



January 2013

The Expectancy Theory: Teachers' Perspectives Of Motivation And Compensation

Jennifer Susan Soupir-Fremstad

Follow this and additional works at: <https://commons.und.edu/theses>

Recommended Citation

Soupir-Fremstad, Jennifer Susan, "The Expectancy Theory: Teachers' Perspectives Of Motivation And Compensation" (2013). *Theses and Dissertations*. 1482.

<https://commons.und.edu/theses/1482>

This Dissertation is brought to you for free and open access by the Theses, Dissertations, and Senior Projects at UND Scholarly Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UND Scholarly Commons. For more information, please contact zeinebyousif@library.und.edu.

THE EXPECTANCY THEORY: TEACHERS' PERSPECTIVES OF
MOTIVATION AND COMPENSATION

by

Jennifer Susan Soupir-Fremstad
Bachelor of Arts, University of North Dakota, 1997
Master of Science, Minnesota State University, Moorhead, 2001

A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

In partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Grand Forks, North Dakota

August

2013

This dissertation, submitted by Jennifer Soupir-Fremstad in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done, and is hereby approved.

Dr. Brenda Kallio, Chairperson

Dr. Sherry Houdek, Committee Member

Dr. Gary Schnellert, Committee Member

Dr. William Siders, Committee Member

Dr. Jodi Holen, Member-at-Large

This dissertation is being submitted by the appointed advisory committee as having met all of the requirements of the Graduate School at the University of North Dakota and is hereby approved.

Dr. Wayne Swisher
Dean of the Graduate School

August 2, 2013

Title: The Expectancy Theory: Teachers' Perspectives of Motivation and Compensation

Department: Educational Leadership

Degree: Doctor of Philosophy

In presenting this dissertation in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my dissertation work or, in her absence, by the chairperson of the department or the dean of the Graduate School. It is understood that any copying or publication or other use of this dissertation or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of North Dakota in any scholarly use which may be made of any material in my dissertation.

Jennifer Soupir-Fremstad
August 2, 2013

TABLE OF CONTENTS

LIST OF FIGURES	ix
LIST OF TABLES	x
ACKNOWLEDGMENTS	xi
ABSTRACT	xii
CHAPTER	
I. INTRODUCTION	1
Researcher Background	3
Problem Statement	4
Purpose.....	5
Conceptual Framework.....	5
Research Questions.....	9
Definition of Terms.....	9
Limitations	11
Delimitations.....	11
Organization of the Study	12
II. REVIEW OF LITERATURE	13
Introduction.....	13
Motivation.....	15
Understanding Teacher Inputs and Outputs.....	15

Expectancy Theory: The Creation of Motivation	18
Job Satisfaction and Compensation	21
Teacher Compensation Practices	24
The Single Salary Schedule	26
Merit Pay: The Early Years	28
Merit Pay to Performance-Based Pay	29
The Case for Performance-Based Compensation	30
The Case Against Performance-Based Compensation	33
Performance-Based Pay Systems: Design and Implementation	36
Performance-Based Pay Plans: Current Models	38
ProComp (Denver).....	38
Q Comp (Minnesota)	39
Summary	40
Description of Chapter III.....	42
III. METHODOLOGY	43
Introduction.....	43
Research Questions.....	43
Research Methodology	44
Description of Research Population.....	45
Survey Instrument.....	46
Collection of Data	49
Data Analysis	50

	Description of Chapter IV.....	51
IV.	RESULTS OF DATA AND DATA ANALYSIS	52
	Introduction.....	52
	Frequency Data Section I: Demographic Information.....	52
	Frequency Data Section II: Perceptions of Motivation, Recognition, and Reward.....	55
	Analysis of Survey Data	57
	Research Question 1	58
	Research Question 2	59
	Research Question 3	60
	Research Question 4	63
	Summary	64
	Description of Chapter V	65
V.	SUMMARY OF FINDINGS AND DISCUSSION.....	66
	Introduction.....	66
	Review of Methodology	68
	Research Question 1: Effort (Expectancy)	69
	Frequency Summary	69
	Inferential Statistics Summary	70
	Conclusion	70
	Research Question 2: Administrator (Instrumentality).....	70
	Frequency Summary	70
	Inferential Statistics Analysis	71

Conclusions.....	71
Research Question 3: Recognition and Compensation (Valence).....	71
Frequency Summary	71
Inferential Statistics Analysis	72
Conclusions.....	72
Research Question 4: Expectancy, Instrumentality and Valence	73
Inferential Statistical Analysis	73
Conclusion	74
Recommendations for School Leaders	74
Recommendations for Further Study	80
APPENDICES	82
REFERENCES	90

LIST OF FIGURES

Figure	Page
1. Teacher Input/Output Model.....	7
2. E x I x V = Motivation.....	9
3. Teacher Input/Output Model.....	17
4. E x I x V = Motivation.....	18
5. Levels of E x I x V = Level of Motivation	20
6. E x I x V = Motivation.....	69
7. Framework for Teacher Evaluation	78

LIST OF TABLES

Table	Page
1. Survey Item Purpose, Theoretical Base, and Research Focus	49
2. Gender and Level of Education	53
3. Frequency Table: Level of Education and Teaching Assignment	54
4. Frequency Data: Question 6 Effort	55
5. Frequency Data: Question 7 Administration	56
6. Frequency Data: Question 8 Recognition	56
7. Frequency Data: Question 9 Compensation	57
8. Tests of Normality	58
9. Test Statistics: Demographics and Effort	59
10. Test Statistics: Demographics and Administration.....	60
11. Test Statistics: Demographics and Recognition	61
12. Experience and Recognition Crosstabulation	61
13. Test Statistics: Demographics and Compensation.....	63
14. Correlation Matrix Table: Effort, Administration, Recognition, and Compensation	64

ACKNOWLEDGMENTS

“The dream begins with a teacher who believes in you, who tugs and pushes and leads you to the next plateau, sometimes poking you with a sharp stick called truth.”

Dan Rather

I want to express my sincere gratitude to my committee members. My advisor, Dr. Brenda Kallio; Dr. Sherry Houdek, Dr. Gary Schnellert, Dr. Jodi Holen, and Dr. William Siders have provided insight and support throughout this process. I especially want to thank Dr. William Siders for sharing his expertise with me, and for his encouragement and his patience as I muddled through the statistics. You taught me more than numbers, and I am grateful.

I want to thank Fargo Public Schools for allowing me to conduct this study and for providing me the opportunity to learn and grow as a school leader for the last eight years. I owe so much to the staff at South High School, especially my administrative team members. They have been my mentors; my colleagues; and, most importantly, my friends. They define what it means to “Strive for Excellence.”

When this process began, the encouragement and support I received from the Paul family was invaluable. The family opened its home to me for three years and allowed me to watch their family grow. I am grateful for the family’s kindness and friendship. Gerad, Misty, Georgia, Ella, and Greta, thank you for being my home away from home.

I cannot begin to express the profound gratitude I have for my parents, Darold and Claudia. The two of you live the way I want to live: with a sense of purpose and unlimited love. Thank you for seeing in me all that I do not. I could not ask for better parents. I love you!

I have been blessed with an amazing husband, Joel. I am inspired by his capacity to love and support all that I do. He is my cheerleader, my partner, and my best friend. To him, I owe more than can ever be expressed.

To Ethan and Emma, you are the greatest gifts I have ever been given. This process has taken a great deal of time and moments away from you both. I hope that you understand that hard work and sacrifice are a significant part of a purposeful life. I hope that you value learning and experiences; take time for moments of reflection and gratitude; they will only enhance all that you learn. Nothing that I accomplish in this life will ever be as rewarding as being your mother. I love you more than all of the stars in the sky.

ABSTRACT

Human resources are the most important part of any organization. If the organization is to perform at its best, development and motivation of the employees are essential.

The research in this study examined the application of the Expectancy Theory and how it can be used to obtain a better understanding of teachers' perceptions about motivation and compensation. There were 198 teachers invited to complete the survey, representing the elementary, middle-school, and high-school levels. Of the 198 teachers invited, 131 teachers began the survey, and frequency numbers varied by question. In the end, 118 teachers completed the entire survey and categorical data from the responses were presented in frequency and percentage form.

Demographic data were collected and analyzed. Teachers' responses to questions determined if there were relationships between the multiple components of the Expectancy Theory. ANOVA data were presented to identify relationships and correlations among the Expectancy Theory components and demographic information. These relationships help understand teachers' perspectives about effort (hard work), instrumentality (the belief that performance will lead to a reward), valence (the value of the reward), and motivational force.

The information obtained in this study provides school administrators, school boards, and policy makers with information that could lead to changes in teacher

compensation and motivation. The research may encourage stakeholders to conduct a comprehensive review of their evaluation and compensation practices as a means to increase teacher motivation. School leaders can use the information to design plans that address the challenges of recruiting, motivating, and retaining highly qualified teachers.

Key Words: Expectancy Theory, Teacher Motivation, Teacher Compensation, Teacher Effort

CHAPTER I

INTRODUCTION

Managing human capital may require managers and, in the case of schools, administrators to design plans and programs to motivate employees. Maximizing employee performance is critical to achieve the educational goals of federal, state, and local initiatives aimed at improving school performance and that are founded on the understanding that organizations progress to the extent they are able to motivate and develop their employees (Webb & Norton, 2013). Current practices for teacher compensation may create challenges due to the salary scale's inflexibility. Compensation plans have three broad objectives—to attract, retain, and motivate—qualified and competent employees (Seyfarth, 2005). Without the ability to vary from the single-salary schedule or to provide other rewards, teacher motivation may be impacted.

Since passage of the No Child Left Behind Act in 2001, much has been done in the name of school reform and student academic performance. School reform efforts in the United States focus on the identification, recruitment, motivation, and retention of highly effective teachers. The focused change in emphasis on teaching and the teaching profession gained national awareness when, in 2009, the Bill and Melinda Gates Foundation phased out funding for small high schools and, instead, turned its attention toward teacher quality (Moore Johnson & Papay, 2009). That same year, President Barack Obama indicated the need to improve teacher quality could be accomplished by

reforming teacher-compensation practices. “It’s time to start rewarding good teachers, [and] stop making excuses for bad ones” (as cited in Bazinet, 2009, para. 3). Later that year, the President not only promoted alternative compensation plans, but also claimed these reforms should be based on student test scores. “Success should be measured by results . . . That’s why any state that makes it unlawful to link student progress to teacher evaluations will have to change its ways” (The White House, 2009, p. 3).

In the United States, approximately 96% of public school districts, with nearly 100% of all public school teachers, reported they used the single-salary schedule for their compensation system (Podgursky & Springer, 2010). Teachers, paid according to a single-salary schedule, are provided salary increments according to the teacher’s years of experience and the teacher’s number of college or university units and degrees (Odden & Kelley, 2002). The value of a single-salary compensation system is that it pays teachers based on quantifiable criteria, i.e., years of experience, educational credentials, and job titles or classifications (Webb & Norton, 2013). The criteria are objective, measurable, and not subject to administrative discretion (Webb & Norton, 2013; North Dakota Legislative Council, 2001). Highly paid teachers earn salaries not because they are necessarily exceptional teachers or have tackled tough assignments, but because they have accumulated seniority in school systems where pay is based on longevity (Hess, 2004).

Promoting teacher quality is a key element in improving primary and secondary education in the United States, reported as one main goal of the current presidential administration requiring a “highly-qualified teacher” in every classroom (Harris & Sass, 2011). The quality of teaching has been shown to directly correlate with students’ ability

to succeed in school and in the workplace (Koppich, 2008). A salary structure that offers monetary rewards based solely on inputs, much like the single-salary schedule, seems increasingly at odds with a system structured around educational outcomes (Kerchner, Koppich, & Weeres, 1997; Podgursky & Springer, 2011). It is essential for school leaders to review the compensation and rewards that motivate quality teachers in the classroom.

Researcher Background

At the time the research was conducted, the researcher was a building administrator at a school that hired 10 or more teachers every year. The challenge of recruitment, motivation, and retention was frequently discussed at district level administrator meetings and during negotiations for teacher contracts. The researcher conducted a study that focused on specific components of the Expectancy Theory that may impact teacher motivation. This study may assist in the design and implementation of plans to promote the recruitment and retention of quality teachers.

At the time the survey was conducted, the researcher was an employee of the school district but was not employed at any of the buildings where the survey was given. The position held by the researcher was that of a school administrator and not a classroom teacher. Given the researcher's position, no teachers participating in the study were directly connected to or influenced by the researcher. At the completion of the study, the researcher had taken a position with another school district.

Problem Statement

School leaders face great challenges to recruit, motivate, and retain teachers.

Mandates at the federal and state level require school leaders to conduct comprehensive reviews of compensation in an attempt to recruit highly qualified teachers.

Thomas B. Wilson (1999) stated:

[C]ompanies that offer exorbitant financial packages to people find the loyalty and commitment are only temporary. . . . The companies that have been successful in addressing the “talent issue” have placed a great deal of importance on their rewards systems, formal and informal. (p. 190)

Satisfaction with work is a measure of the likelihood that individuals will remain in their jobs and is a reasonable measure of the likelihood that teachers will remain in teaching. In fact, a new generation of teachers, who desire challenge, seek avenues to remain fresh, and seek recognition when deserved, is taking advantage of teacher-development activities and paths for advancement (Jensen, Yamashiro, & Tibbetts, 2010). To meet the new job expectations, to promote job satisfaction, and to promote retention, schools need to explore merit-pay options (Margolis, 2008). Addressing the means to motivate teachers is essential to create job satisfaction and, ultimately, to retain high-quality teachers. Theories that explore employee motivation, along with how applying the concepts of these theories can increase the motivation of teachers, and the impact motivation has on student learning may provide insight for school leaders who are attempting to recruit and retain teachers. Vroom’s Expectancy Theory as well as Adam’s Equity Theory provides school leaders with identifiable components of teacher inputs and outputs that may impact motivation. Districts that offer competitive salaries and benefits

may be able to attract and retain well-qualified teachers, and equitable compensation plans help districts to maintain employees' morale and motivation (Seyfarth, 2005).

Given the federal and state requirements that schools face regarding student performance, school districts need highly motivated and qualified teachers in the classroom. When the concepts of the Expectancy Theory are applied to current practices for teacher motivation and compensation, the single-salary schedule may not offer the best means to motivate and compensate quality teachers. This study addressed how the Expectancy Theory may assist school leaders when exploring teacher motivation by reviewing rewards and compensation.

Purpose

The purpose of this study was to discern teachers' perspectives about motivation and compensation utilizing Vroom's Expectancy Theory. This study applied the major components of the Expectancy Theory and directly related them to motivational aspects of compensation and rewards. A comprehensive review of the theory as well as performance-based pay was conducted. The study examined how teacher motivation was affected by changes in the expectancy, instrumentality, and valence components of the Expectancy Theory.

Conceptual Framework

“School administrators who understand human motivation will be much more effective in making positive differences in the school climate and in maximizing human potential” (Webb & Norton, 2013, p. 131). Motivation can be classified into three dimensions: direction, effort, and persistence (Webb & Norton, 2013).

1. Direction is concerned with the pattern of choices one makes when choosing among all possible alternatives. An example might be the teacher who continues to take courses to obtain an additional degree or certification.
2. Effort refers to the behavioral indicators about how hard a person is working on a task. This behavior may not be solely a function or motivation; rather, other variables might interfere with the teacher's effort. For example, classroom interruptions caused by students or environmental factors may interfere with a teacher's effort.
3. Persistence is concerned with how long a person pursues a course of action. Persistence could mean the number of years teaching or the extent to which a teacher is willing to keep trying a particular task.

Understanding these three dimensions of motivation will assist school leaders in measuring motivation changes for teachers when applying the Expectancy Theory.

Theories of motivation are designed to address why a person, or in the case of this study, a teacher, will behave in a certain way, give a certain amount of effort, or be more or less satisfied in his/her position. The primary theory for this study is the Expectancy Theory. The Equity Theory provides a foundation for applying and understanding the Expectancy Theory.

In 1963, John Stacey Adams, a workplace and behavioral psychologist, developed what is known as the Equity Theory, which illustrated how employees become demotivated when they perceive the existence of unfair treatment in the workplace (Webster, 2013). Adams' Equity Theory helped employers recognize there must be a

balance between what employees put into a task or job as well as the output of that task or job. When applied to current teacher-compensation practices, teachers may perceive unfair treatment in the workplace because, even if their input changes, the output remains the same under a single-salary pay plan. This outcome may create teachers who are demotivated.

This researcher used the common inputs and outputs for teachers and created a figure demonstrating the need to create balance in the workplace as explained by the Equity Theory. When there are changes in inputs or outputs, the imbalance that is created may lead to a decline in motivation or job satisfaction (see Figure 1).

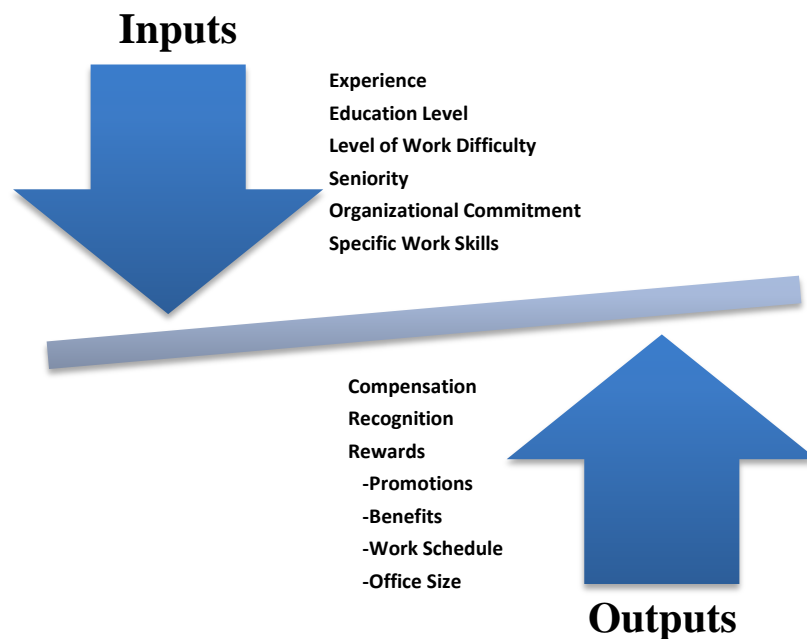


Figure 1. Teacher Input/Output Model. (Soupir-Fremstad, 2013).
Based on Adam's Equity Theory, 1963

To understand the factors of the Expectancy Theory, the inputs and outputs described in the Equity Theory must be recognized. The level of education, experience, and commitment, all inputs in the Equity Theory, are directly connected to the effort and instrumentality factors of the Expectancy Theory. Compensation, recognition, and

rewards, all outputs in the Equity Theory, are directly connected to the valence factor of the Expectancy Theory. The Equity Theory attempts to create a balance between inputs and outputs, and the Expectancy Theory uses these inputs and outputs to measure motivation.

Vroom's Theory of Work and Motivation, introduced in 1960, started with the idea that people tend to prefer certain goals or outcomes over others (Miner, 2007). Employees, or teachers, anticipate experiencing feelings of satisfaction if the preferred outcome, or goal, is achieved. The outcome, along with satisfaction or dissatisfaction, is viewed solely by the individual employee. "Thus the accumulation of earnings per se might be viewed as inherently satisfying to one person, but to another, it is important as a means to the end of buying a sports car" (Miner, 2007, p. 67). In 1967, Porter and Lawler presented a model using much of Vroom's work, but they identified variables that impact motivation and performance. The Expectancy Theory addressed intrinsic and extrinsic rewards as a means of creating satisfaction in the workplace (Miner, 2007).

Vroom designed the Expectancy Theory based on motivation and management in the workplace. The theory suggests that employees' perceived views of workplace outcomes determine the level of motivation they have when working (Redmond & Hite, 2013). If the organization requires an employee to demonstrate a high-level work product, the employee expects the outcome to be high as well. If that expectation is met, the employee may be motivated to continue producing a high-level product. However, if the employee inputs a high-level of effort and the outcome, or reward, is lower than expected, the employee may experience a reduction in motivation (see Figure 2).

$$\text{Expectancy} \times \text{Instrumentality} \times \text{Valence} = \text{Motivation}$$
$$(\text{Effort}) \times (\text{Performance}) \times (\text{Rewards}) = \text{Motivation}$$

Figure 2. $E \times I \times V = \text{Motivation}$ (Vroom, 1964).

Through the utilization of the Expectancy Theory framework, this study provided a better understanding about the impact that recognition and compensation have on teacher motivation. Using the components of the Expectancy Theory, expectancy (effort), instrumentality (performance), and valence (rewards), the study examined the impact these factors have on teacher motivation. The application of the Expectancy Theory to these components may help school leaders increase teacher motivation and, in turn, improve student learning.

Research Questions

To guide this study, the following research questions were developed:

1. How do teachers' perspectives of effort (hard work) impact motivation?
2. How do teachers' perspectives of instrumentality (the belief that performance will lead to a reward) impact motivation?
3. How do teachers' perceptions of valence (the value of the reward) impact motivation?
4. What relationships among the three factors (expectancy, instrumentality, and valence) impact motivation?

Definition of Terms

Alternative compensation: Using indicators other than those utilized in the single-salary schedule (teacher degree and years of experience) to determine teacher pay (Rowland & Potemski, 2009).

Effort: Conscious exertion of power: hard work. Something produced by exertion or trying (“Effort,” 2012).

Expectancy: One component of the Expectancy Theory. Expectancy is the belief that one’s effort (E) will result in attainment of desired performance (P) goals. (“Expectancy Theory,” 2013).

Expectancy theory: Motivational theory based on cognitive psychology. It proposes that people are motivated by their conscious expectations of what will happen if they do certain things and that they are more productive when they believe their expectations will be realized (“Expectancy Theory,” 2013).

Equity theory: Concept that people derive job satisfaction and motivation by comparing their efforts (inputs) and income (outputs) with those of other people in the same or other firms (“Equity Theory,” 2013).

Individual performance-based pay: System designed to link teacher or administrator pay to the results of a performance evaluation. Student performance, professional involvement and growth, and classroom instruction could be factors viewed in a performance-based pay plan (Webb & Norton, 2013).

Instrumentality: One component of the Expectancy Theory. Agency or means by which an entity accomplishes its functions, fulfills its obligations, or realizes its objectives (“Instrumentality,” 2013).

Merit pay: Associated with alternative compensation from the 1980s, “merit pay” refers to teacher compensation that is based on either principal evaluations (old-style merit pay) or students’ standardized test scores (new-style merit pay; Rowland & Potemski, 2009).

Motivation: the act or process of motivating or the condition of being motivated (“Motivation,” 2012). “Motivation is derived from the word “motive” which means needs, desires, wants, or drives within individuals. It is the process of stimulating people to action to accomplish goals” (Management Studyguide, 2012, p. 1).

Valence: One component of the Expectancy Theory. Negative or positive psychological value assigned by a person to another person, event, goal, job, object, outcome, etc., based on its attractiveness to him or her (“Valence,” 2013).

Limitations

It is acknowledged that the study has limitations that are common with survey research. The surveyed population is not an all-inclusive sample; however, an attempt was made to represent common types of school-district teachers: elementary, middle school, and high school. The results from the survey vary in frequency depending on the respondent’s completion of the question. The frequency is listed on every table to clearly identify the number of respondents.

Delimitations

There are several variables when reviewing expectancy, instrumentality, valence, and motivation. For this study, the expectancy component focused on effort as identified as hard work. The instrumentality component was teachers’ perceptions of their building administrator recognizing their hard work. The valence component focused on the results of teachers’ hard work through rewards and recognition. The motivation component used consistent application of expectancy, instrumentality, and valence to determine predicted effort.

Organization of the Study

Chapter I provides an Introduction to the study, describes the Problem, states the Purpose of the study, gives the Conceptual Framework, lists the Research Questions, explains the Definition of Terms used throughout the dissertation, addresses the Limitations and the Delimitations of the study, and explains the researcher background. Chapter II provides a Review of Literature which addresses the Expectancy Theory and workplace motivation, studies that have applied the Expectancy Theory, an overview of Teacher-Compensation Practices, a review of performance-based pay plans, and the pros and cons of these plans. Chapter III provides the Methodology of the study from survey design to implementation. Chapter IV contains the analysis and synthesis of the survey data along with the results derived from those data. Chapter V summarizes the study, identifies key findings, and provides conclusions and recommendations for additional research.

CHAPTER II

REVIEW OF LITERATURE

Introduction

In a 2012 survey conducted by the Society for Human Resources, 44% of the people surveyed claimed they would likely look for a new job within the next 12 months (Marks Jarvis, 2012). Job satisfaction and motivation are essential components to retain quality employees and to increase the effectiveness of an organization (Manzoor, 2012). One important factor in job satisfaction is compensation. In that same survey, only 22% of the employees reported being “very satisfied” with their pay and compensation (Marks Jarvis, 2012). These numbers become more alarming when reviewing teachers’ job satisfaction. In the MetLife Survey of the American Teacher, conducted in 2012, only 39% of surveyed teachers reported they were very satisfied with their current position; that response was down 5% from the 2011 results (Resmotivs, 2013). “The least satisfied teachers are those who work in schools that have slashed budgets, and who have less time for collaboration with peers and professional development than teachers from other schools” (Resmotivs, 2013, p. 1).

Since passage of the No Child Left Behind Act in 2001, much has been done in the name of school reform and students’ academic performance. School-reform efforts in the United States have increasingly come to focus on the identification, recruitment, motivation, and retention of highly effective teachers. As such, teacher-compensation

plans have been the primary means of recruitment, motivation, and retention. Despite ongoing debates about the adequacy of total compensation, the design of merit-pay systems, and the structure of pension benefits, there should be broad agreement that pay be designed to recruit and retain the highest-quality teachers in a cost-effective manner (Richwine, 2012). If policymakers and school leaders want to get teacher pay right, they can no longer look at across-the-board pay raises. Single salary compensation plans do nothing for the long-term recruitment, motivation, and retention of highly qualified teachers. Instead, policymakers “should focus on rewarding highly qualified teachers with targeted salary increases” (Richwine, 2012, p. 1).

Teachers who are hired using the single-salary schedule for compensation not only know what they and all other teachers are making for their current position, but are also able to predict what they will make each subsequent year they are employed in that district. This salary predictability does little to motivate, recognize, or reward hard work. Research has suggested that rewards promote employee satisfaction which directly influences employee performance (Manzoor, 2012). By maintaining job satisfaction, school districts are more likely to effectively recruit, motivate, and retain high-quality teachers.

Chapter II focuses on the literature review. The literature was selected to provide a better understanding about the Expectancy Theory and workplace motivation, as well as how these theories explain employees’ responses to effort and hard work, recognition as a means of motivation, and monetary rewards as a means of motivation. This chapter also gives an overview of historical trends and patterns for teacher compensation, current

trends for teacher compensation, and how performance-based plans are implemented in school districts throughout the United States.

Motivation

The Expectancy Theory has important implications for motivating employees. Employee motivation is enhanced by altering the individual's effort-to-performance expectancy, performance-to-reward expectancy, the reward valences, and/or the need to do all three (Lunenburg, 2011). By recognizing the importance of motivation, school leaders can better understand ways to devise compensation plans that encourage the recruitment of highly qualified teachers, motivate teachers to continue improving instruction and learning in the classroom, and retain effective teachers at their schools. For this study, the concept of motivation is explored through the Expectancy Theory.

Understanding Teacher Inputs and Outputs

In 1963, John Stacey Adams, a workplace and behavioral psychologist, developed a theory that illustrates how employees become demotivated when they perceive the existence of unfair treatment in the workplace (Webster, 2013). Adams based his Equity Theory on the elements of Maslow's Hierarchy of Needs and Herzberg's Two-Factor Theory (Webster, 2013). The Equity Theory is a strikingly simple theory; it is comprised of four interlocking propositions (Walster, Walster, & Berscheid, 1978, p. 6):

1. Individuals will try to maximize their outcomes (where outcomes equal rewards minus costs).
2. a. Groups can maximize collective reward by evolving accepted systems for equitably apportioning resources among members. Thus, groups will

evolve such equity systems, and will attempt to induce members to accept and adhere to these systems.

b. Groups will generally reward members who treat others equitably and generally punish (increase the costs) members who treat others inequitably.

3. When individuals find themselves participating in inequitable relationships, they will become distressed. The more inequitable the relationship, the more distress individuals will feel.
4. Individuals who discover they are in an inequitable relationship will attempt to eliminate their distress by restoring equity. The greater the inequity that exists, the more distress they will feel and the harder they will try to restore equity.

The Equity Theory, as applied in the workplace, calls for a fair balance between the employee's inputs and the outputs (Webster, 2013). To demonstrate the balance of inputs and outputs, the researcher created a figure utilizing common components of teacher inputs and outputs (see Figure 3). Therefore, inequity, when perceived, results in dissatisfaction (distress) either in the form of anger (under-rewarded) or guilt (over-rewarded). Tension is created in proportion to the amount of inequity. This tension, in turn, serves as a motivating force to reduce the inequity and move it to zero (Miner, 2007).

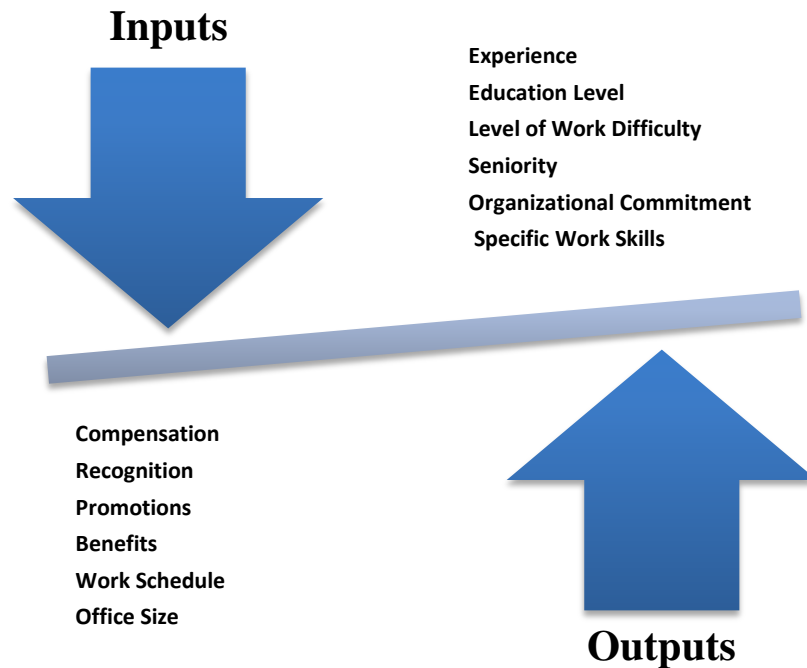


Figure 3. Teacher Input/Output Model. (Soupir-Fremstad, 2013).

Based Adams Equity Theory.

Figure 3 has identified the inputs and outputs experienced by teachers. When school leaders attempt to motivate teachers, it is important to recognize the levels of input and output for staff. If teachers perceive that a high level of work difficulty, a high level of education attainment, and many years of experience (inputs) are not balanced with high compensation, recognition, or other rewards (outputs), they perceive inequity and look for ways to remedy the inequity. The ways to remedy inequity in education are limited and are often achieved by working less, reducing the inputs, or leaving the position. Increasing the outputs can only be accomplished through school leaders and administrators.

The inputs and outputs described in the Equity Theory are directly connected to the factors of the Expectancy Theory. Recognizing that the inputs identified in the

Equity Theory, such as experience, level of education, level of work difficulty, seniority, organizational commitment, and specific work skills (inputs) and compensation, recognition, promotion, benefits, work schedule, and office size (outputs), are all categorized in the factors identified in the Expectancy Theory assists in developing rewards that motivate teachers. Inputs are often directly associated with the factors of expectancy and instrumentality while outputs are directly associated with valence. This understanding is needed to help school teachers and leaders increase motivation.

Expectancy Theory: The Creation of Motivation

Dr. Victor Vroom, an international expert on leadership and decision making, designed the Expectancy Theory based on motivation and management in the workplace. The theory suggests that employees' perceived view of workplace outcomes determines the level of motivation they have when working (Redmond & Hite, 2013). Vroom defines motivation as the force impelling a person to perform a particular action, as determined by the interaction of (a) the person's expectancy the act will be followed by a particular outcome and (b) the valence of that outcome (Vroom, 1964). First-level outcomes are the direct result of behavior (e.g., performing at a certain level or entering a certain work role), and people achieve their valence through their instrumentality for securing a second-level outcome (e.g., pay, promotion, or recognition), which may have a valence in and of itself or which may have valence because it leads to other outcomes (Lawler III & Suttle, 1973).

$$\text{Expectancy} \times \text{Instrumentality} \times \text{Valence} = \text{Motivation}$$
$$(\text{Effort}) \times (\text{Performance}) \times (\text{Rewards}) = \text{Motivation}$$

Figure 4. E x I x V = Motivation.

There are three components upon which Vroom's Expectancy Theory is based (Redmond & Hite, 2013). The first is expectancy. Expectancy is described as the belief that higher or increased effort will yield better performance. This concept can be explained by the thinking of "If I work harder, I will make something better" (Remond & Hite, pp. 3-4). Conditions that enhance expectancy include having the correct resources available, having the required skill set for the job, and having the necessary support to do the job correctly.

The second component is instrumentality. Instrumentality is the thought that, if an individual performs well, then a valued outcome will come to that individual. Some things that impact instrumentality are having a clear understanding about the relationship between performance and outcomes, having trust and respect for people who make decisions about the outcomes, and seeing transparency in the process of determining the outcomes. In education, instrumentality is often associated with school administrators and performance evaluations.

The final component is valence. Valence, i.e., "value," refers to the outcomes' desirability. There are individual differences in the level of value associated with specific outcomes. For example, monetary bonuses may not increase the motivation of an employee who prefers recognition. Valence can be thought of as the pressure or importance a person puts on an outcome. In education, valence is often associated with compensation and recognition.

When used in an organization, the Expectancy Theory proposes that employees are motivated when they feel confident that they can achieve, when they value the outcome of their efforts, and when they believe the reward is what was promised by the

organization (Agadoni, 2013). Leaders should try to increase the belief that employees are capable of performing the job successfully, increase the belief that good performance will result in valued rewards, and increase the expected value of rewards resulting from the desired performance (Lunenburg, 2011).

If a person is motivated to the degree that his/her effort will lead to an acceptable performance (expectancy), the performance will be rewarded (instrumentality), and that the value of the reward is highly positive (valence), then the level of effort will likely be equal to the level of performance and, in turn, that level of performance will be equal to the perceived level of rewards (Lunenburg, 2011) (see Figure 5). The researcher created a figure to illustrate the level of motivation using the Expectancy Theory components. The outcome level of effort, performance, and rewards equals that of the motivation the employee has to continue the job. The key in this theory “lies the expectation that action X leads to outcome Y” (Gratz, 2009, p. 161). It is this expectation that impacts motivation and attitudes. Vroom identified that “positive attitudes toward the job are conceptually equivalent to job satisfaction and negative attitudes toward the job are equivalent to job dissatisfaction” (Vroom, 1964, p. 99).



Figure 5. Levels of $E \times I \times V =$ Level of Motivation.

Job Satisfaction and Compensation

Rewards and recognition are just two factors which can have an effect on teachers' job satisfaction and motivation (Shah, Ur-Rehman, Akhtar, Zafar, & Riaz, 2012). There may be an important link between reward and recognition as well as between motivation and satisfaction. Changes in rewards and recognition can bring a definite change in work motivation and job satisfaction (Ali & Ahmed, 2009).

In 2003, Towers Perrin surveyed more than 35,000 United States employees and found that base pay was ranked second and that pay raises based on performance was ranked eighth for attracting employees (Rynes, Gerhart, & Minette, 2004). In a comparable study, Towers Watson (2012) conducted a global study on workforce engagement that surveyed 35,000 employees worldwide. The number one factor listed for the recruitment and retention of engaged employees was base salary. Studies indicated that employees respond more effectively to monetary incentives than to any other motivational human-resource intervention (Rynes et al., 2004).

The relationship between motivation and job satisfaction and performance is clearly established: positively motivated employees are more creative, motivated, and satisfied. The challenge for human resources administrators and other administrators in the school system is to find ways to optimize performance toward the attainment of system and individual goals (Webb & Norton, 2013).

The alignment of bonuses and compensation with goal-setting and collaboration can lead to productivity increases and improved employee motivation (Blinder, 1990; Heneman III, Milanowski, & Kimball, 2007; Lawler, 1990; Markos & Sridevi, 2010).

Empirical research studies support compensation plans that are established using the fundamental components of the Expectancy Theory, most notably instrumentality, or the degree to which an individual views the receipt of a reward as connected to his or her effort (Adkins, 2004). Empirical research shows that the closer the perceived connection is between effort and the compensation reward, the more effective the reward programs are at motivating individuals (Heneman III et al., 2007; Lawler, 1990; Markos & Sridevi, 2010; Odden & Kelley, 2002).

Kelley, Odden, Milanowski, and Heneman III (2000) developed a model for teacher motivation based on the Expectancy Theory. In the model, teacher motivation is a function of expectancy, instrumentality, and reward value. The more the teacher sees his or her work impacting student achievement, the greater the teacher's motivation. The teachers' perceived strength of this connection between effort and student achievement is influenced by their efficacy and external factors such as the learning environment or administrative support (Kelley et al., 2000).

The reward, or outcome, associated with the teachers' desired performance is also important. The teacher must believe that the reward is worth the additional effort in order to be motivated toward the performance objective (Kelley et al., 2000). This reward, or outcome, can be challenging because the extra compensation must be an amount large enough to be worth the perceived effort required to attain the reward (Adkins, 2004). Negative consequences can also provide motivation if the consequences are large enough to create concern. Failure to receive a bonus, criticism from the principal, a poor performance evaluation, and threatened job security are all negative consequences that could potentially motivate teachers (Kelley et al., 2000).

The model developed by Kelley et al. (2000) demonstrated that performance-based rewards are highly complex and require a great deal of teacher input to be successful. Teachers must value the outcome of increased student achievement and believe that their effort impacts that outcome. They must also believe that the additional effort is worth the potential reward or monetary outcome.

In 2010, Dr. Jonathan Eckert, with support from the Bill and Melinda Gates Foundation, completed an assessment of six schools that had implemented performance-based compensation systems using money from the federal Teacher Incentive Fund (TIF). Although the design and implementation of each program differed, an analysis of preliminary data indicated that the results were similar at each school (Eckert, 2010). Eckert discovered that there were six themes that emerged as a result of performance-based compensation systems, and much like the Kelley et al. study in 2000, the factors of the Expectancy Theory were addressed in three of the themes in his study.

Eckert (2010) found that the first theme, performance compensation, was most effective when integrated with professional development, collaboration, and evaluation as a comprehensive approach to system-wide improvement. Performance compensation directly connected with the factor of instrumentality. The next theme indicated that financial incentives reward additional work and success, but were valued as a component of a broader emphasis to improve teaching and learning. This theme directly connected with the factors of expectancy and valence. The third theme that connected with the Expectancy Theory was that schools created teacher leader positions with significant additional compensation to provide school-based support, evaluation, and oversight for instructional improvement. This theme was directly connected to valence.

Throughout the study, Eckert (2010) indicated that the involvement of teachers and school leaders when designing the compensation systems was essential. “Teacher involvement in the design and implementation of performance-based compensation systems improves implementation, and well-implemented performance-based plans can improve the school climate and collaboration” (Eckert, 2010, p. 3). Eckert also recognized that bonuses can be highly motivational for goal achievement when implemented correctly (Eckert, 2010).

Teacher Compensation Practices

Teacher-compensation practices have changed little since the mid-1600s when Massachusetts passed the Olde Deluder Satan Act of 1642. Teachers were contracted and paid using taxpayer money and were often supplementally supported through churches and philanthropic contributions (Guthrie, Springer, Rolle, & Houck, 2007). During the early years of education, preference was given to male teachers over females, and men were often paid more because of that preference. “In 1832 the state of Connecticut paid its male teachers \$11 a month and its female teachers \$4” (Anthony, 1988, p. 3).

When westward expansion began, the one-room school house emerged, and with it, came the room-and-board compensation model (Podgursky & Springer, 2007). The theory behind this model was to attract and retain high-quality teachers while maintaining the ability to monitor and instill a sense of community, moral character, and book learning. However, as the economy shifted from an agricultural foundation toward industrialization, additional changes occurred in education. A new system of

compensation was designed to model the factories of the late 1800s (Podgursky & Springer, 2007).

The grade-based compensation model was designed to pay teachers according to level of skill needed to educate a child at a certain level. Because it was believed that elementary-age students were easier to educate, less formal training was needed. Secondary students required a teacher with more skills and knowledge; therefore, those teachers would be paid more than the elementary teacher (Guthrie et al., 2007). Springer (2009) stated that the grade-based compensation model sometimes included additional monetary rewards triggered by annual performance reviews. These monetary rewards were an early form of merit pay that often carried with it gender and racial inequities as well as preferential treatment for some teachers (Guthrie et al., 2007).

Slight changes to teacher compensation occurred throughout the 1800s, and by the early 1900s, Ryan (2008) contended that the first form of merit pay was used in Massachusetts. “In Newton, Massachusetts, and elsewhere, salaries, were in theory, pegged to the knowledge, skills and abilities of various teachers” (Ryan, 2008, p. 1). In reality, “teachers were not paid according to their merit but instead based on race, gender, or political connections” (Ryan, 2008, p. 1).

By 1903, Pennsylvania was the first state to create a minimum teacher-compensation law. This act provided that a minimum wage of \$35 be paid to any teacher in the state of Pennsylvania on a monthly basis (Spencer, 1932). Soon, several states followed with legislation that set a minimum teacher salary, but these laws did nothing to address the inconsistencies of compensation based on skills or gender. By the 1920s,

most states shifted the focus of legislation from a minimum salary and began to adopt the single-salary pay schedule (Ryan, 2008).

The Single Salary Schedule

In the early 1920s, Denver, Colorado, and Des Moines, Iowa, adopted a new single-salary schedule which has since become the primary model for teacher compensation (Springer, 2009). Implemented as a way to limit corruption, political favoritism, and bias that occurred in hiring and compensation practices, the single-salary schedule provided a level of equality for compensation.

Popularized following World War II when the school population burgeoned and teachers were in short supply, the single-salary schedule became widespread as a way of equalizing pay across gender, race, and position. At the time, female teachers (most of whom taught at the elementary level) were paid less than male teachers (most of whom taught at the secondary level), and black teachers were paid less than white teachers. Standardizing teacher salaries was a means to attract the necessary complement of individuals to the profession (Koppich, 2008, p. 3).

The single-salary schedule provided a fair, easy-to-understand, bias-free, and easy-to-implement way of compensating teachers. Teachers knew what their salaries would be from one year to the next with very little uncertainty (Koppich, 2008). The single-salary schedule paid equivalent salaries for equivalent preparation and experience. This salary schedule allowed for several assumptions to be made about this type of compensation (Webb & Norton, 2013):

1. Teaching of all grade levels and subjects is of equal importance and equally difficult.

2. The more professional preparation and training the teacher has, the more effective the teacher.
3. The more experience the teacher has, the more effective the teacher.
4. Salary variations are unnecessary and undesirable motivators for teachers.
5. The single-salary schedule minimizes frictions and dissatisfaction among teachers.
6. The single-salary schedule is the easiest to administer. (p. 199)

This system of uniform pay based the salaries on a fixed schedule that only took into account the years of experience and the level of education gained by the teacher.

The purpose was to promote longevity within a school district and to provide an incentive for teachers to receive additional education (Moore Johnson & Papay, 2009). Teachers supported this type of compensation because it did not require individuals to compete for pay and because it rewarded individual efforts, such as professional development and training, as indicators of effectiveness (Koppich, 2008). The single-salary schedule gave teachers the same access to earn a pay raise under the same set of rules. Salary increases were no longer partially based on what teachers viewed as arbitrary administrative assessments of their merit (Odden & Kelley, 2002). Because the schedule was easy to administer, it provided equity and removed arbitrary assessments of teacher merit. Generally speaking, the single-salary schedule worked well for school districts nationwide, but the single-salary schedule plan began to change with the publication of *A Nation at Risk* in 1983.

A Nation at Risk recommended that teacher salaries be “professionally competitive, market sensitive, and performance-based” (National Commission on Excellence in Education, 1983, p. 30). After this report, many districts and states created merit-pay plans, career ladders, and other forms of compensation that differed from the traditional single-salary schedule. It was during the early 1980s that a national call for

improving teacher performance through monetary incentives was initiated; however, many of these plans were short lived (Odden & Kelley, 2002).

Merit Pay: The Early Years

In 1983, *A Nation at Risk* gave rise to the standards-based reform movement which turned attention from what students should be learning to assessing what students were learning. Because there was a shift to measurable student outcomes, changes in compensation were made to pay teachers who improved student learning (Moore Johnson & Papay, 2009). Merit-pay plans rose quickly in the 1980s and faded just as rapidly. The failings of these past merit plans were well documented (Murnane & Cohen, 1986; Odden & Kelley, 2002; Podgursky & Springer, 2007). Merit-pay plans were often based on the principal's evaluations of teacher performance. This subjective form of evaluation encouraged competition among teachers. This discourse among teachers led to the failure of many plans because teachers and teacher unions were not supportive (Ryan, 2008).

Another cause for failure was the lack of funding provided by government and school district officials during the implementation of merit-pay plans. Districts and states rarely provided stable funding for such programs (Odden & Kelley, 2002). "The programs are initially enacted with great expectation. They are usually funded at below required levels, and then funding is eliminated in a few years at the first sign of district fiscal distress" (Odden & Kelley, 2002, p. 36).

In 1986, Murnane and Cohen found that merit programs that remained over time were used at wealthy school districts that had sufficient funding for the program. The districts that had merit-pay plans that lasted for several years had certain common

characteristics: (a) Teacher morale was high; (b) merit pay was not promoted as a punishment for ineffective teachers; (c) community housing costs were high (indication of community affluence); (d) there was great support for public-school education; (e) teachers' uniform salaries were high before the implementation of merit-pay plans; and (f) the existing evaluation plans functioned well (Murnane & Cohen, 1986). These programs also had a tendency to reward a large percentage, but not all, of the teachers. "As a result, the programs may have been termed 'merit programs,' but they actually accorded additional pay for additional tasks in which all teachers engaged" (Odden & Kelley, 2002, p. 36).

Merit Pay to Performance-Based Pay

The changes in educational context over the last decade have recently revived the calls for compensation reform. "Increasing regulation and accountability from sources like the No Child Left Behind Act of 2001, and competition from charter schools and school choice have increased pressures on districts to improve student achievement" (Moore Johnson & Papay, 2009, p. 12). The compensation reforms can be categorized into four main types (Moore Johnson & Papay, 2009):

1. Knowledge and skills: pay for undertaking professional development or acquiring skill-based credentials.
2. Roles: pay for assuming special roles and responsibilities.
3. Market factors: pay for teaching in hard-to-staff subjects or schools.
4. Performance: pay for effective instructional practice and student achievement. (p. 13)

"Many current efforts to restructure teacher pay, including many of those funded by the federal Teacher Incentive Fund, focus on incentives to individual teachers for improved student scores on standardized tests" (Koppich, 2008, p. 12). Other programs

have taken a broader approach, offering incentives for professional circumstances or accomplishments, improved teaching practices, market incentives (hard-to-staff schools), and knowledge and skills acquisition (Koppich, 2008). As new types of compensation plans are introduced, there may be increased support for these plans from classroom teachers, politicians, and teacher associations.

In recent years, a growing number of studies indicate that teacher attitudes toward compensation reform have improved (Springer & Gardner, 2010). Coupled with support from national teacher associations and politicians, the new approach of performance-based pay is gaining ground; the federal government began awarding grants, such as the Teacher Incentive Fund, to promote these changes (Brodsky, DeCesare, & Kramer-Wine, 2010). Researchers who believe student performance is the issue believe that compensation reform and policy should emphasize student performance (Hanushek & Rivkin, 2007). Thus, performance-based pay might include student outcomes if it is to be effective.

The Case for Performance-Based Compensation

Advocates of performance-based compensation contend that, to improve the quality of education and the performance of students, we have to invest in teachers who demonstrate achievement gains. “One of the primary challenges in improving student achievement and closing the achievement gap is the fact that economically disadvantaged students generally require more academic instruction and more effective teachers than are required by non-economically disadvantaged students” (Springer et al., 2007, p. 6). Students who are deemed most at risk for academic failure are placed with the most ineffective teachers. This practice of placing at-risk students with the most ineffective

teachers is confirmed through required reports that are completed in compliance with the No Child Left Behind Act (Springer et al., 2007). “Pay for performance in education is based on the premise that monetary incentives will provide schools with tools to recruit and retain highly-effective teachers, and help teachers focus on pedagogical and organization changes required to improve student learning” (Jacob & Springer, 2008, p. 2). This research is supported by Goldhaber (2008) when he reported:

[A] significant amount of this work [research on teacher attributes to student achievement] suggests that inputs-based strategies for improving teacher quality, such as changes in teacher training or licensure standards, are unlikely to yield significant changes in the quality of the teacher workforce due to the weak links between such policies and student achievement. More recent research utilizing datasets that link individual teachers to their individual students is yielding new insights about how teachers compare to one another. This work shows there is a tremendous variation in the effectiveness of teachers in the workforce. (pp. 3-4)

In a 2008 working paper, Podgursky noted that a single-salary schedule does not allow for more effective teachers to be rewarded. He goes on to make distinctions between effective and ineffective teachers:

[S]ome fourth grade teachers are much more effective at raising student achievement than others. More generally, some teachers are harder working and are more inspirational to students (and parents) than others. Some teachers are burnt out and simply putting in time until retirement. The single-salary schedule suppresses differences between more effective and less effective teachers. (pp. 8-9)

A pay system that rewards teachers based on performance will motivate teachers to work harder, will draw new teachers who are willing to work at meeting performance targets into the profession, and will retain effective teachers in schools (Podgursky, 2008).

Given the need for improved student achievement, advocates for performance-based compensation often present several reasons for its implementation. The first

reason for implementing performance-based compensation is teacher effectiveness. Teacher effectiveness is the number one determining factor in students' academic achievement and overall school experience (Sanders, Wright, & Langevin, 2008). Teachers respond to incentives as a reward for additional work and success, but they also value the improved teaching and learning that occur with an effective performance-based pay plan (Berry & Eckert, 2012). Another reason for implementing performance-based pay plans is to link what students learn to what teachers earn. This accountability has become essential to school finance. More than 80% of any school district's budget goes to compensation, and the public wants to see a connection between student outcomes and these expenditures (Slotnik, 2009).

Advocates of performance-based pay also recognize that the vast majority of school teachers are paid on a salary schedule that is based on years of experience and education level. These two variables are weakly correlated with student outcomes (Griffith, 2010; Sanders et al., 2008). Proponents also argue that single-salary systems, "which typically reward teachers for experience and credentials alone, make teaching unattractive to high achieving people with technical skills and make difficult teaching assignments unattractive to incumbents" (Goldhaber, Dearmond, & Deburgomaster, 2011, p. 441). These types of teaching assignments lead into another important factor for performance-based pay. Performance-based pay helps make teaching more professional by aligning compensation with the pay for other professionals who have similar training or education levels (Koppich, 2008).

Teacher-performance incentive programs and models are designed and implemented in an effort to increase teacher effectiveness, to elevate students' academic

achievement, to enhance school productivity, and to recruit and retain teachers (Springer, Ballou, & Peng, 2008). Supporters of performance pay believe it is one way to combat the teacher shortages that plague hard-to-staff subject areas, high-poverty schools, and schools that have high percentages of racial and ethnic minorities (Koppich, 2008). “At least 30 states offer financial incentives for those who teach in schools or subject areas that are hard to staff” (Berry & Eckert, 2012, p. 5). A recent report from the Center for American Progress indicated that the large inequalities where students are taught by qualified teachers is related to the differentials in overall school funding and teacher salaries (Berry & Eckert, 2010). These inequalities are challenging because studies show that quality teachers who continually work with students have students who experience both significant and long-lasting achievement gains (Koppich, 2008).

The Case Against Performance-Based Compensation

Although the argument can be made that performance-based pay has advantages, many researchers have identified areas for concern in the design of pay-for-performance systems as well as the negative outcomes that could be generated from such systems. In a 2008 working paper, Rothstein stated:

In education, most policy makers who promote performance incentives and accountability seem mostly oblivious to the extensive literature in economics and management theory, documenting the inevitable corruption of quantitative indicators and the perverse consequences of performance incentives which rely on such [limited quantifiable] indicators. If ignorant of this literature, proponents of performance incentives in education are unable to engage in careful deliberation about whether, in particular cases, the benefits are worth the price. (p. 79)

Rothstein (2008) cited many unintended consequences of performance pay; “goal distortion” (p. 9) and “cream skimming” (p. 40) are created when attempts to quantify

and compensate based on select outcomes result in a focus that is unbalanced. Using data from standardized assessments may not be reliable, causing detrimental consequences.

Rothstein (2008) identified schools that place an exaggerated emphasis on test scores (goal distortion) which may lead to teachers and school leaders manipulating students to prevent them from taking the test or from being identified in a certain subgroup. There have been cases where teachers and administrators encourage low-performing students to not attend school so their scores will not be counted against the school (cream skimming; Rothstein, 2008). This type of test manipulation was discovered in Atlanta, Georgia, in 2011. “Atlanta teachers and principals for years methodically altered answer sheets for students taking state tests, boosting scores and transforming struggling schools—and the district as a whole—into what appeared to be a spectacular urban success story . . .” (Samuels, 2011, p. 1). In response to the scandal, United States Secretary of Education Arne Duncan stated, “There are no shortcuts to success, and there are schools and districts across Georgia and the country that are facing the same expectation to perform that are making genuine progress without cheating” (as cited in Samuels, 2011, p. 2). However, a string of other districts have faced accusations of test tampering, including Washington, DC; Baltimore; and Philadelphia. One can expect that tying financial bonuses to student achievement will only increase and intensify this effect (Wood Coleman, 2009).

Opponents of performance-based pay have concerns that go beyond the scope of goal distortion or cream skimming which they cite as reasons for opposing performance-based compensation practices. The first reason for opposing performance-based compensation is a belief that changing the salary system is an attempt to keep teacher

salaries artificially depressed (Koppich, 2008). This artificially depressed salary is accomplished by performance-based compensation systems that reward only the top 15-20% of performers without making any effort to improve the quality of all teachers (Solomon & Podgursky, 2000). Some performance-pay systems limit the number of teachers who qualify for additional pay. Such plans penalize equally qualified teachers because there are not enough funds to reward all (Ornstein, Levine, & Gutek, 2011).

Another concern for performance-based compensation plans is the impact that these plans have on teachers, students, and school climate. The single-salary schedule does not require teachers to compete for pay. Competition negatively impacts teacher collaboration and may have a negative impact on school climate and culture (Koppich, 2008). When money is the motivator, it may be detrimental to the health of the school climate and culture; some studies indicate that intrinsic motivators increase productivity better than extrinsic motivators (Preis, 2010).

Another argument is that performance-pay systems rely too heavily on standardized tests which place limits on what is considered good teaching and could narrow the curriculum taught to students (Koppich, 2008). Factors related to student achievement are so diverse that it is impossible to identify the teacher's impact (Ornstein et al., 2011). This diversity in student achievement is particularly true in schools where multiple teachers are responsible for the same student (Hanover Research, 2012). This lack of capacity to measure the teacher's actual impact may mean that some teachers are awarded compensation while others are not (Hanover Research, 2012).

Those individuals opposed to performance-based compensation argue that guidelines for evaluating performance pay are inequitable. The single-salary schedule is

unbiased, objective, and predictable (Koppich, 2008). Evaluations are too subjective to use effectively (Koppich, 2008; Ryan, 2008). Individuals who evaluate teacher merit or performance may favor the teachers who do not challenge district policy or seem to threaten the stability of the school with innovative approaches (Ornstein et al., 2011). Most teachers receive satisfactory evaluations with few distinctions in overall quality, but there is typically not a method of distinction or recognition for those teachers who are truly excellent (Weisberg, Sexton, Mulhern, & Keeling, 2009).

Even with performance incentives, teachers tend to prefer not to work in disadvantaged schools, and this trend appears to be strengthened when there are no additional monetary incentives at these schools (Vigdor, 2008). If the only measure of performance incentives is hard-to-staff schools or subject areas, there is a risk that teachers may only focus on those students just under the threshold of proficiency, ignoring those students at the highest and lowest performance levels (Preis, 2010).

Due to recent shifts in teacher and teachers' union attitudes regarding performance pay, more school leaders and politicians are reviewing compensation options. With additional pressures from the No Child Left Behind legislation as well as the implementation of the Common Core State Standards, high-quality teachers are needed to improve student achievement (Koppich, 2008). Performance-based compensation may provide districts with incentives to recruit, motivate, and retain high-quality teachers.

Performance-Based Pay Systems: Design and Implementation

In her 2008 working paper, Koppich outlined 10 factors that contribute to developing and implementing new forms of teacher compensation:

1. Are designed to meet multiple challenges.
2. May include multiple options for teachers to advance in pay.
3. Represent joint union-management undertakings.
4. Include some form of opt-in.
5. Are not punitive.
6. Do not include quotas.
7. Retain at least echoes of the standard salary scale.
8. Reflect careful planning and transparency.
9. Are about capacity building.
10. Do not adopt a one-size-fits all approach. (pp. 20-21)

Ritter and Jensen (2010) suggested there are five essential elements to develop and implement a merit-pay plan in schools. First, school districts must generate teacher, staff, and administrator support. To gain this support requires collaboration and input from all stakeholders.

Second, schools must develop rewards that motivate teachers in productive ways. School and teacher goals must be realistic, measurable, and attainable. The rewards must match the amount of additional work teachers will need to do to meet the goals. The program must be sustainable; if it will only happen for one year, teachers will not be motivated.

Third, schools must make the merit-pay program part of a comprehensive school-improvement strategy. School leaders must provide all staff members with current student performance data and practice continuous performance monitoring.

Fourth, schools must create a merit-pay program that promotes and encourages collaboration. Promoting and encouraging collaboration reinforces the idea that everyone in the school is responsible for teaching and student learning. The increased collaboration will enhance school climate and culture.

Finally, schools must employ multiple measures of teacher effectiveness. Teachers should be rewarded for taking additional classes, earning additional certifications, improving student test scores, mentoring new teachers, etc. The program should be a reward and should not be punitive.

No performance-based plan should be designed with a single focus in mind (raising student test scores); rather, plans should be designed to meet multiple goals (Koppich, 2008):

These include encouraging high quality teachers to take on challenging assignments, enhancing the capacity of teachers to improve their practice (and use teaching strategies that research suggests are likely to improve student achievement), developing means for teachers to use leadership skills without having to leave teaching, *and* improving the levels of student learning. (p. 21)

Performance-Based Pay Plans: Current Models

ProComp (Denver)

In March of 2004, 59% of the members of the Denver Classroom Teacher Association voted in favor of full implementation of ProComp, a pay-for-performance compensation plan (Gonring, Teske, & Jupp, 2007). The teacher association vote was followed by a 2005 vote by Denver citizens that raised the mill levy to support an additional \$25 million annually to fund the ProComp plan (Brodsky et al., 2010). The first full year of implementation happened during the 2006-2007 school year; the program was voluntary for teachers hired prior to January 2006 but was mandatory for individuals hired after that date.

The ProComp program consists of four key components to determine eligibility for financial incentives: professional development of teacher knowledge and skills, professional evaluations, market incentives, and student growth (Brodsky et al., 2010).

Teachers were able to determine if they wanted to pursue one or several of the components. Teachers in hard-to-staff schools and/or subjects earned a 3% bonus. Meeting one annual student growth objective earns a 1% bonus while meeting two annual student growth objectives earns a 2% bonus, both above the base teaching salary (Koppich, 2008). Excluding the incentives for an advanced degree, an individual teacher stands to gain upwards of \$5,000 per year by meeting all the criteria (Goldhaber, 2009).

Some initial findings were reported after a 2008 evaluation. Just over half (55%) of the participating teachers believed the program increased their engagement in relevant professional-development activities; about half of the participating teachers believed that ProComp was consistent with school district goals; and 31% of the participating teachers reported they were being compensated fairly when compared to their peers (Brodsky et al., 2010). There were no data that would indicate any major changes to student performance during the first year of implementation. Stakeholders involved in designing ProComp are now responsible for administering it. The system is a result of persistence, tenacity, inventiveness, and innovation (Gonring et al., 2007).

Q Comp (Minnesota)

In 2004, the Minnesota Federation of Teachers worked with then Governor Tim Pawlenty to create a partnership with the Milken Family Foundation. This partnership sparked the 2005 legislation that designed and enacted the Q Comp program for the state of Minnesota (Brodsky et al., 2010). Q Comp is a voluntary program that allows school districts to design new pay plans and to receive additional state funding to implement the plans. Plans must include a career ladder (teacher-advancement option), job-embedded professional development, improved professional evaluation, performance pay, and a new

salary schedule (Koppich, 2008). Because it is based on the federal Teacher Advancement Program (TAP), Q Comp has created several career-ladder models that promote instructional leadership (Jerald, 2009). The focus of Q Comp is not on individual classroom student performance; rather, it places emphasis on school performance as a whole.

The program encourages career-advancement options that allow master teachers to become instructional leaders, or mentors, who will guide novice teachers to better practice:

The program offers an incentive to accomplished teachers to act as a leadership resource within their respective districts, thereby recognizing that master teachers contribute not only through the classrooms they directly teach but also through teaching in other teachers' classrooms, which they help to improve. (Brodsky et al., 2010, p. 216)

In the 2008-2009 academic year, 44 school districts and 28 charter schools had Q Comp programs. Larger school districts created these programs at a much faster rate than smaller districts (Brodsky et al., 2010). In a January 2009 evaluation conducted for the Q Comp program, evaluators found that there was a positive relationship between the number of years a school district participated in the Q Comp program and student performance (Brodsky et al., 2010). Collaboration between teachers and administrators has increased, and there was more focus around instruction, planning, and professional development (Koppich, 2008).

Summary

School-reform efforts in the United States have increasingly come to focus on the identification, recruitment, motivation, and retention of highly effective teachers. As such, teacher-compensation plans have been the primary means of recruitment,

motivation, and retention. Despite ongoing debates about the adequacy of total compensation, the design of merit-pay systems, and the structure of pension benefits, there is broad agreement by school leaders, policymakers, and teachers that pay should be designed to recruit and retain the highest-quality teachers in a cost-effective manner (Richwine, 2012).

If policymakers and school leaders want to get teacher pay right, they can no longer look only at across-the-board pay raises. These compensation plans do nothing for the long-term recruitment, motivation, and retention of highly qualified teachers. Instead, policymakers “should focus on rewarding highly qualified teachers with targeted salary increases” (Richwine, 2012, p. 1).

The relationship between motivation and job satisfaction, and performance is clearly established: positively motivated employees are more creative, motivated, and satisfied. The challenge for human resources administrators and other administrators in the school system is to find ways to optimize performance toward the attainment of system and individual goals (Webb & Norton, 2013).

The alignment of bonuses and compensation with goal-setting and collaboration can lead to productivity increases and improved employee motivation (Blinder, 1990; Goldhaber, 2009; Heneman III et al., 2007; Lawler, 1990).

Through the use of common components in a performance-based pay evaluation (teacher effort, administrator evaluation, and recognition/reward), the study looks to measure the impact that these components have on teacher motivation. Applying the Expectancy Theory to these components may help school leaders increase teacher motivation and, in turn, improve student learning.

Description of Chapter III

Chapter III provides the Methodology used to conduct the research. A review of the Research Questions is provided as well as an overview of quantitative research methods and limitations. A summary of the survey population, the method of collecting the data, and a description of the Data Analysis is provided.

CHAPTER III

METHODOLOGY

Introduction

When addressing school-reform issues, one should consider the importance of teachers' effort, motivation, and job satisfaction. Current compensation plans consist of a single-salary schedule which allows teachers to know their exact compensation given their level of education and years of service to the school district. This compensation method is contrary to the fundamental concepts of the Expectancy Theory and the components of the Equity Theory.

Teachers' perceptions about their personal effort and the impact it has on student performance, as well as additional rewards, may increase motivation and job satisfaction. Performance-based compensation allows school districts to have flexibility to compensate teachers in addition to the contracted salary. These compensation plans often focus on student-performance outcomes and encourage innovative instruction that increases student learning. Understanding teachers' perceptions of expectancy (effort), instrumentality (recognition), and valence (rewards) provides school leaders with information to determine the effectiveness of performance-based plans in the school districts.

Research Questions

The following research questions guide the research:

1. How do teachers' perspectives of effort (hard work) impact motivation?
2. How do teachers' perspectives of instrumentality (the belief that performance will lead to a reward) impact motivation?
3. How do teachers' perceptions of valence (the value of the reward) impact motivation?
4. What relationships among the three factors (expectancy, instrumentality, and valence) impact motivation?

Research Methodology

The research conducted for this study was quantitative. Creswell (2005) defined quantitative research as an inquiry approach that is useful for describing trends and explaining the relationships among variables found in the literature. Quantitative research may be less useful for exploring new concepts or documenting a research participant's personal views (Johnson & Christensen, 2012). Quantitative research tends to focus too much on the researcher's personal view of education and can create a contrived situation where the research participant is taken out of context (Creswell, 2005).

The primary procedure for quantitative research is survey design. This researcher administered a survey to a small group of teachers, within the Fargo Public School District, in order to identify the attitudes, opinions, behaviors, and characteristics of a large group of teachers. As in quantitative research, a survey is administered to a small group of people (sample) in order to identify certain attitudes, opinions, behaviors, and characteristics for a larger group of people (population); (Creswell, 2005). The selection of subjects consisted of identifying three grade levels of schools in the district: one

elementary school, one middle school, and one high school. The survey instrument was administered using the Qualtrics program, available through the University of North Dakota, using an email invitation to classroom teachers at each building.

Description of Research Population

Fargo Public Schools is one of the largest school districts in the state of North Dakota, serving over 10,800 students. The district is comprised of 14 elementary schools, three middle schools, three comprehensive high schools, and 1 alternative high school. The district-level administration is located in downtown Fargo and consists of the superintendent, assistant superintendents, directors, and other district support staff. Just over 950 certified teachers are employed throughout the district, and they work directly with building-level administration. All teachers are contracted on a single-salary schedule that is negotiated by the school board and the Fargo Education Association. There is no alternative compensation plan for classroom teachers.

The building sites were selected based on the number of teachers in the building and the number of students served in the building. An elementary school, a middle school, and a high school were selected. A total of 198 teachers were invited to complete the survey. The survey population included 50 classroom teachers at the elementary school, 70 classroom teachers at the middle school, and 78 classroom teachers at the high school. Student enrollment was 491 at the elementary school (grades K-5), 758 at the middle school (grades 6-8), and 955 at the high school (grades 9-12). Class size ranged from 20-24 students at the elementary, from 22-28 at the middle level, and from 22-30 at the high school. These numbers are representative of other schools throughout the district.

Survey Instrument

The survey instrument was designed using two comparable studies that measured teacher perceptions about compensation plans. Adkins' (2004) study, *Teacher Performance Pay: The Perceptions of Certified School-Based Personnel*, used a questionnaire titled "Teacher Performance Pay Attitudinal Survey" in which 28 items were developed to address teachers' perceptions about compensation. The survey used a five-point rating scale: Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. The survey was tested for reliability and validity using Cronbach's coefficient alpha (Adkins, 2004). The survey consisted of five parts, each measuring the teachers' perspectives of performance pay. In Parts III and IV of the survey, teachers were asked questions directly related to teacher effort and motivation. These questions connected with two factors of the Expectancy Theory and served as a guide to compose items in the survey used for this study.

In 2008, Huth completed a study titled *Teacher Attitudes Toward Alternative Forms of Compensation Beyond the Traditional Single Salary Schedule*. The survey consisted of 21 items. Seven items in the survey were demographic, and an additional 14 items were rated using a 5-point rating scale: Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, and Strongly Disagree. Two field-test groups were used to determine validity and reliability. The study had teachers respond to statements about compensation on a five-point scale. The demographic information gathered for that study served as a guide for the demographic information used in this study's survey. Each study measured teacher perceptions about compensation practices, and each survey used a Likert scale.

Using the survey instruments from the two studies as a guide for this study, the researcher designed survey questions that identified components of the Expectancy Theory. The researcher designed survey questions that addressed expectancy (Question 6, effort), instrumentality (Question 7, administration), and valence (Questions 8 and 9). The survey was reviewed by two faculty members at the University of North Dakota, and feedback was used to modify survey questions. A pilot group of teachers, 14 in total, read the survey and provided additional feedback to the researcher.

The survey consisted of two sections: Section I: Demographic Information and Section II: Perceptions of Motivation, Recognition, and Reward. Teacher responses in Section II used a four-point Likert scale. The ratings were as follows: Questions 6 and 7 were (1) Not Confident, (2) Somewhat Confident, (3) Confident, and (4) Very Confident. Questions 8 and 9 were (1) Not Likely, (2) Somewhat Likely, (3) Likely, and (4) Very Likely. A high score for the responses indicated a favorable perception, and a low score indicated a negative perception about each question. The survey was conducted using the online survey tool Qualtrics through the University of North Dakota.

- Questions 1-5 collected demographic data about classroom teachers. Teachers were asked their gender, their number of years of teaching experience, the highest level of education attained, and the current school assignment (elementary school, middle school, and high school).
- Question 6 asked teachers to identify how likely their own effort impacts student learning. The Expectancy Theory provided the basis for this question because the theory suggests that teachers' perceptions about the likelihood of a desired outcome impact the teachers' performance level.

The expectancy component of the theory was addressed in this question about teacher effort.

- Question 7 asked teachers to identify how likely they believed their administrator would be to reward them for their effort. The Expectancy Theory suggested that external variables can impact motivation and effort. The instrumentality component of the theory was addressed in this question about school administrators.
- Question 8 asked teachers to identify how likely they would be to increase their effort for social recognition. The Expectancy Theory suggested that the outcome must be significant enough to increase effort and motivation. The valence component of the theory was addressed in this question about social recognition.
- Question 9 asked teachers to identify how likely they would be to increase their effort for additional compensation. The Expectancy Theory suggested that the outcome must be significant enough to increase effort and motivation. The valence component of the theory was addressed in this question about additional compensation (see Table 1).

Table 1

Survey Item Purpose, Theoretical Base, and Research Focus.

Questions	Purpose	Theoretical Base	Research Question(s)
Part I (1-5)	Demographic Data		All
Part II (6)	Effort	Expectancy Theory	1
(7)	Recognition	Expectancy Theory	2
(8 & 9)	Reward	Expectancy Theory	3
(6-9)	Predicated Effort	Expectancy Theory	All

Collection of Data

Upon creating the survey, Dr. Robert Grosz, Assistant Superintendent of Curriculum and Instruction with Fargo Public Schools, was contacted, and permission was obtained to conduct the survey at three school buildings in the district (see Appendix A). The IRB at the University of North Dakota, as well as the committee members, granted approval to conduct the study (see Appendix B & C).

An email, requesting participation to complete the survey, was sent to the 198 building teachers on May 21, 2013 (see Appendix D). The email to teachers consisted of a greeting, the purpose of the survey, and a link to the survey. It was also noted that the survey was confidential and voluntary; no teacher names would be used, and the schools would not be identified in the study. Directions for completion were provided on the survey form. The teachers had one week to complete the survey. A follow-up email was sent on May 26, 2013, providing a thank you to individuals who had completed the survey and encouraging those who had not completed the survey to do so prior to the survey document being closed (see Appendix E). At the end of the week, the survey link was closed, and the survey information was collected; 131 teachers answered at least one

question on the survey. Frequency numbers varied by question and are identified for each question in the analysis provided in Chapter IV.

Data Analysis

Inferential statistical analysis was conducted. The data analysis was designed to address the four research questions using the two sections of the survey: Section I: Demographics and Section II: Perceptions of Motivation, Recognition, and Reward.

Research Questions 1, 2, and 3 have data presented in two ways. The first data set is the frequencies with which teachers responded to the questions. Frequency information provides the overall positive or negative perceptions for each question. Categorical data are shared in frequency and percentage form. Tables are used to support the numerical data. ANOVA data are presented to identify relationships and correlations among the Expectancy Theory factors and demographic information. The relationships between the factors of the Expectancy Theory and demographics provide methods in which school leaders can attempt to increase teacher motivation. Tables and numeric data are presented to address the ANOVA analysis.

Research Question 4 addresses the relationships, or correlations, among the factors of the Expectancy Theory. Spearman *rho* analysis is conducted to determine significance between the factors of expectancy, instrumentality, and valence. The numeric data are presented in a data table to demonstrate correlations or significant relationships.

Description of Chapter IV

In Chapter IV, the data are presented. The analysis discerns teachers' perceptions about individual effort and the possible impact it has on student performance and personal motivation. The data analysis also discerns teachers' perceptions of rewards and recognition as well as the value of each perception when used to increase effort and motivation. Relationships among the Expectancy Theory's factors are presented.

CHAPTER IV

RESULTS OF DATA AND DATA ANALYSIS

Introduction

The purpose of this study was to discern teachers' perspectives of motivation and compensation utilizing Vroom's Expectancy Theory. The researcher applied the major components of the Expectancy Theory and to relate them to motivational aspects of compensation and rewards. This chapter presents quantitative data analysis and the results in the following sections:

1. How do teachers' perspectives of effort (hard work) impact motivation?
2. How do teachers' perspectives of instrumentality (the belief that performance will lead to a reward) impact motivation?
3. How do teachers' perceptions of valence (the value of the reward) impact motivation?
4. What relationships among the three factors (expectancy, instrumentality, and valence) impact motivation?

Frequency Data Section I: Demographic Information

A total of 198 teachers (50 classroom teachers at the elementary school, 70 classroom teachers at the middle school, and 78 classroom teachers at the high school) were invited to complete the survey. Of the 198 teachers who were invited to complete the survey, 128 teachers (66%) began the survey; however, not all respondents completed

the entire survey. Respondents who completed any of the survey questions are included in the frequency data presented for individual questions. Therefore, frequency numbers vary for some survey questions and are listed for each data set.

When frequency data are presented, the total number of respondents is given. A total of 128 teachers responded to the question about gender: 45 males (35%) and 83 females (65%). The years of experience ranged from fewer than 3 years to 21 years or more. For statistical purposes, the years of experience were categorized into 4 groups: fewer than 3 years had 12 respondents (9.4%); 3-10 years had 37 respondents (28.9%); 11-20 years had 36 respondents (28.1%); and 21 or more years had 43 respondents (33.6%) (see Table 2).

Table 2

Gender and Level of Education (N=128)

<i>Variable</i>	<i>Respondents</i>	<i>Percentage</i>
Gender		
Female	83	65.0
Male	45	35.0
Years of Teaching		
Fewer than 3 Years	12	9.4
3 to 10 Years	37	28.9
11 to 20 Years	36	28.1
21 or More Years	43	33.6

The level of education for each respondent was also categorized for statistical purposes. Those categories were as follows: Baccalaureate had 53 respondents (41.4%); Master's had 71 respondents (55.5%); Specialist had 2 respondents (1.6%); and Doctorate had 2 respondents (1.6%).

In addition to the level of education attained by the respondents, the current teaching assignment was obtained. The current teaching assignment was categorized for statistical purposes into three categories: Elementary School had 34 respondents (26.6%); Middle School had 41 respondents (32%); and High School had 53 respondents (41.4%) (see Table 3).

Table 3

Frequency Table: Level of Education and Teaching Assignment (N=128)

<i>Variable</i>	<i>Numbers</i>	<i>Percentage</i>
Level of Education		
Baccalaureate	53	41.4
Master's	71	55.5
Specialist	2	1.6
Doctorate	2	1.6
Teaching Assignment		
Elementary School	34	26.6
Middle School	41	32.0
High School	53	41.4

To summarize the demographic information for this study, there were more females than males who responded. The years of experience were evenly distributed in three of the four categories with the “fewer than three years of experience” category making up less than 10% of the respondents. Nearly all respondents held a bachelor’s or master’s degree, with only four respondents reporting they held a specialist or doctoral degree. The number of teacher respondents at each school equaled more than 50% of the total staff. The number of respondents was as follows: the elementary school had 50 teachers, and 34 of them (68%) responded to the survey; the middle school had 70 teachers, and 41 of them (59%) responded to the survey; and the high school had 78 teachers, and 53 of them (68%) responded to the survey.

Frequency Data Section II: Perceptions of Motivation, Recognition, and Reward

The second section of the survey consisted of four questions, Survey Questions 6, 7, 8, and 9, with a focus on perceptions about effort, administration, recognition, and compensation. The teachers were asked to respond given a four-point Likert scale with the response for questions about effort (Question 6) and administration (Question 7) being (1) Not confident, (2) Somewhat Confident, (3) Confident, and (4) Very Confident. The response/options for questions about recognition (Question 8) and compensation (Question 9) used a four-point Likert scale with the following range: (1) Not Likely, (2) Somewhat Likely, (3) Likely, and (4) Very Likely. The number of respondents changed for each question and is identified in the data presented.

Question 6 asked teachers to respond about their level of confidence that their hard work (effort) would increase student performance. A total of 119 teachers responded to the question: Not Confident had 1 respondent (.8%); Somewhat Confident had 24 respondents (20.2%); Confident had 63 respondents (52.9%); and Very Confident had 31 respondents (26.1%) (see Table 4).

Table 4

Frequency Data: Question 6 Effort (N=119)

<i>Variable</i>	<i>Frequency</i>	<i>Percentage</i>
Effort		
Not Confident	1	.8
Somewhat Confident	24	20.2
Confident	63	52.9
Very Confident	31	26.1
Total Respondents	119	100.0

Question 7 asked teachers to respond about their level of confidence that their building administrator would reward them for their hard work. A total of 120 teachers

responded to this question: Not Confident had 30 respondents (25%); Somewhat Confident had 38 respondents (31.7%); Confident had 45 respondents (37.5%); and Very Confident had 7 respondents (5.8%) (see Table 5).

Table 5

Frequency Data: Question 7 Administration (N=120)

<i>Variable</i>	<i>Frequency</i>	<i>Percentage</i>
Administration		
Not Confident	30	25.0
Somewhat Confident	38	31.7
Confident	45	37.5
Very Confident	7	5.8
Total Respondents	120	100.0

Question 8 asked teachers to respond with the likelihood they would increase their effort if the outcome led to social recognition. A total of 118 teachers responded: Not Likely had 51 respondents (43.2%); Somewhat Likely had 42 respondents (35.6%); Likely had 18 respondents (15.3); and Very Likely had seven respondents (5.9%) (see Table 6).

Table 6

Frequency Data: Question 8 Recognition (N=118)

<i>Variable</i>	<i>Frequency</i>	<i>Percentage</i>
Recognition		
Not Likely	51	43.2
Somewhat Likely	42	35.6
Likely	18	15.3
Very Likely	7	5.9
Total Respondents	118	100.0

Question 9 asked teachers to respond about the likelihood they would increase their effort if the outcome led to additional compensation. A total of 119 teachers responded: Not Likely had 29 respondents (24.4%); Somewhat Likely had 33

respondents (27.7%); Likely had 39 respondents (32.8%); and Very Likely had 18 respondents (15.1%) (see Table 7).

Table 7

Frequency Data: Question 9 Compensation (N=119)

<i>Variable</i>	<i>Frequency</i>	<i>Percentage</i>
Compensation		
Not Likely	29	24.4
Somewhat Likely	33	27.7
Likely	39	32.8
Very Likely	18	15.1
Total Respondents	119	100.0

Analysis of Survey Data

Survey responses that were categorical data (i.e., gender, educational experience, education level, and school assignment) were applied as factors for effort, perceived school administrator effectiveness, social recognition, and compensation motivation. A computed Shapiro-Wilk test was conducted to determine whether responses were normally distributed. The computed statistics were all significant ($p < .05$), indicating that the distribution of responses was significantly different than the normal distribution (i.e., results not normal) (see Table 8). These two conditions, some survey item responses being categorical and others not normally distributed, with responses to the survey items indicated the need for a non-parametric statistical test. The Kruskal-Wallis non-parametric test for ranked and not normally distributed data was selected as an appropriate application to assess the relationships of the factors with motivation.

Table 8

Tests of Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
Effort	.818	116	<.001
Administrator	.858	116	<.001
Recognition	.802	116	<.001
Compensation	.872	116	<.001
Lilliefors Significance Correction			

Research Question 1

How do teachers' perspectives of effort (hard work) impact motivation? This research question was answered using Survey Question 6 which asks teachers to rate their level of confidence that their effort impacts student performance. Frequency data indicated that, of the 119 teachers who responded to the question, most (63) teachers (52.9%) said that they were Confident that their effort would impact student performance. An additional 31 teachers (26.1%) indicated that they were Very Confident that their effort would impact student performance. Twenty-four teachers (20.2%) indicated that they were Somewhat Confident that their effort would impact student performance. One teacher (.8%) responded that he/she was Not Confident his/her effort would impact student performance (see Table 4).

Survey Question 6 asked respondents to rate the impact of their hard work on student performance. Non-significant Kruskal Wallis statistics for effort with gender ($H(3) = .708, p = .871$), effort with experience ($H(3) = 2.170, p = .538$), effort with

education attained ($H(3) = 1.730, p = .630$), and effort with current teaching assignment ($H(3) = 1.650, p = .647$) indicated no significant differences in the effort variable for any of the demographic factors (see Table 9).

Table 9

Test Statistics: Demographics and Effort

Test Statistics^{a,b}				
	Gender	Experience	Education	Assignment
<i>H</i>	.708	2.170	1.731	1.657
<i>Df</i>	3.000	3.000	3.000	3.000
<i>Asymp.Sig.</i>	.871	.538	.630	.647

a. Kruskal Wallis Test

b. Grouping Variable: Effort

Research Question 2

How do teachers' perspectives of instrumentality (the belief that performance will lead to a reward) impact motivation? This research question was answered using Survey Question 7 which asks teachers to rate their level of confidence in their building-level administrator rewarding their effort. Frequency data indicated that, of the 120 teachers who responded to the question, 45 teachers (37.5%) said that they were Confident that their building-level administrator would reward their effort. An additional seven teachers (5.8%) indicated they were Very Confident that their building-level administrator would reward their effort. Thirty-eight teachers (31.7%) indicated that they were Somewhat Confident their building-level administrator would reward their effort. Thirty teachers (25%) indicated they were Not Confident their building-level administrator would reward their effort (see Table 5).

Table 10

Test Statistics: Demographics and Administration Recognition

Test Statistics^{a,b}				
	Gender	Experience	Education	Assignment
<i>H</i>	2.396	4.346	.673	2.823
Df	3.000	3.000	3.000	3.000
Asymp.Sig.	.494	.226	.879	.420

c. Kruskal Wallis Test

d. Grouping Variable: Administrator

Non-significant Kruskal Wallis statistics for administration with gender ($H(3) = 2.396, p = .494$), administration with experience ($H(3) = 4.346, p = .226$), administration with education attained ($H(3) = .673, p = .879$), and administration with current teaching assignment ($H(3) = 2.823, p = .420$) indicated no significant changes in the administrator variable for any of the demographic factors (see Table 10).

Research Question 3

How do teachers' perceptions of valence (the value of the reward) impact motivation? This research question was answered using data from two survey questions. Survey Question 8 asked teachers to rate the likelihood that they would change their effort if they received social recognition. Frequency data illustrated that, of the 118 teachers who responded to the question, 51 of them (43.2%) indicated that they were Not Likely to increase their effort for social recognition. An additional 42 teachers (35.6%) indicated that they were Somewhat Likely to increase their effort for social recognition. Eighteen teachers (15.3%) indicated that they were Likely to increase their effort for social recognition, and seven teachers (5.9%) indicated that they were Very Likely to increase their effort for social recognition (see Table 6).

Survey Question 8 used a non-significant Kruskal Wallis statistics for recognition with gender ($H(3) = 2.786, p = .426$), recognition with education attained ($H(3) = 3.652, p = .302$), and recognition with current teaching assignment ($H(3) = 5.987, p = .112$), and the responses indicated no significant changes in the recognition variable for the demographic factors of gender, education attained, and current teaching assignment. However, significant findings for recognition with experience ($H(3) = 8.626, p = .035$) indicated differences in the recognition variable for experience (see Tables 11 and 12).

Table 11

Test Statistics: Demographics and Recognition

Test Statistics^{a,b}				
	Gender	Experience	Education	Assignment
Chi-square	2.786	8.626	3.652	5.987
Df	3.000	3.000	3.000	3.000
Asymp.Sig.	.426	.035	.302	.112

a. Kruskal Wallis Test

b. Grouping Variable: Recognition

Table 12

Experience and Recognition Crosstabulation

	RECOGNITION				Total Respondents
	Not Likely	Somewhat Likely	Likely	Very Likely	
EXPERIENCE					
Fewer than 3 years	4	3	3	1	11
3 to 10 years	12	12	7	3	34
11 to 20 years	13	13	7	2	35
21 or more years	22	14	1	1	38
TOTAL RESPONDENTS	51	42	18	7	118

Mann-Whitney tests were computed to follow-up on the significant Kruskal Wallis test results in the recognition with experience category. In keeping with minimizing effects of multiple post-hoc comparisons, a *Bonferroni correction* was applied ($\alpha/\text{number of comparisons}$), and the α for these post-hoc tests was set to .0083. The Not Likely and Likely levels of recognition differed for experience (medians “11 to 20 years” and “3 to 10 years,” respectively; $U = 273.50, df = p < .008$) (see Table 11). At the lowest experience level, most teachers (63%) report being “Not Likely” or only “Somewhat Likely” to increase their effort for social recognition and the percentage increases with experience.

Research Question 3 was also answered using data collected from Question 9 on the survey. Survey Question 9 asked teachers to rate the likelihood they would change their effort if they received additional compensation. Frequency data showed that, of the 119 teachers who responded to the question, 39 of them (32.8%) indicated they were Likely to increase their effort for additional compensation. An additional 18 teachers (15.1%) indicated they were Very Likely to increase their effort for additional compensation. Thirty-three teachers (27.7%) indicated they were Somewhat Likely to increase their effort for additional compensation, and 29 teachers (24.4%) indicated that they were Not Likely to increase their effort for additional compensation (see Table 7).

Survey Question 9 used a Kruskal Wallis statistics for compensation with gender ($H(3) = 1.48, p = .686$), compensation with experience ($H(3) = 6.42, p = .093$), compensation with education attained ($H(3) = 1.57, p = .665$), and compensation with current teaching assignment ($H(3) = .741, p = .864$). The results indicated no significant changes in the recognition variable for any of the demographic factors (see Table 13).

Table 13

Test Statistics: Demographics and Compensation

Test Statistics^{a,b}				
	Gender	Experience	Education	Assignment
<i>H</i>	1.485	6.415	1.574	.741
Df	3.000	3.000	3.000	3.000
Asymp.Sig.	.686	.093	.665	.864

c. Kruskal Wallis Test

d. Grouping Variable: Compensation

Research Question 4

What relationships among the three factors (expectancy, instrumentality, and valence) impact motivation? This research question was answered using Survey Questions 6-9 which addressed each component of the Expectancy Theory. Using the Spearman's *rho* test for correlation of ranked data, each pair of factors was analyzed for association. Correlation could be significant at the .05 level (2-tailed).

An analysis of the data determined two significant relationships among the four factors. The relationship of effort with administrator was statistically significant (Spearman's *rho* ($n = 119$) = .298, $p < .05$). Teachers' perceptions of the value of their effort was positively related to their belief their administrator would recognize their effort. The relationship of recognition with compensation was statistically significant (Spearman's *rho* ($n = 117$) = .630, $p < .05$) (see Table 14). Teachers' likelihood of increasing effort for social recognition was positively related to their likelihood of increasing effort for compensation.

Table 14

Correlation Matrix Table: Effort, Administrator, Recognition, and Compensation

	Effort	Administrator	Recognition
Administrator	.298		
Respondents	.001		
Recognition	119	.069	
Respondents	.010	.459	
Compensation	.914		
Respondents	117	118	
Compensation	-.045	-.037	.630
Respondents	.629	.692	.000
Respondents	118	119	117

- a. Spearman's *rho*
- b. Significance
- c. Respondents

Summary

This chapter presented an analysis of the quantitative data results from the survey titled Expectancy Theory: Teachers' perspectives of motivation and compensation. The survey was used to determine teachers' overall perception regarding increased motivation and compensation. Frequency data varied for each survey question to accurately depict the number of respondents for individual questions. Of the 198 teachers invited to complete the survey, 131 of them (66.1%) responded to at least one survey question while 128 of the (64.6%) completed Section I of the survey which consisted of demographic data. Section II of the survey had four factors and responses for each factor as follows: Effort had 119 (60.1%) responses; administrator recognition had 119 (60.1%) responses; social recognition had 118 (59.6%) responses; and financial compensation had 119 (60.1%) responses.

Research Questions 1, 2, and 3 addressed teachers' perceptions about the components of the Expectancy Theory: effort, instrumentality, valance, and how each

component impacts motivation. Frequency data were used to give a summary of teachers' perceptions about effort, confidence in administrator effectiveness, social recognition, and compensation. To determine if there was a relationship between the demographic data and the factors of effort, administrator effectiveness, social recognition, and compensation, Kruskal-Wallis non-parametric tests were conducted, and Mann-Whitney tests were used when post-hoc analysis was indicated.

Research Question 4 used data from each tested component of the Expectancy Theory, and a Spearman's *rho* test was conducted to determine if there were statistically significant relationships between factors. Two significant relationships were discovered. The first significant relationship was the relationship with effort and administrator and the second significant relationship was the relationship with recognition and compensation.

Description of Chapter V

Chapter V provides a Summary of Findings and Discussion for this study. A review of the research methodology and research questions is provided. An analysis of data is presented for each research question, and summaries of the findings are provided. Additional recommendations are made for school leaders, and recommendations for additional research studies are presented.

CHAPTER V

SUMMARY OF FINDINGS AND DISCUSSION

Introduction

Research has shown that teachers and teacher expertise are the most important factors for student learning and achievement (Jensen et al., 2010). Since the passage of No Child Left Behind in 2001, schools have been challenged to demonstrate adequate yearly progress (AYP) for all students. Given the requirements that schools face regarding student performance, school districts need highly motivated and qualified teachers in the classroom. When the concepts of the Expectancy Theory are applied to current practices for teacher motivation and compensation, the single-salary schedule may not offer the best means to motivate and compensate quality teachers. This study addressed how the Expectancy Theory can assist school leaders when increasing teacher motivation by reviewing rewards and compensation.

The purpose of this study was to discern teachers' perspectives about motivation and compensation utilizing Vroom's Expectancy Theory. This study applied the major components of the Expectancy Theory (expectancy, instrumentality, and valence) and directly related them to motivational aspects of compensation and rewards. The study examined how teacher motivation is affected by changes in the expectancy, instrumentality, and valence components of the Expectancy Theory.

There are three components upon which Vroom's Expectancy Theory is based (Redmond & Hite, 2013). The first component of the Vroom's Expectancy Theory is expectancy which is described as the belief that higher or increased effort will yield better performance. This concept can be explained by the thinking of if I work harder, I will make something better. Conditions that enhance expectancy include having the correct resources available, having the required skill set for the job, and having the necessary support to do the job correctly.

The second component of the Vroom's Expectancy Theory is instrumentality which is described as the thought that, if an individual performs well, a valued outcome will come to that individual. Some things that impact instrumentality are having a clear understanding of the relationship between performance and outcomes, having trust and respect for people who make decisions about the outcomes, and seeing transparency in the process of determining the outcomes. In education, instrumentality is often associated with school administrators and performance evaluations.

The third component of the Vroom's Expectancy Theory is valence which is the "value" and refers to the outcomes' desirability. There are individual differences in the value associated with specific outcomes. For example, monetary bonuses may not increase the motivation for an employee who prefers recognition. Valence can be thought of as the pressure or importance a person puts on an outcome. In education, valence is often associated with compensation and recognition.

The researcher designed survey questions that used each factor of the Expectancy Theory in an attempt to measure teachers' perceptions about each factor and to determine the impact it has on motivation. Vroom identified that "positive attitudes toward the job

are conceptually equivalent to job satisfaction and negative attitudes toward the job are equivalent to job dissatisfaction” (Vroom, 1964, p. 99). By understanding teachers’ perceptions of expectancy, instrumentality, and valence, school leaders can design recognition and compensation programs that promote and improve teacher motivation and that, in turn, impact student performance.

Review of Methodology

A nine-question survey was developed to address three components of the Expectancy Theory. Section I of the survey consisted of four questions that provided demographic data about the respondents. These data consisted of gender, years of teaching experience, level of educational attainment, and current school assignment. Section II of the survey consisted of four questions that addressed factors of the Expectancy Theory. Question 6 asked teachers to respond to effort (expectancy). Question 7 asked teachers to respond to administrator effectiveness (instrumentality). Questions 8 and 9 asked teachers to respond to recognition and compensation (valence).

An analysis of the data was conducted using response frequency and inferential statistical analysis. The analysis allowed the researcher to determine the overall perception of the respondents regarding each question and to determine if there are significant statistical relationships between demographic factors and Expectancy Theory factors.

Frequency data can be applied to the Expectancy Theory using the formula designed by Vroom in 1964 (see Figure 6). Using the frequency data, the researcher applied the results to the formula to determine which factors increase motivation according to the teachers’ perceptions.

$$\text{Expectancy} \times \text{Instrumentality} \times \text{Valence} = \text{Motivation}$$
$$(\text{Effort}) \times (\text{Performance}) \times (\text{Rewards}) = \text{Motivation}$$

Figure 6. $E \times I \times V = \text{Motivation}$.

Results from the inferential statistical analysis were used to determine if certain demographic factors were related to responses of the Expectancy Theory factors. This information may allow school leaders to focus certain levels of recognition or rewards on specific teacher demographic groups, resulting in a more efficient and effective way to motivate teachers.

Another set of inferential statistical analysis was utilized to determine if there were statistically significant relationships among the Expectancy Theory's factors. This information may allow school leaders to design systems for reward and recognition that effectively address multiple factors of the theory and increase teacher motivation. The result of increased teacher motivation is improved student performance.

Research Question 1: Effort (Expectancy)

How do teachers' perceptions of effort (hard work) impact motivation?

Frequency Summary

Survey Question 6 asked teachers how confident they were that, if they work hard, their students would perform better. A total of 119 teachers responded to this question. Ninety-four teachers (79%) responded in the confident or very confident category. These numbers indicated the respondents may be intrinsically motivated and believe their effort impacts student performance.

Inferential Statistics Summary

The Kruskal-Wallis statistical test was used to determine relationships among the demographic factors from Section I of the survey as well as Question 6 from Section II of the survey. There were no statistically significant relationships among the demographic factors and effort (expectancy).

Conclusion

Although there were no statistically significant relationships identified among the demographic factors and the expectancy factor, the frequency data suggest that the majority of teachers believe their hard work will have a positive impact on student performance. Current policy and research neglect to recognize that two powerful and sustainable sources of motivation for teachers are improved student learning and support gained through collaborative relationships with other teachers (Lewis, Perry, Friedkin, & Roth, 2012). The effort that teachers exude in the classroom must produce improved student learning in order to positively affect teachers' overall motivation.

Research Question 2: Administrator (Instrumentality)

How do teachers' perceptions of instrumentality (the belief that performance will lead to reward) impact motivation?

Frequency Summary

Survey Question 7 asked teachers how confident they were their building administrator would reward them for hard work. A total of 120 teachers responded to this question. Fifty-two teachers (43.3%) responded in the Confident or Very Confident category. These numbers indicated that the teachers were not as likely to believe their administrators would recognize their hard work in the classroom. Sixty-eight teachers

(56.7%) had less confidence in the building-level administrator's ability to recognize the hard work of the teachers in their buildings.

Inferential Statistics Analysis

The Kruskal-Wallis statistical test was used to determine relationships among the demographic factors from Section I of the survey as well as Question #7 from Section II of the survey. There were no statistically significant relationships among demographic factors and performance (instrumentality).

Conclusions

The factor of instrumentality requires that the employee understands the outcome of his/her performance and trusts that the performance evaluation will be conducted effectively. Instrumentality is described as the thought that, if an individual performs well, a valued outcome will come to that individual. Some things that impact instrumentality are having a clear understanding about the relationship between performance and outcomes, having trust and respect for people who make decisions about the outcomes, and seeing transparency in the process of determining the outcomes. In education, instrumentality is often associated with school administrators and performance evaluations.

Research Question 3: Recognition and Compensation (Valence)

How do teachers' perceptions of valence (the value of the reward) impact motivation?

Frequency Summary

Research Question 3 was answered by using data from two survey questions. Survey Question 8 asked teachers to rate the likelihood they would change their effort if

they received social recognition. Frequency data indicated that, of the 118 teachers who responded to the question, most teachers (93, or 78.8%) indicated they were Not Likely or Somewhat Likely to increase their effort for social recognition. The overall response of teachers was they were less likely to change the level of effort for social recognition.

Survey Question 9 asked teachers to rate the likelihood they would change their effort if they received additional compensation. Frequency data indicated that, of the 119 teachers who responded to the question, 57 teachers (47.9%) indicated they were Likely or Very Likely to increase their effort for additional compensation.

Inferential Statistics Analysis

The Kruskal-Wallis statistical test was used to determine relationships among the demographic factors from Section I of the survey as well as Questions 8 and 9 from Section II of the survey. There were no statistically significant relationships among demographic factors and compensation; however, there was a statistically significant relationship between years of experience and recognition (valence).

Conclusions

Frequency data suggested that teachers are less motivated by extrinsic factors such as social recognition; however, compensation was more motivating than social recognition. In comparison to the other factors studied, the valence factors suggested that extrinsic motivators, such as recognition and compensation, were not perceived as positively as the intrinsic motivators of hard work and student performance for the expectancy component in Survey Question 6.

Inferential statistics demonstrated one significant relationship between years of experience and recognition. In a time when teacher turnover costs public education

nearly \$7 billion annually (Carroll, 2012), this relationship is important for school leaders as they attempt to devise programs that recruit, motivate, and retain high-quality teachers. The relationship between motivation, and job satisfaction, and performance is clearly established: positively motivated employees are more creative, motivated, and satisfied.

Research Question 4: Expectancy, Instrumentality, and Valence

What relationships among the three factors (expectancy, instrumentality, and valence) impact motivation?

Inferential Statistical Analysis

Additional data analysis was conducted using Spearman's *rho* test for correlation; each component was analyzed for significance. Correlation was significant at the .05 level (2-tailed).

An analysis of the data determined two significant relationships among the four factors. The relationship with effort with administrator was statistically significant (Spearman's *rho* ($n = 119$) = .298, $p = .001$). The relationship with recognition with compensation was statistically significant (Spearman's *rho* ($n = 117$) = .630, $p = .001$).

The relationship between effort and administrator suggests that teachers who are highly motivated have a greater level of confidence in the building administrator's ability to recognize the hard work and the effort demonstrated in the classroom. This relationship supports the concept that teachers who feel supported are more likely to be satisfied with their jobs. When applied to the Expectancy Theory, a high level of expectancy and a high level of instrumentality yield a high level of motivation.

The relationship between recognition and compensation suggests that teachers want to receive some level of reward for the work they do. Whether through social

recognition or compensation, teachers need to perceive that the value of the reward is significant enough to continue working hard. School leaders need to create incentives that are valued by teachers, thus increasing motivation.

Conclusion

Education-reform discussions focus on two themes, teacher performance and student learning. Performance-based pay may elicit both incentive effects: raising motivation of and effort from teachers who want to increase their pay (Woessmann, 2010). This type of compensation reward may attract and retain teachers.

Although the survey data did not overwhelmingly support compensation as the primary means to motivate teachers, there are data to support the important measures that school leaders should take to assist with teacher motivation (Goldhaber, 2008). The Expectancy Theory provides school leaders with a measurable way to gauge teacher motivation using the components of expectancy, instrumentality, and valence.

Recommendations for School Leaders

When applying the Expectancy Theory to the survey results, the current data suggested areas of concern before the implementation of a performance-based compensation plan. While compensation is an extrinsic motivator, the survey conducted for this study indicated that teachers were more likely to be motivated intrinsically; believing that working hard would increase student performance.

School leaders must recognize that intrinsic motivation is an important factor for teacher motivation and job satisfaction. For Question 6 of Section II, teachers were asked about their level of confidence that their hard work would help students perform well. Of the 119 teachers who responded to the question, 94 teachers (74.2%) were Confident or

Very Confident that their hard work would increase student performance. This intrinsic motivation was not restricted to new or inexperienced teachers. Frequency data from the survey suggested that, of the 128 teachers who responded to the question about years of experience, 116 teachers (90.6%) had 3 or more years of experience. Seventy-nine teachers (61.7%) had 11 or more years of experience. Building administrators should recognize this type of motivation and should look for and share positive student data with all teachers to increase the expectancy component of the theory.

There are several strategies school leaders can implement that may increase teacher effort, improve student learning, and increase motivation. Hiebert and Morris (2012) indicated that the focus needs to shift from improving “teachers” to improving “teaching.” This shift from improving teachers to improving teaching requires school leaders to give teachers time to collaborate and to create two significant instructional products: “specially annotated lesson plans and common assessments” (Hiebert & Morris, 2012, p. 94). These instructional activities provide teachers with the resources they need to effectively instruct and measure the learner outcomes for each lesson, thus increasing effort and motivation.

As Lewis et al. (2012) identified, a teacher’s relationship with his/her colleagues can impact motivation. “Although some teachers manage to invent techniques on their own, many more teachers could probably learn them if they had systematic opportunities to learn from colleagues” (Lewis et al., 2012, p. 372). In addition to building teachers’ knowledge, collaboration can build shared professional norms and motivation (Lewis et al., 2012).

This researcher suggests that the building leader look at collaborative models such as Professional Learning Communities to promote teacher collaboration. Hord (2004) described five interrelated dimensions that are characteristic of schools that have successfully adopted a Professional Learning Community model. Hord proposed that a school that organized itself as a Professional Learning Community exhibits supportive and shared leadership, shared values and vision, collective learning and an application of learning, supportive conditions, and shared practice. The conversations that teachers have regarding student performance may increase teacher effort and may increase the teachers' intrinsic motivation.

Local, state, and federal achievement standards have changed the landscape of educational accountability. School leaders are being held accountable for how well teachers teach and students learn. In order to meet these challenges, school leaders must design programs that support teachers, encourage student performance, and increase motivation.

Effective school leaders recognize the teacher leaders in their building. School leaders who promote and encourage teacher leaders have found that teacher leaders can help others to embrace school goals, understand the changes needed to strengthen teaching and learning, and create collaboration that works toward school improvement (Leithwood & Riehl, 2003). This recognition requires school leaders to define the roles for teacher leaders, to identify specific outcomes, and to provide feedback and evaluation standards that promote motivation. All components of the Expectancy Theory are addressed in this type of programming.

Another area of concern is the frequency data from Question #7 from Section II of the survey where respondents were asked about their confidence the building administrator would recognize and reward them for hard work in the classroom. Of the 120 teachers who responded to the question, 58 teachers (56.7%) had a negative perception of the building administrator's ability to recognize and reward their hard work. The Expectancy Theory suggests that this lack of connection between the teachers' individual performance (expectancy) and the performance reward (instrumentality) limits the motivational impact of the reward.

Effective school leaders build relationships and positive school culture that promote collaboration and high expectations for student performance. Promoting collaboration requires building leaders to shift from the role of manager to the role of instructional leader.

The most effective principals focus on building a sense of school community. . . . This includes respect for every member of the school community; an upbeat welcoming, solution-oriented, no-blame, professional environment; and efforts to involve staff and students in a variety of activities, many of them school-wide. (Wallace Foundation, 2013, p. 9)

In education, the building administrator is responsible for conducting performance evaluations for teachers in their building. Given the results for Survey Question 7, it is essential that building administrators clearly define performance expectations for teachers and adequately evaluate the teachers' performance. It is also important for building administrators to recognize their teachers' hard work. Recognition can be accomplished through feedback provided during informal classroom walk-throughs as well as the formal evaluation process. The MET Project (2013) identifies nine principles that school leaders could use to measure effective teaching. This framework outlines methods that

will enhance the evaluation process and promote teacher effectiveness in the classroom (see Figure 7).

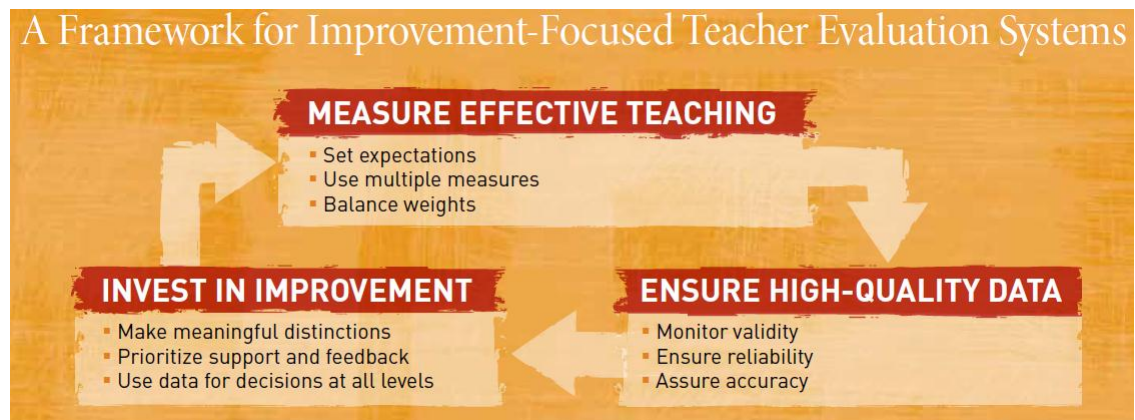


Figure 7. Framework for Teacher Evaluation (MET Project, 2013).

“Leaders do not merely impose goals on followers, but work with others to create a shared sense of purpose and direction” (Leithwood & Riehl, 2003, p. 4). In a study conducted in 2010, Day et al. reported that successful school leaders define their values and visions to raise expectations, set direction, and build trust. School leaders enhanced the quality of teaching and learning by building collaboration and strong relationships with teachers (Day et al., 2010). School leaders were encouraged to provide a safe environment to try new models and alternative approaches that might be more effective. When provided with this type of environment, teachers saw themselves as professionals and improved their sense of self-efficacy. This improved sense of self-efficacy, in turn, had a positive impact on the way they interacted with students and other teachers (Day et al., 2010).

The survey data indicated a statistically significant relationship for Survey Questions 6 and 7 (effort and administrator). This relationship supported the need for school leaders to increase the level of confidence teachers feel about their ability to

recognize and reward teacher effort. School leaders may not be able to directly impact teacher effort, but increasing the instrumentality component of the Expectancy Theory may increase the teachers' motivation. Increasing the instrumentality component happens by creating a clear vision for the school and cultivating a culture of collaboration and academic performance.

The last concern indicated by the study was the level of likelihood that teachers would change their effort level for social recognition or compensation. Of the 118 teachers who responded to Survey Question 8 regarding social recognition, 93 teachers (78.8%) stated they were Not Likely or Somewhat Likely to change their effort for this reward. Of the 119 teachers who responded to Survey Question 9, 62 teachers (52.1%) indicated that they were Not Likely or Somewhat Likely to change their effort for this reward. The valence component of the Expectancy Theory suggested that the rewards must be significant enough to be perceived as valuable to the employee.

Although this study did not specifically address the amount of compensation awarded for increased effort, compensation, as well as recognition data, indicated respondents less likely to change the level of effort for compensation and social recognition. Additional research in this area might provide school leaders with a more specific indicator of value when rewarding teachers.

While researchers have found that improvements in teacher recruitment and retention are correlated to financial factors, teacher retention is influenced by professional development opportunities, work conditions, and building-leader support (Jensen et al., 2010). School leaders are encouraged to work with staff to design programs that

recognize and support teachers, as well as to award additional compensation when possible.

Recommendations for Further Study

This study was limited to three school buildings within the Fargo Public School District. Additional research studies that include other districts throughout the state would enhance the generalizations made regarding teacher perceptions about motivation and compensation. In particular, additional research including demographic information regarding school-district size and the number of building administrators would enhance the suggested outcomes of the study.

Further research regarding teacher motivation, both intrinsic and extrinsic, would assist building administrators in designing the most effective strategies to recruit and retain highly-qualified teacher for their buildings. Determining the importance of these factors was limited due to the research questions' focus.

Further research regarding overall satisfaction with teacher pay would be important in determining the positive or negative response for performance-based pay within school districts. Merit-pay plans rose quickly in the 1980s and faded just as rapidly. The failings of these past merit plans were well documented (Murnane & Cohen, 1986; Odden & Kelley, 2002; Podgursky & Springer, 2007). Merit-pay plans were often based on the principal's evaluations of teacher performance. This subjective form of evaluation encouraged competition among teachers. This discourse among teachers led to the failure of many plans because teachers and teacher unions were not supportive (Ryan, 2008). School districts continued to attempt alternative compensation programs

with varying results. Additional research study about alternative compensation plans and teacher-evaluation models may provide insight regarding the failure of these plans.

This study focused on compensation as a factor to increase motivation using the Expectancy Theory as the model. Job satisfaction and compensation research might provide additional information for school administrators prior to changing the current compensation practices.

APPENDICES

Appendix A

Fargo Public Schools Research Study Request

AF 4300

RESEARCH STUDY REQUEST

I hereby request permission to conduct a research study in the Fargo Public School District during the period from May 15, 2013 to August 1, 2013.

TOPIC: Expectancy Theory: Educators' Perspectives of Motivation and Compensation

If this request is granted, I agree to abide by ADMINISTRATIVE POLICY 4800:
(refer to the FPS web site at www.fargo.k12.nd.us)

Signature of Researcher Jennifer Fremstad

Institution of Higher Education University of North Dakota, Grand Forks

Signature of Graduate Advisor Brenda Kallis

Date May 16, 2013

In addition to completing the Research Study Request Form, a copy of the following items are attached for review:

- 1. Abstract of the project
- 2. Questionnaire(s) to be used
- 3. Consent letter to be sent to parents

Endorsement: This request is approved disapproved

Administrator: [Signature]

Date 5/16/13

A copy of this approval form must be presented to the school building principal before conducting any survey. The principal has the final approval to conduct a survey in a school building.

Please print your name and the mailing address where you want this form returned:

Name: Jennifer Soupir-Fremstad

Street Address: 2904 Eagle Drive

City, State & Zip: Moorhead, MN 56560

Appendix B

Expectancy Theory: Teacher's Perspective of Motivation and Compensation

This survey was developed to gain teachers' perspectives of motivation and compensation. Your participation in this survey is voluntary. Your responses do not identify personal information or current place of employment. Please respond to the following questions.

If you agree to complete this survey please, check yes. If you wish to leave the survey, please check no.

YES NO

1. What is your gender?
 - a. Male
 - b. Female

2. Total number of years you have been employed as a professional educator?
 - a. Fewer than 3 years
 - b. 3 to 10 years
 - c. 11 to 20 years
 - d. 21 or more years

3. Level of educational attainment?
 - a. Baccalaureate
 - b. Master's
 - c. Specialist
 - d. Doctorate

4. Current school assignment?
 - a. Elementary School
 - b. Middle School
 - c. High School

5. How confident are you that if **you work hard**, your students will perform well?

Not Confident Somewhat Confident Confident Very Confident

6. How confident are you that **your building administrator will reward you** for your hard work?

Not Confident Somewhat Confident Confident Very Confident

7. Your school has just announced a performance-based pay plan. As part of this plan, a recognition ceremony will be conducted for qualifying teachers. How likely would you be to increase your effort next year for this social recognition?

Not Likely Somewhat Likely Likely Very Likely

8. Your school has just announced a performance-based pay plan. As part of this plan, additional compensation will be awarded to qualifying teachers. How likely would you be to increase your effort next year for this additional compensation?

Not Likely Somewhat Likely Likely Very Likely

Appendix C

IRB Project Approval

REPORT OF ACTION: EXEMPT/EXPEDITED REVIEW University of North Dakota Institutional Review Board

Date: 5/20/2013 Project Number: IRB-201305-357

Principal Investigator: Soupir-Fremstad, Jennifer

Department: Educational Leadership

Project Title: Expectancy Theory: Educators' Perspectives of Motivation and Compensation

The above referenced project was reviewed by a designated member for the University's Institutional Review Board on 5/21/2013 and the following action was taken:

Project approved. **Expedited Review** Category No. _____
Next scheduled review must be before: _____

Copies of the attached consent form with the IRB approval stamp dated _____ must be used in obtaining consent for this study.

Project approved. **Exempt Review** Category No. 2
 This approval is valid until AUG 1 2013 as long as approved procedures are followed. No periodic review scheduled unless so stated in the Remarks Section.

Copies of the attached consent form with the IRB approval stamp dated N/A must be used in obtaining consent for this study.

Minor modifications required. The required corrections/additions must be submitted to RDC for review and approval. **This study may NOT be started UNTIL final IRB approval has been received.**

Project approval **deferred**. **This study may not be started until final IRB approval has been received.** (See Remarks Section for further information.)

Disapproved claim of exemption. This project requires Expedited or Full Board review. The Human Subjects Review Form must be filled out and submitted to the IRB for review.

Proposed project is not human subjects research as defined under Federal regulations 45 CFR 46 or 21 CFR 50 and does not require IRB review.

Not Research Not Human Subject

PLEASE NOTE: Requested revisions for student proposals MUST include adviser's signature. All revisions MUST be highlighted and submitted to the IRB within 90 days of the above review date.

Education Requirements Completed. (Project cannot be started until IRB education requirements are met.)

cc: Dr. Brenda Kallio

Michelle K. Bender 5/21/2013
Signature of Designated IRB Member Date
UND's Institutional Review Board

If the proposed project (clinical medical) is to be part of a research activity funded by a Federal Agency, a special assurance statement or a completed 310 Form may be required. Contact RDC to obtain the required documents.

(Revised 10/2006)

Appendix D

Email to Participants

University of North Dakota
College of Education and Human Development
Department of Educational Leadership
Phone: 701.777.4255
Education Building, Room 374, 231 Centennial Drive Stop 7189, Grand Forks, ND
58202-7189

Title of Research Study: Equity and Expectancy: Teachers' Perceptions of Alternative Compensation Plans.

Dear Teachers:

My name is Jennifer Soupir-Fremstad. I am a graduate student in the Educational Leadership program at the University of North Dakota and I am conducting research to determine teachers' perceptions of alternative compensation plans.

I am inviting you to take part in this study. Your participation is voluntary and you will not be required to identify yourself or the school in which you are employed. You can choose to withdraw your participation at any time during the survey. By taking part in the study, you will provide information that will be beneficial when discussing teacher compensation in the state of North Dakota.

The survey will take approximately 5-10 minutes to complete. Your responses will remain confidential. At the end of the survey, you will have the opportunity to write additional comments regarding alternative compensation; I ask that you provide as much information as possible in those comments.

Please click this link to begin the survey:

https://und.qualtrics.com/SE/?SID=SV_9LVfbrigJeaCbwV

If you have any questions about this research project, you may contact me by email at jfremstad33@gmail.com or by calling 701.730.8265. You may contact my advisor, Dr. Brenda Kallio at 701.777.4255 or by email at brenda.kallio@email.und.edu.

Thank you for taking the time to participate in this research. If you wish to receive a copy of the results, please contact me. Your help is appreciated.

Sincerely,

A handwritten signature in cursive script that reads "Jennifer Fremstad". The signature is written in black ink and is positioned below the word "Sincerely,".

Appendix E

Follow-up Email to Participants

I would like to thank those who have taken the time to complete the short survey “Expectancy Theory: Teachers’ Perspectives of Motivation and Compensation”.

There is still time to participate in this study. The survey will remain active until Thursday, May 30th. If you have not completed the survey, please consider doing so. The average time to complete the survey is under 5 minutes.

Click on the following link to complete the survey: https://und.qualtrics.com/SE/?SID=SV_9LVfbrigJeaCbwV

Thank you again for your time and assistance.

A handwritten signature in black ink, reading "Jennifer Fremstad". The signature is written in a cursive style with a large, looping initial "J".

Jennifer Fremstad

REFERENCES

- Adkins, G. K. (2004). *Teacher performance pay: The perceptions of certified school-based personnel* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3163586)
- Agadoni, L. (2013, March 25). *Expectancy Theory in business organizations*. Retrieved from Small Business Chronicles: www.smallbusiness.chron.com/expectancy-theory-business-organizations-18670.html
- Ali, R., & Ahmed, M. S. (2009). The impact of reward and recognition programs on employee's motivation and satisfaction: An empirical study. *International Review of Business Research Papers*, 5(4) 270-279.
- Anthony, P. (1988). Teachers in the economic system. In K. Alexander & D. H. Monk, *Attracting and compensating America's teachers* (pp. 1-20). Cambridge, MA: Ballinger Publishing Company.
- Bazinet, K. R. (2009, March 11). President Obama's education plan calls for performance-based pay, firing poorly performing teachers. *New York Daily News*. Retrieved from http://www.nydailynews.com/news/politics/2009/03/10/2009-03-10_president_obama_education_plan_calls_for-1.html
- Berry, B., & Eckert, J. (2012). *Creating teacher incentives for school excellence and equity*. Boulder, CO: National Education Policy Center. Retrieved from <http://necp.colorado.edu/publication/creating-teacher-incentives>

- Blinder, A. S. (1990). *Paying for productivity: A look at the evidence*. Washington, DC: Brookings Institution.
- Brodsky, A., DeCesare, D., & Kramer-Wine, J. (2010). Design and implementation considerations for alternative teacher compensation programs. *Theory into Practice, 49*(3), 213-222. doi:10.1080/00405841.2010.487757
- Carroll, T. G. (2012). *The high cost of teacher turnover*. A working paper for the National Commission on Teaching and America's Future, Washington, DC. Retrieved from <http://nctaf.org/wp-content/uploads/2012/01/NCTAF-Cost-of-Teacher-Turnover-2007-policy-brief.pdf>
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson Merrill.
- Day, C., Sammons, P., Hopkins, D., Harris, A., Leithwood, K., Gu, Q., & Brown, E. (2010). 10 strong claims about successful school leadership. Nottingham, England: National College for School Leadership. Retrieved from <http://www.almaharris.co.uk/files/10strongclaims.pdf>
- Eckert, J. (2010). Performance-based compensation: Design and implementation at six Teacher Incentive Fund sites. Seattle, WA: Bill and Melinda Gates Foundation. Retrieved from http://www.tapsystem.org/publications/eck_tif.pdf
- Effort. (2013, March 23). In *Merriam-Webster's online dictionary*. Retrieved from www.merriam-webster.com/dictionary/effort
- Equity Theory. (2013, March 23). In *BusinessDictionary.com*. Retrieved from www.businessdictionary.com/definition/equity-theory.html#ixzz2JDg3bP00

- Expectancy Theory. (2013, March 23). In *BusinessDictionary.com*. Retrieved from www.businessdictionary.com/definition/expectancy-theory.html#ixzz2JDeJcp5X
- Goldhaber, D. (2008, February 28). *The politics of teacher pay reforms*. A working paper prepared for Performance Incentives: Their Growing Impact on American K-12 Education, Nashville, TN. Retrieved from https://my.vanderbilt.edu/performanceincentives/files/2012/10/200801_Goldhaber_TeacherPayReform1.pdf
- Goldhaber, D. (2009). *Teacher pay reforms: The political implications of recent research*. Washington, DC: Center for American Progress. Retrieved from http://www.americanprogress.org/issues/2006/12/pdf/teacher_pay_report.pdf
- Goldhaber, D., Dearmond, M., & Deburgomaster, S. (2011). Teacher attitudes about compensation reform: Implications for reform implementation. *Industrial and Labor Relations Review*, 64(3), 441-463. Retrieved from <http://digitalcommons.ilr.cornell.edu/ilrreview/vol64/iss3/2>
- Gonring, P., Teske, P., & Jupp, B. (2007). *Pay-for-performance teacher compensation: An inside view of Denver's ProComp Plan*. Cambridge, MA: Harvard Education Press.
- Gratz, D. B. (2009). *The peril and promise of performance pay*. Lanham, MD: Rowman & Littlefield Education.
- Griffith, M. (2010). Teacher merit pay: What do we know? *The Progress of Education Reform*, 11(3), 1-4. Retrieved from www.ecs.org/per
- Guthrie, J. E., Springer, M. G., Rolle, R. A., & Houck, E. A. (2007). *Modern education finance and policy*. Englewood Cliffs, NJ: Allyn & Bacon.

- Hanover Research. (2012, February). *Pay-for-performance models for teachers and administrators*. Washington, DC: Author. Retrieved from www.hanoverresearch.com
- Hanushek, E. A., & Rivkin, S. G. (2007). Pay, working conditions, and teacher quality. *The Future of Children*, 17(1), 69-86. Retrieved from [http://hanushek.stanford.edu/sites/default/files/publications/Hanushek%2BRivkin%202007%20Future%20of%20Children%2017\(1\).pdf](http://hanushek.stanford.edu/sites/default/files/publications/Hanushek%2BRivkin%202007%20Future%20of%20Children%2017(1).pdf)
- Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality and student achievement. *Journal of Public Economics*, 95, 798-812. Retrieved from http://ac.els-cdn.com.ezproxy.library.und.edu/S0047272710001696/1-s2.0-S0047272710001696-main.pdf?_tid=bde39cfa-d297-11e2-bb6c-00000aacb35d&acdnat=1370956174_ad5ddf09b62f2fdd7c700cc171b93ef4
- Heneman III, H. G., Milanowski, A., & Kimball, S. (2007, February). Teacher performance pay: Synthesis of plans, research, and the guidelines for practice. *Consortium for Policy Research in Education: Policy Briefs*, 46, 1-15. Retrieved from http://www.cpre.org/images/stories/cpre_pdfs/RB46.pdf
- Hess, F. M. (2004). Teacher quality, teacher pay. *Policy Review*, 124, 15-28.
- Hiebert, J., & Morris, A. K. (2012). Teaching, rather than teachers, as a path toward improving classroom instruction. *Journal of Teacher Education*, 63(2), 92-102.
- Hord, S. (2004). *Learning together/leading together: Changing schools through professional communities*. New York, NY: National Staff Development Council & Teachers College Press.

- Huth, E. E. (2008). *Teacher attitudes toward alternative forms of compensation beyond the traditional single salary schedule* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3320201)
- Instrumentality. (2013, June 21). In *BusinessDictionary.com*. Retrieved from <http://www.businessdictionary.com/definition/instrumentality.html>
- Jacob, B., & Springer, M. G. (2008, February 28). *Teacher attitudes toward pay for performance: Evidence from Hillsborough County, Florida*. A working paper prepared for Performance Incentives: Their Growing Impact on American K-12 Education, Nashville, TN. Retrieved from https://my.vanderbilt.edu/performanceincentives/files/2012/10/200808_JacobSpringer_AttitudePayPerf.pdf
- Jensen, U., Yamashiro, G., & Tibbetts, K. (2010). *What do we know about teacher pay-for-performance?* Honolulu, HI: Kamehameha Schools. Retrieved from <http://www.ksbe.edu/spi/pdfs/performancepay.pdf>
- Jerald, C. (2009). *Aligned by design: How teacher compensation reform can support and reinforce other educational reforms*. Washington, DC: Center for American Progress. Retrieved from <http://cell.uindy.edu/docs/TAP/AlignedByDesign.pdf>
- Johnson, B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches*. Thousand Oaks, CA: Sage Publications, Inc.
- Kelley, C., Odden, A., Milanowski, A., & Henneman III, H. (2000, February). The motivational effects of school-based performance awards. *Consortium for Policy Research in Education Policy Briefs*. Retrieved from http://www.cpre.org/sites/default/files/policybrief/870_rb29.pdf

- Kerchner, C. T., Koppich, J., & Weeres, J. G. (1997). *United Mine Workers: Unions and teaching in the knowledge society*. San Francisco, CA: Jossey-Bass.
- Koppich, J. (2008, February). *National Center of Performance Incentives*. Retrieved from
Toward a More Comprehensive Model of Teacher Pay:
https://my.vanderbilt.edu/performanceincentives/files/2012/10/200806_Koppich_CompModelTeacherPay.pdf
- Lawler, E. E. (1990). *Strategic pay: Aligning organizational strategies and pay systems*. San Francisco, CA: Jossey-Bass.
- Lawler III, E. E., & Suttle, J. L. (1973, June). Expectancy Theory and job behavior. *Organizational Behavior and Human Performance*, 9(3), 482-503.
- Leithwood, K. A., & Riehl, C. (2003). *What we know about successful school leadership*. Working paper prepared for National College for School Leadership. Retrieved from <http://dcbsimpson.com/randd-leithwood-successful-leadership.pdf>
- Lewis, C. C., Perry, R. R., Friedkin, S., & Roth, J. R. (2012). Improving teaching does improve teachers: Evidence from lesson study. *Journal of Teacher Education*, 63(5), 368-375.
- Lunenburg, F. C. (2011). Expectancy Theory of motivation: Motivating by altering expectations. *International Journal of Management, Business, and Administration*, 15(1), 1-6. Retrieved from
<http://www.nationalforum.com/Electronic%20Journal%20Volumes/Lunenburg,%20Fred%20C%20Expectancy%20Theory%20%20Altering%20Expectations%20IJMBA%20V15%20N1%202011.pdf>

- Management Studyguide. (2012, March 21). *What is motivation?* Retrieved from Management Studyguide:
http://www.managementstudyguide.com/what_is_motivation
- Manzoor, Q.A. (2012, August 22). *Impact of employee's motivation on organizational effectiveness.* Retrieved from Macrothink Institute Business Management and Strategy: <http://www.macrothink.org/bms>
- Margolis, J. (2008). What will keep today's teachers teaching? Looking for a hook as a new career cycle emerges. *Teachers College Record*, 110(1), 160-194. Retrieved from <http://www.tcrecord.org/Home.asp>, ID Number 14567.
- Markos, S., & Sridevi, M. S. (2010). Employee engagement: The key to improving performance. *International Journal of Business and Management*, 5(12), 89-96. Retrieved from
<http://www.ccsenet.org/journal/index.php/ijbm/article/download/6745/6332>
- Marks Jarvis, G. (2012, October 5). *Ichy workers looking to land a better job.* Retrieved from Chicago Tribune: http://articles.chicagotribune.com/2012-10-05/business/sc-conn-1004-marksjarvis-20121005_1_job-satisfaction-job-security-job-market
- MET Project. (2013). *Feedback for better teaching: Nine principles for using measures of effective teaching.* Seattle, WA: Bill and Melinda Gates Foundation. Retrieved from
http://www.metproject.org/downloads/MET_Feedback%20for%20Better%20Teaching_Principles%20Paper.pdf
- Miner, J. B. (2007). *Organizational behavior 4: From theory to practice.* Armonk, NY: M. E. Sharpe.

- Moore Johnson, S., & Papay, J. P. (2009). *Redesigning teacher pay: A system for the next generation of educators*. Washington, DC: Economic Policy Institute.
- Motivation. (2012, March 23). In *Merriam-Webster's online dictionary*. Retrieved from <http://www.merriam-webster.com/dictionary/motivation>
- Murnane, R., & Cohen, D. (1986, April). Merit pay and the evaluation problem: Why most merit pay plans fail and a few survive. *Harvard Educational Review*, 56(1), 1-18. Retrieved from <http://ejournals.ebsco.com.ezproxy.library.und.edu/direct.asp?ArticleID=47E8955A400044B9B53C>
- National Commission on Excellence in Education. (1983). *A Nation at Risk: The imperative for educational reform*. Washington, DC: U.S. Department of Education. Retrieved from http://datacenter.spps.org/uploads/sotw_a_nation_at_risk_1983.pdf
- North Dakota Legislative Council. (2001, August). *Teacher compensation package-background memorandum*. Retrieved from <http://www.legis.nd.gov/assembly/57-2001/docs/pdf/39018.pdf>
- Odden, A., & Kelley, C. (2002). *Paying teachers for what they know and do: New and smarter compensation strategies to improve schools*. Thousand Oaks, CA: Corwin Press, Inc.
- Ornstein, A., Levine, D., & Gutek, G. (2011). *Foundations of education* (11th ed.). Boston, MA: Houghton, Mifflin Company.

- Podgursky, M. J. (2008, February 28). *Market-based pay reforms for public school teachers*. Working paper prepared for Performance Incentives: Their Growing Impact on American K-12 Education, Nashville, TN. Retrieved from https://my.vanderbilt.edu/performanceincentives/files/2012/10/200807_Podgursky_MarketBasedPay1.pdf
- Podgursky, M. J., & Springer, M. G. (2007). Teacher performance pay: A review. *Journal of Policy Analysis and Management*, 26(4), 909-949.
doi:10.1002/pam.20292
- Podgursky, M. J., & Springer, M. G. (2010). Market- and performance-based reforms of teacher compensation: A review of recent practices, policies, and research. A working paper prepared for The Program on Education Policy and Governance, Harvard Kennedy School, Cambridge, MA. Retrieved from http://www.hks.harvard.edu/pepg/MeritPayPapers/Podgursky_Springer_10-09.pdf
- Podgursky, M. J., & Springer, M. G. (2011). Teacher compensation systems in the United States K-12 public school system. *National Tax Journal*, 64(1), 165-193.
Retrieved from <http://bi.galegroup.com.ezproxy.library.und.edu/global/article/GALE%7CA251191939/6f2ace9566af551ea8b8660847d539cc?u=gran63131>
- Preis, S. (2010). *Teacher effectiveness and teacher compensation*. Prepared for The Joint Committee on Education, St. Louis, MO. Retrieved from <http://www.senate.mo.gov/jced/Teacher%20Effectiveness%20and%20Teacher%20Compensation%20Report%209.14.10.pdf>

- Redmond, B. F., & Hite, Z. A. (2013, February 4). *Expectancy Theory*. Retrieved from Penn State Wikispaces:
<https://wikispaces.psu.edu/display/PSYCH484/4.+Expectancy+Theory>
- Resmotivs, J. (2013, February 21). Teacher survey shows record low job satisfaction in 2012. *Huff Post Politics*. Retrieved from
http://www.huffingtonpost.com/2013/02/21/teacher-survey-job-satisfaction-2012_n_2729062.html
- Richwine, J. (2012, April 23). *Backgrounder*. Retrieved from The Heritage Foundation Leadership for America: <http://report.heritage.org/bg2681>
- Ritter, G. W., & Jensen, N. C. (2010). The delicate task of developing an attractive merit pay plan for teachers. *Phi Delta Kappan*, 91(8), 32-37.
- Rothstein, R. (2008, February 28). *Holding accountability to account: How scholarship and experience in other fields inform exploration of performance incentives in education*. A working paper prepared for Performance Incentives: Their Growing Impact on American K-12 Education, Nashville, TN. Retrieved from
https://my.vanderbilt.edu/performanceincentives/files/2012/10/200804_Rothstein_HoldingAccount.pdf
- Rowland, C., & Potemski, A. (2009, October). *Alternative compensation terminology: Considerations for education stakeholders, policymakers, and the media*. Retrieved from Center for Educator Compensation Reform:
<http://www.cecr.ed.gov>

- Ryan, J. E. (2008, February 28). *A legal perspective on performance-based pay for teachers*. A working paper prepared for Performance Incentives: Their Growing Impact on American K-12 Education, Nashville, TN. Retrieved from <http://www.my.vanderbilt.edu/performanceincentives/ncpi-publications/incentive-pay-landscape-and-politics/a-legal-perspective-on-performance-based-pay-for-teachers>
- Rynes, S. L., Gerhart, B., & Minette, K. (2004, Winter). The importance of pay in employee motivation: Discrepancies between what people say and what they do. *Human Resource Management, 43*(4), 381-394.
- Samuels, C. A. (2011). Test-tampering found rampant in Atlanta system [Cover story]. *Education Week, 30*(36), 1-22. Retrieved from <http://web.ebscohost.com.ezproxy.library.und.edu/ehost/detail?sid=cff8e088-b129-4d6a-be78-0210cbc39cb2%40sessionmgr112&vid=6&bk=1&hid=126&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#db=aph&AN=63698170>
- Sanders, W. L., Wright, P., & Langevin, W. E. (2008, February 28). *Do teacher effect estimates persist when teachers move to schools with different socioeconomic environments?* A working paper prepared for Performance Incentives: Their Growing Impact on American K-12 Education, Nashville, TN. Retrieved from https://my.vanderbilt.edu/performanceincentives/files/2012/10/200820_Sanders_TeacherEffectEstimates1.pdf
- Seyfarth, J. T. (2005). *Human resources management for effective schools*. Boston, MA: Pearson.

- Shah, M. J., Ur-Rehman, M., Akhtar, G., Zafar, H., & Riaz, A. (2012). Job satisfaction and motivation of teachers of public educational institutions. *International Journal of Business and Social Science*, 3(8), 217-289. Retrieved from http://www.ijbssnet.com/journals/Vol_3_No_8_Special_Issue_April_2012/31.pdf
- Slotnik, W. J. (2009). Get performance pay right: Six cornerstones of successful compensation reform. *Education Week*, 28(36), 32-26. Retrieved from <http://web.ebscohost.com.ezproxy.library.und.edu/ehost/delivery?sid=7cd66f73-e408-48c0-a49c-fa9519d1a88b%40sessionmgr111&vid=6&hid=125>
- Solomon, L. C., & Podgursky, M. (2000). The pros and cons of performance-based compensation. *Milken Family Foundation*. Retrieved from http://web.missouri.edu/podgurskym/articles/files/Pros_cons.pdf
- Spencer, P. R. (1932). *A state minimum teachers' salary schedule*. New York, NY: Teachers College, Columbia University.
- Springer, M. G. (2009). *Performance incentives: Their growing impact on American K-12 education*. Washington, DC: Brookings Institution Press.
- Springer, M. G., Ballou, D., & Peng, A. (2008, February 28). *Impact of the teacher advancement program on student test gains: Findings from an independent appraisal*. A working paper prepared for Performance Incentives: Their Growing Impact on American K-12 Education, Nashville, TN. Retrieved from https://my.vanderbilt.edu/performanceincentives/files/2012/10/200819_Springer_ImpactAdvancedProg1.pdf

- Springer, M. G., & Gardner C. D. (2010). Teacher pay for performance: Context, status, and direction. *Phi Delta Kappan*, 91(8), 8-15. Retrieved from <http://projects.brevardschools.org/PAS/Shared%20Documents/Teacherpayforperformance.pdf>
- Springer, M. G., Podgursky, M., Lewis, J. L., Ehlert, M. W., Gardner, C. D., Gosh-Dastidar, B., . . . Taylor, L. L. (2007). *Governor's Educator Excellence Grant (GEEG) program: Year one evaluation report*. Austin, TX. National Center on Performance Incentives, Peabody College of Vanderbilt University. Retrieved from https://my.vanderbilt.edu/performanceincentives/files/2012/10/200708_SpringerEtAl_GEEG_Year12.pdf
- Towers Watson. (2012). *Global workforce study engagement at risk: Driving strong performance in a volatile global environment*. New York, NY: Author.
- Valence. (2013, June 21). In *BusinessDictionary.com*. Retrieved from <http://www.businessdictionary.com/definition/valence.html>
- Vigdor, J. L. (2008, February 28). *Teacher salary bonuses in North Carolina*. A working paper prepared for Performance Incentives: Their Growing Impact on American K-12 Education, Nashville, TN. Retrieved from https://my.vanderbilt.edu/performanceincentives/files/2012/10/200803_Vigdor_TeacherBonusesNC.pdf
- Vroom, V. (1964). *Work and motivation*. New York, NY: Wiley.

- Wallace Foundation. (2013, January). *The school principal as leader: Guiding schools to better teaching and learning*. Washington, DC:. Retrieved from <http://www.wallacefoundation.org/knowledge-center/school-leadership/effective-principal-leadership/Documents/The-School-Principal-as-Leader-Guiding-Schools-to-Better-Teaching-and-Learning-2nd-Ed.pdf>
- Walster, E., Walster, G. W., & Berscheid, E. (1978). *Equity: Theory and research*. Boston, MA: Allyn and Bacon, Inc.
- Webb, L. D., & Norton, M. S. (2013). *Human resources administration: Personnel issues and needs in education*. Boston, MA: Pearson.
- Webster, A. L. (2013, March 21). *The Equity Theory in the workplace*. Retrieved from eHow: http://www.ehow.com/print/info_8625598_equity-theory-workplace.html
- Weisberg, D., Sexton, S., Mulhern, J., & Keeling, D. (2009). The widget effect. *Education Digest*, 75(2), 31-35. Retrieved from <http://web.ebscohost.com.ezproxy.library.und.edu/ehost/pdfviewer/pdfviewer?vid=3&sid=e4e9d518-e2a6-425c-92b0-46ed7c95ecbb%40sessionmgr104&hid=126>
- The White House. (2009, July 24). *Remarks by the president on education*. Retrieved from http://www.whitehouse.gov/the_press_office/Remarks-by-the-president-at-the-Department-of-Education
- Wilson, T. B. (1999). *Rewards that drive high performance: Success stories from leading organizations*. New York, NY: American Management Association.
- Woessmann, L. (2010). *Cross-country evidence on teacher performance pay*. A working paper prepared for Center for Economic Studies information and forschung, Bonn, Germany. Retrieved from <http://ftp.iza.org/dp5101.pdf>

Wood Coleman, C. (2009). *Principal attitudes toward pay for performance incentives for teachers* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database. (UMI No. 3471535)