teacher shortage (National Commission on Teaching and America's Future, 2003). There are approximately six million individuals certified to teach, but roughly 50% are not employed in the field (Retention Problems, 2005). The shortage is exacerbated by the fact that many education majors never enter the teaching profession (Gursky, 2000/2001).

Furthermore, teachers are exiting the profession at a faster rate than they are entering (Watlington et al., 2004), with retirements only accounting for approximately 13% of attrition (Ingersoll, 2003). To mitigate the predicament, educators should explore possible causes of attrition (Howard, 2003). Undesirable working conditions (National Commission on Teaching and America's Future, 2003) seem to be a significant factor regarding attrition, particularly for new teachers (Alliance for Excellent Education, 2005).

In the 2004-2005 school year, the National Center for Education Statistics (2007) sampled 7,429 teachers via the Teacher FollowUp Survey. The survey included K-12 teachers in the United States who participated in the Schools and Staffing Survey the previous year. Results indicated 35.7% of the teachers left the profession, 25.7% were employed as teachers in a different school, and 38.6% remained at the same school as the previous year. Reasons for leaving their positions include increased autonomy in their new positions, more manageable workloads, a better balance between personal and

professional life, and job advancement. In addition to the academic impact of teacher attrition, there are a number of related monetary costs for educators.

The highly qualified teacher requirements in the No Child Left Behind Act of 2001 are increasing the financial burden of the dwindling number of teachers (Dodson & Garrett, 2004). In Nebraska, over \$11 million is spent on annual costs relative to teachers leaving the profession (Alliance for Excellent Education, 2005). Until needed compensatory reforms are in effect to recruit and retain high quality teachers, educational organizations are likely to absorb stress-related costs for the current pool of teachers resulting from absenteeism, health issues, and attrition (Thomas et al., 2003). Potential litigation is one reason why educational leaders may want to consider the impact of stress on teachers, as educators and teachers' unions are cognizant of the negative impact teacher stress can have on organizational effectiveness (Brown et al., 2002).

Ingersoll and Smith (2004) purported teacher attrition may cumulatively impact teacher morale and the cohesiveness of the educational organization, resulting in decreased effectiveness. Teacher stress may lead to burnout, health issues, and additional costs to educational organizations that may impact the availability of quality learning experiences for all students (Antoniou, Polychroni, & Walters, 2000). Until issues related to teacher stress are adequately addressed, students may not have opportunities to participate and progress in the curriculum to the best of their abilities (Dove, 2004).

Likewise, teacher attrition is the single-most important factor contributing to the teacher shortage (Dove, 2004). Previous educational research has targeted the teacher shortage and reasons for leaving the profession (Bracey, 2002). Additional research that

examines potential causes of teacher exits may inform the development of strategies for retaining highly qualified teachers.

Stress

Stress is a broad term with many potential meanings. Nassiri (2005) suggests stress is the response of an individual to environmental stimuli. In the early 1900s, Walter Cannon began to study the relationship between emotions and physiological responses and developed the *fight or flight* response (Richmond, 2007). The premise is that an individual will respond to a perceived threat by preparing for battle or fleeing. Cannon's research laid the groundwork for future stress research, including the work of Hans Selye.

Selye's (1956) response-based approach led to the creation of the General Adaptation Syndrome (GAS). The GAS is based on the assumption that there is a universal response of the body to any external demand on it. The three stages include alarm reaction, resistance, and exhaustion. Alarm reaction is the identification of perceived stress, resistance is the body's physical response to mediate the stress, and exhaustion is the dissipation of stress and return of the body to a homeostasis. If the body does not return to a homeostasis, illness, exhaustion, or death may occur.

On the contrary, Richard Lazarus (1966) developed a stimulus-based approach to stress that is identified as an interaction between the individual and the environment. Stress is a result of an individual's appraisal of the environment. Primary appraisal and secondary appraisal are at the forefront in Lazarus' theory. Primary appraisal is the perception of whether or not the environment is stressful. Secondary appraisal includes analysis of the extent to which the environment is stressful.

Several years after the germinal work of Cannon, Selye, and Lazarus, Beehr and Newman (1978) conducted a review of literature regarding occupational stress. Results indicated a growing interest in stress research. Three key themes emerged in the literature review: there are various definitions of occupational stress, research methodology is weak, and there are few interdisciplinary approaches to studying occupational stress.

In addition, the lack of clarity in occupational stress research led to the development of several occupational stress models including, but not limited to, the Institute of Social Research (ISR) Model, McGrath Model, Person-Environment (P-E) Fit Model, General Systems Model, Karasek Job Demand-Control Model, and the Cybernetic Model. The ISR Model and McGrath Model focus on employees' perceptions of, and responses to, the work environment. The P-E Fit Model and the General Systems Model explore the fit between employees' job responsibilities and their abilities to carry out the responsibilities. Karasek's Job Demand-Control Model examines employees' job decision latitude as it relates to stress. The Cybernetic Model explores the continuous influence of feedback on employees' stress and behavior.

While all of the models contain elements regarding the study of occupational stress, the ISR Model and the GAS provide a framework for exploring the relationship between stress and teachers' intentions to leave their current positions. The ISR Model focuses on stress as the response of employees, based on their perceptions of the environment. Hence, the ISR Model is reflected in the sources of stress and manifestations of stress in the TSI. The GAS principle includes alarm reaction, resistance, and exhaustion and may be manifested in teachers' intentions to leave their current positions.

Definitions

This study uses the following definitions:

Attrition: Attrition is the process of teachers leaving their current positions.

(Billingsley, 2004).

Highly Qualified Teacher: Highly Qualified Teacher is a teacher that meets state certification and licensing requirements including, but not limited to, earning a bachelor's degree in the subject taught or demonstration of knowledge in the subject taught (NCLB, 2002).

Stress: Stress is the response of the individual as he/she strives to acclimate to environmental stimuli (Nassiri, 2005). Stress may be either eustress or distress (Selye, 1956). Eustress is positive stress, which may improve health and performance. Distress is stress overload that may lead to decreased health and performance.

Teacher Stress Inventory: The Teacher Stress Inventory is a 49-item inventory designed to measure occupational stressors specific to teachers (Fimian, 1988).

Assumptions

An assumption of this study is that the survey instruments are valid and reliable tools for measuring teachers' stress and intentions to leave their current positions. The teachers will comprehend the importance of the study and return the surveys. Another assumption is that teachers read, clearly understood, and answered the questions presented according to the instructions provided. A further assumption is that the teachers completed the surveys honestly.

Limitations

The study was limited to responses to a self-report survey received from randomly selected public school teachers in Nebraska. By virtue of the geographic location and limitations of the survey instrument, the results of the study may not be used to make generalizations to other populations. Nebraska teachers' stress levels and intentions to leave their current positions may not represent the stress levels and intentions of all teachers.

It is possible that some teachers may complete their surveys in a hasty manner. In these cases, their responses may not accurately reflect their perceptions. Furthermore, although confidentiality is assured, some teachers may fear that their careers will be threatened if they are identified as teachers under stress, and may therefore not truthfully answer their surveys.

Delimitations

The study was delimited to public school districts within the state of Nebraska. Nebraska was established in 1867 (Nebraska Blue Book, 2004-2005). The 2005 population was approximately 1,758,787 (American FactFinder, 2006). There were approximately 21,083 teachers in Nebraska serving 285,095 students (Statistical Analysis Report, 2004). The results of the study may not be relevant to other states with varying demographics and different educational-system structures.

Furthermore, the study was delimited to public school teachers at the early childhood, elementary, middle school, and high school levels. The results are limited to this population, and should not be generalized to all public school teachers. The study

was further delimited to responses from the Teacher Stress Inventory for measuring stress and a Likert-type scale for measuring teachers' intentions to leave their current positions.

Summary

Due to a scarcity of qualified teachers employed in the profession, a national crisis is being created in education (Madsen & Hancock, 2002). Teacher shortages seem to affect nearly all grade levels and subject areas (Fore et al., 2002), due to more teachers exiting the profession than are entering each year (Watlington et al., 2004). Attrition is a primary factor in the teacher shortage in the United States (Dove, 2004).

Teacher turnover impacts the quality of teaching, and inhibits student and district achievement of adequate yearly progress standards outlined in NCLB (Kaplan & Owings, 2005). Stress may be one factor that is perpetuating teacher attrition (Mearns & Cain, 2003; Larwood & Paje, 2004), as stress is known to permeate the teaching profession (Brown et al., 2002). The relationship between attrition and stress is, therefore, worthy of greater exploration.

Chapter 1 included an overview of the research problem of attrition, the purpose of the study, significance to society, significance to leadership, research questions, hypotheses, and conceptual framework. The chapter concluded with definitions of key terms, assumptions, the scope of the study, and a summary of key points previously identified. Chapter 2 includes an examination of literature regarding teacher attrition and stress.

CHAPTER 2: REVIEW OF THE LITERATURE

Teacher retention has been an area of concern in education for several decades (Tye & O'Brien, 2002). This may have a detrimental effect on the quality of education provided to students, as teacher quality is one of the key factors that influence student performance (Alliance for Excellent Education, 2005). In an effort to maintain effective educational programs for students, the retention of highly qualified teachers should be considered a top priority for educators (Darling-Hammond, 2003). Stress may be one reason teachers choose to leave the profession (Nagel & Brown, 2003), and research that examines the relationship between teacher stress and attrition may enhance the development of strategies for retaining highly qualified teachers.

Documentation

Extensive searches were conducted in the EBSCOhost , InfoTrac OneFile, and ProQuest databases. Additional searches were conducted on the world wide web to identify relevant material from reputable sources. Key search terms and phrases included *teacher attrition, teacher recruitment, teacher retention, teacher turnover, causes of attrition, health issues and teachers, burnout, stress, attrition, legislation and burnout, burnout in education, stress and teachers, and costs of attrition*. A plethora of other combinations of the aforementioned search terms and phrases were also used.

Many recent articles were identified in peer-reviewed journals. Additional articles were located in other education-related materials, while germinal research was identified in several books. The nature of the topics being addressed warranted expansion of the search to include information available via the World Wide Web, because of limited

information specific to teacher stress and attrition. The search culminated in approximately 120 items of practical use relative to the proposed study.

Literature Review

Thousands of teachers leave their positions each year (Kelly, 2004). As educational leaders strive to place highly qualified teachers in all classrooms, a national crisis is being created by a shortage of qualified teachers (Fore et al., 2002; Madsen & Hancock, 2002). Given the magnitude of the shortage, efforts to resolve the issue may require a long-term commitment on the part of educational stakeholders. There may be many reasons for the impending teacher shortage (Howard, 2003), with one being teacher turnover (McCann & Johannessen, 2004). Teachers leave their positions for several reasons including, but not limited to, a career change, occupational stress, working conditions, raising a family, legislative demands, increased caseload, and inadequate compensation (Alliance for Excellent Education, 2005; Howard, 2003; National Commission on Teaching and America's Future, 2003; Plash & Piotrowski, 2006).

The shortage is complicated by the fact that only about half of the six million people that hold teaching credentials in the United States are employed as teachers (Retention Problems, 2005). At the end of the 20th Century and the beginning of the 21st Century, the teacher shortage was exacerbated (Cochran-Smith, 2004) by a greater number of teachers exiting the profession than were entering (Watlinton et al., 2004). The teacher shortage problem is compounded by an attrition rate that is higher than other occupations (Dove, 2004). In fact, Walsh and Carroll (2005) suggest approximately one-third of novice teachers leave during the first three years on the job, and approximately half leave within the first five years on the job.

A review of recent research (Bracey, 2002) indicated teacher attrition is a significant factor in the United States teacher shortage (Dove, 2004). While attrition may be related to a variety of issues, stress is one factor that may motivate teachers to leave their positions (Larwood & Paje, 2004; Mearns & Cain, 2003). Recent attention to teacher stress has resulted in a body of research on the topic (Nagel & Brown, 2003; Williams & Gersch, 2004). Additional research that explores the relationship between teacher attrition and stress may help educational stakeholders mitigate teachers' desires to leave the profession, while identifying strategies to retain highly qualified teachers.

Teacher Attrition

In the United States, a teacher shortage has been created by turnover in the teaching profession and is likely to continue until specific causes and related solutions are identified (McCann & Johannessen, 2004). The shortage has widespread implications (Fore et al., 2002; Madsen & Hancock, 2002), as it seems to extend across all grade levels and subjects. The magnitude of turnover perpetuates the shortage and, accordingly, undermines teacher quality (National Commission on Teaching and America's Future, 2003). Consequently, a national predicament has been created in education.

As a result, the teacher shortage issue may not be easily resolved. The shortage is a multifaceted issue with many potential causes and solutions (Howard, 2003). Approximately half of all certified teachers are either unemployed or working in other occupations (Retention Problems, 2005). Hence, the National Commission on Teaching and America's Future (2003) suggests that attrition, rather than a lack of available certified teachers, is the primary reason for the teacher shortage. The shortage is

perpetuated by the premise that many education majors never enter the teaching profession (Gursky, 2000/2001).

It appears the teacher shortage has existed for several decades, with little hope of the problem being alleviated (Cochran-Smith, 2004). For example, Kelly (2004) discusses the number of teachers who are leaving the profession, with Dove (2004) putting the number at 250,000 annually. Yet, retirements only account for approximately 13% of attrition (Ingersoll, 2003). To effectively alleviate the problem, educators need to seriously consider potential reasons for the high rate of attrition (Howard, 2003).

Some of the reasons that teachers leave their current positions are the following: dismissal, raising a family, retirement, job dissatisfaction, or additional personal reasons (Alliance for Excellent Education, 2005). Ingersoll (2003) synthesized results from the Schools and Staffing Survey and the Teacher Followup Survey by the National Center for Education Statistics. Ingersoll's analysis revealed teachers often leave the profession due to job dissatisfaction and a willingness to pursue other career options. This information is consistent with Howard's (2003) findings.

Teacher preparation, working conditions, and salaries are other reasons cited for leaving the profession (Dove, 2004; National Commission on Teaching and America's Future, 2003). Specifically, teacher salaries are approximately 20% less than other employees in positions with similar education and training. Based on information from the U.S. Bureau of Labor Statistics, the National Commission on Teaching and America's Future contends the average teacher salary in 2001 was \$44,040. This salary was \$6,200 less than the average salary for registered nurses, \$6,660 less than

accountants, \$12,730 less than dental hygienists, and \$27,090 less than computer programmers.

Altogether, teacher attrition is the primary factor contributing to the teacher shortage in the United States (Alliance for Excellent Education, 2005; Bracey, 2002; Dove, 2004; Ingersoll, 2003; National Commission on Teaching and America's Future, 2003). Consequently, research has focused on the teacher shortage and why teachers leave the profession. It is apparent that much of the shortage is due to pre-retirement turnover. Thus, educators must find better methods of recruiting and retaining teachers. Additional research that examines potential causes of teacher exits may enhance the development of strategies for retaining highly qualified teachers.

Legislation and the Need for Highly Qualified Teachers

The No Child Left Behind Act of 2001, known as NCLB, may be one of the most important initiatives to ever be enacted in the United States (Simpson, LaCava, & Graner, 2004). NCLB requires educators to staff schools with highly qualified teachers in all core subject areas (NCLB, 2002). One goal of NCLB is to have all students make adequate yearly progress, and a strategy for success is to require teachers of core academic areas to be highly qualified. While support for NCLB may vary, the issue of highly qualified teachers is one that generates extensive interest (Ingersoll, 2002a). In fact, Darling-Hammond (2003) suggests retention of highly qualified teachers should be a top priority for all educational administrators.

Consequently, school districts have felt the impact of increased accountability and the demand for improved teacher quality (Watlington et al., 2004). It is believed that student success is significantly impacted by the quality of their teachers (Prince, 2002;

Kaplan & Owings, 2004). If educators expect to improve student achievement, consistent instruction by high quality teachers may be an essential component of the plan for success. Now, more than ever, there is a need in education to recruit and retain highly qualified teachers (Dove, 2004).

Furthermore, there is an inequitable distribution of highly qualified teachers in the United States (Prince, 2002). Children from school districts with low socio-economic status and large minority representation are most likely to be taught by inexperienced teachers (Berry, 2004). Research suggested that urban schools typically produce lower-achieving students, possibly due to highly qualified teachers seeking employment in more desirable working environments and lower quality candidates filling positions in urban schools (Howard, 2003). Although urban schools are not the only ones affected by a lack of highly qualified teachers, they appear to be the schools most likely to be negatively impacted by such a shortage, as working conditions are potential factors that may increase teachers' stress and/or intentions to leave (Dove, 2004; National Commission on Teaching and America's Future, 2003).

The NCLB requirements regarding highly qualified teachers create many challenges for educators as they try to meet adequate yearly progress for all students. Districts are already feeling the impact of the shortage of highly qualified teachers (Zepeda, 2006). The Alliance for Excellent Education (2005) purported middle schools and high schools in the United States will be seriously affected by the need for highly qualified teachers, as 70% of high school students are not proficient readers. Hence, recruitment and retention of highly qualified teachers is essential for eliciting school improvement (Howard, 2003).

Recruitment

The highly qualified teacher requirements of NCLB have negatively impacted teacher recruitment (Quinn, 2005). By 2009, approximately 2.7 million additional teachers will be needed in public school districts (Madsen & Hancock, 2002). To meet this need for additional teachers, school districts will need to focus intense energy on recruitment (Grant, 2001). It is important for educational administrators to remain cognizant of the fact that recruitment is a multi-dimensional process that goes beyond merely hiring a teacher to fill an open position. Recruitment must focus on a comprehensive approach to locating and selecting qualified candidates for teaching positions in America's classrooms.

Conventional strategies for recruiting new teachers are no longer adequate for addressing the impending shortage (Grant, 2001), and additional attention should focus on encouraging college students to pursue a career in teaching. Previous recruitment strategies include newspaper advertisements, job fairs, and college recruiting (Sargent, 2003). Crews (2002) recommended establishing communication with teaching majors and making on-site visits to universities. In addition to offering signing bonuses for high need subjects or schools (Alliance for Excellent Education, 2005), one of the most accepted approaches to recruitment is the awarding of scholarships to students who complete the teacher education program (Watlington et al., 2004). Incentive pay and tuition assistance also seem to be effective means for attracting quality candidates (Morice & Murray, 2003).

Grant (2001) purported recruitment in the field of education has not kept pace with recruitment in the business sector. As a result, NCLB allocated \$3 billion dollars for

the purpose of meeting highly qualified teacher requirements through an “emphasis on strategies such as signing bonuses and merit pay, recruitment of nontraditional candidates, new teacher induction, scientifically based professional development and alternative certification” (Berry, 2004, p. 5). At the present time, there are a number of technological resources available for recruitment purposes: national databases, on-line applications, virtual brochures, and electronic fingerprinting.

Although recruitment of highly qualified teachers is important for meeting the NCLB requirements, teacher retention is another essential factor (Cochran-Smith, 2004). With the looming effects of NCLB, teachers are becoming skeptical about the extent to which they can realistically meet the requirements contained therein (Kaplan & Owings, 2004). That being said, educators also need to focus greater attention on teacher retention (Dove, 2004).

Retention

In recent years, legislators have responded to the teacher shortage by spending a significant amount of time and energy on teacher recruitment (Ingersoll & Smith, 2003). Despite the fact that teacher recruitment may alleviate some of the teacher shortage, it appears much more attention should be focused on reducing attrition through teacher retention. Teacher attrition has the potential to negatively impact student achievement and the school climate. Focusing greater attention on strategies for retention may moderate the attrition problem, which appears to affect novice teachers and experienced teachers alike (Holloway, 2003).

Some educational stakeholders recognize that teacher retention is an imminent concern that affects both elementary and secondary teachers (Kelley, 2004). Previous

attention to the teacher shortage focused on reasons for teachers leaving, but it may also be beneficial to focus on reasons why teachers remain in the profession (Williams, 2003). In light of NCLB, the retention of highly qualified teachers is likely to be a primary focus for nearly all educational stakeholders (Kelley). To effectively address the issue of having a highly qualified teacher in every classroom, as required by NCLB, educators should seek to identify reasons for teacher attrition and generate corresponding strategies for retaining teachers (Renard, 2003). However, there may be substantial costs related to implementation of NCLB and teacher attrition.

Related Costs

The highly qualified teacher requirements in the No Child Left Behind Act of 2001 are compounding the challenges related to funding for public education (Dodson & Garrett, 2004). Millions of dollars are spent every year on teacher recruitment (Alliance for Excellent Education, 2005). In Nebraska, over \$11 million is spent on costs relative to teachers exiting, and nearly \$27 million is spent on the total cost of attrition and transfers combined. Teacher attrition costs include administrative time, staff development, mentoring, and recruitment expenses (Kelley, 2004). Until needed compensatory reforms are in full effect to recruit and retain high quality teachers, educational organizations are likely to absorb stress-related costs for the current pool of teachers resulting from absenteeism, health issues, and attrition (Thomas et al., 2003).

Potential litigation is one motivator for educational institutions to consider the impact of stress on teachers. Educators and teachers' unions are becoming more cognizant of the potential negative impact teacher stress may have on organizational effectiveness (Brown et al., 2002). In one case, monetary compensation was awarded for

work-related stress incurred by a teacher (Conflicting Views, 2004). The teacher was assigned coordinator duties that were above and beyond the typical teaching assignment. To no avail, the teacher repeatedly informed the employer of stress-related symptoms resulting from the additional duties. The employer's apparent deliberate indifference led to monetary compensation for the teacher.

There are a plethora of consequences relative to teacher attrition (Ingersoll & Smith, 2004) that may have a significant impact on the success of students (Imazeki, 2005). Yet, some costs of teacher attrition are not easily quantifiable (Dove, 2004). Ingersoll and Smith purport teacher attrition may lower teacher morale and lessen cohesiveness of the educational organization, resulting in decreased effectiveness.

Altogether, a recent emphasis on teacher stress in educational research (Hepburn & Brown, 2001) highlights the importance of addressing the issue. Teacher stress may impact teacher quality and have a negative effect on learning experiences for students. Until teacher stress is adequately addressed, student achievement may continue to be compromised (Dove, 2004).

Stress

Stress is a concept with a variety of potential definitions. The term stress originated from the Latin word *strictus* which means *to tighten* (Jex, 1998). Lazarus (1966) suggests the term is derived from the field of engineering. From the scientific point of view, stress may be perceived as an external force exerted on an object, and strain is the consequence of such stress.

The majority of the research on the topic began in the 1900s. At the beginning of the 20th Century, physiologist Walter Cannon conducted research that explored the

relationship between emotions and individual physiological responses (Richmond, 2007). Cannon expanded on the 19th Century work of Claude Bernard and coined the term homeostasis, in reference to the efforts of one's body to maintain a steady state of physiological equilibrium (Selye, 1956).

Furthermore, Cannon's research produced the well-known *fight or flight* response (Richmond, 2007). The fight or flight response stems from the sympathetic nervous system's reaction to perceived threats on the body. The sympathetic nervous system may undergo physiological changes that prepare an individual to either battle a perceived threat or remove oneself from apparent danger. Specific body responses may include the discharge of adrenaline, release of glucose, utilization of body fat, accelerated heart rate, elevated blood pressure, increased perspiration, and enhanced blood flow to large muscles that leads to a feeling of coldness in the extremities.

For example, if an employer confronts an employee for coming to work late, the employee may perceive the situation as threatening. The employee's heart rate may increase, blood pressure may rise, and the individual may experience sweaty palms, as a result of the confrontation. According to the fight of flight response, the employee may then fire back a combative response or find a way to swiftly escape the situation by changing the subject.

Cannon's response-based approach to stress laid the foundation for future research, including the work of Hans Selye, a renowned endocrinologist and the father of stress (Jex, 1998). Selye proposed that stress may be either positive or negative. Eustress is positive stress, which may improve health and performance. Distress is stress overload that may result in poor health and decreased performance. The distinction between

positive and negative stress is valuable, as it opened up theoretical possibilities for how stress may be perceived.

In the 1950s, Selye's study of negative stress expanded the response-based approach, with the development of the General Adaptation Syndrome (GAS) [Richmond, 2007]. Through the GAS, stress was viewed as a universal physical response of the body to any demand placed on it (Selye, 1956). If one experienced distress, it was expected the body would go through a prescribed series of adaptations to mitigate the stress.

Specifically, the GAS includes three stages: alarm reaction, resistance, and exhaustion (Selye, 1956). The alarm reaction stage includes the psychophysical reaction of the body known as Cannon's previously identified fight or flight response. When a perceived threat is identified, there is a point in time when the affected individual must decide whether to confront the threat or flee from danger.

For example, when a teacher submits a child abuse report, parents may become upset. If the teacher perceives the confrontation as threatening, the fight or flight response may be activated. The teacher may make a choice between discussing the issue with the parents or fleeing from the situation by referring the parents to the building administrator.

The resistance stage is evident through activation of the adrenal cortex and pituitary gland, as well as the simultaneous release of adrenaline (Selye, 1956). If the teacher in the previous example attempts to resolve the issue with the angry parents, the teacher may feel adrenaline pumping and begin to experience a heightened sense of awareness. Heart rate, blood pressure, and perspiration may also increase, as a result of stimulation of the sympathetic nervous system.

During the exhaustion phase, the perceived threat may dissipate and bodily functions may return to a homeostatic state (Selye, 1956). If the teacher is able to effectively resolve the previously identified situation with the parents, bodily functions are likely to return to the same level as before the confrontation. If the perceived threat does not dissipate, the teacher may experience a suppressed immune system that leads to illness, exhaustion, or death. The parents may continue to be upset about the referral to social services and the teacher's on-going activation of the sympathetic nervous system may continue to suppress the immune system and make the teacher more susceptible to illness or exhaustion.

In contrast to Selye's response-based approach to stress, Richard Lazarus developed a stimulus-based approach (Lazarus, 1966). Lazarus' transactional theory identifies stress as an interaction between an individual and the environment. The perception of the involved individual determines whether a situation is deemed stressful. Stress is the consequence of an individual's appraisal of the situation and includes primary appraisal and secondary appraisal.

Primary appraisal requires initial judgment of whether or not a situation is stressful for a particular individual (Lazarus, 1966). Lazarus purports that no single measure may be used to determine whether a situation is stressful. The individual engaged in the experience is the only one that may evaluate whether or not a situation is stressful, and this involves cognitive processes that consider the on-going interaction between the individual and the environment. In contrast to a response-based approach, transactional theory takes into account how emotion and motivation may impact stress.

Once a situation has been identified as stressful, an individual engages in secondary appraisal and determines the extent to which the situation is stressful. Secondary appraisal may be affected by personality factors and the availability of coping resources. If he or she has capacities and resources sufficient to overcome the stressful situation, the perceived threat may be minimal. In addition, if one feels his or her capacities and resources are not sufficient to address the situation effectively, the perceived threat may be deemed significant.

Therefore, Selye proposed a response-based approach to stress and Lazarus presents a stimulus-based approach. On the contrary, Kasl (1978) purported there may be a range of conceptualizations regarding stress that take into consideration both the stimulus and response. The range of conceptualizations may be from highly specific to extremely general.

In 1978, Beehr and Newman conducted a review of literature relative to workplace stress, employee health, and organizational stress. They suggested stress research among organizational psychologists was minimal, but increasing. Stress research may have been lacking among organizational psychologists, because the primary focus in organizations was work performance, accompanied by a relatively new belief that employee health could be affected by psychological events.

Despite the lack of stress research among organizational psychologists, Beehr and Newman (1978) noticed a growing interest in the topic among government officials, business executives, consumer groups, and citizens. Americans' interest in stress and health was evidenced by greater involvement in stress management techniques such as progressive muscle relaxation, meditation, mental imagery, biofeedback, and fitness

programs. The American Psychological Association Task Force also encouraged psychologists to explore organizational health topics such as stress, as they relate to work performance. Acknowledgement of the potential relationship between stress, health, and work performance was further enhanced by the premise that psychological factors may very well play a role in the process.

It is apparent that job stress may involve a myriad of interactions between an individual and the environment (Beehr & Newman, 1978). From their review of stress literature, Beehr and Newman identified three key points: occupational stress definitions vary, research methodology is mediocre, and interdisciplinary approaches to the topic of stress are limited. Several theoretical models of occupational stress have been developed in an effort to address the ambiguity of occupational stress research. Six of these occupational stress models will be explored next.

Occupational Stress Models

As previously noted, there are a number of potential definitions for stress. The complexity of the topic makes it difficult to generate a universally accepted definition. There are also a number of theoretical approaches to occupational stress. As a result, six models of occupational stress were examined.

Institute of Social Research (ISR) Model

In the early 1960s, the University of Michigan's Institute for Social Research became one of the first programs in the United States to study organizational stress (Katz & Kahn, 1978). As a result of this work, the Institute for Social Research (ISR) model became one of the first organizational stress models ever developed. The ISR model includes six components: the objective environment, the psychological environment,

response, mental and physical health and disease, enduring properties of the person, and interpersonal relations.

The objective environment includes anything in the workplace that employees may perceive such as the physical arrangement of furniture, proximity to co-workers, working relationships, noise, lighting, etc. (Katz & Kahn, 1978). The psychological environment signifies the method by which employees appraise the objective environment. For example, employees may appraise the objective environment through the paradigm of how it impacts their ability to fulfill their job responsibilities. If employees work best with few distractions, they may perceive close proximity to talkative co-workers as detrimental to effective fulfillment of their job responsibilities. On the other hand, if employees feel close-knit relationships are an integral part of their job responsibilities and essential for organizational stability, they may encourage close proximity to co-workers.

The response component includes the employees' physiological, behavioral, and emotional reactions to their appraisal of the objective environment (Katz & Kahn, 1978). If employees believe close proximity is detrimental to their job performance, their physical responses may include increased respiration, heart rate, or blood pressure. Behavioral responses may include decreased effort and absenteeism. Emotional responses might be evident in depression and lower job satisfaction.

As a result of employees' physical, behavioral, and emotional responses, there may be consequences (strains) such as mental and physical health and disease (Katz & Kahn, 1978). For instance, increased respiration, heart rate, and blood pressure may be manifested as heart disease. As a result of the stressful environment, decreased effort,

absenteeism, depression, and lower job satisfaction may lead to voluntary or involuntary termination of employment.

The enduring properties of the person (genetic, demographic, personality) and interpersonal relations are the final two components of the ISR model. These enduring factors may vary among employees and influence the other four components of the model. Employees have different genetics, demographics, personalities, and interpersonal relations that may affect how they perceive situations in the work environment and respond to stress. Thus, the ISR model includes interaction of six components that affect how employees deal with occupational stress.

McGrath Model

In 1976, McGrath proposed a four-stage model of occupational stress that is somewhat similar to the ISR model. The model is based on employees' perceptions of, and responses to, situations in the workplace environment. McGrath's model includes cognitive appraisal, decision making, performance, and outcomes.

Cognitive appraisal is the process by which an employee perceives workplace situations (McGrath, 1976). If employees are told by their supervisor that the department has exceeded the photocopy budget for the last two weeks and they need to limit their use, employees who have not used the copy machine in the last two weeks may feel they are being unduly scrutinized. As a result of their cognitive appraisal, these employees may engage in decision making to determine how they will respond to their supervisor's comments. If the employees perceive the supervisor's comments to be negative and unjustified, a stressful event is present and employees may decide to respond by engaging

in behavior that inhibits their job performance such as spending time gossiping about the supervisor, becoming unmotivated or increasing their absenteeism rate.

The next stage involves performance of the selected response (McGrath, 1976). If employees respond to their supervisor's comments by spending work time gossiping about their supervisor or consciously decreasing their work effort, it will likely have a negative effect on their work performance. As employees reflect on the situation and gain feedback regarding the effectiveness of the encounter, they are going through the outcome process of the model. If the encounter is deemed effective, the employees will likely experience minimal stress, as well as psychological and physical homeostasis. On the other hand, an encounter that is deemed ineffective may create a psychological and/or physical imbalance or misfit that perpetuates the cycle of cognitive appraisal, decision making, performance, and reappraisal found in McGrath's model. Consequently, stress may increase for the affected employees.

Person-Environment (P-E) Fit Model

The P-E Fit model is rooted in the work of social psychologist Kurt Lewin (Jex, 1998). Lewin's study of interactional psychology laid the foundation for the P-E fit model where behavior is "a function of the interaction between the person and the situation (e.g., $B=f[P,S]$ " (p. 7). The model also reflects the extent to which the person fits the situation. An imbalance may occur when the employee's skills, abilities, or values do not match the environmental demands or resources. When there is not a good fit between the person and the environment, unmet needs may lead to strain that affects work performance.

For example, a teacher who has worked for 20 years in a traditional schedule of eight 45-minute periods per school day is told the school will be moving to a block schedule of four 90-minute periods per school day next year. Given the fact that the teacher has no experience working in a block schedule and has not participated in professional development regarding how to teach in a block schedule, there may be a misfit between the person and the situation. If the teacher perceives the demands to be excessive and unmet needs regarding knowledge and training for the block schedule persist, stress may be present that affects the teacher's performance.

Furthermore, a P-E misfit may occur when there is a significant difference between organizational values and employee values (Jex, 1998). If the organization believes it is essential to teach Girls and Boys Town Social Skills on a daily basis and the teacher feels that individualized interventions of the teacher's own creation are more effective, a misfit may occur. The discrepancy between organizational values and employee values may lead to on-going stress that impacts the teacher's work performance. While the P-E fit model goes beyond the ISR and McGrath transactional models and takes into consideration the situational fit between the person and the environment, there is limited research to support the model.

General Systems Model

The concept of fit is also somewhat evident in the General Systems Model created by Cox and McKay (1981). Within this model, stress and related strain are present when the employee perceives there is a considerable lack of fit between workplace demands and the individual's ability to effectively manage the demands of the job. Specifically,

there is an on-going process of interaction, appraisal, and coping. Lack of fit may occur through a circular, five-stage process, as shown in Figure 1.

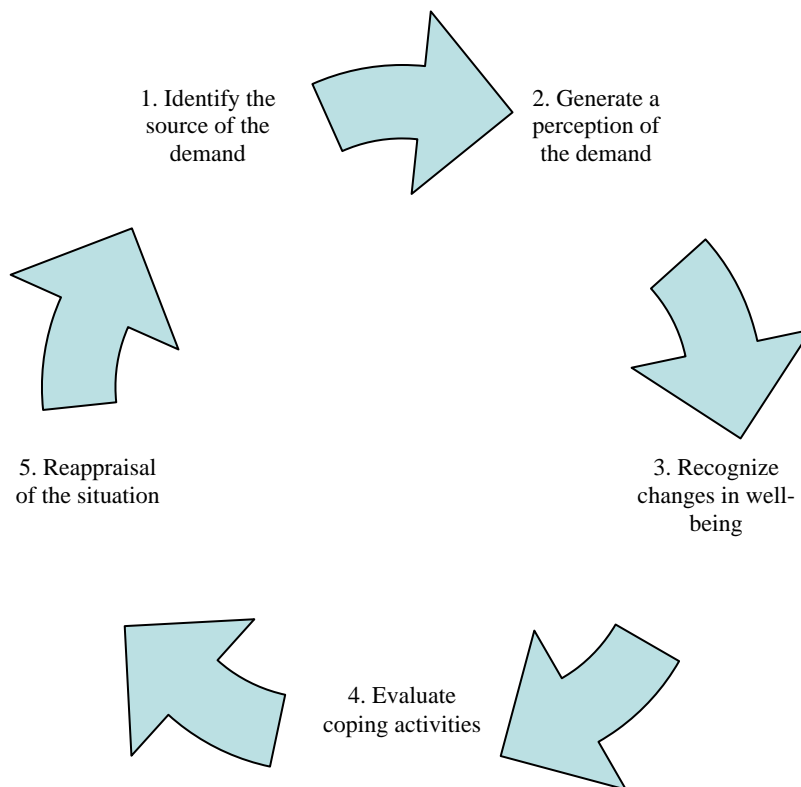


Figure 1. General Systems Model.

For example, a teacher may identify adequate yearly progress requirements in NCLB (2002) as a source of significant demand. In order to effectively meet the federal requirements, the teacher may need to examine current instructional practices to ensure that lessons are differentiated to meet the various learning styles of students. The teacher must then assess whether or not current skills and resources are sufficient to address the demand for increased accountability. Once the teacher identifies whether or not current skills or resources are adequate to address the demand, the situation may be reappraised in light of whether there is a good fit between the job demand and the teacher's ability to cope with the demand. If there is a lack of fit between job demand and the teacher's

ability to cope, the teacher may experience stress that negatively impacts work performance and leads to burnout or attrition.

Karasek Job Demand-Control Model

Karasek (1979) developed the Job Demand-Control model to explain that the most stressful workplace experiences are those in which the employee has limited job decision latitude. Job decision latitude is determined by the interaction between job demands and job control. Karasek posited that situations with high job demand and limited control foster the most stressful workplace experiences, resulting in strain that may negatively impact work performance.

For instance, a teacher may be charged with the responsibility of differentiating learning experiences for a class of 24 students that possess multiple learning styles including, but not limited to, visual, auditory, and kinesthetic. This may be considered a high job demand. The teacher may perceive that a plethora of classroom materials are needed, in order to plan multiple activities that will address the variety of learning styles. If the teacher is limited to a \$50 annual budget, the teacher may perceive they have little control over their ability to obtain necessary resources and plan effective learning experiences that address a myriad of learning styles. As a result of the high demand to help all students progress in the curriculum, and the limited control over allocating resources necessary to plan related learning experiences, the teacher may experience anxiety and hopelessness that negatively impact work performance.

Cybernetic Model

The final model to be explored on the topic of occupational stress is the cybernetic model by Cummings and Cooper (1979). The developers of this model feel it

is consistent with ongoing research on the topic. Cybernetics is the on-going influence of available feedback on behavior. As it relates to occupational stress, cybernetics includes an employee's use of information and feedback to adjust responses to stressful situations.

The interaction between the person and the environment, as similarly noted in McGrath's model and the P-E Fit model, is essential to the cybernetic model. Specifically, the premise is that an employee adjusts behavior to cope with factors that may disrupt one's physical or psychological equilibrium within the work environment. The cybernetic model is a four-stage model that includes detection of stress, selection of adjustment processes, implementation of adjustment processes, and the effects of adjustment processes on stress over time.

In an educational environment, a teacher may be asked to use a planning period to substitute for an ill colleague. The teacher may perceive the loss of a planning period to be a stressful situation, as the teacher will need to find other time to allocate for lesson planning. Through selection and implementation of adjustment processes, the teacher may choose to do lesson planning after school. Since after-school lesson planning may take away from the teacher's personal and family time, the resultant effect may be additional stress for the teacher. If the teacher is required to frequently give up a planning period and complete lesson planning after school, the cumulative effects may lead to heart disease or mental illness.

In summary, it is unlikely that a single definition or model of occupational stress will be universally accepted. Nonetheless, several models have been presented that provide paradigms for studying occupational stress. Application of models relative to the current study will be investigated next.

Application of Selected Models

In recent years, considerable research attention has focused on stress in education (Hepburn & Brown, 2001; Nagel & Brown, 2003; Williams & Gersch, 2004). Hepburn and Brown suggested the focus of stress in education recently shifted from the students to the teachers, as teachers appear to be the educational stakeholders experiencing the greatest hardships and enduring the greatest stress. Moreover, teaching is considered to be an extremely stressful job (Brown et al., 2002).

Throughout the world, there is currently a concern regarding the impact of prolonged stress on the health of teachers and the learning experiences of students (Antoniou et al., 2000). Costs related to teachers' health issues are also a concern for educational stakeholders seeking to provide quality educational experiences with limited resources (Thomas et al., 2003). Consequently, research that explores the effects of occupational stress may benefit all educational stakeholders.

In the present study, stress is defined as the emotional and physical responses of individuals as they acclimate themselves to their environments (Nassiri, 2005). The definition is reflected, to some extent, in all six of the identified occupational stress models. However, the definition of stress selected for this study appears most consistent with the ISR model and an alternative paradigm of Selye's GAS.

ISR Model

The ISR model for occupational stress includes the objective environment, the psychological environment, response, mental and physical health and disease, enduring properties of the person, and interpersonal relations (Katz & Kahn, 1978). The primary emphasis is on the response of the employee, based on perceptions of the objective

environment and moderating factors such as coping resources and interpersonal relations. If employees' perceive their environment to be stressful, it may lead to unhealthy physical, behavioral, and emotional responses. Unresolved stress may culminate in decreased effort, depression, absenteeism, lower job satisfaction, and voluntary or involuntary termination of employment.

Many of the components of the ISR model are evident in the TSI instrument that will be used to measure teachers stress levels in the present study. The TSI assesses teachers' perceptions of 49 individual items relative to five sources of stress and five manifestations of stress (Fimian, 1988). Sources of stress include time management, work-related stressors, professional distress, discipline and motivation, and professional investment. Manifestations of stress are fatigue-related, emotional, cardiovascular, gastronomic, or behavioral. These 10 broad categories cover nearly all of the components of the ISR model. Thus, the use of the TSI seems closely related to the ISR model for studying occupational stress in teachers.

Furthermore, there are a number of ways to assess occupational stress of employees. Through the framework of the ISR model, the TSI allows researchers to assess occupational stress that are specific to teachers. That being said, assessment of teachers' occupational stress only represents one component of the proposed correlational study, the independent variable. The dependent variable is related to teacher attrition and examines teachers' intentions to leave their current positions. The GAS principle will be discussed as it relates to teachers' intentions to leave their current positions.

Selye's GAS

The GAS includes three stages: alarm reaction, resistance, and exhaustion (Selye, 1956). Alarm reaction includes the psychophysical reaction of the body to a perceived threat. The affected individual may respond by fighting the perceived stressor or fleeing the situation. If the individual chooses to stay and battle the stressor, the sympathetic nervous system is activated, and the resistance stage begins. Throughout the resistance stage, the immune system is suppressed, decreasing the ability of the body to battle disease.

The exhaustion stage is evident, when the perceived stressor dissipates and bodily functions return to normal (Selye, 1956). If the stressor does not dissipate, the sympathetic nervous system remains active, the immune system is suppressed, and the body is more susceptible to illness, exhaustion, or death. All of the latter may ultimately affect work performance and impact one's ability to remain on-the-job.

While the original intent of the GAS was to view stress as a universal response of the body to any demand placed on it, the ISR model suggests the employee's perception of a potential threat and personal factors may also influence their responses. Many of these factors are included in the ISR model and are accounted for in the TSI, either via the sources and manifestations of stress, or in the demographics section. Additionally, the intentions of the employee to leave their current positions, as it relates to the GAS principle, are captured in the five-point Likert scale.

Altogether, the definition of stress identified for the proposed study is reflected in nearly all six of the previously mentioned occupational stress models. The ISR model, in conjunction with the GAS principle, provides a foundation for the current study. The ISR

and the GAS are complimented by the TSI for assessing teachers' stress levels and a Likert-type scale for measuring teachers' intentions to leave their current positions.

Study Context

It is apparent that teacher recruitment is not keeping pace with teacher attrition (Watlington et al., 2004). The attrition problem is evident in novice and experienced teachers throughout the nation (Inman & Marlow, 2004) and may result in decreased teacher quality (Pittinsky, 2005). Correspondingly, students may be deprived of meaningful learning experiences that prepare them to become productive members of society (Imazecki, 2005). The attrition problem has been present for several decades (Tye & O'Brien, 2002), due to a number of factors (Larwood & Paje, 2004). The contextual factors associated with stress and attrition are discussed next.

Background

To ensure that every child has an equitable opportunity to receive a meaningful educational experience, the No Child Left Behind Act of 2001 (2002) required all United States public school districts receiving Title I funds to have a highly qualified teacher in every classroom by 2006. This presented a challenge for many school districts, because teacher attrition has been an ongoing problem (Renard, 2003). Previous recruitment efforts do not appear to have mitigated the problem (Grant, 2001).

In response to the requirements of the No Child Left Behind Act of 2001, the Nebraska Department of Education (n.d.) implemented a state goal requiring that all students be taught by quality staff. The Nebraska Department of Education is working in partnership with higher education institutions to achieve the state goal via several means: a Nebraska Partnership for Quality Teacher Education Project, a P16 Initiative, and a

Statewide Teacher Education Project Coordinating Council. These efforts are important to ensure that those who choose to enter the profession are highly qualified and able to provide students with quality educational experiences.

Beyond the partnership with higher education institutions, the Nebraska Department of Education (2002) enhances its teacher recruitment efforts by offering federal student loan forgiveness for teachers who become endorsed in subjects with a dearth of qualified teachers, or who secure positions in low income schools. Students with education majors may be eligible for partial forgiveness of Perkins and Stafford loans (U. S. Department of Education, 2004). For the past four years, Nebraska identified between 6 and 13 shortage areas for student loan forgiveness that have been approved by the U.S. Department of Education each year (Nebraska Department of Education).

While efforts to enhance recruitment in Nebraska are laudable, Ingersoll and Smith (2003) suggest that the key to getting a highly qualified teacher in every classroom is retention. The importance of retention is reflected in the Stafford loan forgiveness program, as it requires teachers to be employed for five years before reaping financial benefits (U.S. Department of Education, 2004). The Nebraska State Education Association (n.d.) suggested that much more work remains to be done in addressing the need for quality teachers and creating meaningful learning experiences for students.

In addition to legislation at the federal level aimed at improving educational quality, the state of Nebraska has implemented a Student-based Teacher-led Assessment and Reporting System (STARS) to improve learning opportunities for children (Roschewski, 2004; Roschewski, Isernhagen, & Dappen, 2006). The STARS is designed around the premise that student performance is likely to be improved through

development of an assessment system driven by teachers at the local level. Potential benefits of the STARS include more meaningful results, better assessments, and improvement in assessment literacy (Bandalos, 2004).

However, Bandalos (2004) warned that the system may require extensive time commitments from teachers and increase their stress levels. If these negative effects are realized, they may have a detrimental effect on teacher quality, as workload appears to increase stress and burnout for teachers, possibly leading to attrition (Larwood & Paje, 2004). The purpose of this study was to explore the relationship between stress and Nebraska teachers' intentions to leave their current positions. Nebraska demographic and educational factors were examined to enhance understanding of the study context.

Nebraska Demographics and Educational Factors

In 2004, the population in Nebraska was approximately 1.7 million people (U.S. Census Bureau, 2004). About 11% of the population lived in poverty. In 2000, 47% of the population was located in urbanized areas. This may be an important characteristic to consider in Nebraska, because Prince (2002) reported that there was an inequitable distribution of highly qualified teachers in the United States. Urban schools appear to be the ones most likely to be impacted by a lack of highly qualified teachers, as they often have teachers with limited qualifications and produce students with less than adequate educational achievement (Howard, 2003).

Nebraska may also be affected by the fact that, in 2000, only 30% of the population lived in rural areas (U.S. Census Bureau, 2004). Rural schools may also be likely to employ teachers who are not deemed highly qualified (American Association of School Administrators, 2002).

According to the Nebraska Department of Education (2004), the preK-12 enrollment for the 2003-2004 school years was approximately 284,000 students, and remained steady for nearly two years. Conversely, the percentage of teachers with master's degrees decreased from about 44% in the 2001-2002 school year to 38% in 2003-2004. The percentage of teachers endorsed in core academic areas ranged from about 87%-97%. With the knowledge that teacher quality impacts student performance (Prince, 2002; Kaplan & Owings, 2004), the decrease in teachers earning master's degrees, and percentages of teachers not fully endorsed in core academic areas present a concern for Nebraska as it strives to provide quality teachers for all of its students.

On the statewide writing assessment, the percentage of students not meeting standards in 2003-2004 for grades four, eight, and 11 ranged from 12% to 20% (Nebraska Department of Education, 2004). For the mathematics assessment, the percentage of students not meeting state standards ranged from 15% to nearly 25%. While data may suggest some gains in educational achievement are being realized (Nebraska Department of Education), the percentages of students not meeting state standards highlights the need to address the shortage of highly qualified teachers (see Figure 2), many lost through attrition (Watlington et al., 2004).

Scope of the Literature

While the scope of the literature regarding teacher attrition appears to be abundant at the global and national levels, the availability of related literature is somewhat limited regarding the state of Nebraska. Literature suggests teacher attrition is an area of concern for educators in Nebraska (Nebraska Department of Education, n.d.; Nebraska

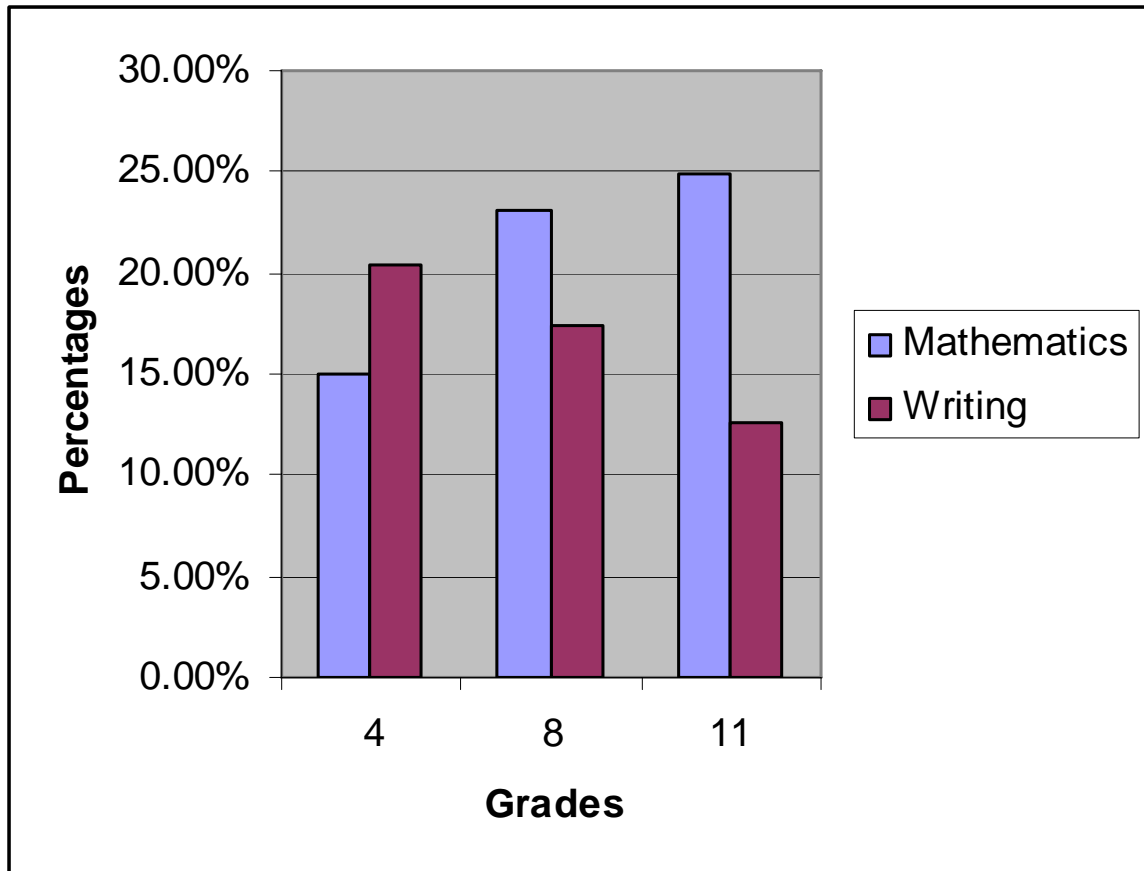


Figure 2. Percentages of students in Nebraska not meeting state mathematics and writing standards in the 2003-2004 school year.

Data from “2003-2004 State of the Schools Report: A Report on Nebraska Public Schools,” by Nebraska Department of Education, 2004. Retrieved November 4, 2005, from <http://reportcard.nde.state.ne.us/20032004/Main/Home.asp>

Department of Education, 2002; Nebraska State Education Association, n.d.; U.S.

Department of Education, 2004), but research addressing causes of teacher attrition is limited. Hence, further research in this area is warranted.

Although research regarding teacher stress is presented from national and international perspectives (Antoniou et al., 2000; Brown et al., 2002; Cheek, Bradley, Parr, & Lan, 2003; Hepburn & Brown, 2001; Thomas et al., 2003), reviews of the ProQuest database, the InfoTrac OneFile database, the EBSCOhost database, the

ThomsonGale database, and the world wide web, yield few meaningful results, particularly for the relationship between the variables of teacher stress and attrition in Nebraska. Research that explores the relationship between stress and attrition for Nebraska teachers will add to the existing body of educational literature, inform the development of strategies for mitigating teacher attrition, and lay a foundation for additional research in this area.

Summary

Teacher turnover is resulting in a shortage of quality teachers employed in the profession (McCann & Johannessen, 2004). The shortage is not due to a lack of certified teachers (National Commission on Teaching & Americas Future, 2003). The pool of available teachers seems to increase annually, but these gains are offset by a larger group of teachers that leave the profession (Watlington et al., 2004).

Teacher attrition is the primary reason for the teacher shortage (Dove, 2004). Almost one-third of all teachers leave the profession within the first three years, and nearly half leave within the first five years (Walsh & Carroll, 2005). Teachers leave the profession for a number of reasons, including stress (Larwood & Paje, 2004). The current concern regarding teacher attrition is likely to have a negative impact on student achievement (Ingersoll & Smith, 2003). Thus, recruitment and retention of highly qualified teachers is essential for reducing attrition and attaining school improvement (Howard, 2003).

Conclusion

Due to a shortage of quality teachers employed in the profession, educators are experiencing a problem of epidemic proportions (Madsen & Hancock, 2002). It appears

the shortage of teachers in the United States is widespread (Fore et al., 2002). One of the primary reasons for the teacher shortage is attrition (Dove, 2004) that may lead to diminished teacher quality (Pittinsky, 2005) and result in mediocre learning experiences for students (Prince, 2002; Kaplan & Owings, 2004).

Consequently, the No Child Left Behind Act of 2001 (2002) requires all schools receiving Title I funds to have highly qualified teachers in all core subject areas. The purpose of the highly qualified teacher requirement is to ensure that no child is denied an equitable education. Educational organizations have responded by focusing attention on recruitment (Ingersoll & Smith, 2003), but greater attention needs to be placed on retention (Holloway, 2003). To ensure all students are taught by highly qualified teachers, identification of reasons for teacher attrition and strategies for retention are essential (Renard, 2003).

Stress is one factor that may be related to attrition (Mearns & Cain, 2003; Larwood & Paje, 2004). Identification of reasons for teacher attrition is important for reducing stress-related consequences: mental and physical health concerns (Cheek et al., 2003) and extensive costs to educational organizations (Thomas et al., 2003). Further research that examines the relationship between teacher stress and attrition may inform the development of strategies for mitigating teacher stress and attrition.

Chapter 2 included an examination of literature regarding teacher attrition and stress. Chapter 3 examines research methodology including research design, appropriateness of the design, research questions, population, informed consent, sampling frame, confidentiality, geographic location, instrumentation, data collection, data

analysis, validity, and reliability. The chapter concludes with a brief overview of key elements.

CHAPTER 3: METHOD

The purpose of this study was to examine the relationship between Nebraska teachers' stress levels and intentions to leave their current positions. The TSI (Fimian, 1988) will be used to measure teachers' stress levels, and a Likert-type scale will be used to measure teachers' intentions to leave their current positions.

This quantitative, correlational study will explore the relationship between teachers' stress levels and their intentions to leave their positions at the end of the school year, within the next three years, and within the next five years, respectively. The results will determine whether teachers who intend to leave their positions within the next five years rate their stress levels higher or lower than those who plan to stay in their current positions.

This chapter will examine research methodology including the research design, appropriateness of the design, research questions, population, informed consent, sampling frame, confidentiality, geographic location, instrumentation, data collection, data analysis, validity, and reliability. The chapter concludes with a brief overview of key elements and transition to Chapter 4: Results.

Research Design

The purpose of this quantitative, correlational study was to examine the relationship between Nebraska teachers' stress levels and intentions to leave their current positions using the TSI and a Likert-type scale, respectively. A quantitative, correlational study is appropriate for exploring causal relationships between independent and dependent variables (Creswell, 2005; Neuman, 2003). A quantitative method was chosen because it provided an opportunity to effectively determine the relationship between

teachers' stress levels and intentions to leave their current positions. While other research methods may yield information to express the relationship between the independent and dependent variables, the chosen method provided for quantification of the relationship, as well as further analysis via extensive statistical analyses.

The independent variables were teachers' stress levels. Stress is defined as the emotional and physical responses of individuals as they acclimate themselves to their environments (Nassiri, 2005). Stress levels were measured using the TSI. The dependent variables were Nebraska teachers' intentions to leave their current positions at the end of the school year, in three years, or in five years. Teachers' intentions to leave their current positions were measured using a Likert-type scale, with 1 representing *definitely not*, 2 representing *probably not*, 3 representing *undecided*, 4 representing *probably*, and 5 representing *definitely*. The results were analyzed using descriptive statistics and inferential statistics, and provided information to determine whether teachers who planned to leave their current positions rated their stress levels higher than those who planned to stay.

Appropriateness of Design

Assessing the relationship between independent and dependent variables can be effectively accomplished with a quantitative, correlational research design (Creswell, 2005; Neuman, 2003). This study used the TSI and a Likert-type scale to survey Nebraska public school teachers and explore the relationship between teachers' stress levels and intentions to leave their current positions.

Previous tools for measuring occupational stress focused on general stress or burnout (Hanif & Pervez, 2003). The TSI was developed to assess occupational stressors

specific to teachers. A measurement tool specifically designed for teachers will more accurately depict occupational stressors experienced in the field of education.

Data used for development of the original TSI was obtained from 3401 teachers randomly selected from lists of teachers obtained from seven states in the eastern United States (Fimian & Fastenau, 1990). In the development of the TSI, 21 samples were used to survey teachers, with 13 samples being obtained by mail. The remaining samples were acquired through workshops or regional surveys.

The present study used a mail survey. A mail survey reflects one of the methods used in the development of the TSI (Fimian, 1988). The survey was distributed to 2000 Nebraska public school teachers. Participants were randomly selected from a list of public school teachers obtained through a search of the Nebraska Department of Education online directory.

The TSI includes 49 items clustered in 10 factors that are separated into sources of stress and manifestations of stress (Fimian, 1988). Sources of stress include time management, work-related stressors, professional distress, discipline and motivation, and professional investment. Manifestations of stress are fatigue-related, emotional, cardiovascular, gastronomic, or behavioral in nature.

A number of quantitative and qualitative research methods may be appropriate for exploring teacher stress or attrition. A quantitative, correlational research design is appropriate for exploring the relationship between independent and dependent variables (Creswell, 2005; Neuman, 2003). A quantitative correlational research design is optimal for identifying the relationship between teacher stress and intentions to leave their current positions, as it includes quantifiable independent and dependent variables.

Research Questions and Hypotheses

Stress may cause teachers to leave the profession within the first three years or the first five years (Walsh & Carroll, 2005). Experienced teachers are also exiting the profession, many for reasons other than retirement (Ingersoll, 2003). This research investigated the following questions: To what extent do teachers' stress levels relate to their intentions to leave their current positions at the end of the school year? To what extent do teachers' stress levels relate to their intentions to leave their current positions within the next three years? To what extent do teachers' stress levels relate to their intentions to leave their current positions within the next five years? This study explored the relationship between teachers' stress levels and their intentions to leave their current positions at the end of the school year, within the next three years, and within the next five years. Participants were also given an opportunity to provide responses regarding factors that may influence their intentions to leave including, but not limited to, inadequate pay, unsafe working conditions, lack of administrative support, increased workload, and/or parental demands.

The first null hypothesis is that higher stress is not associated with stronger intentions of teachers to leave their current positions at the end of the school year. The second null hypothesis is that higher stress is not associated with stronger intentions of teachers to leave their current positions within the next three years. The third null hypothesis is that higher stress is not associated with stronger intentions of teachers to leave their current positions within the next five years.

The first alternative hypothesis is that higher stress is associated with stronger intentions of teachers to leave their current positions at the end of the school year. The

second alternative hypothesis is that higher stress is associated with stronger intentions of teachers to leave their current positions within the next three years. The third alternative hypothesis is that higher stress is associated with stronger intentions of teachers to leave their current positions within the next five years. These associations were studied relative to the total stress score, as well as the five sources of stress and the five manifestations of stress identified in the TSI.

Population

The sample population for this study was limited to K-12 public school teachers employed in Nebraska school districts during the 2006-2007 school year. A total of 2000 participants were randomly selected from a list of approximately 21,751 public school teachers that was obtained from the Nebraska Department of Education.

Academic Review Board/Institutional Review Board

The study was submitted to the University of Phoenix Academic Review Board and Institutional Review Board (ARB/IRB) for approval. A copy of the ARB/IRB approval form is included in Appendix C.

Informed Consent

Survey packets were sent to participants and included a cover letter with an explanation of the procedures, the study purpose, potential risks, and consent to participate. A copy of the survey and a self-addressed, stamped envelope were enclosed. Participants were assured that individual responses would remain confidential. No individuals or districts were identified. A copy of the informed consent letter is included in Appendix E.

Sampling Frame

The sample population in this study was limited to public school teachers employed in Nebraska public school districts during the 2006-2007 school year. A total of 2000 participants were randomly selected for potential participation in the study from a list of approximately 21,751 public school teachers that was obtained from the Nebraska Department of Education. To prevent a potential conflict of interest, teachers from the district where the researcher was employed were excluded from the potential sample.

The intention was to have the sample size for this study meet or exceed the minimum identified by the sample size calculator from Raosoft (2004). With a margin of error at 5%, confidence level of 95%, population size of approximately 21,751, and response distribution of 50%, the recommended sample size was 378. A total of 2000 teachers were surveyed with the hope of obtaining a sample size of at least 378 responses.

Confidentiality

Prior to mailing, the surveys were coded from 1 to 2000. Each respondent was assigned a number, and the surveys were mailed. The researcher maintained a master list of assigned numbers to ascertain if the individual surveys have been returned. To ensure confidentiality, only the researcher had access to the master list of numbers. Only the researcher had access to the surveys. The researcher insured that confidentiality was maintained throughout the study.

Geographic Location

The purpose of this quantitative, correlational study was to examine the relationship between Nebraska public school teachers' stress levels and intentions to

leave their current positions using the TSI and a Likert-type scale, respectively. A total of 2000 teachers were randomly selected for participation in the study from a list of public school teachers obtained from the Nebraska Department of Education.

Instrumentation

The instrument employed in this study was developed by Fimian (1988). Previous tools for measuring occupational stress focused on general stress or burnout (Hanif & Pervez, 2003). The TSI was developed to assess occupational stressors specific to teachers. A measurement tool for teachers will more accurately depict occupational stressors experienced in the field of education, and is therefore more appropriate for use in this study than tools focusing on general occupational stress. This study used the TSI and a Likert-type scale to survey Nebraska public school teachers and explore the relationship between teachers' stress levels and intentions to leave their current positions. Alpha reliability for internal consistency of the TSI is .93. External validity for the TSI is identified as $r=.65$, $p=.0001$.

Verbal permission to use the TSI was obtained from Michael Fimian on Saturday, March 4, 2006. Permission for use is also documented for research and not-for-profit purposes on Fimian's (2000) website *The Teacher Stress Inventory Info Site*. A letter to the researcher explaining the purpose of the study and requesting permission to use the TSI is included in Appendix A. Written permission was obtained from the author and is documented in Appendix B.

The TSI is a four page inventory that includes 49 items (Fimian, 1988). The items are clustered in 10 factors separated into sources of stress and manifestations of stress. Sources of stress include time management, work-related stressors, professional distress,

discipline and motivation, and professional investment. Manifestations of stress are fatigue-related, cardiovascular, gastronomic, or behavioral in nature. Estimated completion time is 15-20 minutes.

The survey begins with directions for completing the identified items (Fimian, 1988). Two sample items are included to provide clarity and understanding for completing the survey. The sample items are followed by a Likert-type scale for responding to the items. The Likert-type scale ranges from 1 (no strength; not noticeable) to 5 (major strength; extremely noticeable). The next section includes a breakdown of the 49 survey items across the 10 identified factors. The final part of the survey includes several demographic variables: gender, number of years teaching, age, number of students taught each day, grade level of students taught, type of students worked with, most advanced educational degree, support from peers, mutual support with supervisors, family support, support from friends, and the presence of a spiritual base for coping with problems at work.

For the purposes of comparing teachers' stress levels with intentions to leave their current positions, respondents were asked to indicate their intentions to leave their current positions at the end of the school year, within the next three years, and within the next five years. A 5-point Likert-type scale was used for teachers to indicate whether they planned to leave their current positions at the end of the school year, within the next three years, and within the next five years, respectively. The statements were rated with 1 representing *definitely not*, 2 representing *probably not*, 3 representing *undecided*, 4 representing *probably*, and 5 representing *definitely*.

Data Collection

The purpose of this quantitative, correlational study was to examine the relationship between Nebraska teachers' stress levels and intentions to leave their current positions using the TSI and a Likert-type scale, respectively. A quantitative correlational study is appropriate for exploring relationships between independent and dependent variables (Creswell, 2005; Neuman, 2003). This correlational study used an explanatory design, as opposed to a predictor design, because data regarding the independent and dependent variables will be collected simultaneously.

The independent variable was teacher stress level. Stress is defined as the emotional and physical process that allows individuals to acclimate themselves to their environments (Nassiri, 2005). Stress levels were measured using the TSI. The dependent variables were Nebraska teachers' intentions to leave their current positions. Teachers' intentions to leave their current positions were measured using a Likert-type scale.

The quantitative measures obtained regarding teacher stress levels and intentions to leave provided a mechanism for calculating a correlation between the variables (Creswell, 2005). The correlation coefficient yielded information regarding the association between the independent and dependent variables, as defined by the explanatory research design. Data regarding the association between the independent and dependent variables may inform development of future research regarding the problem of teacher attrition.

Approximately three days prior to mailing the cover letter and survey instrument, a letter (see Appendix D) was mailed to respondents informing them of the forthcoming survey and rationale for the study. The purpose of the initial letter was to prepare

respondents for the upcoming survey and, hopefully, increase the response rate. Then, a cover letter (see Appendix E) and self-addressed, postage-paid survey (see Appendix F) were mailed to the 2000 teachers randomly selected from a list of approximately 21,751 public school teachers that was obtained through the Nebraska Department of Education.

The surveys were mailed to the teachers' school addresses in May of 2007. The cover letter included an explanation of the study purpose, consent to participate, significance to educational leadership, instructions for completing the survey, and the researcher's contact information. Respondents were assured of the confidentiality of their responses.

The surveys were coded from 1 to 2000, prior to mailing. Each respondent was assigned a number, and the surveys were mailed. A master list of the assigned numbers was kept, and each survey's return was recorded. The assigned numbers were kept confidential, with only the researcher having access to the master list. All surveys were kept confidential, accessible only to the researcher. The researcher insured that confidentiality was maintained throughout the study.

Data Analysis

Given the quantitative correlational research design, responses to the survey were analyzed using descriptive and inferential statistics. Data was analyzed using Microsoft® Excel and Data Desk®/XL Version 2. Frequencies and percentages were reported concerning gender, years of experience, age, number of students taught each day, level of students taught, types of students worked with, highest educational degree, colleague support, supervisor support, family support, support from friends, and a spiritual base for

coping. Descriptive statistics included measures of central tendency such as mean, median, and mode. Measures of dispersion included standard deviation and range.

The Pearson product moment correlation coefficient is appropriate for determining the relationship between independent and dependent variables (Creswell, 2005; Neuman, 2003). A Pearson product moment correlation coefficient and related p-values were calculated to determine if individuals who planned to leave the profession rated their stress levels higher than those who planned to remain in the profession.

Validity and Reliability

To determine face validity, Fimian (as cited in Fimian, 2000) conducted a review of literature in 1979, identifying 135 sources and manifestations of stress. These items were narrowed to a common list of 79 sources and manifestations of stress that were reviewed by graduate faculty, graduate students, and local public school teachers in Connecticut. Based on the review, 63 usable items were retained and included in the pilot study for the TSI. The pilot study was administered to Connecticut teachers. Factor analysis yielded items for inclusion in the next version of the TSI. The TSI was administered to Vermont teachers and yielded similar results to the study with Connecticut teachers. Content analysis was completed by 226 stress experts and yielded five stress sources and five stress manifestations that were included in the final version of the TSI.

Factorial validity was established by inclusion of 3401 teachers from 21 samples in eight states (Fimian, 2000). The samples included regular education teachers, special education teachers, and un-classified teachers. Thirteen samples were obtained via mail

surveys and eight samples were obtained through regional distribution of surveys or at workshops.

External validity was established by having teachers and outside observers simultaneously rate the teachers' stress levels (Fimian, 2000). Regular education teachers were asked to rate their stress levels, as well as having significant others rate the teachers' stress levels. Results indicated stress ratings of teachers and significant others were related for the Total Strength ($r=.65$; $p=.0001$) and the subscale ($r=.49$ to $.69$; $p=.0001$).

Cronbach's coefficient alpha was used to determine internal consistency whole scale reliability at .93 for the combined sample, .92 for special education teachers and .93 for regular education teachers (Fimian, 2000). This demonstrates that the TSI is reliable for whole scale consideration. "In sum, the TSI is a potentially valuable instrument for use in public school settings to assess teacher stress. The manual provides extensive support for its reliability and validity as well as a fair description of the norm group" (Wiese, 1992, ¶ 13).

Summary

The purpose of this study was to examine the relationship between Nebraska teachers' stress levels and intentions to leave their current positions. The TSI (Fimian, 1988) was used to measure teachers' stress levels and a Likert-type scale will be used to measure teachers' intentions to leave their current positions.

A quantitative correlational study is appropriate for exploring causal relationships between independent and dependent variables (Creswell, 2005; Neuman, 2003). The study was designed to explore the relationship between teachers' stress and their intentions to leave their positions within the next five years. The results identified

whether a relationship existed between teachers' stress levels and intentions to leave their current positions.

This chapter examined research methodology including research design, appropriateness of the design, research questions, population, informed consent, sampling frame, confidentiality, geographic location, instrumentation, data collection, data analysis, validity, and reliability. Based on data gathered through implementation of the research methodology identified in Chapter 3, the results of the study are examined in Chapter 4.

CHAPTER 4: RESULTS

The purpose of this study was to survey Nebraska public school teachers and explore the relationship between their stress levels and intentions to leave their current positions. Teachers' stress levels were measured using the TSI. On the TSI, teachers were asked to rate themselves on ten stress-related items from 1 (*no strength; not noticeable*) to 5 (*major strength; extremely noticeable*).

Teachers' intentions to leave their current positions were measured using a Likert-type scale. On the Likert-type scale, teachers were asked to rate their intentions to leave from 1 (*definitely not*) to 5 (*definitely*). Teachers rated their intentions to leave at the end of the school year, in the next three years, and in the next five years. This study was a quantitative, correlational study and the results provided information that determined the nature of the relationship between teachers' stress levels and their intentions to leave their current positions.

While teacher quality is considered a key factor affecting student performance (NCLB, 2002; U.S. Department of Education, 2002), the quantity of qualified teachers working in the profession is inadequate to meet present educational needs (Zepeda, 2006). As opposed to a scarcity of available teachers (Retention Problems, 2005), a primary concern is that many qualified teachers never enter the profession (Gursky 2000/2001)

In addition, scores of teachers enter the profession and leave within their first five years on the job (Inman and Marlow, 2004). Research suggests that approximately 16% of teachers leave within their first year of teaching (Howard, 2003), 30% of teachers leave within their first three years, and nearly 50% leave within their first five years

(Walsh & Carroll, 2005). Based on data from the Nebraska State Education Association (n.d.), these numbers appear to be consistent in Nebraska, as nearly half of all teachers in the state leave within their first five years of teaching.

Consequently, the ongoing issue of teacher turnover may negatively impact teacher quality and inhibit student performance (Kaplan & Owings, 2004). Renard (2003) suggested identification of reasons for teacher attrition may inform the development of strategies for retaining highly qualified teachers. The present study surveyed Nebraska public school teachers to determine the relationship between their stress levels and intentions to leave their current positions.

Research Questions

The data for this quantitative, correlational study was collected to address the following three research questions:

1. To what extent do teachers' stress levels relate to their intentions to leave their current positions at the end of the school year?
2. To what extent do teachers' stress levels relate to their intentions to leave their current positions within the next three years?
3. To what extent do teachers' stress levels relate to their intentions to leave their current positions within the next five years?

Participants had the opportunity to identify factors that may have influenced their intentions to leave such as unsafe working conditions, lack of administrative support, increased workload, and/or the desire to raise a family. Participants were also asked to provide demographic information regarding gender, number of years experience in teaching, age, number of students taught each day, level of students taught, types of

students worked with, and most advanced educational degree. Supplemental questions were used to determine factors that may influence participants' intentions to leave their current positions. The supplemental questions examined colleague support, supervisor support, family support, support from friends, and having a spiritual base for coping with problems at work.

Statement of the Hypotheses

The following hypotheses were studied relative to the total stress score, as well as the five sources of stress and the five manifestations of stress identified in the TSI. To determine whether to accept or reject the null hypotheses, the p-values for each correlation were compared to the .05 level of significance for this study. If the p-value was less than or equal to .05, the null hypothesis was rejected. If the p-value was greater than .05, the null hypothesis was accepted.

H1o Higher stress is not associated with stronger intentions of teachers to leave their current positions at the end of the school year.

H1a Higher stress is associated with stronger intentions of teachers to leave their current positions at the end of the school year.

H2o Higher stress is not associated with stronger intentions of teachers to leave their current positions within the next three years.

H2a Higher stress is associated with stronger intentions of teachers to leave their current positions within the next three years.

H3o Higher stress is not associated with stronger intentions of teachers to leave their current positions within the next five years.

H3a Higher stress is associated with stronger intentions of teachers to leave their current positions within the next five years.

Data Collection

Data collection procedures began in May of 2007. On approximately May 1, 2007, an initial letter (Appendix D) was mailed to 2000 teachers randomly selected from a list of approximately 21,751 public school teachers obtained through the Nebraska Department of Education. The purpose of the initial letter was to inform potential respondents of the purpose of the study, alert them that a survey was coming to be completed, and to motivate them to participate in it.

On May 4, 2007, an informed consent letter (Appendix E) and self-addressed, postage-paid survey (Appendix F) were mailed to the 2000 potential study participants. The surveys were mailed to the teachers' school addresses, as this information was publicly available. The cover letter included an explanation of the study purpose, consent to participate with a signature line, significance to educational leadership, instructions for completing the survey, and the researcher's contact information. Participants were assured of the confidentiality of their responses.

The surveys were coded from 1 to 2000, prior to mailing. Each respondent was assigned a number, and the surveys were mailed. A master list of the assigned numbers was kept, and each survey's return was recorded. The assigned numbers were kept confidential, with only the researcher having access to the master list. The researcher insured that confidentiality was maintained throughout the study.

A total of 676 surveys were returned. Of those 676 surveys, only 616 were accompanied by a signed consent form and had the stress sections and at least one item

on the intention to leave section properly completed, yielding a response rate for the survey of 30.8%. To adequately address the research questions, all of the “stress” items and at least one of the “intention to leave” items needed to be completed. The rest of the surveys which were returned to the researcher were excluded from the study for the following reasons: incomplete or duplicate responses in the sources of stress and manifestations of stress sections, no responses in the section regarding intentions to leave, the lack of a signed consent form, or a special request to not be included in the study.

The use of incomplete or duplicate responses in the sources of stress and manifestations of stress sections would have rendered the TSI results invalid for the purposes of this study. Inclusion of surveys that did not have responses in the section regarding intentions to leave would have prevented the researcher from determining the relationship between teachers’ stress and their intentions to leave. Surveys that were not accompanied by a signed consent form could not be used, as this would have violated the code of conduct regarding the use of human subjects in educational research.

Data Analysis

Given the quantitative, correlational research design, responses to the survey were analyzed using descriptive and inferential statistics. Data were analyzed using Microsoft® Excel and Data Desk®/XL Version 2. The mean, median, range, and standard deviation are reported in Table 1 for years of experience, age, and number of students taught each day. Table 2 includes frequencies and percentages for the following variables: gender, level of students taught, types of students worked with, highest educational degree, colleague support, supervisor support, family support, support from friends, and a spiritual base for coping. Based on information from the Nebraska

Department of Education, the area in which the teacher was employed (i.e. general education or special education) was also included in Table 2.

Although the total number of surveys that included properly completed stress sections and intention to leave sections was 616, some of these surveys did not have all of the demographic variables completed. Thus, the total number of responses for some of the demographic variables was less than 616. Surveys that did not have all demographic variables completed were still included in the study, because the surveys had all of the stress sections and at least one item in the intentions to leave section completed that were necessary to determine the relationship between teachers' stress levels and their intentions to leave. A lack of some demographic variables did not compromise calculation of the relationship between teachers' stress and their intentions to leave their current positions.

Table 1

Descriptive Statistics for Experience, Age, and Number of Students Taught

<i>Item</i>	<i>Mean</i>	<i>Median</i>	<i>Standard Deviation</i>	<i>Range</i>
Years of Experience	16.58	15	10.65	45 (1-46)
Age	42.79	43	11.33	49 (22-71)
# of Students Taught	63.09	45	53.78	460 (0-460)

Furthermore, the total n is larger than 616 for some demographic variables, as it may have been appropriate for teachers to mark more than one response. For example, if teachers indicated that they taught students at the elementary, middle school, and secondary levels, they were marked accordingly in each category. Particularly in the

areas of special education or Title I reading, it is possible for teachers to teach students at multiple educational levels.

The average (mean) age of participants was 42.79 years with a standard deviation of approximately 11 years. The median age was 43 years. Participants' ages ranged from 22 to 71 years.

Table 2

Frequencies and Percentages for Selected Demographic Variables

Item	<i>n</i>	%
Gender		
Female	474	77.1
Male	141	22.9
Area of employment		
General education	542	88.0
Special education	74	12.0
Level of students		
Early childhood	26	3.6
Elementary	291	40.5
Middle School	162	22.6
Secondary	239	33.3
Types of students taught		
Nonhandicapped	305	49.8
Handicapped	55	9.0
Both	253	41.3

Item	<i>n</i>	Percent
Highest degree		
Bachelors	288	47.4
Masters	313	51.6
Ed. Specialist	4	0.7
Doctorate	2	0.3
Colleague support		
Yes	584	96.5
No	21	3.5
Supervisor support		
Yes	453	76.8
No	137	23.2
Family support		
Yes	572	94.2
No	35	5.8
Support from friends		
Yes	573	94.1
No	36	5.9
Spiritual base for coping		
Yes	530	86.7
No	81	13.3

Participants averaged 16.58 years of experience with a standard deviation of 10.65 years. The median for years of experience was 15. Years of teaching experience ranged from 1 to 46 years.

The number of students teachers worked with each day ranged from zero to 460. Teachers that indicated zero may be in roles supporting other staff and not working directly with students on a daily basis. The average number of students worked with each day was 63.09 with a standard deviation of 53.78. The median number of students worked with was 45.00.

Females represented approximately 77% of the sample, and males represented 23% of the sample. General education teachers represented the majority of the sample at 88%, while special education teachers were 12% of the sample. Yet, when all of the teachers were asked to indicate what types of students they worked with each day 50% indicated nonhandicapped, 9% indicated handicapped, and 41% indicated they worked with both handicapped and nonhandicapped students. Given an inclusionary education model that some schools may be using, there may have been general education teachers and special education teachers working with both handicapped and nonhandicapped students (Aldridge & Goldman, 2002). When asked their educational background, 47.4% of the participants indicated their highest degree was a bachelor's, 51.6% held a master's, 0.7% held an education specialist, and 0.3% held a doctorate.

Participants were also asked to answer yes or no to five questions relating to support for their jobs from colleagues, supervisors, family, and friends, as well as whether or not they had a spiritual base for coping with stress. Approximately 97% of participants indicated they had support from colleagues, 77% had support from their

supervisors, 94% had family support, 94% had support from friends, and roughly 87% of participants indicated they had a spiritual base for coping.

The Pearson product moment correlation coefficient was appropriate for determining the relationship between independent and dependent variables (Creswell, 2005; Neuman, 2003). A Pearson product moment correlation coefficient was calculated to determine the relationship between teachers' stress levels and their intentions to leave their current positions.

For each of the three research questions, correlations coefficients were calculated for the five sources of stress, the five manifestations of stress, and total TSI score, yielding a total of 33 correlations. The means and standard deviations were appropriately provided for each of the variables, since these descriptive statistics are used in the formula for calculating the correlation coefficient (Moore, 1997). Table 3 includes all correlation coefficients and related p-values regarding the three research questions, to be discussed next.

Research Question 1

The first research question examined the relationship between teachers' stress levels and their intentions to leave their current positions at the end of the school year. Table 3 includes the correlation coefficients and p-values relative to the five sources of stress, five manifestations of stress, and total TSI score. On the TSI, participants rated sources of stress and manifestations of stress from 1 (*no strength; not noticeable*) to 5 (*major strength; extremely noticeable*). For intentions to leave, participants rated their intent from 1 (*definitely not*) to 5 (*definitely*).

Table 3

Correlation Coefficients and P-Values for the Three Research Questions

Variable	Intent to Leave at End of Year (<i>M</i> =1.57, <i>SD</i> =1.21)	Intent to Leave in 3 Years (<i>M</i> =2.43, <i>SD</i> =1.38)	Intent to Leave in 5 Years (<i>M</i> =3.01, <i>SD</i> =1.47)
Time Management (<i>M</i> =3.45, <i>SD</i> =.68)	.08 (.0019)	.10 (.0003)	.06 (.0219)
Work Related Stressors (<i>M</i> =3.37, <i>SD</i> =.91)	.03 (.1690)	.11 (.0001)	.13 (.0001)
Professional Distress (<i>M</i> =2.71, <i>SD</i> =.96)	.05 (.0430)	.15 (<.0001)	.17 (<.0001)
Discipline/Motivation (<i>M</i> =3.07, <i>SD</i> =.98)	.01 (.3073)	.14 (<.0001)	.12 (<.0001)
Professional Investment (<i>M</i> =2.22, <i>SD</i> =.86)	.07 (.0106)	.21 (<.0001)	.18 (<.0001)
Emotional Manifestation (<i>M</i> =2.45, <i>SD</i> =.99)	.00 (.4776)	.09 (.0007)	.07 (.0087)
Fatigue Manifestation (<i>M</i> =2.44, <i>SD</i> =.91)	.04 (.1044)	.13 (<.0001)	.07 (.0076)
Cardio Manifestation (<i>M</i> =2.18, <i>SD</i> =1.08)	-.02 (.7266)	.08 (.0047)	.09 (.0008)
Gastro Manifestation (<i>M</i> =1.79, <i>SD</i> =1.00)	-.03 (.8155)	.11 (<.0001)	.07 (.0105)
Behavioral Manifestation (<i>M</i> =1.51, <i>SD</i> =.68)	-.03 (.8149)	.12 (<.0001)	.12 (<.0001)
Total TSI Score (<i>M</i> =2.52, <i>SD</i> =.57)	.03 (.1480)	.19 (<.0001)	.17 (<.0001)

Note: *M*=Mean.

For teachers' intentions to leave at the end of the school year, the mean was 1.57. The standard deviation was 1.21. The mean was between *definitely not* and *probably not*, indicating that, on average, most teachers did not intend to leave their current positions at the end of the 2006-2007 school year.

The means for the five sources of stress (time management, work related stressors, professional distress, discipline/motivation, and professional investment) ranged from 2.22 to 3.45 with the highest means for time management (3.45) and work related stressors (3.37). The standard deviations ranged from .10 to .21. The correlation coefficients for the five sources of stress and intentions to leave at the end of the school year were not significant, ranging from .01 to .08. These correlations suggest almost no relationship between teachers' sources of stress and their intentions to leave at the end of the school year. However, due to p-values below the study's .05 level of significance, the null hypothesis was rejected for time management (.0019), professional distress (.0430), and professional investment (.0106).

The means for the five manifestations of stress (emotional, fatigue, cardiovascular, gastrointestinal, and behavioral) ranged from 1.51 to 2.45 with the highest means for emotional manifestation (2.45) and fatigue manifestation (2.44). The standard deviations ranged from .68 to 1.08. The correlation coefficients for the five manifestations of stress and intentions to leave at the end of the school year ranged from -.03 to .04. As with the five sources of stress, these correlations suggest almost no relationship between teachers' manifestations of stress and their intentions to leave at the end of the school year. With p-values above .05, the null hypothesis was accepted for all

five manifestations of stress, as they relate to intentions to leave at the end of the school year.

Total TSI scores yielded a mean of 2.52 and a standard deviation of .57. The mean fell between *mild strength: barely noticeable* to *medium strength: moderately noticeable*. The correlation coefficient for the total TSI score and teachers' intentions to leave their current positions at the end of the school year was .03, suggesting almost no relationship between the two variables. With a p-value of .1480, the null hypothesis was accepted for the relationship between total TSI score and intention to leave at the end of the school year relative to Research Question 1. The results of this study suggest, relative to the total TSI score, that higher stress is not associated with stronger intentions to leave at the end of the school year.

Research Question 2

The second research question examined the relationship between teachers' stress levels and their intentions to leave their current positions in the next three years. Table 3 includes the correlation coefficients and p-values relative to the five sources of stress, five manifestations of stress, and total TSI score.

The mean for teachers' intentions to leave their current positions in the next three years was 2.43. The standard deviation was 1.38. The mean was between *probably not* and *undecided*, indicating that, on average, most teachers did not intend to leave their current positions in the next three years.

The correlation coefficients for the five sources of stress and intentions to leave in the next three years ranged between .10 and .21. The correlation coefficients for the five manifestations of stress and intentions to leave in three years ranged from .09 to .13.

P-values below the .05 level of significance for all five sources of stress and manifestations of stress resulted in the null hypothesis being rejected.

The correlation coefficient for the total TSI score and teachers' intentions to leave their current positions in the next three years was .19. With a p-value of $<.0001$, the null hypothesis was rejected for the relationship between total TSI score and intention to leave in the next three years. The results of this study suggest, relative to the total TSI score, that higher stress is associated with stronger intentions of teachers to leave their current positions in the next three years.

Research Question 3

The third research question examined the relationship between teachers' stress levels and their intentions to leave their current positions in the next five years. Table 3 includes the correlation coefficients relative to the five sources of stress, five manifestations of stress, and total TSI score.

The mean for teachers' intentions to leave their current positions in the next five years was 3.01. The standard deviation was 1.47. The mean was near the *undecided* classification, indicating that, on average, most teachers were unsure of their intentions to leave their current positions in the next five years.

The correlation coefficients for the five sources of stress and intentions to leave in the next five years ranged between .06 and .18. The correlation coefficients for the five manifestations of stress and intentions to leave in the next five years ranged from .07 to .12. The correlation coefficient for the total TSI score and teachers' intentions to leave their current positions in the next five years was .17.

For the majority of the stress-related variables, the correlation coefficients for Research Question 3 fell between those found in Research Question 1 and Research Question 2. The p-values for the five sources of stress and manifestations of stress fell below .05, indicating that the null hypothesis was rejected. With a p-value of $<.0001$, the null hypothesis was also rejected for the relationship between total TSI score and intention to leave in the next five years. The results of this study suggest, relative to the total TSI score, that higher stress is associated with stronger intentions of teachers to leave their current positions in the next five years.

Summary

Overall, the study sample had an average age of 43 years, an average of 17 years of experience, and an average number of students worked with per day of 63. Females comprised approximately three-fourths of the sample, with males being one-fourth of the sample. Roughly 47% of the teachers' highest degree was a bachelor's, with nearly 52% holding a master's degree. A total of 1% of the teachers in the sample had an education specialist or doctorate degree.

Early childhood teachers represented 4% of the sample, elementary teachers were approximately 41% of the sample, middle school teachers accounted for almost 23% of the sample, and secondary teachers were approximately 33% of the sample. General education teachers represented 88% of the sample and special education teachers comprised 12% of the sample. About 50% of the teachers worked with only nonhandicapped students, while 41% worked with both handicapped and nonhandicapped students. Just under 10% of the sample worked with only handicapped students.

Over 90% of the teachers indicated they had support from colleagues, support from family, and/or support from friends. Just over 75% of the teachers felt they had support from their supervisors. Almost 90% of the teachers indicated they had a spiritual base for coping with stress.

For the purposes of this study, 33 correlations and p-values were calculated. Teachers' intentions to leave at the end of the school year, in the next three years, and in the next five years were compared to five sources of stress, five manifestations of stress, and the total stress score on the TSI. Due to p-values below the .05 level of significance established for this study, the null hypothesis was rejected for all 22 correlations relative to the relationship between stress and intentions to leave in three years and five years. The null hypothesis was rejected for only three (time management, professional distress, and professional investment) of the 11 correlations calculated for the relationship between stress and intentions to leave at the end of the current school year. The results of this study suggest that higher stress is associated with stronger intentions of teachers to leave their current positions at the end of the school year, in the next three years, and in the next five years for 25 of the 33 correlations shown in Table 3.

The results of this study suggest that higher stress is not associated with stronger intentions to leave at the end of the school year relative to work related stressors, discipline/motivation, emotional manifestation, fatigue manifestation, cardiovascular manifestation, gastronomical manifestation, behavioral manifestation, and total TSI, as the p-values were greater than the .05 level of significance. Chapter 5 discusses the broader implications of the results and provides recommendations for future research.

CHAPTER 5: SUMMARY AND RECOMMENDATIONS

The purpose of this study was to explore the relationship between teachers' stress and their intentions to leave their current positions at the end of the school year, within the next three years, and within the next five years. This chapter includes the problem restated, the research study summary, limitations, conclusions, implications for educational leadership, and recommendations for further research. This study was a quantitative, correlational study that examined the relationship between stress in teachers and their intentions to leave their current positions. The study also explored a number of demographic variables within the sample and asked participants to indicate whether or not they receive support for their job from colleagues, supervisors, family, and friends, as well as whether or not they have a spiritual base for coping with stress. The results provided information that determined if higher stress was associated with stronger intentions of teachers to leave their current positions.

The Problem Restated

Teacher attrition is a pervasive concern in education that continues to be perpetuated by an annual mass exodus of teachers from the profession (Kelly, 2004; Tye & O'Brien, 2002). Dove (2004) suggests the attrition rate for teachers is higher than other professions, making it even more challenging for educational leaders to fill key positions in a number of specialty areas. Regardless of the challenges faced by school districts throughout the nation, No Child Left Behind (NCLB) requires schools receiving Title I funds to have highly qualified teachers in all core subject areas (NCLB, 2002).

Therefore, teacher retention should be a top priority for educational leaders (Darling-Hammond, 2003), but teachers leave the profession for a variety of reasons

(Howard, 2003). The rate of attrition for novice teachers appears to be particularly high, (Walsh & Carroll, 2005). In Nebraska, it is suggested that attrition rates are consistent with national trends (Nebraska State Education Association, n.d.). Research that explores reasons for teacher exits may help educational leaders develop targeted strategies for retaining teachers and meeting the highly qualified teacher requirements in NCLB. In an effort to identify factors that may mitigate teacher attrition, this study explored the relationship between stress in teachers and their intentions to leave their current positions.

Research Study Summary

While research suggested that nearly half of all teachers leave within their first five years on the job (Nebraska State Education Association, n.d.; Walsh and Carroll, 2005), data from this study suggested somewhat mixed results relative to intent to leave for the identified sample. Table 4 (see Appendix G) includes the percent of responses regarding intentions to leave for teachers with five years or less of teaching experience. Among the teachers in the pool who had five years of experience or less, approximately 17% indicated they would *probably* or *definitely* leave their current positions at the end of the school year. Approximately 23% of the teachers with five years or less of experience indicated they would *probably* or *definitely* leave their current positions in the next three years. Around 33% of the teachers in this group indicated they would probably or definitely leave in five years.

Among the teachers with five years of experience or less that indicated they were *probably* or *definitely* leaving their current positions at the end of the school year, approximately 9% identified inadequate compensation as a reason for leaving. The other most frequently occurring reasons for leaving among this group of teachers were moving

(8%), job advancement (8%), changing jobs or positions (6%), and raising a family (5%). It should be noted that the teachers who planned to leave were allowed to give more than one reason for leaving and there may have been multiple responses from individual teachers included in the identified percentages. For example, if individual teachers indicated moving and job advancement as reasons for leaving, their responses were counted in the percentages for both moving and job advancement.

Table 5 (see Appendix H) comprises the percent of responses regarding intentions to leave for teachers with more than five years of teaching experience. For teachers with more than five years of experience, about 9% indicated they would *probably* or *definitely* leave their current positions at the end of the school year. A total of 25% signified that they were likely to leave in the next three years. Almost 40% of the teachers with greater than five years of experience indicated they would probably or definitely leave in the next five years.

Teachers with more than five years of experience indicated slightly different reasons for leaving than the other teachers in the sample. The most frequently occurring reason for leaving among teachers with more than five years of experience was retirement, with 24% identifying this as a reason for leaving. This may have implications, to be discussed later in this chapter, for educational leaders and policymakers. The other most frequently occurring reasons for leaving for this group of teachers were inadequate compensation (5%), job advancement (4%), changing jobs or positions (4%), raising a family (2%), workload (2%), stress (2%), moving (2%), and health (2%).

Some of the most frequently occurring reasons for leaving that were common among both teachers with five years or less of experience and those with more than five

years of experience included compensation, job advancement, changing jobs or positions, raising a family, and moving. Some reasons for leaving that were frequent for teachers with more than five years of experience, but not among the most frequently occurring reasons for leaving among teachers with less experience included retirement, workload, stress, and health.

Table 6: Appendix I includes the percent of responses for all teachers' intentions to leave. Among the total sample, 11% of the teachers indicated they would *probably* or *definitely* leave their current positions at the end of the school year. Approximately 25% of the teachers indicated they were likely to leave in three years, and 39% of the teachers indicated they were likely to leave in five years.

A close examination of intentions to leave within the current study suggested that teachers with five years of experience or less were more likely to leave at the end of the school year (17%), compared to teachers with more than five years of experience (9%) and the total sample (11%). The percentage of teachers that indicated they were likely to leave in three years was comparable for teachers with five years or less (23%), teachers with more than five years of experience (25%), and the total sample (25%). Teachers with greater than five years of experience (40%) and the total sample (39%) indicated the highest percentages of responses for intent to leave in five years, compared to teachers with less than five years of experience (33%).

With regard to the research questions, the data suggested that for 25 of the 33 correlations higher stress was associated with stronger intentions of teachers to leave their current positions. The null hypothesis was rejected for three correlation coefficients (time management, professional distress, and professional investment) associated with

intentions to leave at the end of the school year, all 11 correlations for intentions to leave in three years, and all 11 correlations for intentions to leave in five years. The Pearson correlation coefficients ranged from .05 to .21, with related p-values ranging from $p < .0001$ to .043. With p-values less than the established .05 level of significance, the data suggested that higher stress was not associated with stronger intentions of teachers to leave at the end of the school year for eight correlations: work related stressors, discipline/motivation, emotional manifestation, fatigue manifestation, cardiovascular manifestation, gastronomical manifestation, behavioral manifestation, and total TSI.

Given that almost no previous research has specifically explored the relationship between teachers' stress levels and their intentions to leave their current positions, the research findings provide a foundation for future research on this topic. The study also provides information for educators and policymakers responsible for the development of programs to support teachers and enhance teacher retention.

This study used a validated instrument (TSI) developed by Fimian (1988) to measure stress levels specific to teachers. Descriptive and inferential statistics were used to analyze the data and answer the research questions. Microsoft® Excel and Data Desk®/XL Version 2 were used to facilitate data analysis.

Limitations

The study was limited to randomly selected Nebraska public school teachers' responses to a self-report mail survey that included the Teacher Stress Inventory for measuring stress levels and a Likert-type scale for measuring teachers' intentions to leave their current positions. The study included teachers at the early childhood, elementary, middle school, and secondary levels. Due to the geographic location chosen for the study,

the limitations of the survey instrument, and the level of teachers included in the study, the results may not be used to make generalizations to other populations of teachers inside or outside of Nebraska. The results also may not be applicable to other regions throughout the country with varying demographics and educational structures.

Although the sample size was sufficient for the identified population, the results may have been skewed by the fact that approximately 70% of the potential participants did not return the survey in a usable format or did not return the survey at all. Potential participants may not have responded to the survey for a number of reasons that may have resulted in a skewed sample of responses to be used for data analysis. Thus, the stress levels and intentions to leave identified for the participants in this study may not characterize the stress levels and intentions of all public school teachers in Nebraska.

It is possible that some teachers may have completed their surveys in a hasty manner, as a result of intense workloads during the school year. Consequently, their responses may not have accurately reflected their stress levels and intentions to leave their current positions at the end of the school year, within the next three years, and within the next five years.

Although participants were assured confidentiality of their responses, some teachers may have feared that their careers would be threatened if they were identified as teachers under stress or considering leaving their current positions. The possibility of negative career consequences resulting from the nature of their responses may have influenced some teachers to respond in ways that did not accurately reflect their perceptions of stress or their intentions to leave their current positions.

Another factor that may have influenced the quantity and quality of the responses was the timing of the survey distribution. Surveys were distributed during the month of May which is typically the last few weeks of the school year. Some teachers may not have responded to the survey because they were trying to finish up end-of-the-year activities. Given that the school year was about to end, teachers may have already been aware of whether or not they would be able to leave their current positions at the end of the year, yielding different perceptions of teachers' intentions than may have been obtained if the survey had been distributed earlier in the school year.

Conclusions

The data for this quantitative, correlational study used the following research questions:

1. To what extent do teachers' stress levels relate to their intentions to leave their current positions at the end of the school year?
2. To what extent do teachers' stress levels relate to their intentions to leave their current positions within the next three years?
3. To what extent do teachers' stress levels relate to their intentions to leave their current positions within the next five years?

Conclusion to Research Question 1:

Higher stress was associated with stronger intentions of teachers to leave their current positions at the end of the school year relative to three sources of stress: time management, professional distress, and professional investment. Higher stress was not associated with stronger intentions of teachers to leave their current positions for two sources of stress, five manifestations of stress, and the total TSI score. The mean for

intentions to leave at the end of the school year fell between *definitely not* and *probably not*, with a slight preference toward the latter.

There may have been mitigating factors that impacted teachers' responses regarding intentions to leave at the end of the school year. For example, teacher responses to the survey were accepted during May and June of 2007. The earliest teachers would have responded to the survey would have been mid-May. Since Nebraska teachers typically sign renewal agreements in April, many of the teachers may have already committed to remaining in their current positions at the time they returned the survey. Thus, they may have responded based on the fact that they would remain in their current position by choice or a perceived lack of other available options.

Furthermore, teachers' responses to the stress items may have been impacted by the timing of the survey. Since nearly all teachers received the survey at a time when the school year was ending and a potentially long-awaited break was near, they may not have responded the same way they would have if the survey had been distributed several weeks earlier. It is difficult to assume that the teachers' responses regarding intentions to leave at the end of the school year, as well as their responses to the stress items, were consistent with how they might have responded if the survey had been distributed earlier in the school year.

Conclusion to Research Question 2:

Higher stress was associated with stronger intentions of teachers to leave their current positions within the next three years for all five sources of stress, the five manifestations of stress, and the total TSI score. The mean for intentions to leave fell between *probably not* and *undecided*, with slight partiality toward the former.

Although the p-values resulted in the null hypotheses being rejected for all 11 correlations related to teachers' stress and their intentions to leave their current positions in three years, the strength of the associations requires closer examination. Correlation coefficients ranged from .08 for cardiovascular manifestation to .21 for professional investment. While acceptance of the alternative hypotheses is necessary for these correlations, the strength of the correlations may not be considered highly significant. The acceptance of the alternative hypotheses and recognition of some association between stress and intentions to leave in three years should be interpreted with caution.

However, teachers' responses to intentions to leave in three years may be deemed more accurate than the responses given for intentions to leave at the end of the school year. The responses for intentions to leave in three years may be more accurate, due to the fact that many teachers probably were not aware of whether or not they would be leaving in three years. One might assume that there is greater fidelity in the quality of teachers' responses for this research question.

Conclusion to Research Question 3:

Higher stress was associated with stronger intentions of teachers to leave their current positions in the next five years for the five sources of stress, the five manifestations of stress, and the total TSI score. The mean for intentions to leave in five years was near the *undecided* category.

As with teachers' intentions to leave in three years, the p-values were such that the null hypothesis was rejected for all 11 correlations relative to stress and teachers intentions to leave in the next five years. Correlation coefficients ranged from .06 for

time management to .18 for professional investment. Again, the strength of the associations should be interpreted with care.

It is unlikely that teachers' responses regarding intentions to leave in five years were affected by the timing of the survey. Although some teachers may anticipate leaving their current positions in the next five years for reasons such as retirement, compensation, or job advancement, the responses of teachers' not experiencing these, or similar, events were not likely to be affected by the timing of the survey.

Implications for Educational Leadership

The goal of NCLB (2002) is "to close the achievement gap with accountability, flexibility, and choice, so that no child is left behind" (p. 1). This act is potentially one of the most noteworthy educational initiatives to be ratified in many years (Simpson, LaCava, & Graner, 2004). It requires schools that receive Title I funds to be austere responsible for student performance and, consequently, has stimulated widespread discussion among educational leaders (Porter-Magee, 2004).

It appears that there are attributes of NCLB that hold great promise for improving the quality of education in America's schools. Ferandino, Tirrozzi, and Forsyth (2003) identified several key elements of NCLB that create significant challenges for educational leaders and may have the greatest impact at the building level including, but not limited to, adequate yearly progress and highly qualified staff.

According to NCLB (2002), teachers of core subjects had to be highly qualified at the conclusion of the 2005-2006 school year. Due to research that suggested teachers' cognition and content knowledge impacted student learning, highly qualified staff

became a crucial element of NCLB, (Walsh, 2004). It is no surprise that highly qualified staff is one of the most noteworthy and contentious components of NCLB.

Yet the recruitment and retention of highly qualified staff in schools throughout the nation is a lofty goal, given the teacher attrition problem that has been documented in recent research (Dove, 2004; Fore, Martin, & Bender, 2002; Gursky, 2000/2001; Howard, 2003; Ingersoll & Smith, 2003; Kelly, 2004; Madsen and Hancock, 2002; Renard, 2003; Retention Problems, 2005; Watlington et al., 2004; Zepeda, 2006). The data from this study suggested that the attrition rates for public school teachers in Nebraska will continue to make it challenging for educational leaders to meet the highly qualified teacher requirements in NCLB.

Among the total sample in this study, 11% of teachers intended to leave their current positions at the end of the 2006-2007 school year, 23% intended to leave in three years, and 39% intended to leave in five years. Some of the teachers' most common reasons for leaving their current positions included retirement, job advancement, changing jobs/positions, inadequate compensation, moving, and raising a family. Thus, it would behoove educational leaders to explore strategies to address these factors and prevent teachers from leaving their current positions.

Specifically, nearly 25% of teachers with greater than five years of experience intended to leave their current positions in five years. This may significantly deplete the pool of veteran teachers employed in the profession. Early separation agreements may be facilitating the exodus of experienced teachers from the profession.

While early separation may be a strategy for addressing budget concerns within the district, it may be negatively impacting the quality of education that is provided to

students. Perhaps, educational leaders should consider the totality of the impact that early separation agreements may have on their districts, beyond the mere short-term financial impacts that may be realized. Is it better to have a large number of less experienced teachers that may be limited in their capacity to improve student performance or is it better to have a few experienced teachers who have higher earnings and may be more effective at enhancing student performance?

Some exits for job advancement and moving may be inevitable. Yet, changing jobs/positions, compensations, and raising a family are areas for which strategies may be developed to enhance teacher retention. It may behoove educational leaders to survey their staff regarding their intentions to leave their current positions and why they may seek to change positions. An in-house survey may allow educational leaders to gain insight into methods that may aid in retaining teachers.

Although increasing compensation is not a comprehensive solution for addressing all teacher attrition issues, it may be an effective way to retain some teachers.

Compensation may come in the form of higher salaries, extra duty pay, signing bonuses for high-demand areas, stipends, or compensatory time. If salary increases are not feasible, teachers may also be compensated by increasing the number of sick leave, bereavement leave, or personal leave days they are granted in their contracts.

Feedback from some teachers suggested that raising a family was a primary reason for leaving their current positions. While working a traditional full-time teacher schedule may not be appealing to someone who is raising a family, there may be other options available for educational leaders to retain quality teachers. Perhaps a half-time teaching schedule would be appealing to teachers that wish to raise a family. There may

be other teachers who also want to raise a family and job-sharing by two half-time teachers may be one way to retain them.

Educational leaders may also want to consider the impact of teachers' stress on their intentions to leave their current positions. The three areas with the highest correlations between teachers' stress and their intentions to leave their current positions were total TSI score, professional distress, and professional investment. For total TSI, the data suggested that there is a positive correlation between teachers overall stress and intentions to leave. To examine the stress levels within a particular school district or individual building, it may be beneficial for educational leaders to administer the TSI. The results of the TSI may provide educational leaders with data that will inform sources of stress and manifestations of stress that need to be addressed with targeted professional development for teachers that may reduce their stress levels and ability to cope in their current positions.

Educational leaders may also want to examine teachers' professional distress, due to its correlation with intentions to leave. Some of the components of professional distress include a lack of advancement opportunities, lack of progression within current positions, lack of respect, inadequate salary, and lack of recognition for extra work and/or good teaching. Educational leaders may be able to minimize the negative components of professional distress by publicly acknowledging teachers that exemplify quality teaching, demonstrate improvement in student learning, and show a commitment to students and the school where they are employed.

Areas of concern for teachers relative to professional investment are that their opinions are not considered, there is a perceived lack of control in decision-making,

absence of job motivation, and a lack of opportunities for professional development. Teachers may not feel respected or valued as professionals in their current positions. Thus, educational leaders may want to focus greater attention on public recognition of highly effective teachers. Opportunities for professional growth and greater responsibility in the school may also help mitigate teachers' negative feelings regarding professional investment, as it relates to intentions to leave their current positions.

Recommendations for Future Research

This study examined the relationship between teachers' stress levels and their intentions to leave their current positions. Several recommendations for further research are provided:

1. Expand the study to include all public school teachers in Nebraska. Distribution of the survey in an online format may increase the response rate and make data analysis achievable in real time.
2. Survey private school teachers in Nebraska and compare the results to this study.
3. Conduct a random sample of teachers throughout the United States, so the results may be generalized to teachers throughout the country.
4. Distribute the survey at various times throughout the school year and compare the results to this study.
5. Conduct follow-up research to determine if teachers who indicated they intended to leave their current positions did leave their positions as they indicated in this study.

6. Explore, in greater detail, why some teachers are changing positions. Identify whether teachers are leaving to pursue educational positions or non-educational positions.

Summary

Until this study, no known research existed relative to the relationship between teachers' stress levels, as measured by the TSI, and their intentions to leave their current positions. The purpose of this study was to examine the relationship between Nebraska public school teachers' stress levels and their intentions to leave their current positions at the end of the 2006-2007 school year, within the next three years, and within the next five years. Although the correlation coefficients may not be considered strong, the null hypothesis was rejected for 25 out of 33 correlations. Consequently, the data suggested that higher stress was associated with stronger intentions of teachers to leave their current positions for three correlations (time management, professional distress, and professional investment) related to intentions to leave at the end of the school year, all 11 correlations for intentions to leave in three years, and all 11 correlations to leave in five years.

Furthermore, data from this study regarding potential teacher attrition was somewhat consistent with previous research (Nebraska State Education Association, n.d.; Walsh and Carroll, 2005). In this study, 11% of teachers intended to leave at the end of the 2006-2007 school year, 23% intended to leave in three years, and 39% intended to leave in five years. Some of the most frequently identified reasons for leaving include retirement, job advancement, changing jobs/positions, compensation, moving, and raising a family. The data from this study may provide educational leaders with the knowledge to select appropriate strategies for addressing teachers' stress and their intentions to leave

their current positions. Additional research relative to stress and intentions to leave may further clarify the relationship between the independent and dependent variables explored in this study.

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Appendix A

Letter Requesting Permission to Use an Existing Survey

Richard E. Hasty
1710 Pheasant St.
Plattsmouth, NE 68048
(402) 296-6130
rihast01@email.uophx.edu

May 1, 2006

Dr. Michael Fimian
37 Gay Rd.
Brookfield, MA 01506-1822
(508) 867-5909
Fimian@InstructionalTech.Net

Re: Use of the Teacher Stress Inventory (TSI)

Dear Dr. Fimian:

I am writing as a follow-up to our telephone conversation regarding the use of the Teacher Stress Inventory (TSI) in my doctoral study at the University of Phoenix. I am hoping to study the relationship between teacher stress and intentions to leave their current positions.

At the present time, I would like to use the TSI in the form of a mail survey. However, I am also considering the use of the TSI in an on-line survey to increase the response rate. I am requesting permission to use the study in the form of a paper survey and/or an online survey. The online survey format would likely include development of a temporary website to complete the study. Teachers would be sent a link where they could go to complete the survey. A copy of the University of Phoenix *Permission to Use an Existing Survey* form is enclosed. Thank you for your support.

Regards,


Richard E. Hasty

Enc.

Appendix B

Signed Permission to Use an Existing Survey

UNIVERSITY OF PHOENIX
PERMISSION TO USE AN EXISTING SURVEY

Date 05/02/06

Mr. /Ms Dr. Michael Fimian
 Address 37 Gay Rd.
 Brookfield, MA 01506-1822

Thank you for your request for permission to use the Teacher Stress Inventory in your research study. We are willing to allow you to reproduce the instrument as outlined in your letter at no charge with the following understanding:

- You will use this survey only for your research study and will not sell or use it with any compensated management/curriculum development activities.
- You will include the copyright statement on all copies of the instrument.
- You will send your research study and one copy of reports, articles, and the like that make use of this survey data promptly to our attention.

If these are acceptable terms and conditions, please indicate so by signing one copy of this letter and returning it to us.

Best wishes with your study.

Sincerely,

* you will include end date
 at which point the online
 version of the IST will
 be removed from the web
 * Please email a link to same

 Signature

I understand these conditions and agree to abide by these terms and conditions.

Signed Richard E. Hardy Date 05/02/06

Michael J. Ken

Expected date of completion 05/17/07

Appendix C
ARB/IRB Approval



UNIVERSITY OF PHOENIX
INSTITUTIONAL REVIEW BOARD

On behalf of Dr. Bill Pepicello, Chair of the Institutional Review Board, your doctoral research proposal has been reviewed and deemed "exempt."

Your progress report for this study is due one year from the date identified below.

Teacher Attrition: The Relationship Between Teachers' Stress and Their Intentions to Leave Their Current Positions

By

Richard Hasty

Dr. Bill Pepicello

Bill Pepicello
Provost of Academic Affairs
University of Phoenix

University of Phoenix

(April 25, 2007)

Appendix D

Notice of Upcoming Survey

Richard E. Hasty
1710 Pheasant St.
Plattsmouth, NE 68048
(402) 990-2391
rhasty@email.uophx.edu

May 1, 2007

Dear Colleague,

As a doctoral candidate in Educational Leadership at the University of Phoenix, I am writing to inform you that you are one of approximately 2000 Nebraska public school teachers that were randomly selected to participate in a study regarding teacher stress and attrition. The study is entitled *Teacher Attrition: The Relationship Between Stress in Teachers and Their Intentions to Leave Their Current Positions*.

The purpose of the research study is to examine the relationship between Nebraska teachers' stress levels and intentions to leave their current positions. This study may yield information regarding reasons for teacher attrition and influence policies and procedures for retaining quality teachers. When you receive the survey in the next few days, please consider participating in the study and being actively involved in research that may inform policies and procedures for retaining quality teachers. Your assistance and feedback will be greatly appreciated.

Sincerely,

Richard Hasty
University of Phoenix
Doctoral Candidate

Appendix E
Informed Consent

Richard E. Hasty
 1710 Pheasant St.
 Plattsmouth, NE 68048
 (402) 990-2391
 rihast01@email.uophx.edu

May 4, 2007

Dear Colleague,

I am writing to request your assistance with a research study concerning teacher stress and attrition. I am currently a student at the University of Phoenix pursuing a doctoral degree in educational leadership. I am conducting a research study entitled *Teacher Attrition: The Relationship Between Teachers' Stress and Their Intentions to Leave Their Current Positions*. The purpose of the research study is to examine the relationship between Nebraska teachers' stress levels and intentions to leave their current positions. This study may yield information regarding reasons for teacher attrition and influence policies and procedures for retaining quality teachers.

Your participation will involve approximately 15-20 minutes to complete the enclosed survey. Participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, you can do so without penalty or loss of benefit to yourself. The results of the research study may be published, but your name will not be used and your results will be maintained in strict confidence. In this research, there are no foreseeable risks to you. If you agree to participate in the study, please read the statement below, sign on the line provided, and fill in the date. This letter and completed survey should be returned in the enclosed self-addressed, postage-paid envelope.

By signing this form I acknowledge that I understand the nature of the study, the potential risks to me as a participant, and the means by which my identity will be kept confidential. My signature on this form also indicates that I am 18 years old or older, and I give my permission to voluntarily serve as a participant in the study described.

Signature of Study Participant

Date

If you have any questions concerning the research study, please call me at (402) 990-2391. Thank you for your time and consideration. It is greatly appreciated.

Sincerely,

Richard E. Hasty
 University of Phoenix
 Doctoral Candidate

Appendix F
Copy of Survey Instrument

HOW STRONG ?	1 no strength; not noticeable	2 mild strength; barely noticeable	3 medium strength; moderately noticeable	4 great strength; very noticeable	5 major strength; extremely noticeable
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PROFESSIONAL DISTRESS

15. I lack promotion and/or advancement opportunities.	1	2	3	4	5
16. I am not progressing in my job as rapidly as I would like.	1	2	3	4	5
17. I need more status and respect on my job.	1	2	3	4	5
18. I receive an inadequate salary for the work I do.	1	2	3	4	5
19. I lack recognition for the extra work and/or good teaching I do.	1	2	3	4	5

DISCIPLINE AND MOTIVATION

I feel frustrated...

20. ...because of discipline problems in my classroom.	1	2	3	4	5
21. ...having to monitor pupil behavior.	1	2	3	4	5
22. ...because some students would better if they tried.	1	2	3	4	5
23. ...attempting to teach students who are poorly motivated.	1	2	3	4	5
24. ...because of inadequate/poorly defined discipline problems.	1	2	3	4	5
25. ...when my authority is rejected by pupils/administration.	1	2	3	4	5

PROFESSIONAL INVESTMENT

26. My personal opinions are not sufficiently aired.	1	2	3	4	5
27. I lack control over decisions made about classroom/school matters.	1	2	3	4	5
28. I am not emotionally/intellectually stimulated on the job.	1	2	3	4	5
29. I lack opportunities for professional improvement.	1	2	3	4	5

EMOTIONAL MANIFESTATIONS

I respond to stress...

30. ...by feeling insecure.	1	2	3	4	5
31. ...by feeling vulnerable.	1	2	3	4	5
32. ...by feeling unable to cope.	1	2	3	4	5
33. ...by feeling depressed.	1	2	3	4	5
34. ...by feeling anxious.	1	2	3	4	5

FATIGUE MANIFESTATIONS

I respond to stress...

35. ...by sleeping more than usual.	1	2	3	4	5
36. ...by procrastinating.	1	2	3	4	5
37. ...by becoming fatigued in a very short time.	1	2	3	4	5
38. ...with physical exhaustion.	1	2	3	4	5
39. ...with physical weakness.	1	2	3	4	5

HOW STRONG ?	1 no strength; not noticeable	2 mild strength; barely noticeable	3 medium strength; moderately noticeable	4 great strength; very noticeable	5 major strength; extremely noticeable
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CARDIOVASCULAR MANIFESTATIONS

I respond to stress...

40. ...with feelings of increased blood pressure.	1	2	3	4	5
41. ...with feeling of heart pounding or racing.	1	2	3	4	5
42. ...with rapid and/or shallow breath.	1	2	3	4	5

GASTRONOMICAL MANIFESTATIONS

I respond to stress...

43. ...with stomach pain of extended duration.	1	2	3	4	5
44. ...with stomach cramps.	1	2	3	4	5
45. ...with stomach acid.	1	2	3	4	5

BEHAVIORAL MANIFESTATIONS

I respond to stress...

46. ...by using over-the-counter drugs.	1	2	3	4	5
47. ...by using prescription drugs.	1	2	3	4	5
48. ...by using alcohol.	1	2	3	4	5
49. ...by calling in sick.	1	2	3	4	5

Demographic Variables

My sex: ____

Number of years I have taught: ____

My age: ____

Number of students I teach each day: ____

Level of students I teach: (circle the rest of your answers)

Early Childhood Elementary Middle School Secondary

Type of students I work with (primary responsibility):

Nonhandicapped Handicapped Nonhandicapped and Handicapped

The most advanced degree I have is a:

Bachelors Masters Ed. Specialist Doctorate

My colleagues and I support one another when needed.	Yes	No
My supervisors and I support one another when needed.	Yes	No
My family supports my feelings about work.	Yes	No
My friends support my feelings about work.	Yes	No
I have a spiritual base for coping with problems at work.	Yes	No

Intentions to Leave

Read each statement and decide if you feel this way about your job. Then, indicate how strong the feeling is when you experience it by circling the appropriate rating on the 5-point scale with 1 representing *definitely not*, 2 representing *probably not*, 3 representing *undecided*, 4 representing *probably*, and 5 representing *definitely*.

	Definitely Not	Probably Not	Undecided	Probably	Definitely
1. I intend to leave my current position at the end of the school year.	1	2	3	4	5
2. I intend to leave my current position within the next three years.	1	2	3	4	5
3. I intend to leave my current position within the next five years.	1	2	3	4	5

*If you selected a 4 or 5 for either of the questions above relative to your intention to leave, please describe any life events that influenced your decision (i.e. marriage, divorce, higher pay, illness, a death in the family, job advancement, retirement, etc.).

Life events influencing my intention to leave relative to questions one, two, or three above:

Thank you for taking the time to complete and return the survey.
Your contribution to educational research is greatly appreciated!

Appendix G

Intent to Leave for Teachers with ≤ 5 Years Experience

Table 4

Intent to Leave for Teachers With ≤ 5 Years Experience

Response	Intent to Leave at End of Year <i>n</i> (%)	Intent to Leave in 3 Years <i>n</i> (%)	Intent to Leave in 5 Years <i>n</i> (%)
1-Definitely Not	78 (65.6)	28 (26.9)	17 (16.7)
2-Probably Not	16 (13.5)	32 (30.8)	21 (20.6)
3-Undecided	5 (4.2)	20 (19.2)	30 (29.4)
4-Probably	3 (2.5)	13 (12.5)	18 (17.7)
5-Definitely	17 (14.3)	11 (10.6)	16 (15.7)

Appendix H

Intent to Leave for Teachers with > 5 Years Experience

Table 5

Intent to Leave for Teachers with > 5 Years Experience

Response	Intent to Leave at End of Year <i>n</i> (%)	Intent to Leave in 3 Years <i>n</i> (%)	Intent to Leave in 5 Years <i>n</i> (%)
1-Definitely Not	383 (77.5)	166 (35.0)	106 (22.9)
2-Probably Not	53 (10.7)	122 (25.7)	80 (17.3)
3-Undecided	14 (2.8)	66 (13.9)	92 (19.9)
4-Probably	8 (1.6)	62 (13.1)	67 (14.5)
5-Definitely	36 (7.3)	58 (12.2)	117 (25.3)

Appendix I

Intent to Leave for All Teachers

Table 6

Intent to Leave for All Teachers

Response	Intent to Leave at End of Year <i>n</i> (%)	Intent to Leave in 3 Years <i>n</i> (%)	Intent to Leave in 5 Years <i>n</i> (%)
1-Definitely Not	461 (75.2)	194 (33.6)	123 (21.8)
2-Probably Not	69 (11.3)	154 (26.7)	101 (17.9)
3-Undecided	19 (3.1)	86 (14.9)	122 (21.6)
4-Probably	11 (1.8)	75 (13.0)	85 (15.1)
5-Definitely	53 (8.7)	69 (11.9)	133 (23.6)