University of Nevada, Reno

The Job Satisfaction of Elementary Teachers and the Effects of Selected Professional Practices

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in Educational Leadership

by

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May 2017
THE GRADUATE SCHOOL

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The Job Satisfaction Of Elementary Teachers And The Effects Of Selected Professional Practices

be accepted in partial fulfillment of the requirements for the degree of

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ABSTRACT

Teacher job satisfaction continues to decline due to increased stress in the work place, reduced budgets, political mandates, and declining moral (Gray & Taie, 2015; Metropolitan Life Insurance Company, 2012). Every time a teacher leaves the education profession there are economic consequences because new teachers must be vetted, hired, and trained. Knowledge of job satisfaction factors helps teachers, school administrators, and school districts improve job satisfaction, retain teachers, improve student achievement, and save public education money because dedicated teachers remain in the profession.

This quantitative study examined the job satisfaction of elementary school teachers in a large public school district located in a western state employing the theoretical framework of Herzberg’s (Herzberg et al., 1959, 1997) Two-Factor Motivator-Hygiene Theory and Bandura’s (1977b) Self-Efficacy Theory. The combination was employed because people’s needs are fulfilled through a variety of facets from their world of work (Herzberg et al., 1959, 1997; Bandura, 1986).

The study used an established instrument, the Job Satisfaction Survey, in combination with a demographic and professional practices questionnaire to understand current teacher job satisfaction and to see if demographic or selected professional practices had any impact on teacher job satisfaction. The Job Satisfaction Survey consisted of nine job satisfaction sub-scales that were further divided into two dependent variables of intrinsic and extrinsic satisfiers. The eight demographic questions along with the four professional practice questions served as the independent variables. The surveys were administered through an on-line survey application.

Highlights of the results from the Job Satisfaction Survey indicated teachers were moderately satisfied with their co-workers, nature of work, and supervision and that they were
dissatisfied with their pay and operating conditions. Overall participants were slightly more satisfied than dissatisfied and teachers were also more satisfied with their intrinsic job satisfaction than their extrinsic job satisfaction factors.

MANOVA calculations determined significant differences existed intrinsically and extrinsically for salary, total years of teaching experience, level of belief in professional development, feelings of classroom autonomy, and the level of belief in one’s ability to improve the achievement of students. It was interesting to note that the professional practice of mentoring did not play a significant role in the job satisfaction of teachers.

The professional practices of professional development, autonomy, and the belief in the ability to improve student achievement play an important role in teacher job satisfaction.
ACKNOWLEDGEMENTS

I dedicate this work to my fellow education professionals. I truly believe that teachers are the heart of a community and are facilitators to the growth and guidance of the mind, both young and old. Teachers teach because they love to foster learning. Therefore, their job satisfaction is paramount. If my research can help in improving job satisfaction, my time has been well spent.

Foremost, I would like to thank Dr. Kenneth Coll, Dean of the College of Education and my Committee Chairman. I thank him for his time, advice, and patience, but mostly for his inspiration and confidence in my research. To Dr. Jafeth Sanchez, wise beyond her years, I thank her for her insightful editing. To Dr. Cleborne Maddux for helping conquer to new avenues when it came to analyzing the data. To Dr. Perry who took the time to meet me, understand my study, and provide thoughtful suggestions. And my sincerest appreciation to Dr. Maragakis who, despite having a very full schedule as the Dean of the College of Engineering, afforded me his precious time to serve on my committee and provide input from a broader educational perspective. Thank you all, I have been very blessed to work with you.

I also want to thank my husband, an amazing engineer and closet statistician, who loved peering over my shoulder and providing guidance when needed; I thank you Ray for your patience and hours of discussion on my research. To my daughter, Elaina for her relentless encouragement whenever I got tired or dispirited; her continued support is appreciated more than she will ever know. To my dear friend Dr. Jimi Francis, who always provided calm reassurance and insight to this long process, her advice was always present. And to all my dear family, friends, and co-workers who were encouraging and always there to lend a hand when I was overwhelmed. You all are amazing and I will never forget your dedication, inspiration, and support.
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CHAPTER I

Introduction

Teachers are a valuable human resource in every society, some even refer to it as a noble profession (Chamundeswari, 2013); yet, high attrition rates and retention issues plague the profession. The field of education is facing challenges like never before with high-stakes testing, reduced funding, and additional regulations (Reeves, 2004; Walker, 2014; Westervelt, 2015). Thus, administrators and educators alike are concerned about the increased external demands placed on them with little support; moreover, politicians and the media incriminate teachers for education troubles, and when praise or a compliment is given, it is usually in the form of criticism (Cockburn & Haydn, 2004; Comber & Nixon, 2009; Reeves, 2004; Westervelt, 2015). These factors have contributed to alarming numbers of teachers leaving the profession of education; teacher attrition (Dupriez, Delvaux, & Lothaire, 2016; Lindqvist, Nordänger, & Carlsson, 2014). However, concurrently, there are also teachers so committed to education, that they have stayed teaching despite the obstacles and difficulties; teacher retention (Darling-Hammond, 2003; Marinell, & Johnson, 2014; Nieto, 2003). Employee turnover is inevitable, but mitigating the reasons employees leave is prudent (Aydogdu & Asikgil, 2011; Borysenko, 2015). Research demonstrates time and again that employee turnover costs money and affects a company’s product/outcome; in the field of education employee turnover costs tax-payer money and impacts student achievement (Borysenko, 2015; Dube, Freeman, & Reich, 2010; Ronfeldt, Loeb, & Wyckoff, 2013). When employees are satisfied with their job, they are more committed to it than those who are not; therefore, it stands to reason that keeping teachers who are satisfied with their job benefits everyone (Aydogdu & Asikgil, 2011; Cockburn & Haydn, 2004; Robinson, Garton, Vaughn, 2007). Educators, school administrators, parents, and policy makers
need to better understand the facets impacting the job satisfaction of teachers in order to
effectively address and reduce teacher attrition and improve teacher retention. If not, there will
be “serious financial, structural and educational consequences for America’s educational system”
(Ingersoll, Morrill, & Stuckey, p. 27, 2014).

Job satisfaction is a multi-faceted and ever-changing issue, as is the field of education. Components such as attrition, burnout, and stress often have a negative effect on job satisfaction, but factors such as contingent rewards, shared leadership, and self-efficacy have a positive influence and aids in employee retention (Aydogdu & Asikgil, 2011; Kitchel et al., 2012; Somech & Drach-Zahavy, 2000). It is particularly important to better understand the factors that contribute to job satisfaction because job satisfaction interfaces with the operation and success of organizations (Aydogdu & Asikgil, 2011; Chamundeswari, 2013; Ingersoll, 2002). Teachers interface with children, children are the future of societies, so it behooves policy holders, school administration, and society to understand what enhances job satisfaction for teachers while simultaneously enhancing teacher performance (Chamundeswari, 2013).

Attrition can present itself in several ways. Teacher shortages range the gamut from new teachers departing the profession early, to retirements, to a severe drop in enrollment in teacher training programs (Gray & Taie, 2015; Ingersoll, 2002; U.S. Department of Education Office of Post Secondary Education, 2015). Several states are heeding the warning signs of their endangered teacher ranks and are endeavoring to develop a variety of retention programs and incentives to address teacher attrition, but it is not one solution fits all, every community, district, and state has different needs (Barshay, 2016; Boyd et al., 2009).

Nevertheless, in spite of a long list of negative aspects (low pay, difficult working conditions, long hours, etc.), there are some people who still decide to go into teaching and many
who stay in the field of education their entire career because they find job satisfaction in education (Beaudoin & Taylor, 2004). To pin an exact definition on job satisfaction can be elusive and it can have a variety of factors that contribute to achieving contentment. It depends on the profession and each individual, but there are some items educators have cited as influential in achieving or contributing to their satisfaction (Beaudoin & Taylor, 2004; Blau, 1999). Student success, collegiality, on-going professional development, opportunities for advancement, shared leadership, autonomy, and self-efficacy are some factors that provide job satisfaction and unreservedly keep teachers in education (Bandura, 1977a, 1995; Beaudoin & Taylor, 2004; Boyd et al., 2009; Pedota, 2015; Reilly, Dhingra, & Boduszek, 2014).

Understanding job satisfaction of teachers is far reaching as it can also effect “career longevity and tenure” (Kitchel et al., p. 32, 2012). Researchers such as Darling-Hammond (2000), Ingersoll (2001, 2002), Ingersoll and Smith (2003), and Dupriez et al. (2015) show that if we can identify the elements that are essential to the job satisfaction of teachers, we stand to gain a great deal while reducing losses. If teacher attrition can be reduced, budgeted allotments for new staffing and training decrease, drop-out rates decline with enthusiastic and devoted teachers, and eventually incarceration rates wane (because kids stay in school) (Blomberg, Bales, Mann, Piquero, & Berk, 2011; Lochner & Moretti, 2003). These losses can be valuable gains if we learn what it takes to keep satisfied and dedicated teachers. Retention brings a stronger, more dedicated work force with knowledgeable educators, thus these teachers raise student achievement, and build a stronger more educated community. (Kitchel et al., 2012; Robinson et al., 2007).
Statement of the Problem

At the core of improving our communities and our nation, is the charge of public school teachers. Regrettably, the United States continues to struggle with a significant teacher shortage, not to mention the shortage of highly qualified teachers (Gray & Taie, 2015; Ingersoll, 2002). The addition of high attrition rates to the current teacher shortage generates grave cause for unease (Heineke, Mazza, & Tichnor-Wagner, 2014; Metropolitan Life Insurance Company, 2012). Of chief concern is that teacher job satisfaction is at its lowest rate since 1986 and continues to decline due to increased stress in the work place, reduced budgets, and declining moral (Gray & Taie, 2015; Metropolitan Life Insurance Company, 2012). Teacher shortages also elude to the topic of recruitment; however, recruitment is not the subject matter of this study.

Like other occupations, decreased job satisfaction in education has been linked to attrition (Anhorn, 2008; Arnett & Polkinghorne, 2010; Pearson & Moomaw, 2005), and teacher attrition directly affects the academic achievement of students because the new replacement teachers lack continuity, knowledge, and experience (Billingsley, 2004; Flynt & Morton, 2009; Gray & Taie, 2015; Johnson, 2010). Even when the pools of highly qualified teachers are given the same diversity of students, other factors can influence job satisfaction. For example, state or district policies, school site administration, pay or the lack of funds and resources may lead to a lack of job satisfaction (Darling-Hammond, 2003). With so many challenges teachers are frustrated and teacher attrition rates are soaring (Ingersoll & Smith, 2003; Darling-Hammond, 2003; Haynes, Maddock, & Goldrick, 2014).

Job satisfaction is particularly important within the elementary school level as it provides children their initial educational experience during their formative years (Caprara, Barbaranelli, Steca, Malone, 2006; Karabiyik & Korumaz, 2014; Schiller, L. & Hinton, 2015). Strong teacher
relationships from effective teachers establish life-long positive learning traits (Birch & Ladd, 1996). These factors make it imperative to identify the factors among elementary teachers that relate to their job satisfaction, and ultimately, a force of effective teachers. Researching the job satisfaction of elementary teachers is especially important because this particular group of teachers is at the forefront of the education of America’s children.

The problem or gap in knowledge is that teachers are leaving the field of education for a multiplicity of reasons creating a need for further research. While there has been a multitude of teacher job satisfaction studies across the nation, very limited data exists for the state under consideration of study. In conducting this research, insight may be gained into the factors that influence the job satisfaction of elementary school teachers and contribute to the literature in seeking solutions to teacher retention and reduction in attrition. This comprehension will not only help teachers, school administrators, and school districts retain teachers, ultimately it could help to improve the lives and education of children.

**Purpose of the Study**

The purpose of this quantitative study is to examine the job satisfaction of elementary school teachers in a large public school district located in a western state. Concurrently, it will seek to identify specific aspects that may contribute to job satisfaction in the field of education. The urban school district where the study took place serves to educate approximately 63,000 students K-12 in roughly 100 schools. There are 64 elementary schools in the district employing approximately 1,300 elementary school teachers. The survey was administered to ten of the elementary schools composed of low, medium and high (or affluent) social economic status.

There are many job satisfaction survey instruments, but to achieve a better understanding of teacher job satisfaction, the use of a survey instrument written particularly for employees in
the human services field (i.e., teachers) is significant. Human services employees are a diverse set, but they all serve to help people within a community to solve problems and improve the quality of life. Teachers, as human service employees, work in a very different environment than many other professionals. Teachers specifically interface with learners, from children and adults, thus an instrument geared toward their type of work is vital. The best instrument to collect data for this study currently is the Job Satisfaction Survey (JSS) developed by Spector in 1985. Since its inception, Spector has continued to update the survey.

The JSS is divided into nine subscales of pay, promotion, supervision, nature of work, operating conditions, co-workers, communications, fringe benefits, and contingent rewards. Of these nine factors, they are further divided and classified for the study’s analysis into two dependent variables of intrinsic satisfiers and extrinsic dissatisfiers.

The independent variables are composed from a short 12 question demographic and professional practices survey which gathered participant data on: age, ethnicity, marital status, level of educational attainment, licensure level, number of schools taught at, salary, years of teaching experience, opinion of professional development, classroom autonomy, belief of personal impact on student achievement, and mentoring participation.

**Primary Research Questions**

Conducting further research on teacher job satisfaction will help construct a more comprehensive recognition of the elements vital to job satisfaction in education. Two particular questions arise when considering such research: (1) What is the current level of job satisfaction of school teachers, and (2) What professional practices influence teacher job satisfaction? The results of these two questions will add to the body of knowledge in the job satisfaction of teachers.
Assumptions

Assumptions of the study:

1. The Job Satisfaction Survey is reliable and valid.

2. The participants of the study are a realistic representation of the elementary school teachers in the district under study.

3. The participants in the study understand the survey directions and questions.

4. The participants in the study understand their survey answers are anonymous.

5. The survey reflects participants’ perceptions, which represent their reality.

Limitations

Limitations anticipated with the study:

1. The study is limited by the honesty of the participants and perceptions can be different than what a participant reports.

2. The perspective, experience, and knowledge of the researcher is also a limitation because it may affect how the data will be gathered, interpreted and presented.

3. The elementary school level does not have enough male teacher participants to be statistically viable in the gender category, therefore gender is not included as a demographic question. This is based on another recent elementary survey in the same district, but of a completely different topic area, wherein there was not enough male participants (Parks, 2014).

4. The time of the year may affect teachers’ opinions about their job satisfaction.

5. The district under study changed their superintendent during the fall of 2014 under volatile circumstances.
Delimitations

This study will be delimited to the elementary schools within a western state of the United States participating in the study. The data from this survey was gathered using the Job Satisfaction Survey by Spector (1985) and a demographic and professional practices questionnaire. Finally, the scope of this study is quantitative and is limited only to these specific participants.

Definition of Terms

The following words are defined for clarity and standardization. Additionally, words or phrases may have multiple meanings; therefore, for the clarity of the reader and for the purpose of this study they are defined herein.

*Attitude* – A person’s fairly stable mindset/tendency to respond consistently on how they feel and think about an issue, person, object, etc. and is reflected in their behavior (Johns & Saks, 2008).

*Attitudinal Measures* – A popular form of quantitative data for surveys used to measure attitudes of individuals’ feelings toward educational topics (Creswell, 2015).

*Attrition* – The unpredictable and uncontrollable, but normal, reduction of work force due to resignations, retirement, sickness, or death (BusinessDictionary.com - Online Business Dictionary, n.d.).

*Autonomy* – The extent to which an employee is able to decide how to do his or her job. (Spector, 2011).

*Basic Needs* – Maslow identified five basic needs to motivation based in order of prepotency: physiological, safety, love, esteem, and self-actualization (Maslow, 1943, 2012).
*Burnout* – A specific form of job strain often seen in professionals who work closely with clients (i.e., students). Burnout has three dimensions: 1) emotional exhaustion, 2) depersonalization, and 3) a feeling of reduced personal accomplishment (Maslach & Jackson, 1984).

*Compensation* - in addition to pay, it can contain a broad spectrum of things like fringe benefits, contingent rewards, and the prospect of promotion (Tremblay, Vandenberghe, & Doucet, 2013).

*Contingent Rewards* – A reward to support and reinforce desirable behavior such as productivity (BusinessDictionary.com - Online Business Dictionary, n.d.).

*Control Variable* – A form of an independent variable that researchers measure to eliminate it as an influencing factor. It is controlled through statistical design and is often used in demographics (Creswell, 2015).

*Dependent Variable* – An attribute or characteristic that is dependent upon or influenced by an independent variable. Most studies have more than one dependent variable in it (Creswell, 2015).

*Elementary School* – Primary schooling focused on the education of children typically serving students from kindergarten up to the sixth grade (Collins & O'Brien, 2003).

*Facet Satisfaction* – Specific satisfaction dimensions of a job such as pay, supervision, co-workers, nature of the work, etc. (Warr, 2002).

*Frequency Distributions* – A method for illustrating the distribution of scores within a range of numbers or class intervals (Salkind, 2011).


*Homoscedasticity* – having data values that are distributed, or spread out, to about the same degree. (Mertler & Vannata, 2005)
Hygiene Factors - In two-factor theory, the job factors that fall outside the nature of the work itself, such as pay and other rewards (Herzberg et al., 1959, 1997).

Independent Variable – Researchers study independent variables to see what effect or influence they have on an outcome (Creswell, 2015).

Interval Variables - variables for which their central characteristic is that they can be measured along a continuum and they have a numerical value (Dillman, Smyth, & Christian, 2009).

Intrinsic Factors – Internal desires or motivations to perform a certain task (Herzberg et al., 1959, 1997).

Job Dissatisfaction – Aspects of the job that makes an employee unhappy or disenfranchised from their work due to one or more factors (BusinessDictionary.com - Online Business Dictionary, n.d.).

Job Satisfaction – An employee’s attitude and feelings about his/her job and aspects or features of the job (Spector, 2011).

Likert Scale – A rating scale with theoretically equal intervals among responses (Creswell, 2015).

Linearity – presupposes a straight line relationship between two variables (Mertler & Vannata, 2005).

MANOVA – Multiple Analysis of Variance allows for analyzing the dependent variables of the job satisfaction survey against the independent/control variables (Spector, 2011).

Nature of Work – An integral component to the job that occurs naturally (i.e., teachers work in a school) (Spector, 2011).

Normality - A data set is normally distributed when the data itself follows a uni-modal bell-shaped curve that is symmetric about its mean (Cheshire, 2011).
Nominal Variable – Used when a variable has two or more categories, but in no particular order. For example, select the subject you teach: math, English, science, music or indicate your gender: male, female (Dillman et al., 2009).

Ordinal Variable – An ordered set of answers for variables that have two or more choices in a ranked order. For example, indicate your highest level of education: high school, some college, graduate school. But no value is placed on the order, one choice is not better than the other (Dillman et al., 2009).

Overall Satisfaction - Considers the whole of the experience and its general satisfaction (Warr, 2002).

Perception – A way of regarding, understanding, or interpreting something; a mental impression (Johns & Saks, 2008).

Psychometrics – The branch of survey research that enables you to determine how good the survey is and provides a way to quantify the precision of measurement of qualitative concepts, such as satisfaction (Litwin, 1995).


Self-Efficacy – An individual’s perception of his/her likelihood of succeeding at a task or achieving an outcome based upon personal effort (Bandura, 1986).

Teacher Autonomy – the ability to make a professional informed decision about the best instructional strategies for students (Teacher Autonomy, 2014).

Test-Retest Reliability – A survey is stable if the correlation between scores from one time to another is high, this is an index of a survey’s stability (Fink, 2003).
Well-Being – in the workplace typically refers to both mental and physical feelings of health and usually spoken of in positive terms (Cartwright & Cooper, 2009).

Working Conditions - The conditions in which an employee works, including but not limited to such things as amenities, physical environment, stress and noise levels, degree of safety or danger, etc. (BusinessDictionary.com - Online Business Dictionary, n.d.).

Summary

This quantitative study is presented in five chapters, followed by references and appendices. The first chapter provided the introduction of the study, the statement of the problem, purpose of the study, limitations, delimitations, the definition of terms, and the overall organization of the study. The second chapter will present a review of the literature, with the following subject matter in detail: importance of the study, theoretical framework, job satisfaction definitions and studies, teachers’ role in human services, survey instruments for job satisfaction, job satisfaction theorists, elementary schools defined, teacher shortages and attrition, teacher retention, and the nine sub-scales to job satisfaction.

Chapter III details the methodology that was used in the study. This includes the statement of the problem, research design, participants, instrumentation, dependent and independent variables, instrument scoring, instrument consistency and reliability, validity, data collection, and the data analysis. The fourth chapter presents an analysis of the data with the fifth chapter focusing on a discussion of the findings, their implications and recommendations for further study.
CHAPTER II

Literature Review

Introduction

Today, more than ever before, the world of work has aggressive competition wherein employees are key to organizational success and a major component to that success is the happiness or satisfaction of employees (Saari & Judge, 2004). The satisfaction of one’s job is directly linked to employee well-being, a complex human emotion of job attitude (Warr, 2002). The study of job attitude or as it is more commonly recognized, job satisfaction, is multi-faceted and the study of “the cause of anything so complex as a human emotion is likely to be discovered only after prolonged and intricate investigation” (Hoppock, 1935, p. 25).

Many things contribute to employee job satisfaction, but there are a few points that stand out: opportunities to use one’s skills and abilities, job security, salary, the goal to see one’s organizations succeed, communication, and relationships at work (Society for Human Resource Management, 2012a). Research studies on job satisfaction help leaders, managers, and administrators make crucial personnel policy and strategic decisions for their organizations (Society for Human Resource Management, 2012a). While school districts can be viewed as just another employer, the human resources of educational organizations may be considered at the soul of every community.

Only in the last one hundred years have researchers begun to study and comprehend the nature of the employee. Since the inception of the concept of industrial/organizational psychology in the early 1900’s, the study of job satisfaction has continued to be a topic of demand and exploration. Moreover, it is expected that over 10,000 studies in job satisfaction will have been conducted by 2015 (Spector, 2012; Wright, 2006). It is only in the later part of the
1900’s that researchers started looking at job satisfaction within education; also, a survey instrument more suited to the human services employee, such as the public school teacher, was not formulated until 1985 (Spector, 1985, 1997).

Research about job satisfaction within education tends to cluster findings into a broad group, but this can negate the particular identities and nuances of each sub group within education such as elementary, middle, and high school (Bray & Thomas, 1995). For example, kindergarten teachers do not have the same working environment as the middle school teacher, high school teacher, or college professor. Educators understand that in a successful classroom there are a number of learning and teaching styles, and both vary by the age of the learner; slowly the general public and legislators are becoming more aware of this (Egan, 1997). McCabe and Altamura (2011) solidified this further in pointing out that a youngster’s social, psychological, and academic development through play is a vital component to establishing a foundation for personal interactions and academic success later on. The adolescent who has gained these aforementioned skills can mature these behaviors in the learning environment and thus participate in classroom lessons involving the social competencies of regulating emotions, sharing, and gaining perspectives from another’s point of view (Holopainen, Lappalainen, Junttila, & Savolainen, 2012).

There are also some commonalities among teachers of all student levels, from kindergarten through higher education. Educators benefit and receive pleasure from a supportive school environment where students and teachers have sufficient resources, a collaborative culture, proper time allotments, and supportive leadership; all combined they contribute to improved student learning and teaching techniques (Haynes et al., 2014). In turn these factors pave the path to supportive teaching and learning environments with greater student achievement
and higher teacher retention (Haynes et al., 2014). Quality teachers foster engaged learners, and engaged learners lead to successful students prepared to enter the workforce (Haynes et al., 2014). Teachers who work in collegial climates and have many of the aforementioned components described above experience a summative feeling of job satisfaction (Aydogdu & Asikgil, 2011).

Job satisfaction can be explored in several ways but herein two particular concepts will be discussed: (a) overall satisfaction and (b) facet satisfaction. The study of overall satisfaction considers the whole of the experience and its general satisfaction, while facet satisfactions are more specific and are concerned with the many facets of the job, like pay, supervision, co-workers, nature of the work, etc. (Warr, 2002). This study will examine a number of the facet satisfactions that impact elementary school teachers. Job aspects like the elementary school environment, earnings, fringe benefits, contingent rewards, promotional opportunities, supervision, operating conditions, retention and attrition, co-workers and school climate, and the nature of work. In addition, this study will examine if age, ethnicity, marital status, level of educational attainment, level of credential, number of schools taught at, salary, years of teaching experience, belief in professional development, classroom autonomy, belief in improving student achievement, and having a mentor teacher have any impact or implications into teacher job satisfaction. Beyond the enhancement of individual lives, job satisfaction research also has implications to improving the effectiveness of organizations (Judge & Klinger, 2008). This becomes particularly important in the realm of education because education intimately interacts with everyone’s lives.
Importance of the Study

The profession of teaching faces many challenges in retaining our Nation’s educators; therefore, job satisfaction of teachers needs to be better understood before a remedy can be sought. Especially a remedy mandated by a legislative or school board pundit; Berry, Darling-Hammond, Hirsch, Robinson, and Wise (2006) related it to providing medical treatment without a diagnosis, thereby yielding malpractice. The importance of this study is to help fill the gap and add to the body of knowledge of the critical aspects that influence job satisfaction of urban elementary school teachers. Only a limited number of studies exist on the job satisfaction of teachers and even fewer exist on the satisfaction of elementary school teachers. For studies that have been explored, Zhang (2006) reported that researchers have not been successful in providing informed literature on teacher satisfaction, thus more research is still needed. To date this will be the first job satisfaction survey of elementary school teachers within this particular district. The benefit to such research is that it may help in the retention of elementary school teachers, and ultimately this knowledge will serve to provide a better education to our nation’s youth.

Theoretical Framework

Many scholars have defined the concept of the theoretical framework, but Creswell (2015) stated it simplistically as, “theories are no more than broad explanations for what we would expect to find when we relate variables… think about a theory as a bridge that connects the independent and dependent variables” (p. 120). The framework for this study will be guided by two theoretical foundations. The first is Herzberg’s (Herzberg et al., 1959, 1997) Two-Factor Motivator-Hygiene Theory and the second is Bandura’s (1977b) Self-Efficacy Theory.
Herzberg’s (Herzberg et al., 1959, 1997) two-factor theory, indicated that a variety of facets fulfill people’s needs through their world of work. One factor is determined from the job or work itself, while the second comes from motivational rewards, like pay (Spector, 2011). The two-factor theory consists of physiological needs; the hygiene factor, and psychological growth; the motivational factor (Herzberg et al., 1959, 1997).

Hygiene factors consist of the physiological needs like pay, supervision, work conditions, interpersonal communications with co-workers, subordinates, and supervisors, and organizational policies; these factors have also been referred to as animal factors (Herzberg et al., 1959, 1997). When present, hygiene factors have a neutral effect on job satisfaction, but when absent, they have a negative consequence; a lack thereof can lead to job dissatisfaction (Herzberg et al., 1959, 1997). Hygiene factors have also been referred to as the maintenance factors and are comprised of the psychological, safety and love needs from Maslow’s hierarchy of needs (Herzberg et al., 1959, 1997).

Maslow’s hierarchy of needs seeded the foundation to Herzberg et al.’s (1959, 1997) hygiene factors. Maslow recognized that humans seek equilibrium, a survival concept wherein the human body strives to maintain a balanced chemical equilibrium (Cannon, 1939). Maslow noted that humans are always seeking to maintain a natural balance or homeostasis in their external world. In achieving and maintaining homeostasis, he identified humans as having five basic needs: “psychological, safety, love, esteem, and self-actualization,” these have often been referred to as Maslow’s Hierarchy of Needs (Maslow, 1943, 2012, p. 39).

Maslow (1943, 2012) identified the five components in an order of importance, or root survival, and described the five basic needs as being “organized into a hierarchy of relative prepotency” (p.12). For example, if the physiological needs of an individual are not being met
that particular need will dominate one’s consciousness in order to be fulfilled, and when fulfilled, the next greater need will take precedence (Maslow, 1943, 2012). The most important needs must be met first and foremost, until then; the conscience will ignore the others (Maslow, 1943, 2012).

The needs of humans change with time wherein, part of the time their needs are being met and part of the time they are in want of meeting those needs (Maslow, 1943, 2012). Every life is different and every person reacts differently to every situation. No two people will react the same way to a given situation, nor will they react to the same situation the same way at a different juncture (Maslow, 1943, 2012). Therefore, an individual who has experienced deprivation will behave differently than an individual who has not experienced it (Maslow, 1943, 2012). Maslow (1943, 2012) also indicated that, depending on what needs are currently being met in an individual, even the need of gratification can become as important as deprivation in certain circumstances. No matter the need, psychological, safety, love, esteem, or self-actualization, whatever the dominating goal is, it is a strong determinant to the way one looks at the world and the philosophy s/he has towards the future (Maslow, 1943, 2012). Maslow’s Hierarchy of Needs are not necessarily connected directly to the job itself, rather the circumstances that encompass carrying out the line of work (Dartey-Baah & Amoako, 2011).

Herzberg’s Hygiene factors composed from Maslow’s Hierarchy of Needs are important, but they are not motivational aides. Herzberg et al. (1959, 1997) purported that no matter how favorable the hygiene factors are they are never truly motivating. Dartey-Baah and Amoako (2011) further concluded that while appropriate hygiene factors can provide an opening juncture for motivating people, they also concurred that hygiene factors are not motivators.
The second half of Herzberg’s et al. (1959, 1997) two-factor theory is psychological growth or motivational factors. Motivational factors (a uniquely human characteristic) consists of psychological growth: achievement, recognition, and responsibility (Herzberg et al., 1959, 1997). Herzberg et al. (1959, 1997) asserted that motivational factors are inherent to the job and do not come from rewards or benefits, such as pay. When factors that contribute to psychological growth are present, motivation is high and contributes to high performance standards (Herzberg et al., 1959, 1997). Herzberg et al. (1959, 1997) believed, “It would be foolhardy on our part to present a detailed recipe, on the basis of our study, for the cure of all the world’s ills” (p. 131). However, the authors held steadfast that combining the hygiene and motivation factors could provide a more productive employee and a more satisfying job environment (Herzberg et al., 1959, 1997).

Albert Bandura (1977a, 1986), a leading cognitive psychologist of the later twentieth century, was the principal originator of the psychological construct, social cognitive theory and within it the human agency of self-efficacy. He understood that the task of learning would be almost insurmountable if humans had to rely strictly on their own actions and the crucial point to social cognitive theory proffered that knowledge is gained in social settings largely through observation (Bandura, 1977a, 1986). This was a significant development in the study of human behavior because prior to this time many theories were rooted on the basis of one’s environment; social cognitive theory recognized people had the ability to change their behavior and alter life’s future outcomes (Pajares, 2002). The pragmatic components of social cognitive theory have been used in the study of psychology in a variety of areas such as the classroom setting, vocational decision-making, organizational behavior, sports, and various other areas of emotional and physical health (Denler, Wolters, & Benzon, 2014).
Humans, born with virtually a blank slate of knowledge, have a unique ability to learn vicariously through their surroundings and alter the course of events in their life based upon their knowledge, behavior, and environment (Bandura, 1986; Pajares, 2002). Individuals are intimately involved in their development and Bandura (1986, 1997) pointed out that the acquisition of language, life skills, and even cultural behaviors are complex and cannot be fully grasped without the aid of observation, imitation, and modeling. Overall, most people learn from observation and modeling because the two offer humans an opportunity to collect knowledge and provide an awareness of how to perform new tasks or behaviors in the future thus leading to opportunities for imitation (Bandura, 1977a). It is the sum of these three components that provide a road map for being able to act on forthcoming challenges one encounters throughout life (Bandura, 1977a).

The development of a human’s functioning is influenced from three key components: personality traits/cognitive factors, social interaction/behaviors, and one’s environment; collectively they compose Bandura’s (1986) social cognitive theory. Together the components have triadic reciprocality because they operate together and interact upon each other (Bandura, 1986). Humans being capable of complex thought processes are not just reactive to a situation, they have the ability to generate, create, and be proactive (Bandura, 1997). Bandura’s (1986) triadic reciprocity, not necessarily weighted in an equal fashion, explains that the three components work together allowing humans to examine their past behavior and the resulting outcome on their environment/life, this thought process can subsequently influence future behavior. The resulting decision Bandura (1977b) termed reciprocal determinism. And, wherein no two individuals are alike, each individual’s situation will result in a different outcome (Bandura, 1997).
The ability for humans to be actively involved in their personal development and comprehend that their actions can affect outcomes is the basis of social cognitive theory (Pajares, 2002). A key component to this ability is each individual’s capacity to develop and hold their own self-beliefs which in turn allow each person to hold a degree of control over their opinions, beliefs, emotions, and behaviors (Bandura, 1997; Pajares, 2002). It is within self-belief that the theory of self-efficacy rests and embraces a significant position inside social cognitive theory (Bandura, 1997; Pajares, 2002). Self-efficacy is rooted in the foundation of social cognitive theory.

Self-efficacy is a person’s opinion and beliefs about one’s potential to achieve or accomplish a task (Bandura, 1977a). Bandura (1997) exhibited the strength of self-efficacy when he stated, “People’s level of motivation, affective states, and actions are based more on what they believe than on what is objectively true” (p. 2). Further, it is not about the skills one actually possesses, rather their decision-making ability of what can be achieved with the skills one has (Bandura, 1986). Self-efficacy is not attained through constant successful acts of achievement; self-efficacy develops through an individual’s persistence in attempting to seek solutions. It is through the process of trial and error, instituting a variety of behaviors and methods, that one finds success (Bandura, 1986). Being unsuccessful at times is part of the learning process and adds to the development of one’s self-beliefs (Pajares, 2002). Bandura found “people need firm confidence in their efficacy to mount and sustain the effort required to succeed (1997, p. 11).

Efficacy serves innumerable purposes throughout life (Bandura, 1986). In the positive reflection, self-efficacy can be a constructive, optimistic, and a strengthening factor in one’s belief in the ability to achieve, but it can also take on a negative and debilitating connotation when mishaps lead to self-doubt and coping inefficiency (Bandura, 1986; Pajares, 2002). Pajares (2002)
summed up self-efficacy in noting that one’s thought processes: productive, destructive, optimistic, or pessimistic, will ultimately help regulate and determine one’s ability to persevere in the face of adversity and manage the choices one has to make in life.

As one might imagine, self-efficacy also plays a critical role in occupational development and one’s skills can either hamper or promote one’s career (Bandura, 1997). Hackett, Betz, and Doty (1985) identified a list of self-efficacy skills that mark successful traits in the work world. Their list included the ability to communicate and relate well with co-workers, organize and manage job demands, exhibit leadership qualities, and be able to manage job stress (Hackett et al., 1985)

D.E. Super (1963) expressed the concept of self-efficacy and its influence in the selection of a profession as a reflection of self-actualization. He felt that in choosing an occupation an individual has to reflect upon the type of person he/she is and how the person sees himself in that occupation; the achievement of self-actualization culminates once the individual is working within their profession (Super, 1951/1988). “The point is that an individual’s self-concept is his concept of himself, not the inferences…made by others” (Super, p. 5, 1963).

When Bandura (1986) applied the theory of self-efficacy to the classroom setting he hypothesized that it was a prodigious determinant to a student’s persistence as well as the amount of effort and activity of choice. Since that time, studies of self-efficacy and academic achievement have borne out evidence that the two are positively related (Denissen, Zarrett, & Eccles, 2007; Zimmerman, Banudra, & Martinez-Pons, 1992; Mojavezia & Tamiz, 2012). Bandura (1997) felt that the educational setting was a reflection of the broader society and therefore an appropriate environment in which to address the enhancement and development of self-efficacy. The adversative realities of a society “affect student educability and (can) impair
the school environment” (Bandura, p. 243, 1997). Schools that recognize the importance of efficacy strive to develop it and structure its lessons and learning activities in a manner that helps build a sense of individual proficiency and academic achievement for all students (Bandura, 1997; Pedota, 2015).

Bandura (1995) accentuated the connection of student achievement to teacher job satisfaction when he emphasized that “the task of creating environments conducive to learning rests heavily on the talents and self-efficacy of teachers” (p. 19). The strength and conviction of a teacher’s self-efficacy is manifested in the atmosphere of every classroom and generates educational settings wherein students have stronger academic achievements (Bandura, 1995; Gibson & Dembo, 1984, Pedota, 2015). Teachers with a high degree of efficacy towards education teach with the belief that all students can find success despite oppressive or difficult settings and understand the necessity of additional effort on their part to help students achieve (Bandura, 1997). Contrastingly, teachers with low efficacy believe they have little influence on their students learning and achievement, criticize low achievers, and spend less time on instruction (Bandura, 1997; Gibson & Dembo, 1984). General teacher efficacy is evident not only in the educational process, but it also affects an educator’s outlook towards implementing new methods and technologies in their classroom; this receptive attitude further contributes towards student achievement and the teacher’s efficacy (Bandura, 1997). Teachers with strong efficacy also believe they can overcome negative societal influences on their students through sound teaching techniques, supportive administration, and an outlook of resolving problems (Bandura, 1997; Pajares, 1996). Research has shown that teachers with high efficacy exhibit high job satisfaction (Karabiyik & Korumaz, 2014).
Together, Herzberg et al. (1959, 1997) Two-Factor Motivator-Hygiene Theory and Bandura’s (1977b) Self-Efficacy Theory compose the foundation to this study. The two foundations in combination are important because Herzberg et al. (1959, 1997) brings forth the two crucial values of recognizing the importance of employees’ psychological needs (hygiene factors) and their psychological growth (motivation) in the work place while Bandura (1997) underscored the importance of human potential based on the belief in one’s self to confront, plan, and address the challenges one faces, not only on the job, but also in life. A great deal of the work of these theorists has continued to be used in job satisfaction research.

**Job Satisfaction**

The issue of job attitude/job satisfaction is likely the most researched topic in the science of industrial/organizational psychology (Judge & Church, 2000). Moreover, the main theme in job satisfaction are the philosophies and concepts of workplace attitudes (Judge & Klinger, 2008). Over half of the adult population spends a majority of their time at work so what people do for a living is central to their identity (Judge & Klinger, 2008). Centuries ago, the link between job and identity led to an individual’s acquired surname or last name; for example, surnames like baker, cooper, sawyer, turner, wright, all originated as a descriptive link to an individual’s livelihood (Judge & Klinger, 2008). However, in addition to the central tenet of jobs/professions in relation to the importance of who one associates with being today, there are several reasons to study job attitudes (Judge and Klinger, 2008). The study of job satisfaction can enhance the lives of individuals while concurrently enhancing an organization’s effectiveness (Judge & Klinger, 2008).

The topic of job satisfaction falls under the study of industrial/organizational psychology and developed in the late 1800’s (Spector, 2011). Industrial/organizational psychology, or I/O, is
a rapidly expanding sub-field of psychology focused on the growth, advancement, and use of scientific tenets in the work environment (Spector, 2011). Spector (2011) related that while the two divisions are focused on different end points, it is virtually impossible to divide the two. The original area of study, the industrial branch focused on the management of personnel while the organizational branch sought to understand employee behavior and the improvement of workplace well-being (Spector, 2011; Warr, 2002).

During the early years of I/O, the United States psychologists mainly focused on job performance and organizational efficiency while the United Kingdom psychologists focused on employee health and fatigue (Kreis, 1995). Many early studies between the late 1800’s and the early 1900’s, laid the preliminary groundwork for later work on job satisfaction (Wright, 2006). Throughout this time, a major contributor to the I/O foundation was Frederick Winslow Taylor who studied employee productivity and advocated that employees should be trained to perform their job to the best of their abilities and be rewarded for such performance (Spector, 2011; Wright, 2006). The advent of World War I brought new challenges to I/O because war brought new personnel demands to productivity, and thus the field of I/O psychology was sought out for advice on matters of employee selection, training, health, safety, and efficiency (Kreis, 1995; Spector, 2011). By the 1920’s the field of I/O psychology was fairly well-established and respected in both the United States and abroad (Spector, 2011). Through the years, the field of I/O has continued to expand and develop many sub-categories, all focused in some fashion on the employee and productivity (Spector, 2011).

While headway had been made during the early twentieth century regarding employee well-being and productivity, researchers were still not focusing on the topic of job satisfaction (Wright, 2006). Wright (2006) pointed out that the term, *job satisfaction*, was only mentioned
twice in the Journal of Psychology between 1919 and 1946. Between the 1930’s to the 1940’s researchers studied topics, such as employee attitudes, boredom, and general satisfaction (Wright, 2006). Arthur W. Kornhauser’s pioneering work of 1933 foreshadowed the importance of job satisfaction and the role it would play in predicting the effectiveness and achievement potential of employees (Wright, 2006). The first, widely recognized articles were from 1937 on Robert Hoppock’s work and 1939 on D.E. Super’s work and were published in the Journal of Psychology (Wright, 2006). It was almost 10 years after that before another published article on job satisfaction was written. Since then, however, a plethora of research and writings on job satisfaction have been produced, totaling over 10,000 (Spector, 1997). Despite a slow start, one of today’s most widely studied I/O sub-categories is job satisfaction (Wright, 2006; Judge & Klinger, 2008).

Research has shown that job satisfaction is inseparably correlated to one’s personal welfare and as most of the adult population across the world spends a majority of their waking hours at work it should be of little wonder that one’s subjective well-being is tied to their job satisfaction (Judge & Klinger, 2008). Well-being encompasses both mental and physical health. Saari & Judge (2004) noted the following:

> When we think we have feelings about what we think. Conversely, when we have feelings, we think about what we feel. Cognition and affect are thus inextricably linked, in our psychology and even in our biology. Thus, when evaluating our jobs as when we assess most anything important to us, both thinking and feeling are involved. (p. 396)

Organizations can do a great deal to improve employee well-being and the meaning of work (Cartwright & Cooper, 2009). While the field of psychology has been an area of study for centuries, its sub-topic of job satisfaction is relatively new and yet it affects most of the adult
population, research has shown it bears serious consideration as a component to any healthy organization.

**Definitions of Job Satisfaction**

Researchers (Spector, 2011; Weiss & Cropanzano, 1996) have identified job satisfaction as an attitudinal component. Employees have attitudes or feelings about their job yet the most notable in the topic is job satisfaction (Saari & Judge, 2004). Weiss and Cropanzano (1996) stated that “satisfaction is an evaluative judgment about one’s job that partly, but not entirely, results from emotional experiences at work” (p. 2). Hence, job satisfaction can be defined as an employee attitude (Saari & Judge, 2004). Hoppock (1935) defined job satisfaction in greater depth as “any combination of psychological, physiological, environmental circumstances that causes a person truthfully to say, ‘I am satisfied with my job’” (p. 47). His definitive points demonstrated the multi-facets involved in the topic.

Weiss and Cropanzano (1996) concurred that job satisfaction is composed from people’s emotional experiences and their cognitive content or beliefs. Along the same line of thought, Arthur Brief (1998) described job satisfaction as “an internal state that is expressed by affectively or cognitively evaluating an experienced job with some degree of favor or disfavor” (p. 86). In 1969, Edwin Locke defined job satisfaction as a “… pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating the achievement of one’s job values” (p. 316). By 1976, Locke simplified the definition a bit by stating, “a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1300). Therefore, it could be said that job satisfaction is composed of one’s attitude and their beliefs; together, the two, form work-based outcomes of worker happiness (Wright & Cropanzano, 2000).
Characteristics of Job Dissatisfaction

Job dissatisfaction is a psychological state and may produce reactions that are detrimental to the organization and the individual (Henne & Locke, 1985). Locke (1976) defined job satisfaction as a pleasurable emotional state from one’s job experience, job dissatisfaction on the other hand, would be an emotional state that is often brought on by incontrollable job stress (Glicken & Robinson, 2013). The state of job dissatisfaction can be exhibited in many ways from tardiness, to absenteeism (physical withdrawal), high attrition, to low moral (Henne & Locke, 1985; Harrison, Newman, & Roth, 2006), and the unhappiness of these employees may pervade into other employees, and undermining the job satisfaction and productivity of others (Organ, 1988).

Sadly, job dissatisfaction does not necessarily stop at the end of the work day. Dissatisfaction can affect one’s overall life satisfaction (Henne & Locke, 1985). Judge and Watanabe (1994) noted that some people’s job dissatisfaction invades their personal life through drug and alcohol abuse, depression, illnesses, and troubled relationships to name a few. Sometimes these workplace stressors end in workplace violence (Glicken & Robinson, 2013).

The managing and professional supervisors who are cognizant of their environment and employees are the best for initially recognizing job dissatisfaction before something like attrition or a workplace tragedy occurs (Glicken & Robinson, 2013). Recognition is the first step, addressing and solving job dissatisfaction issues, from individual employee to an organization-wide issue, can be a difficult journey that may require professional intervention (Glicken & Robinson, 2013). Ultimately, the course of action an individual employee takes to address dissatisfaction will depend on the cognitive abilities and nature of the individual (Henne &
Locke, 1985); but, having an authentic understanding of employee attitudes is one of the most important things an organization could know about their employees (Harrison et al., 2006).

**Teachers’ Role in Human Services**

Human Service employees fill a great arena of positions that support communities and thus there are many diverse types of careers in the industry (HumanServicesEdu.org, 2015). Depending on who one consults, the role of the human services employee can fill a narrow gap of working in residential group homes and institutional settings (National Organization for Human Services, n.d.), to providing intervention to people in times of personal calamity or chronic problems (HumanServicesEdu.org, 2015), to a more encompassing range of fields that support and help humans with the challenges of life. Richard and Emener (2009) recognize the later and site that human services professionals are found working in “behavior and mental health, human resources, education, police and public safety, and leisure and recreation” (p. 240).

In some fashion, all human services definitions have in common the goal of helping people reach their maximum potential (HumanServicesEdu.org, 2015). Common traits of people who work in human services like to help people, understand the basic traits of healthy human functioning, and know how to intercede where required with appropriate interventions (Richard & Emener, 2009). Defining the human services professional is not a simplistic definition, the field like the employee, is multi-faceted.

As human services professionals, teachers have knowledge and training in the field of education which involves a combination of skills from a variety of professional backgrounds. While part of their training may be in the logistics of English, math, and science, it also has elements in psychology, sociology, anatomy and physiology (Darling-Hammond, Bransford, &
National Academy of Education, 2005). To be an educator requires one to have not only an understanding of the three R’s (reading, writing & arithmetic), but an understanding of those root elements that compose the human being’s growth, development and behavior (Darling-Hammond et al., 2005). So, while some may consider teachers to be on the fringes of human services, they play a vital role in helping people achieve their maximum potential.

**Survey Instruments for Evaluating Job Satisfaction**

While the concept of job satisfaction has been researched at great lengths for nearly a hundred years, and numerous surveys have been developed and administered, van Saane, Sluiter, Veerbeek, and Fringes-Dresen (2003) reported, “no recent overview of job satisfaction instruments and their quality is available” (p. 191). It was then, researchers van Saane et al. (2003) commenced a study to evaluate the psychometric qualities of job satisfaction survey instruments. The studies selected for this inquiry had investigated “the responsiveness of job satisfaction instruments” (p. 192, van Saane et al., 2003). Tersely, these survey instruments were evaluated on their qualities of reliability and validity.

The literature review of van Saane et al. (2003) examined the concept of job satisfaction and found it could be interpreted differently depending on the work environment. Because a job satisfaction standard has not been established, the researchers commenced by identifying and establishing 11 essential work factors most likely inherent in job satisfaction (van Saane et al., 2003). These 11 standard factors were then used as the basis of their study’s content validity (van Saane et al., 2003). The 11 factors van Saane et al., (2003) identified were autonomy, work content, communication, financial rewards, growth/development, promotion, co-workers, meaningfulness, supervision/feedback/recognition, workload, and work demands.
To be considered for inclusion in the study, the researchers determined that the job satisfaction survey instruments had to have a minimum of nine out of the 11 essential work factors, had been peer reviewed, and were available for use between 1988 and 2001 so as to focus on instruments written and used in the current-day work world (van Saane et al., 2003).

The van Saane et al. (2003) literature review initially identified twenty-nine job satisfaction survey instruments. The team further delineated that at minimum, an acceptable survey tool had to meet the benchmarks for internal consistency (Cronbach’s alpha), had test-retest co-efficient (Pearson’s correlation), and had convergent validity (van Saane et al., 2003). In the end, only seven of the initial twenty-nine instruments met this criteria (van Saane et al., 2003). Of the seven qualifying job survey instruments, two were for general or global personnel, four were written for medical staff, and one for human services personnel (van Saane et al., 2003). None were specifically written for educators.

Of these instruments, the Job Satisfaction Survey written by P. Spector (1985), was in its origination, specifically developed for human services personnel and incorporated nine of the 11 sub-scales of the standard work factors: pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, co-workers, nature of work, and communication. The two not included were autonomy and growth/development. Table 1 lists the 11 standard work factors as compared to the work factors found in the Job Satisfaction Survey.
Table 1:
11 Standard Work Factors vs the Job Satisfaction Survey Work Factors

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<tr>
<th>11 Standard Work Factors</th>
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<td>Autonomy</td>
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<td>Work Content</td>
<td>Nature of Work</td>
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<td>Communication</td>
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<td>Financial Rewards</td>
<td>Salary</td>
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<td>Growth/Development</td>
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<td>Promotion</td>
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<td>Co-workers</td>
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<td>Meaningfulness</td>
<td>Nature of work</td>
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<td>Supervision/Feedback/Recognition</td>
<td>Supervision &amp; Contingent Rewards</td>
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<td>Workload</td>
<td>Operational Procedures</td>
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<td>Work Demands</td>
<td>Operational Procedures</td>
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Since the van Saane et al. study in 2003, there has not been any further comparative evaluations of job satisfaction instruments. Spector’s Job Satisfaction Survey has been selected as the instrument to be used in this study because of its focus on the human services employee, its reliability, and its validity.

Job Satisfaction Theorists and Their Work

Early Pioneers. As the nature of work grew more complex, so did the need to organize and regulate its processes and work related behaviors (Weber, 1968); and these concepts are at the root of the field of industrial/organizational psychology. Through the past 120 years there have been numerous theorists contributing to its foundational theories; some complement each
other while others are significantly different. For the consideration of this study a select few have been chosen to encapsulate the major contributors to the field.

As mentioned prior, the pioneering research delving into the psychology of the working world began in the late 1800’s producing the first university text on the subject by 1913 (Spector, 2011). Early researchers into organizational psychology were engineers, psychologists, and scientists such as Ludwig Lange, Charles Meyers, Hugo Munsterberg, Walter Dill Scott, Fredrick Winslow Taylor, Frank and Lillian Gilbreth, and Arthur Kornhauser, (Wright, 2006; Spector, 2011). Their research focused on job performance and workplace efficiency (Kreis, 1995; Wright, 2006). Fredrick Winslow Taylor spent his career studying the productivity of factory workers and his writings focused on hiring and managing employees, groundbreaking work that would influence work organization through World War I (Brief, 1998; Spector, 2011).

These aforementioned researchers of the early 1900’s had all observed the component of attitude in the workplace, but they never acknowledged its significance. Elton Mayo and Fritz Roethlisberger were the first to ascertain that the characteristics of employee attitude and productivity cannot be separated out from the workplace (Spector, 2011). It was through their work in the Hawthorne studies between 1924 and 1933 that brought to light the importance of employee attitudes in the workplace (Wright, 2006; Spector, 2011). The notable term coined from the Hawthorne studies, the *Hawthorne Effect*; signified that employee performance/productivity improved when employees were involved in their employer’s experiment (Kornhauser, 1933; Spector, 2011). Spector (2011) concurred that social factors have been found to be more important to employee job performance than physical factors.

**Arthur Kornhauser.** Arthur Kornhauser (1933) set down the first guidelines for doing job satisfaction interviews, but referred to it as job attitudes. He espoused the importance of
employee attitudes as they related to satisfaction or dissatisfaction and outlined five widely held techniques for carrying out such research (Kornhauser, 1933). The techniques used by prior researchers were composed of the most preferential verbal-based interview methods (Kornhauser, 1933). The first three types were a variation on a written recording of the interview: 1) the impressionistic method was based upon recording what people said and how they said it, 2) the unguided interview was an informal method recording the interviewee’s comments, and 3) the guided interview had the interviewee answer specific questions (Kornhauser, 1933). The fourth and fifth method concentrated more on a particular question and answer form with the fourth type being question blanks seeking yes/no answers (yielding simple data), and the fifth engaged scales for measuring particular attitudes (i.e.: 20 to 30 questions on job attitude) (Kornhauser, 1933). Sadly, credit for his ground-breaking work has often been overlooked (Wright, 2006).

Robert Hoppock. Robert Hoppock is acknowledged as a pioneer in the actual study of job satisfaction and developed the first job satisfaction survey. Hoppock published his book *Job Satisfaction* in 1935, and pointed out that “as an independent variable job satisfaction may not even exist…whatever satisfaction is, we seem to derive it from a variety of circumstances” (p. 47). Hoppock (1935) detailed that satisfaction could be reached on several different levels, but that complete satisfaction would be undesirable because it would mean that all enjoyment was only derived from work. He felt employees were actually seeking optimum satisfaction wherein they were relieved of frantic work tension, but still driven to work.

Hoppock (1935) detailed six components that he believed factored into the possible causes of job satisfaction. First, he saw an individual’s personal make-up and how s/he responded to unpleasant situations (favorably or unfavorably); that in itself would be tailored by
an individual’s upbringing, an extremely complex element (Hoppock, 1935). Second, one’s relationships at work and adjusting to work with different people; third, one’s status in life and where one saw themselves in the society as this factored into self-respect, thus impacting human interaction. Forth, Hoppock (1935) considered how the nature of work fit with one’s personal interests and preparation for the job; fifth, was the pursuit of security, both economic and social; and sixth, a sense of locality and selflessness to the job and others. In combination, with these aforementioned components, Hoppock (1935) believed we needed to study and understand job satisfaction because it enabled us to overcome dissatisfaction which is only detrimental to the employee and society. Throughout his career Hoppock studied the job satisfaction of numerous positions, from laborers to professionals (Hoppock, 1935; Wright, 2006).

**Abraham Maslow.** Based upon the hierarchy of needs, Maslow developed one of the most widely known needs theory of job satisfaction (Stein, 2007). Maslow theorized that people in general have needs (an internal drive) that motivates them to achieve and accomplish tasks (Stein, 2007). Maslow (1943, 2012) felt those achievements or accomplishments are exhibited through work and satisfying one’s hierarchy of needs (psychological, safety, love, esteem, and self-actualization needs). Within the needs framework many work motivators have been identified and researched such as pay, working conditions, job security, and the nature of work to name a few (Stein, 2007).

In his later research within the hierarchy of needs, Maslow studied high achieving/ self-accomplished individuals such as Thomas Jefferson, Abraham Lincoln, Eleanor Roosevelt, and other notable individuals; he found that all shared a high attainment of self-actualization (Stein, 2007). A particular characteristic of self-actualization is the way one thinks about life’s goals and while the end goal is an accomplishment, the journey is just as important, if not the most
important accomplishment along the way (Stein, 2007). This personality trait can be seen in many successful individuals. Steven Stein (2007) noted that these are the types of employees who take joy in caring for and helping others succeed in their workplace and community.

**Fredrick Herzberg.** Fredrick Herzberg, another leading researcher in the field of industrial and organizational psychology, helped the world of work realize how important meaningful work is to people (Spector, 2011). When it came to employers considering Maslow’s hierarchy of needs within the workplace, Herzberg et al., (1959, 1997) felt some may see it as a constant bargaining point that employee needs will never be met and it will be a constant battle. On the other hand, in a more positive and progressive stance, Herzberg et al., (1959, 1997) saw that through the needs hierarchy “it means that personnel programs must be geared to be sensitive to the changes that are continually taking place in the needs of the employees (p.110). Herzberg et al., (1959, 1997) found that humans tend to actualize or embody themselves in every aspect of their lives and consequently only through the endeavor and accomplishment of a job can individuals obtain the rewards that inspire one to continue to pursue ambitions and goals. In seeking to discover what made employees satisfied, Herzberg et al., (1959, 1997) further found that employees identified with specific aspects of the job, its accountability and accomplishments, but when he asked about what factors caused dissatisfaction employees identified extrinsic factors such as corporate guidelines, the work environment, and wages. Herzberg et al. (1959, 1997) would identify intrinsic factors as motivators while extrinsic items were termed hygiene factors. From this he identified the two factor theory to job satisfaction and noted the factors that often led to satisfaction were different from those factors that led to dissatisfaction (Judge & Church, 2000). It is important to note Herzberg found that just because a
dissatisfier was removed it only removed dissatisfaction, and did not induce satisfaction or motivation (Herzberg et al., 1959, 1997; Judge & Church, 2000; Spector, 2011).

In the years after Herzberg’s work, many theorists rejected the two factor theory stating there was lack of evidence and believed intrinsic as well as extrinsic factors can cause both satisfaction and dissatisfaction (Spector, 2011). Herzberg et al., (1959, 1997) rejected the pessimism he experienced around him that projected a meaningless future of work, rather he believed “that the greatest fulfillment of man is to be found in (work) activities that are meaningfully related to his own needs as well as those of society” (p. 139). Spector (2011) pointed out that regardless of the limitations found in Herzberg’s theory, his work has played a very substantial role in understanding job satisfaction, the world of work, and the importance of meaningful work in people’s lives.

**J. Stacey Adams.** J. Stacey Adams brought the concept of the equity theory to the field wherein employees seek to find an equitable balance between input and output of fellow employees and with their organization (Adams, 1963; Spector, 2011). “Outputs are the rewards… including pay, fringe benefits, good treatment, enjoyment, and status. Inputs are the contributions made by the employee to the organization (Spector, 2011, p. 204). If employees feel that there is inequity among fellow employees it induces a degree of tension therein motivating them to reduce said tension (Bartol & Durham, 2000). The key lies in that it is not actual equity, but perceived inequity that is the motivating factor (Bartol & Durham, 2000). An interesting application of the equity theory is when an employee considers another’s pay inequitably high in relation to their skill it causes lower job satisfaction, he goes on to say that other environmental factors as such can contribute to workplace happiness or unhappiness as the case maybe (Warr, 2009). Researchers Bartol and Durham (2000) found that while Adams tried
to provide potential situations with a positive outcome, typically the outcome of a perceived inequity was negative. The zenith for Adams’ equity theory was that he believed if we could develop “an understanding of inequity, we increase our knowledge of our most basic productive resource, the human organism” (1963, p. 435).

**Victor Vroom.** Victor Vroom found that few researchers investigated employee behavior through the efficiency theory; a theory wherein the elements of the environment, behavior, and performance were studied concurrently (Vroom, 1960). This then led him to the realization that prior participation had only been related to dependent variables like “morale, productivity, turnover, and job satisfaction” and very little research had “been conducted… on the personality factors of the participant which influence these relationships” (Vroom, 1960, p. 4). When Vroom investigated the inclusion of personality factors he represented his theory in a mathematical function of:

\[
\text{Force} = \text{Expectancy} \times \sum (\text{Valences} \times \text{Instrumentalities})
\]

Spector restated Vroom’s theory as follows, “force represents the amount of motivation an individual has to engage in a particular behavior… relevant to job performance” (2011, p. 200). Force is produced from the expectancy (the subjective probability an individual has about their ability to actually perform the activity/behavior) times the sum of valences (the value being physical or mental) combined with instrumentalities (the subjective probability that a particular behavior will result in a particular reward) (Spector, 2011). If the equation is rewritten in simpler terms: An individual’s motivation to perform is equal to their ability to do it, times the sum of the value (or reward) they get, times the likelihood they will actually participate. Candidly, this means that when the rewards are perceived by the employee to match the productivity expectations, the employee happily finds motivation to work.
Spector (2011) described the situation as potentially more complex as multiple results are likely because there are many emotional attraction combinations. For example, an individual’s option to go on vacation or work overtime; depending on the employee one person may warrant a particular option over the other and still yield satisfaction. In the end, Vroom (1960) concluded that the ramifications for a participant (or individual) rely heavily on the individual’s personality traits. Vroom’s adaption of the expectancy theory became well-known (Spector, 2011).

**Job Satisfaction in Education**

In addition to wanting a happy or satisfied employee in the general workforce, it is probably more imperative to foster job satisfaction among teachers. This is critical because teacher job satisfaction is highly related to student achievement (Mojavezi & Tamiz, 2012; Pedota, 2015; Verdugo, Greenberg, Henderson, Uribe, Jr., & Schneider, 1997). Schools cannot be reformed, student achievement scores cannot be raised, nor can teacher attrition rates be reduced if we do not consider the legitimacy of job satisfaction within our teacher ranks (Verdugo et al., 1997).

A recent study by Schiller and Hinton (2015) explored students’ achievement and happiness and found those students who were happy and in positive relationships with their teachers and fellow students performed better scholastically. Teachers are role models for their students and if teachers perform better it stands to reason that students will perform better as well (Chamundeswari, 2013). Schiller and Hinton (2015) agree that much more research is needed in this area, but the baseline results continue to be highly encouraging.

With the publishing of a Nation at Risk (1983), teachers became embroiled in the quagmire of the bureaucratic process of education reform; however, these practices were incapable of producing a platform by which to establish quality schools and totally contrary to a
job environment fostering satisfied teachers (Verdugo et al., 1997). One of the components that reformers failed to consider was the climate and culture in which teachers work (Verdugo et al., 1997). Studies show that when schools have a shared sense of teaching, learning, and site decision making an educational community is formed and it is through this community that effective schools are fostered (Verdugo et al., 1997). Verdugo et al., (1997) observed:

The greater the involvement of teachers in the evaluation and assessment of school programs… the more likely it is that they will give legitimacy to their governing regime, the greater will be their sense of community, and the greater will be their job satisfaction.

(p. 51)

**Job Dissatisfaction in Education**

During the 28th annual MetLife Survey of the American Teacher (2012), 1001 teachers were surveyed of which only 44% of the teachers were very satisfied with their jobs. Some researchers reason the dissatisfaction is due to the economy with cut-backs and less stability (Heitin, 2012; Ingersoll, Merrill & Stuckey, 2014). Others note dissatisfaction is attributed to lay-offs, increase in class sizes, and reduction or elimination of programs (Metropolitan Life Insurance Company, 2012).

Judge, Thoresen, Bono, & Patton (2001) found that job dissatisfaction in professionals, such as teachers, was even more critical because of the impact it can have on intrinsic motivation. In turn, such dissatisfaction can have a direct correlation to student achievement (Haynes et al., 2014, Ronfeldt et al., 2013). Jobs such as teaching, which often have a high degree of autonomy, provide greater latitude for attitudes to affect motivation and behavior, and the job ‘satisfaction-performance relationship’ may be more robust than blue-collar work (Judge et al., 2001). Moore (2012) concurred in her findings that autonomy, along with the principal’s
leadership, the school’s and community’s conditions made a significant difference in job satisfaction. Moore noted that autonomy and good leadership deflected dissatisfaction, while “student and community problems increased the odds of teacher dissatisfaction” (2012, p. 1).

Teacher dissatisfaction is also compounded by the political process of burdening teachers with excessive responsibility for student achievement while severely limiting funding (Metropolitan Life Insurance Company, 2012; Moore, 2012) States have instituted a variety of initiatives from restricting collective bargaining, to reforming teacher tenure process, to binding evaluations to student achievement (Doherty & Jacobs, 2015; Moore, 2012). Teaching has gone from a stable career to one of volatility and uncertainty thus adding a great deal more stress to an already stressful profession (Moore, 2012).

Dissatisfaction in teaching may stem from the aforementioned deteriorating working conditions, however, it is also important to consider the individual and the job (Santoro, 2014). Not everyone is cut-out for the education profession even if they are in love with the idea. This concept embodies Santoro’s (2014) moral dimensions of dissatisfaction in teaching; teachers who leave because they do not feel they are able to produce their personal best for students (Santoro, 2014). These professionals leave teaching based on their morals.

Even when all the factors of dissatisfaction are combined there are “the positive aspects of teaching, such as helping students and community involvement, (that) outweigh the negative aspects of the job” and it is these things that help fend-off dissatisfaction (Moore, 2012, p. 9). A positive school setting, supportive colleagues, administration, and community, and autonomy all work in partnership to increase job satisfaction and keep teachers teaching (Metropolitan Life Insurance Company, 2012; Moore, 2012; Struyven & Vanthournout, 2014).
Studies of Job Satisfaction in Education

Robert Hoppock. Hoppock (1935) reported one of the first teacher job satisfaction surveys. The 200-question survey was administered anonymously to a cross section of 51 urban and rural communities composed of 500 teachers wherein the results from the highest scores (most satisfied) were compared against the lowest scores (least satisfied). His goal in comparing the high scores against the low scores was to compare the extremes in hopes of identifying and discriminating between those factors (Hoppock, 1935). From this Hoppock (1935) identified a robust connection between employees’ general attitude towards life and their levels of satisfaction in their job. Overall, he reported that satisfied teachers were well-adjusted adults, enjoyed better human relationships with their administrators and co-workers, taught in larger cities, were satisfied with their pay, felt successful, and were supported by their families and friends. The dissatisfied noted fatigue and monotony more frequently; however, of the dissatisfied, four-fifths reported their job as interesting. A final interesting demographic of the satisfied was that they were 7.5 years older (nearing 40) than their dissatisfied co-workers (Hoppock, 1935). In culmination, while he found what factors satisfied teachers shared, the results raised the dispositional “question as to what satisfaction is, and whether fundamentally, it is mental or physical” (Hoppock, 1935, p. 40).

Thomas Sergiovanni. Pursuant to a contract with the U.S. Department of Health, Education, and Welfare, Thomas Sergiovanni (1967) researched the job satisfaction of teachers. He found that most job satisfaction survey results reported factors of satisfaction and dissatisfaction on a continuum and he wanted to apply Herzberg’s two factor theory to see if instead they were mutually exclusive (Sergiovanni, 1967). For the theory of job satisfaction to be true on the continuum a dissatisfaction factor when changed or removed should result in job
satisfaction (Sergiovanni, 1967). Recall in Herzberg’s theory, the elimination of a dissatisfier does not lead to satisfaction because satisfaction and dissatisfaction are mutually exclusive. Herzberg et al. (1959, 1997) had observed that job factors that result in satisfaction were in direct correlation to the position, while those job factors that led to dissatisfaction were related to the work environment. Figure 1 itemizes the satisfiers that are found in the work itself and the dissatisfiers found in the work environment.
Satisfiers

(found in work itself)

- Achievement
- Recognition
- Work Itself
- Responsibility
- Advancement

Dissatisfiers

(found in the work environment)

- Salary
- Possibility of Growth
- Interpersonal Relations (students)
- Interpersonal Relations (Superiors)
- Interpersonal Relations (co-workers)
- Supervision – technical
- Company Policy and Administration
- Working Conditions
- Personal Life
- Job Security

Figure 1: Factors of Satisfiers and Dissatisfiers (Sergiovanni, 1967).

With minor modifications to Herzberg’s methodology, Sergiovanni (1967) surveyed teachers on their job feelings and found achievement, recognition, and responsibility as the main contributors to job satisfaction while interpersonal relations with both students and co-workers’ supervision – technical, supervision, school policy personal life and fairness were all dissatisfiers. Sergiovanni (1967) noted that while the majority stood as mutually exclusive a few remaining factors had potential to classify as a satisfier or a dissatisfier; this deviated from Herzberg’s complete ‘mutually exclusive’ factor. Sergiovanni (1967) concluded that teachers mainly derive their satisfaction from work-centered activities while their dissatisfiers originated from conditions or environments in and around work.

Deriving satisfaction from work-centered activity assumes that one’s energies and efforts are not taxed or depleted by unsatisfactory conditions of work. The point is not whether satisfiers are more crucial the dissatisfiers, or visa-versa, but rather the dependence of the satisfiers on the elimination or tempering of the dissatisfiers. (Sergiovanni, 1967, p. 81).
**Job Satisfaction Among America’s Teachers.** The National Center for Education Statistics (Perie & Baker, 1997) released its report “Job Satisfaction Among America’s Teachers: Effects of Workplace Conditions, Background Characteristics, and Teacher Compensation” in July 1997 and brought to focus more current day concerns of teacher satisfaction. Like other careers, the report recognized that every profession experiences attrition. Teachers left the classroom to pursue other professions or retire, but they also left because of professional dissatisfaction and to seek better paying opportunities (Perie & Baker, 1997).

While teacher satisfaction is composed of organizational factors, it is also made up of teacher and school characteristics (Perie & Baker, 1997). The outstanding factors associated with teacher satisfaction were found to be a desire for “more administrative support and leadership, good student behavior, a positive school atmosphere, and teacher autonomy” (Perie & Baker, 1997, p. 51). While these workplace conditions were highly valued, compensation was not found to be a substantial contributor to satisfaction (Perie & Baker, 1997). Therefore, the report recommended policy makers should focus on those items for which they could practicably engage with in raising satisfaction (Perie & Baker, 1997). The report also warned that the factors of autonomy were not to be forgotten, “the results of this study imply that involving teachers in school-wide policy decisions and giving them some degree of control in their classrooms are associated with high levels of teacher satisfaction” (Perie & Baker, 1997, p. 52). The study concluded in stating that in combining these factors, teacher satisfaction could be increased.

**The Met-Life Survey.** For over 30 years the Metropolitan Life Insurance Company has conducted an annual survey of teachers entitled the MetLife Survey of the American Teacher with the goal of providing educational administrators, community leaders, and politicians information on educational issues (Metropolitan Life Insurance Company, 2012). Each year their
survey focuses on a different educational key note; the 2012 survey focused on the viewpoints of teachers and school administrators towards the responsibilities and challenges of school leadership (Metropolitan Life Insurance Company, 2012). The survey, found that school leadership had a significant impact on job satisfaction for both teachers and school administrators.

This reconfirmed the findings from their 2003 survey, *An Examination of School Leadership*. A connection still existed “between teacher job satisfaction and principal’s performance,” those who were satisfied were also satisfied with the relationship they had with their principal (Metropolitan Life Insurance Company, 2012, p. 37). Teachers are typically autonomous, and principals who understand the autonomous nature of teachers embrace this asset by weaving the natural leader qualities of autonomy into the school’s leadership. In turn a principal’s effectiveness is often attributed to the teachers who share in the school’s leadership role (Metropolitan Life Insurance Company, 2012).

Teachers, as school leaders, have become a newly recognized “distinct resource in education and an important dimension of the teaching profession” (Metropolitan Life Insurance Company, 2012, p. 41). As educational leaders, these teachers fulfill roles, both formally and informally, from educational coaches to mentors, and collaborate on site-based to community-wide education projects that form professional learning communities (Metropolitan Life Insurance Company, 2012). When teachers have aspired in the past for leadership roles they left the classroom to become principals. Today, teacher-leaders are forging new leadership roles that benefit everyone; fellow teachers, principals, and students (Metropolitan Life Insurance Company, 2012). These “new pathways for leadership…” are being seen “as ways to strengthen
the profession, job satisfaction, and retention of effective teachers” (Metropolitan Life Insurance Company, 2012, p. 41).

In addition to the discussion of leadership benefits to satisfaction in the 2012 MetLife Survey, it discussed overall job satisfaction and teacher stress (See Figure 2). Through the years the MetLife questionnaire has included a question basically asking how satisfied teachers were in their profession (2012). Teachers answered in a four point Likert scale from very satisfied, somewhat satisfied, somewhat dissatisfied, to very dissatisfied (Metropolitan Life Insurance Company, 2012). Its findings reported that job satisfaction was at its lowest point in 25 years, declining another 5% over the prior year (Metropolitan Life Insurance Company, 2012).
The survey found that overall 51% of teachers reported they are under stress several days a week and elementary teachers reported greater stress (Metropolitan Life Insurance Company, 2012). Fifty-nine percent of elementary teachers described experiencing great stress several times per week; a notable increase since the question was last asked in 1985 where only 35% of the elementary teachers reported being stressed (Metropolitan Life Insurance Company, 2012). The MetLife Survey (2012) found increased classroom demands and budget cuts contributed to the stress levels of teachers.

Teachers from this survey with lower job satisfaction were typically in their mid-career (six to 20 years), taught in an urban setting, had low income struggling leaners, and found it a challenge to implement the Common Core State Standards (Metropolitan Life Insurance Company, 2012).
Company, 2012). These teachers were also less likely to rate their principal or fellow teachers as doing an excellent job (Metropolitan Life Insurance Company, 2012).

MetLife’s 2012 survey concluded that while teacher moral was in severe decline due to budget cuts and increased demands, an untapped resource maybe in creating more school leadership roles and utilizing teachers in such hybrid positions to address professional growth and job satisfaction.

Since Robert Hoppock examined teacher job satisfaction in 1935, learned scholars have continued to explore and discover the multiple facets of teacher job satisfaction. Studies and surveys like those conducted by Thomas Sergiovanni (1967), the study of Job Satisfaction Among America’s Teachers by Perie and Baker (1997), and The MetLife Survey (2012) continue to contribute to the literature.

**Elementary Schools Defined**

While the exact composition of elementary schools varies from one district to another across the United States, the concept of the elementary school shares a long and successful history of being committed to making the central focus of education wholly around the child (Wiles, 2009). Over the past 200 years the business of school has changed. From the first early days of education in the United States until now, the curriculum has been tailored to meet the needs of society and its culture; understandably it no longer resembles its original self (Dexter, 1904; Rury, 2013). The exact composition of the earliest curriculum is not exactly known, but archival records show the lessons were imbued with biblical overtones while including the acquisition of reading, writing, and mathematics (Dexter, 1904). Basic and unsystematic would be fitting descriptors of the early elementary school setting where there was no lock-step grade classification, rather students were able to process new skills and progress at the pace of their
ability (Dexter, 1904). While the early schools were simple, they served people well for what was needed in life.

The first official school house built in America was in the late 1690’s and served as a precursor to the school buildings that would rise throughout the country during the next 250 years (Dorchester Antiquarian & Historical Society, 1859). Until approximately 1909 when the first junior high was established, primary schools employed teachers who served grades first through eighth; thereafter, they served students in grades first through sixth (Wiles, 2009). The kindergarten concept is the new comer to the elementary scene and was not even introduced in this country until the late 1850’s (Watertown Historical Society, 2015). Today, kindergarten is a curriculum of preparation for school, a traditional program in the elementary school (Wiles, 2009).

Elementary schools are commonly found to have kindergarten through sixth grade classes, although another frequent model is K-fifth grade (Wiles, 2009). In addition to focusing on the whole child as advocated by Catharine Beecher and John Dewey (Goldstein, 2014), an array of academic experiences is provided to the elementary school aged child by highly trained teachers (Wiles, 2009). Jon Wiles (2009) described the elementary child as a changing and lively entity adept at learning substantial amounts of information. Wiles (2009) advocated that today’s elementary program should be a curriculum filled with lessons that will serve students as the foundation to their education and beyond. The individuals charged with such a task, elementary school teachers, have a prodigious responsibility. “The expertise and experience of teachers as well as their time and attention, morale, and innovation, are all important resources for the success of students” (Metropolitan Life Insurance Company, 2012, p. 41).
Outside of the family, an elementary school teacher becomes the next most important adult figure in a child’s life (Birch, & Ladd, 1996). Pianta (1999) pointed out that children who have experienced constructive and encouraging teacher-student relationships perform better academically and Birch and Ladd (1996) noted that these particular relationships are an important intervention for those children who may be academically at risk. Positive relationships help build academic success which O’Connor and McCartney (2007), found paramount in kindergarten through third grade. By third grade children are also transforming from the process of decoding words to reading for knowledge and children who fall behind during this period can struggle academically the remainder of their educational years (Stanovich, 1986).

Like all teachers, elementary school teachers are a precious resource, but maybe even more so because of their intensive dedication to introducing the young mind to education at a pivotal juncture in life. Elementary teachers are often the first and most influential figure in a child’s life outside of the parent (Golden, Kist, Trehan, & Padak, 2005). Through high quality teaching, elementary teachers have the opportunity and ability to instill the love of learning and foster high student achievement during a child’s earliest learning experiences (O’Connor & McCarthy, 2007). The Metropolitan Life Insurance Company (2012) reported that “Teachers are widely acknowledged as the most important school-related factor influencing student achievement” (p. 41). They went on to concur that teachers are the next biggest influence on a child’s life outside the home and that their responsiveness and ingenuity in the classroom contributes to each child’s success (Metropolitan Life Insurance Company, 2012).

Teacher Shortages

Fewer people are choosing to pursue a career in education. Since 2008-09 the states have been reporting the number of higher education students enrolled in teacher preparation programs,
and despite a one-year increase in 2008-09, the enrollment numbers have continued to decline between 2009-13 (U.S. Department of Education Office of Post Secondary Education, 2015). The U.S. Department of Education’s Office of Postsecondary Education (2015) reported that not only are fewer high school students indicating an interest in pursuing a teaching career, the enrollment numbers in teacher preparation programs (both traditional and non-traditional) have continued to decline. During the same time period of 2009-2013, higher education marked a 3% decrease in overall enrollment while teacher preparation programs marked a 31% decline (U.S. Department of Education Office of Post Secondary Education, 2015). Some researchers attribute this decline to waning moral, excessive testing, the economy, and job dissatisfaction to name a few (Ingersoll, et. al., 2014; Metropolitan Life Insurance Company, 2012; U.S. Department of Education Office of Post Secondary Education, 2015).

Inevitably, just before a new school year opens, news headlines across the country post stories about teacher shortages. However, recent research is reporting “a more thorough review of long-term trends indicates that the nation as a whole is unlikely experiencing a shortage crisis” (Aragon, 2016, p. 3). The National Center for Analysis of Longitudinal Data in Education Research (CALDER, 2015) states that indeed enrollment in teacher training programs has moderated over the last few years it is most likely due to a cyclic economy issue rather than a systemically rooted problem. This does not negate that the field of education still has recruitment, attrition, and retention issues, but it may not be as dire as some have reported.

Each state has its own set of licensing policies and requirements, geographical and economic challenges, and subject matter staffing needs and these all can affect a teacher’s choice of where to teach (Aragon, 2016). Many states acknowledge their staffing challenges and are
offering or developing a variety of programs attempting to address teacher shortages. This will be discussed more under teacher retention.

**Teacher Attrition**

Dalton, Todor, and Krackhardt (1982) described dysfunctional turnover as when an exemplary employee leaves an organization voluntarily. An effective organization should want to avoid dysfunctional turnover and retain model employees (Abelson, M., & Baysinger, 1984). Teachers leave the teaching profession for one of two reasons: personal or natural (Struyven & Vanthournout, 2014). Natural reasons are typically for things like retirement or a variety of family needs while personal reasons are broken into transfer attrition and exit attrition (Struyven & Vanthournout, 2014), The transfers are relocating to different schools, but the exiting teachers are leaving the profession of education and this is dysfunctional turnover.

In 2002, Ingersoll reported that the attrition rate in teaching was appreciably higher than in other professions and the last decade and a half have not provided a solution. A recent study completed through the Institute of Education Sciences (Gray & Taie, 2015) indicated that within the first five years of teaching 17% of beginning teachers leave the field of education. Another study indicated that annually, overall, approximately 227,000 teachers change school locations and another 230,000 leave the profession of teaching altogether; in total, that is 13% of the public school teachers (Haynes et al., 2014).

High attrition rates are further complicated by the shortage of teachers. The National Commission on Excellence in Education in 1983 foretold of teacher shortages based on two demographic aspects – an aging teacher pool and increasing student populations (Ingersoll, 2002). Fast forward 30 years, and what researchers did not foresee or take into consideration were other factors such as poor working conditions, low pay, unrealistic achievement mandates,

Another repercussion of attrition is evidenced when teacher shortages force school districts to hire under qualified teachers that are under prepared or ill prepared for the classroom (Darling-Hammond, 2000; Dupriez et al, 2016). These under qualified teachers then face the daunting task of educating a diverse student populace of academically challenged to brilliant learners, economically disadvantaged to economically advantaged, disruptive to engaged, and English language learners to English proficient (Haynes et al., 2014; Ingersoll, 2002). The end result is that the students of these under prepared teachers have lower achievement scores and higher drop-out rates (Haynes et al., 2014). These same teachers quit because they are stressed out, over worked, and broke (Ingersoll & Smith, 2003; Darling-Hammond, 2003; Dupriez et al., 2016; Haynes et al., 2014).

The professional identity of a teacher has undergone a myriad of changes mostly resulting from policy makers which assume teachers are continuously malleable technicians instead of autonomous professionals (Comber & Nixon, 2009). Teachers are by their very nature autonomous professionals. The concept of autonomy can vary from one teacher to another, but over-all it is the ability for teachers to make a professional informed decision about the best instructional strategies for their students (Teacher Autonomy, 2014). Unfortunately, through interfering policies and policy makers, teachers are continuously trying to meet bureaucratic demands instead of discussing quality educational pedagogy (Comber & Nixon, 2009). A common problem is that the requirements to fulfill the obligations of teaching and the actual
resources available are two different things and the mismatch leads to stress and burnout (Kitchel et al., 2012). In short, when teacher autonomy is threatened or lost, attrition can result.

Widely documented in research is the precursor of stress on job satisfaction and stress, experienced over long periods of time, can lead to burnout (Kitchel et al., 2012; Troman & Woods, 2001). Stress and burnout are two different things and while everyone experiences stress, not everyone experiences burnout (McCormick & Barnett, 2011). The division as to which employees may suffer burnout will come down to the severity and duration of the stress and the ability of the individual to address or handle the stressors before they become overwhelming (McCormick & Barnett, 2011). Maslach & Jackson (1984) identified burnout as a composite of “emotional exhaustion, depersonalization, and reduced personal accomplishment” and can develop in personnel who work closely in people-focused, helping professions (p. 134). When these components are present in teachers with low efficacy, the result is further withdrawal from the work place, greater depersonalization of it, consequently intensifying emotional exhaustion, and heightening their sense of futility; this process in turn leads to teacher burnout (Bandura, 1997; Jackson, Schwab, & Schuler, 1986; Maslach & Jackson, 1984). Together, these factors compound an already demanding work environment, contribute further to a deteriorating teacher workforce, and declining teacher job satisfaction (Ingersoll, 2001; Strauss, 2015, Walker, 2014).

It has been suggested by some researchers that school administrators provide professional development to teachers at risk for burnout (Kitchel et al., 2012; McCormick & Barnett, 2011). These teachers are not only experiencing distress themselves they are subjecting students to ineffective teaching which in turn, harms society (McCormick & Barnett, 2011). Such interventions are not only to save teachers from leaving education, but to also intervene for the
quality of education. Addressing attrition issues not only can improve teacher performance, but it also may enhance job satisfaction (Chamundeswari, 2013).

**Teacher Retention**

Jill Barshay’s (2016) interview of Richard Ingersoll quoted him as saying, “Turnover is the big driver of the shortages. The problem isn’t that we don’t produce enough new teachers. The problem is that we’re not retaining enough of the teachers we already have.” The topic of retention is often at the forefront of the problems school districts, school boards and policy makers are discussing (Cavazos, 2015). School districts should be evaluating what key components keeps teachers in their schools and district because the components of teacher job satisfaction often mirror the components of retention.

Several states are heeding the warning signs of their endangered teacher ranks and are developing a variety of retention programs and incentives. Mentoring programs, alternative certification, retention bonuses, professional development, and policy proposals specifically targeted at recruitment and retention are some of the notions aimed at curving attrition (Aragon, 2016; Barshay, 2016; Boyd et al., 2009), but clearly no one answer will fit the state of affairs for every location. States like North Carolina, Mississippi, and Oklahoma have devised programs to help new teachers pay off school loans in exchange for a commitment to work a minimum of four or five years in high need areas (Herron, 2016; Kieffer & Mader, 2013; Mississippi Receives 2016 Frank Newman Award for State Innovation, 2016; Price, 2016). An Indiana school district makes professional development classes available during a teacher’s first two years that focus on providing tips and techniques to better acclimate to the position of teaching; they want their new teachers to feel supported (Cavazos, 2015). And many states are instituting
some sort of induction (mentoring) program (Ingersoll & Strong, 2011). The importance of retention is beginning to be recognized.

Teaching is a tough profession that some contend can never truly be perfected, but preparing and supporting teaching professionals before and after they enter the classroom is key (Buchanan et al., 2013; Ingersoll & Strong, 2011). Research has shown that retention is also enhanced through continuing education, collegiality, and professional support (Buchanan et al., 2013; Cavazos, 2015; Nieto, 2003). All points reinforcing self-efficacy (Bandura, 1977a). Good teachers are always participating in and seeking out new ways to improve their knowledge and their teaching ability (Nieto, 2003). Veteran teachers have a great amount knowledge and experience and pairing them with new teachers in a mentoring venue provides the opportunity for new and experienced educators to learn and collaborate with colleagues (Buchanan et al., 2013; Cavazos, 2015; Ingersoll & Strong, 2011). Both are contributing to the knowledge wealth of the school. Evaluations that provide constructive and positive feedback paired with applicable professional development seminars are a successful retention tool too (Workman & Wixom, 2016). Evaluations can be formal administrator to educator, or even peer to peer, but all discussions, goal-setting, and reflective processing are opportunities for feedback and support (Buchanan et al., 2013; Cavazos, 2015). Buchanan et al. (2013) found that teachers who wanted to improve their teaching skills and participated in professional improvement opportunities were more likely to want to stay in education. Further, those beginning teachers who have participated in some form of induction or mentoring program for at least two years also tend to stay in education and are typically more satisfied with their job (Ingersoll & Strong, 2011).

Teacher educator and author Sonia Nieto (2003) collaborated with a small group of experienced and award winning educators from Boston and identified some unique reasons to
why teachers stay in the profession. Nieto (2003) found autobiography, love, hope and possibility, along with anger and desperation, intellectual work, democratic process, and most importantly the ability to shape the future as reasons teachers persevere through the tough times. Things like autobiography (one’s personal identity) and the love of students and learning are internal components of each teacher and cannot be given or taught by administration, but rather are the core make-up of the individual (Nieto, 2003). However, hope and possibility, intellectual work, democratic process and the ability to help shape the future are all things supported and guided by collaboration of new and experienced teachers, administration, and professional development opportunities. Professional development is not about teaching new tricks, but rather building professionalism and encouraging intellectualism; these are the things that retain teachers (Nieto, 2003). Anger and desperation, grown from lack of support, lack of opportunities for growth, lack of autonomy, and indiscriminate school policies developed by people far detached from education actually fueled hope (Nieto, 2003). And hope was fostered and reinforced by teachers’ philosophies of social justice, collegial support, and intellectual growth (Nieto, 2003). Nieto (2003) asserted that to retain good teachers, teachers need to be educated to work in public service, be supported intellectually, and celebrated for their commitment to education and their innovative ways they find to teach their students. In modest summation, retention, like job satisfaction, seeks intellectual growth with mentally challenging work and supportive colleagues (Chamundeswari, 2013).

Retention is an investment in human capital (Ingersoll & Strong, 2011). Teachers invest a great deal in becoming educators and are a benefit to society, thus understanding what it takes to retain these dedicated individuals is an investment in society (Chamundeswari, 2013; Ingersoll & Strong, 2011). Identifying and providing the appropriate elements to support teachers improves
retention and job satisfaction while concurrently improving classroom engagement (Burke et al., 2013). Understanding the importance of retention cannot be disregarded.

**Nine Elements to Job Satisfaction**

The following section introduces and discusses the nine elements or sub-scales of the Job Satisfaction Survey written by P. Spector (1985) that he believed comprised the most important elements of general job satisfaction. It is important to understand the dimensions of the sub-scales to help comprehend and evaluate what is important to employees in their job satisfaction and how these factors play into job satisfaction for teachers. The nine sub-scales are pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, co-workers, nature of work, and communication. The following section addresses these nine areas with some of the job satisfaction factors grouped together because they are closely related.

**Compensation: pay, fringe benefits, and promotion.** Compensation in the job world is often thought of in the form of money, such as a paycheck (Cambridge Dictionaries Online, 2016). However, in addition to pay, compensation can contain a broad spectrum of things and can also include fringe benefits, contingent rewards, and the prospect of promotion. Compensation is important to employees and may have baring on an employee’s satisfaction (Tremblay et al., 2013). Fundamentally, compensation is not all about the money.

**Pay.** Stein (2007) found that people often complain about or are simply unhappy with their rate of pay. While it is important to understand people’s happiness, or unhappiness with their pay, it is more important to understand why. One of the earliest documentations about pay and job dissatisfaction was Hoppock in 1935. Stein (2007) related there are three factors to consider: (a) the rate of compensation, (b) do employees feel it is a fair pay rate, and (c) what are the employee benefits? Compensation is also tied to employee beliefs on the opportunity for
growth and fairness of pay increases (Stein, 2007). When employees complain about the level of their pay an underlying root cause may well be the factor of fairness, equity of pay among the employees is important to people (Stein, 2007; Tremblay et al., 2013). Greenburg and Lind (2000) referred to this as perceptual bias.

**Promotion.** A promotion is a form of compensation awarded to an employee for excellence and distinction (Human Resources, 2014). The reward of a promotion is seen as career advancement and typically results in a realignment of duties, a title change, and is frequently accompanied with a pay increase (Human Resources, 2014; Society for Human Resource Management, 2012b). For teachers, a promotion can range from department chair to principal, and the knowledge that one can professionally advance their career and pay often leads to greater satisfaction (White, n.d.). Promotions provide an opportunity to teachers to extend their role beyond the classroom and help enforce self-efficacy (White, n.d.).

**Fringe benefits.** Employers have been offering fringe benefits for well over 100 years and today play an important role in employee compensation, however, early on they were most commonly offered only to upper management (Artz, 2010; Employee Benefit Research Institute, 2002; Gale Encyclopedia of U.S. Economic History, 1999). By the 1930’s – 40’s with collective bargaining and wage controls employers found they could use fringe benefits to attract, reward, and retain employees which were scarce during the war (Association of Research Libraries, 1979; Employee Benefit Research Institute, 2002; Gale Encyclopedia of U.S. Economic History, 1999). Through time, fringe benefits have changed and will continue to change based on personal needs as well as the world state of affairs (Association of Research Libraries, 1979).

Fringe benefit packages vary from district to district and state to state, but the National Council on Teacher Quality (2013) reported that the most frequently provided fringe benefits for
teachers are various forms of insurance (life, health, eye, and dental), and retirement plans. Tuition reimbursement and loan forgiveness are two benefits many districts have begun to offer in attempting to recruit new teachers (National Council on Teacher Quality, 2013). In the article “Fringe Benefits: There is more to compensation than a teacher’s salary” (Podgursky, 2003) the author pointed out that despite actual salaries being low, teachers work fewer days than the average employee who receives two weeks off per year and this is a fringe benefit within the profession that is rarely recognized as a benefit.

**Supervision, contingent rewards, and operating conditions.** The success of the following three items are centered around and intertwined with the supervisor. When an organization’s systems for supervision, operating conditions, and contingent rewards are working synergistically, job satisfaction is often the result (Cerit, 2014; Spector, 1997). In the professional environment, such as teaching where supervision is less direct, having established rules, policies, and expectations as well as constructive communication, are welcomed and have positive correlations on the work environment (Cerit, 2014).

**Supervision.** Supervisors or managers carry-out a multifaceted set of tasks, are often the figurehead of an organization, and can have a great deal of influence over its success or failure, be it in business or education (Johns & Saks, 2008). Henry Mintzberg (1973) identified 10 specific roles commonly played by managers: monitor, disseminator, spokesperson, figurehead, leader, liaison, entrepreneur, disturbance handler, resource allocator and negotiator. He further grouped these roles into three categories: informational, interpersonal, and decisional leader (Mintzberg, 1973). Table 2 exhibits this categorization.
Table 2:
The Three Roles Played by Managers

<table>
<thead>
<tr>
<th>Informational</th>
<th>Interpersonal</th>
<th>Decisional</th>
</tr>
</thead>
<tbody>
<tr>
<td>monitor</td>
<td>figurehead</td>
<td>entrepreneur</td>
</tr>
<tr>
<td>disseminator</td>
<td>leader</td>
<td>disturbance handler</td>
</tr>
<tr>
<td>spokesperson</td>
<td>liaison</td>
<td>resource allocator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>negotiator</td>
</tr>
</tbody>
</table>

While there are a variety of theories on management and supervision, from classical to bureaucratic, contemporary supervisors understand the necessity to be flexible and able to adapt appropriate management practices to the current job environment (Johns & Saks, 2008). Employees who believe their supervisor is consistent and fair tend to be more satisfied with their supervisor, their job, and more dedicated to the organization (Walumbwa, Wu, & Orwa, 2008). In the field of elementary education, the school principal is typically the on-site supervisor with the primary focus of fulfilling the role of educational leader (Chenoweth & Theokas, 2012).

Contingent rewards. Contingent rewards are a form of positive feedback for praiseworthy work and are closely related to the supervisor because it is most likely that it is the supervisor who provides such feedback (Spector, 1985). Supervisors who provide contingent rewards are perceived as fair and equitable for rewarding performance (Walumbwa et al., 2008). Among other researchers, Tremblay et al. (2013) also found evidence through their study that contingent rewards provided positive attitudes and relationships in the workplace and were related to job satisfaction. Teachers need to be recognized and rewarded for their efforts (Verdugo et al., 1997). In the educational setting, contingent rewards can be delivered through a variety of avenues; a thank you note, verbal praise at a faculty meeting, or even
acknowledgement through an employee newsletter/announcement. In the business setting, contingent rewards can also include a financial reward (Tremblay et al., 2013).

**Operating conditions.** In simple form, operating procedures establish a standard method of work place procedures and directions for efficiency, and these procedures and directions can greatly fluctuate from one work place to another. Whereas, operating conditions inform employees what is expected of them, provides guidance, and defines accountability (Schniepp and Harrison, 2015). This is particularly important in education where “direct supervision is minimal” and teaching practices can vary between teachers (Johns & Saks, 2008, p. 489). In comparison to a working-class job, supervision in the field of education diverges from how the job is being carried out to ensuring that educational standards are being met through good instruction (Johns & Saks, 2008).

The cultures of schools are often collaborative wherein teachers have shared values and an interdependent working relationship with their colleagues (Noordin & Jusoff, 2010). Teachers, therefore, as a collective whole strive for the success of the many versus the success of self (Cerit, 2014; Noordin & Jusoff, 2010). Cerit (2014) found that collectivism within operating procedures established positive relationships with co-workers and supervisors which further contributed to job satisfaction.

**Nature of work.** Like the world and the society in which we live, the nature of work has changed (Brief, 1998). Spector (2011) defined the nature of work as a naturally occurring fundamental element to the job, for example, teachers work in a school and therefore, work with students. Cappelli, Bassi, Katz, Knoke, Osterman, and Useem (1997) sum up the transformation of the world of work between the early 1930’s and the 1980’s in their text, Change at work. They related that during that particular time period operations were fairly straight forward;
management made all the decisions and employees carried out the work (Cappelli et al., 1997). There was no employee input, shared decision making, or collaboration (Brief, 1998). By the 1980’s other world factors began to impact the nature of work and not for the positive (Cappelli et al., 1997). Cappelli et al. (1997) reported that between 1980’s and 1994 changes in public policy, increased competition, and increased financial marketplace turbulence led to job insecurity, more temporary workers, wage insecurity, increased workplace stress, and decreased job satisfaction. Job satisfaction also marked a decline during this time because organizations were experiencing considerable modifications in their governing and administrative structure and job dissatisfaction is an innate result (Judge & Church, 2000).

While the prior mentioned factors directly affected the business world, the same factors affected the nature of work in the field of education and was exhibited with the release of A Nation at Risk, Goals 2000, No Child Left Behind, and many states (and nations) invoking their own formulas for student achievement standards (Postlewaite, 1994; Vinovskis, 2009). These efforts highlighted the belief that rigor would achieve excellence.

Whether in business or the field of education, these facets contribute to people’s attitude towards their work (Brief, 1998). Brief (1998) reported the continuous fluctuation on the nature of work has three things that affect the study of job satisfaction: 1) the original satisfier may change, 2) the meaning of the main attitude may become modified, and 3) the relationship between the job satisfier and a variable may have changed. Whatever the cause, if the nature of work has changed and led to job dissatisfaction the result many times leads to turnover (Brief, 1998).

**Communication and co-workers.** Kornhauser (1933) wrote that management can nurture climate through communications between employees and advocated three primary ways
in which to accomplish this: 1) through an organization’s main channels (i.e.: company newsletters), 2) employee or union representatives, or 3) an organization’s human resources office. Kornhauser, (1933) embraced and promoted the belief that everyday managers need to evaluate their employees’ attitudes and that very few other managerial functions deserved as much attention.

However, communications between management and the employee are not the only consideration. Communication among co-workers is still important with the team focused operational belief, especially with the complexity of the modern work environment where it is impracticable to work alone (Stein, 2007). S. J. Stein marked that the informal social relationships at work are vital to an organization and are basically the glue that helps make an organization functional. “Group cohesiveness, or a sense of loyalty among co-workers, or teams is a powerful antidote to occupational stress” (Stein, 2007, p. 174). Communication is a vital component to job satisfaction.

Teachers often teach and work in isolation from other educators and staff. Carol Ascher (1991) specifically pointed out the need to breakdown teacher isolation and promoted a variety of avenues to promote communication in the education environment including mentoring, parent-teacher association relationships, teaming, and professional development opportunities. While the concept of teaming has been at work in the middle school arena for many years, elementary and high schools can also benefit from teaming (Ascher, 1991). “Teachers in schools that are engaged in teaming feel a stronger affiliation and support network with their fellow team members and thus are more satisfied with their working climate (Flowers, Mertens, & Mulhull, 1999, p. 58). The new generation of teachers engage in collaborative activities far more than their predecessors of the baby boom generation and expect collaboration as part of the school
setting to provide avenues of academic success for their students (Metropolitan Life Insurance Company, 2010). The school environment should not hold teachers in isolation, rather enable and promote avenues of communication to foster a healthy work environment. New teachers believe collaboration with their colleagues (co-workers) is a key component to their success and those who participate in collaboration report being more satisfied in their jobs (Metropolitan Life Insurance Company, 2010).

Summary

The review of the literature has provided a historical glimpse into the founding theories of job satisfaction and some of its complex qualities. Job satisfaction is multi-faceted and perpetually in a dynamic state of flux because its core elements, employees and world factors, are always in motion. Job satisfaction is not something employers should fear, but rather, seek to understand for the betterment of their organization. The emotional intelligence of an organization is “an organization’s ability to successfully and efficiently cope with change and accomplish its goals, while being responsible and sensitive to its people” (Stein, 2007, p. 64). Employers have to balance their organization’s emotional intelligence and because of this, the study of job satisfaction will never be complete. It will always need to be examined, researched, and studied to be understood in its current context.

Teachers play a vital role in the education of our society’s young people; as employers, it is essential to recognize the factors comprising job satisfaction for educators. Since the inception of education in this country, the composition of the elementary school has evolved. Its history was presented to assist the reader in further understanding the role elementary school and elementary teachers play in a child’s life. Teachers serve as a very significant figure in a child’s primary years and their influence can instill a love of learning and educational success
throughout their life. Keeping well-trained teachers is paramount to children’s academic success; understanding teachers’ job satisfaction helps retain our teachers. This literature is to add to the body of knowledge of job satisfaction for elementary educators.
CHAPTER III

Research Methodology

Chapter III details the methodology used to conduct the study, the compilation of data, and the subsequent analysis. It is divided and discussed in 12 sections culminating with a summary: statement of the problem, research design, participants, instrumentation, independent and dependent variables, JSS Scoring, instrument consistency and reliability, instrument validity, data collection, data analysis, and summary. The methodology and instrumentation used in the study parallels previous work conducted by Bumgartner (2013) and Cui-Callahan (2012).

Statement of the Problem

America’s teachers are leaving the profession of education at an alarming rate for a myriad of reasons; from high stress, to budget cuts, to low job satisfaction. Teacher attrition not only produces a significant teacher shortage, but a lack of highly qualified teachers as well. Job satisfaction of elementary teachers in particular is of concern because they are often the first mentors of children, outside of the parents and family, interfacing with children and setting the educational stage for students (O’Connor & McCartney, 2007). Furthermore, positive teacher–student relationships can have long term effects on a child’s educational success (Pianta, 1999; Birch & Ladd, 1996). Thus, it is imperative to study the job satisfaction of teachers further.

This quantitative study examines the job satisfaction characteristics of elementary school teachers in a large public school district located in a western state using Spector’s (1985) Job Satisfaction Survey. The school district studied serves to educate approximately 63,000 students K-12 in roughly 100 schools. Sixty-four of these schools serve the elementary school level employing over 1,300 elementary school teachers.
As indicated in chapters one and two, there are many demographic and professional practice factors that interface with job satisfaction such as age, ethnicity, marital status, etc., thus it is important these factors are also examined as part of job satisfaction and are the independent variables in the analysis. The demographic and professional practice research questions explored are:

1. Is there any significant difference among the teachers’ Age Group in the elementary schools and the intrinsic and the extrinsic means of the Job Satisfaction Survey?

2. Is there a significant difference among Ethnicity teacher groups in the elementary schools and the intrinsic and the extrinsic means of the Job Satisfaction Survey?

3. Is there a significant difference among Marital Status in the teacher groups in the elementary schools and the intrinsic and the extrinsic means of the Job Satisfaction Survey?

4. Is there a significant difference among Highest Level of Education teacher groups in the elementary schools and the intrinsic and the extrinsic means of the Job Satisfaction Survey?

5. Is there a significant difference among Teacher Credential/Licensing levels in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

6. Is there a significant difference among the Number of Schools Taught teacher groups in the elementary schools and the intrinsic and the extrinsic means of the Job Satisfaction Survey?

7. Is there a significant difference among Salary teacher groups in the elementary schools and the intrinsic and the extrinsic means of the Job Satisfaction Survey?
8. Is there a significant difference among the *Total Years of Teaching Experience* teacher groups in the elementary schools and the intrinsic and the extrinsic means of the Job Satisfaction Survey?

9. Is there a significant difference among those teachers who believe participation in *Professional Development opportunities are meaningful* teacher groups in the elementary schools and the intrinsic and the extrinsic means of the Job Satisfaction Survey?

10. Is there a significant difference among those teachers who believe they can personally structure their lessons to their students’ needs (*Autonomy*) teacher groups in the elementary schools and the intrinsic and the extrinsic means of the Job Satisfaction Survey?

11. Is there a significant difference among those teachers who believe they can personally improve the *Achievement of Students* teacher groups in the elementary schools and the intrinsic and the extrinsic means of the Job Satisfaction Survey?

12. Is there a significant difference among those teachers who had a *Mentor Teacher* during the first years of their career teacher groups in the elementary schools and the intrinsic and the extrinsic means of the Job Satisfaction Survey?

**Research Design**

Creswell (2015) defined a quantitative research design as a prescribed method of gathering, evaluating, and recording what was discovered or learned. This study was conducted using a quantitative research design employing the Job Satisfaction Survey developed by Spector (1985) and a demographic survey. In order to analyze whether the independent variables of the demographic data have significant effects on the dependent variables of the Job Satisfaction Survey, a multiple analysis of variance (MANOVA) was employed. The twelve independent
variables of the demographics and professional practice data (consisting of age, ethnicity, marital status, highest level of educational attainment, licensure level, salary, number of schools taught at, years of teaching experience, belief in professional development, classroom autonomy, achievement of students, and mentor teacher experience) includes nominal, ordinal, and interval points of measure. The two dependent variables (consisting of the intrinsic satisfiers of contingent rewards, co-workers, nature of work, and communication, and the extrinsic dissatisfies of pay, promotion, supervision, fringe benefits, and operating conditions) have ordinal levels of measurement.

Participants

This study focused on the elementary school teachers working within ten of the 64 public elementary schools located in a large school district within a western state. The district serves approximately 63,000 students, of those approximately 33,200 are served at the elementary school level (State Report Card, 2015). All teachers participating in the study taught at schools located within an urban setting and classified as traditional elementary schools, serving kindergarten through sixth grade students (one school was K-5th). The annual per pupil expenditure in the district is around $8,400 (Governing.com, 2017; State Report Card, 2015). Because of their non-traditional structure and size, charter schools were excluded from the study. Principals of the schools with teachers participating in the survey had served a minimum of one year at the school site.

The school district was composed of a wide socio-economic range; thus, to provide a balanced cross-section of the district’s urban elementary schools, teachers from ten facilities with diverse economic backgrounds were invited to participate in the study. The participants were from ten schools that fell into three socio-economic categories based on the free and reduced
lunch (FRL) participation percentages. The ten schools were composed of schools from each of the following FRL 2014-2015 categories: (a) FRL greater than 80%, (b) FRL between 40 and 60%, and (c) FRL equal to or less than 15%. Appendix A provides a composition of each school’s information that includes student enrollment, the number of teachers on staff, and the percentage of students enrolled in the school’s free and reduced lunch program.

Although the information garnered in this study is not meant to be generalizable, certain aspects or conditions could be of use to other western school districts with analogous demographic compositions under some circumstances. There are twenty-eight school districts located in the western United States that share similar demographics to the district under study (Governing, 2017; Find Your Niche, 2016; Public School Review, 2017). The six western states of comparison are Arizona, California, Colorado, Nevada, Texas, and Utah. Table 3 provides a representation of similar districts. The district under study is in the center of the table designated by the letter N with 64 elementary schools and an average FRL of 47.6%. Those districts flanking the district under study are relatively similar in FRL and other characteristics.
Table 3:
Similar School Districts in the Western United States

<table>
<thead>
<tr>
<th>District</th>
<th>Student Population</th>
<th>Distric Cost/Pupil</th>
<th>Elem Schools</th>
<th>Avg Teacher Salary</th>
<th>FRL</th>
<th>Grad Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>61,465</td>
<td>$7,163</td>
<td>52</td>
<td>$56,791</td>
<td>11.2%</td>
<td>89%</td>
</tr>
<tr>
<td>B</td>
<td>53,878</td>
<td>$7,246</td>
<td>38</td>
<td>$65,556</td>
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<td>97%</td>
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<tr>
<td>C</td>
<td>70,857</td>
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<td>71</td>
<td>$71,195</td>
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<td>$62,070</td>
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<td>91%</td>
</tr>
<tr>
<td>E</td>
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<td>97%</td>
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<tr>
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<td>38</td>
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</tr>
<tr>
<td>G</td>
<td>54,689</td>
<td>$10,972</td>
<td>60</td>
<td>$52,033</td>
<td>28.6%</td>
<td>94%</td>
</tr>
<tr>
<td>H</td>
<td>54,535</td>
<td>$9,964</td>
<td>42</td>
<td>$51,028</td>
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<td>87%</td>
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<tr>
<td>I</td>
<td>53,336</td>
<td>$11,657</td>
<td>46</td>
<td>$51,767</td>
<td>32.0%</td>
<td>94%</td>
</tr>
<tr>
<td>J</td>
<td>56,363</td>
<td>$9,562</td>
<td>33</td>
<td>$49,166</td>
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<td>92%</td>
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<td>K</td>
<td>72,910</td>
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<td>37.1%</td>
<td>92%</td>
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</tr>
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<td>$59,680</td>
<td>47.6%</td>
<td>75%</td>
</tr>
<tr>
<td>O</td>
<td>62,000</td>
<td>$8,057</td>
<td>42</td>
<td>$58,668</td>
<td>54.9%</td>
<td>90%</td>
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<tr>
<td>P</td>
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<td>$9,149</td>
<td>68</td>
<td>$76,744</td>
<td>56.2%</td>
<td>72%</td>
</tr>
<tr>
<td>Q</td>
<td>64,000</td>
<td>$8,010</td>
<td>55</td>
<td>$58,427</td>
<td>60.0%</td>
<td>76%</td>
</tr>
<tr>
<td>R</td>
<td>57,436</td>
<td>$8,913</td>
<td>52</td>
<td>$50,629</td>
<td>60.5%</td>
<td>91%</td>
</tr>
<tr>
<td>S</td>
<td>55,320</td>
<td>$10,088</td>
<td>64</td>
<td>$59,067</td>
<td>62.4%</td>
<td>84%</td>
</tr>
<tr>
<td>T</td>
<td>48,078</td>
<td>$8,080</td>
<td>67</td>
<td>$44,040</td>
<td>66.5%</td>
<td>80%</td>
</tr>
<tr>
<td>U</td>
<td>60,852</td>
<td>$9,064</td>
<td>57</td>
<td>$49,205</td>
<td>67.8%</td>
<td>80%</td>
</tr>
<tr>
<td>V</td>
<td>64,000</td>
<td>$8,485</td>
<td>56</td>
<td>$51,224</td>
<td>68.1%</td>
<td>83%</td>
</tr>
<tr>
<td>W</td>
<td>55,577</td>
<td>$10,493</td>
<td>38</td>
<td>$49,199</td>
<td>76.8%</td>
<td>85%</td>
</tr>
<tr>
<td>X</td>
<td>69,716</td>
<td>$8,658</td>
<td>48</td>
<td>$48,471</td>
<td>82.3%</td>
<td>79%</td>
</tr>
<tr>
<td>Y</td>
<td>71,000</td>
<td>$9,199</td>
<td>66</td>
<td>$55,590</td>
<td>84.9%</td>
<td>79%</td>
</tr>
<tr>
<td>Z</td>
<td>53,493</td>
<td>$8,396</td>
<td>37</td>
<td>$64,492</td>
<td>86.2%</td>
<td>87%</td>
</tr>
<tr>
<td>AA</td>
<td>53,303</td>
<td>$10,175</td>
<td>55</td>
<td>$62,581</td>
<td>89.8%</td>
<td>80%</td>
</tr>
<tr>
<td>BB</td>
<td>53,750</td>
<td>$11,097</td>
<td>69</td>
<td>$49,444</td>
<td>91.6%</td>
<td>78%</td>
</tr>
<tr>
<td>Mean:</td>
<td>60,683</td>
<td>$8,933</td>
<td>53</td>
<td>$56,421</td>
<td>51.5%</td>
<td>86%</td>
</tr>
</tbody>
</table>

The student demographics are also similar. Note in Table 3 how the four districts on either side of the district under study are very similar in the ethnic composition (Find Your Niche, 2016). Table 4 represents the student ethnic demographics of similar districts.
### Table 4:
Student Ethnic Demographics of Similar Districts

<table>
<thead>
<tr>
<th>District</th>
<th>White</th>
<th>Hispanic</th>
<th>Multi Racial</th>
<th>Asian</th>
<th>African American</th>
<th>Native American</th>
<th>Pacific Islander</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB</td>
<td>1.80%</td>
<td>91.9%</td>
<td>0.40%</td>
<td>0.30%</td>
<td>6.40%</td>
<td>0.10%</td>
<td>0%</td>
</tr>
<tr>
<td>X</td>
<td>1.90%</td>
<td>71.30%</td>
<td>0.70%</td>
<td>1.30%</td>
<td>24.50%</td>
<td>0.20%</td>
<td>0.10%</td>
</tr>
<tr>
<td>Z</td>
<td>2.60%</td>
<td>93.40%</td>
<td>0.60%</td>
<td>2.80%</td>
<td>0.30%</td>
<td>0.20%</td>
<td>0.10%</td>
</tr>
<tr>
<td>W</td>
<td>6.80%</td>
<td>82.40%</td>
<td>0.60%</td>
<td>3%</td>
<td>7%</td>
<td>0.20%</td>
<td>0.10%</td>
</tr>
<tr>
<td>AA</td>
<td>7%</td>
<td>73.60%</td>
<td>3.20%</td>
<td>1.90%</td>
<td>13.30%</td>
<td>0.50%</td>
<td>0.50%</td>
</tr>
<tr>
<td>U</td>
<td>10%</td>
<td>83.20%</td>
<td>1.40%</td>
<td>1.20%</td>
<td>3.80%</td>
<td>0.20%</td>
<td>0.30%</td>
</tr>
<tr>
<td>Y</td>
<td>10.80%</td>
<td>66.50%</td>
<td>1.40%</td>
<td>11.50%</td>
<td>8.90%</td>
<td>0.60%</td>
<td>0.30%</td>
</tr>
<tr>
<td>S</td>
<td>13.30%</td>
<td>28.60%</td>
<td>7.10%</td>
<td>39.70%</td>
<td>9.70%</td>
<td>0.50%</td>
<td>1.20%</td>
</tr>
<tr>
<td>K</td>
<td>17.90%</td>
<td>26.70%</td>
<td>2.60%</td>
<td>23.70%</td>
<td>28.70%</td>
<td>0.40%</td>
<td>0.10%</td>
</tr>
<tr>
<td>T</td>
<td>21.40%</td>
<td>63.50%</td>
<td>4%</td>
<td>1.60%</td>
<td>5.50%</td>
<td>3.60%</td>
<td>0.40%</td>
</tr>
<tr>
<td>R</td>
<td>21.50%</td>
<td>48.90%</td>
<td>2.10%</td>
<td>8.30%</td>
<td>17.20%</td>
<td>1.90%</td>
<td>0.10%</td>
</tr>
<tr>
<td>V</td>
<td>22%</td>
<td>44.50%</td>
<td>2.20%</td>
<td>6.30%</td>
<td>24.50%</td>
<td>0.50%</td>
<td>0.20%</td>
</tr>
<tr>
<td>O</td>
<td>22.10%</td>
<td>25.90%</td>
<td>7.80%</td>
<td>27.80%</td>
<td>14%</td>
<td>0.70%</td>
<td>1.60%</td>
</tr>
<tr>
<td>L</td>
<td>28%</td>
<td>52.10%</td>
<td>1.60%</td>
<td>11.50%</td>
<td>6.10%</td>
<td>0.30%</td>
<td>0.30%</td>
</tr>
<tr>
<td>M</td>
<td>28.10%</td>
<td>57.50%</td>
<td>3.10%</td>
<td>3.60%</td>
<td>7.30%</td>
<td>0.30%</td>
<td>0.20%</td>
</tr>
<tr>
<td>G</td>
<td>38.90%</td>
<td>23.30%</td>
<td>3.50%</td>
<td>22.20%</td>
<td>11.70%</td>
<td>0.30%</td>
<td>0.10%</td>
</tr>
<tr>
<td>F</td>
<td>39.50%</td>
<td>34.40%</td>
<td>2.70%</td>
<td>13.20%</td>
<td>9.60%</td>
<td>0.40%</td>
<td>0.10%</td>
</tr>
<tr>
<td>N</td>
<td>45.60%</td>
<td>39.50%</td>
<td>5.50%</td>
<td>4.40%</td>
<td>2.30%</td>
<td>1.60%</td>
<td>1.10%</td>
</tr>
<tr>
<td>I</td>
<td>46.20%</td>
<td>27.90%</td>
<td>3.30%</td>
<td>12.30%</td>
<td>9.80%</td>
<td>0.50%</td>
<td>0.10%</td>
</tr>
<tr>
<td>Q</td>
<td>46.40%</td>
<td>41.50%</td>
<td>1.60%</td>
<td>2.10%</td>
<td>4.10%</td>
<td>4.30%</td>
<td>0%</td>
</tr>
<tr>
<td>J</td>
<td>51.70%</td>
<td>34.90%</td>
<td>2.70%</td>
<td>3.60%</td>
<td>6.40%</td>
<td>0.50%</td>
<td>0.20%</td>
</tr>
<tr>
<td>P</td>
<td>53.70%</td>
<td>32.60%</td>
<td>0.60%</td>
<td>4.40%</td>
<td>3.50%</td>
<td>1.50%</td>
<td>3.90%</td>
</tr>
<tr>
<td>H</td>
<td>54.70%</td>
<td>18.70%</td>
<td>5.90%</td>
<td>8.30%</td>
<td>11.70%</td>
<td>0.50%</td>
<td>0.20%</td>
</tr>
<tr>
<td>B</td>
<td>57.40%</td>
<td>25.60%</td>
<td>7.90%</td>
<td>7.40%</td>
<td>1.30%</td>
<td>0.30%</td>
<td>0.10%</td>
</tr>
<tr>
<td>A</td>
<td>75.40%</td>
<td>14.20%</td>
<td>4.30%</td>
<td>4.20%</td>
<td>1.40%</td>
<td>0.50%</td>
<td>0.20%</td>
</tr>
<tr>
<td>E</td>
<td>78.60%</td>
<td>13.50%</td>
<td>3.40%</td>
<td>1.60%</td>
<td>1%</td>
<td>0.40%</td>
<td>1.50%</td>
</tr>
<tr>
<td>D</td>
<td>84.10%</td>
<td>10%</td>
<td>2.70%</td>
<td>0.90%</td>
<td>0.80%</td>
<td>0.40%</td>
<td>1.10%</td>
</tr>
<tr>
<td>C</td>
<td>84.40%</td>
<td>9.30%</td>
<td>2.10%</td>
<td>1.40%</td>
<td>1.20%</td>
<td>0.50%</td>
<td>1.20%</td>
</tr>
</tbody>
</table>

### Instrumentation

Data for this study was collected through the Job Satisfaction Survey and a demographic and professional practice questionnaire. The Job Satisfaction Survey, developed by Spector (1985), was utilized in this study because it was specifically written for the human services sector based on the dimensions of job satisfaction. Teachers are considered a facet of the human
services sector because their profession is based on a high interaction with people. Despite the multitudes of job satisfaction surveys in the industrial sector, prior to the development of the Job Satisfaction Survey, there had been a paltry sum of surveys focused on human service organizations before 1985, and none were expressly written to address this type of employee (Spector, 1985). Spector (1985) was careful to develop a survey which specifically addressed key issues in human service personal and did it in a format under 40 questions.

Prior to this study, two previous dissertations employed the same survey instrument, the Job Satisfaction Survey, in the same western state. Cui-Callahan (2012) first used it to study the job satisfaction of urban high school teachers and Bumgartner (2013) engaged it when he studied the job satisfaction of teachers across five rural school districts. This study will parallel their studies in using the same main survey instrument and asking similar demographic questions, but it will additionally explore four questions about professional practices that may contribute to job satisfaction in the field of education at the urban elementary school level.

The Job Satisfaction Survey (JSS) located in Appendix B is a 36-question assessment presented in a Likert scale and will be utilized to measure job satisfaction of elementary school teachers. “JSS was predicated on the theoretical position that job satisfaction represents an affective or attitudinal reaction to a job” (Spector, 1985, p. 694). Thereby, the JSS was particularly designed to measure attitudinal facets, both individually and in combination (Spector, 1997). The survey divides the data into nine subscales that include pay, promotion, supervision, fringe benefits, operating conditions, contingent rewards, co-workers, nature of work, and communication plus an overall score for job satisfaction. The nine subscales are represented in Table 5.
Table 5: Description of the Nine Subscales

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Pay</td>
<td>Pay and remuneration</td>
</tr>
<tr>
<td>2) Promotion</td>
<td>Promotion opportunities</td>
</tr>
<tr>
<td>3) Supervision</td>
<td>Immediate supervisor</td>
</tr>
<tr>
<td>4) Benefits</td>
<td>Monetary and non-monetary fringe benefits</td>
</tr>
<tr>
<td>5) Contingent rewards</td>
<td>Appreciation, recognition, and rewards for good work</td>
</tr>
<tr>
<td>6) Operating procedures</td>
<td>Operating policies and procedures</td>
</tr>
<tr>
<td>7) Co-workers</td>
<td>People you work with</td>
</tr>
<tr>
<td>8) Nature of work</td>
<td>Job tasks themselves</td>
</tr>
<tr>
<td>9) Communication</td>
<td>Communication within the organization</td>
</tr>
</tbody>
</table>


Spector allows students to use the survey free of charge on two conditions: (a) it is used for noncommercial educational or research purposes, and (b) the results are shared with Spector so that he may continue to update the norms (Spector, 1999). A copy of the survey is in Appendix B.

The demographic and professional practice questionnaire gathered information on age, ethnicity, marital status, highest level of educational attainment, licensure level, salary, number of schools taught at, years of teaching experience, belief in professional development, classroom autonomy, achievement of students, and mentor teacher experience. The demographic and professional practice questionnaire may be viewed in Appendix D.

Dependent and Independent Variables

The two dependent variables of intrinsic and extrinsic job satisfaction in this study are composed from the nine job satisfaction subscales. The intrinsic satisfiers are compiled from
contingent rewards, co-workers, nature of work, and communication, while the extrinsic variables are represented in pay, promotion, supervision, fringe benefits, and operating conditions. The nine subscales pose four questions per subscale intermixing question categories throughout the 36-question survey. Consequently, an overall satisfaction score as well as a score for each of the nine subscales was derived. Complete scoring details will be discussed in the following section. The following is a list of each subscale with its corresponding numbered questions from the Job Satisfaction Survey (Spector, 1985).

*Pay* refers to the economic compensation for the job performed. Is the educator satisfied with the financial compensation?

Corresponding Survey Questions:

1) I feel I am being paid a fair amount for the work that I do.
10) Raises are too few and far between.
19) I feel unappreciated by the organization when I think about what they pay me.
28) I feel satisfied with chances for salary increases.

*Promotion* will examine the attitudes of advancement opportunities that could be associated with higher status and often better pay. Is the educator satisfied that there may be opportunities for promotion?

Corresponding Survey Questions:

2) There is really too little chance for promotion on my job.
11) Those who do well on the job stand a fair chance being promoted.
20) People get ahead as fast here as they do in places.
33) I am satisfied with my chances for promotion.
Supervision refers to the theoretical support and interpersonal relationships with his/her direct supervisor. Is the educator satisfied with the supervision of the immediate supervisor/principal?

Corresponding Survey Questions:

3) My supervisor is quite competent in doing his/her job.

12) My supervisor is unfair to me.

21) My supervisor shows too little interest in the feelings of subordinates

30) I like my supervisor.

Fringe benefits refers to the peripheral benefits (sick leave, insurance, etc.) included with the position in addition to salary. Is the educator satisfied with the fringe benefits/benefits package provided by the district?

Corresponding Survey Questions:

4) I am not satisfied with the benefits I receive.

13) I am not satisfied with the benefits I receive.

22) The benefits we receive are as good as most other organizations offer.

29) There are benefits we do not have which we should have.

Contingent rewards include the acknowledgement for good job performance. Is the educator satisfied with the recognition and/or appreciation provided by the supervisor/principal or coworkers for good work?

Corresponding Survey Questions:

5) When I do a good job, I receive the recognition for it that I should receive.

14) I do not feel that the work I do is appreciated.

23) There are few rewards for those who work here.
32) I don’t feel my efforts are rewarded the way they should be.

*Operating procedures* are a reference to the guidelines, rules, and procedures involved in the performance of the job. Is the educator satisfied with the book-keeping correspondence and mandated procedures that are necessary to the administration of the position?

Corresponding Survey Questions:

6) Many of our rules and procedures make doing a good job difficult.

15) My efforts to do a good job are seldom blocked by red tape.

24) I have too much to do at work.

31) I have too much paperwork.

*Co-workers* observe the interpersonal relationships with one’s colleagues and the perceived competence of fellow coworkers. Is the educator satisfied with his/her coworkers?

Corresponding Survey Questions:

7) I like the people I work with

16) I find I have to work harder at my job than I should because the incompetence of people I work with.

25) I enjoy my coworkers.

34) There is too much bickering and fighting at work.

*Nature of work* refers to the type of work carried out on a day-to-day basis and the pride for one’s accomplishments each day. Is the educator satisfied with the daily duties of what is to be accomplished each day?

Corresponding Survey Questions:

8) I sometimes feel my job is meaningless

17) I like doing the things I do at work.
27) I feel a sense of pride in doing my job.

35) My job is enjoyable.

*Communication* observes the perceived satisfaction with the communication within the organization. Is the educator satisfied with the communication he/she receives and is it sufficient to effectively execute the job?

**Corresponding Survey Questions:**

9) Communication seems good within this organization.

18) The goals of this organization are not clear to me.

26) I often feel that I do not know what is going on with the organization.

36) Work assignments are often not fully explained.

The study’s 12 independent variables included personal and professional questions of age, ethnicity, marital status, level of educational attainment, licensure level, salary, number of schools taught at, years of teaching experience during his/her educational career, belief in professional development, classroom autonomy, the belief of the ability to improve the achievement of students, and mentor teacher experience. The 12 demographic and professional practice question responses are categorized in two, three, or four levels of independent variable choices depending on the number of options provided for each particular question as represented in Table 6.
**Table 6:**
Levels of Demographic Data

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Number of Independent Variables</th>
<th>Categories of Independent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>4 Levels</td>
<td>➢ 21-30 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 31-40 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 41 – 50 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 51+ years</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>2 Levels</td>
<td>➢ White</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Non-white</td>
</tr>
<tr>
<td>Marital status</td>
<td>2 Levels</td>
<td>➢ Married</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Not Married</td>
</tr>
<tr>
<td>Level of educational attainment</td>
<td>3 Levels</td>
<td>➢ Bachelor’s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Bachelors +</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Graduate Degree</td>
</tr>
<tr>
<td>Credential/Licensure level</td>
<td>3 Levels</td>
<td>➢ Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Secondary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Both Levels</td>
</tr>
<tr>
<td>Number of schools taught at</td>
<td>4 Levels</td>
<td>➢ 1 school</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 2-3 schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 4-5 schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 6+ schools</td>
</tr>
<tr>
<td>Salary</td>
<td>4 Levels</td>
<td>➢ $35,000-$42,999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ $43,000-$43,999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ $50,000-$58,999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ $59,000+</td>
</tr>
<tr>
<td>Years of Experience</td>
<td>3 Levels</td>
<td>➢ 0-6 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 7-15 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 16-41 years</td>
</tr>
<tr>
<td>Is Professional Development meaningful</td>
<td>3 Levels</td>
<td>➢ Not at all</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Sometimes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Most of the time</td>
</tr>
<tr>
<td>Able to personalize lessons based on your students</td>
<td>3 Levels</td>
<td>➢ Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Some of the Time</td>
</tr>
<tr>
<td>Improve achievement of students</td>
<td>3 Levels</td>
<td>➢ Few to Some</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Most</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ All</td>
</tr>
<tr>
<td>Mentor Teacher</td>
<td>2 Levels</td>
<td>➢ Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ No</td>
</tr>
</tbody>
</table>
**Instrument Scoring**

The scoring of the Job Satisfaction Survey is based upon the 36 job satisfaction questions presented in a six-point Likert scale. Each answer received a score between 1 and 6 wherein 1 point is assigned for disagree very much, 2 points disagree moderately, 3 points disagree slightly, and so forth. Therefore, the total or overall score on the Job Satisfaction Survey portion could range between 36 and 216 points; a respondent answering every question with a score of one would score a total of 36 while a respondent scoring a six on every question could get a score of 216. However, because it is easier to comprehend a participant’s score based on the Likert scale, wherein 1 is disagree (or dissatisfied) very much and 6 agree (or satisfied) very much, the scores have been converted back to the scale originally used to ask the questions.
36 Question Survey  
(Each question can score 1 - 6)

Nine Subscales of Satisfaction  
Four questions per subscale category

Four Subscales are Intrinsic  
(16 questions)
- Contingent Rewards
- Co-Workers
- Nature of work
- Communications

Five Subscales are Extrinsic  
(20 questions)
- Pay
- Promotional Opportunities
- Supervision
- Fringe Benefits
- Operational Conditions

*Figure 3: Job Satisfaction Survey Subscales and Scoring*
The questions are equally weighted and virtually written half in a positive format and half in a negative format because Spector (1997) found that participants who respond to positive questions have higher scores corresponding to satisfaction, while participants who respond agreeably to negatively worded questions score lower in job satisfaction. Table 7 details the nine subscales and their corresponding questions indicating the positive and negatively worded question formats. “Without item reversals, most respondents will have middle scores because they will tend to agree with half and disagree with half of the items, just because they are worded in opposite directions” (Spector, 1997, p. 9). To eliminate this condition Spector (1997) employed reverse scoring wherein the negatively worded responses have their scores renumbered. The response "Disagree very much" becomes a 6 rather than a 1. The response "Agree very much" becomes a 1 rather than a 6. Likewise, "Disagree moderately" becomes a 5 rather than a 2 and "Agree moderately" becomes a 2 rather than a 5, and "Disagree slightly" is reported as a 4 rather than 3, and "Agree slightly" is reported as a 3 rather than 4 (Spector, 1997, p. 9).

Once the negative item answers have been assigned reversed scores, each subscale is then tallied producing a score between four and twenty-four (Spector, 1997). Finally, the individual totals from all nine subscales are combined and totaled to produce an overall satisfaction score (Spector, 1997). Table 7 represents the nine subscales and their corresponding question numbers. Those designated with an “r” are reversed scored.
Table 7:
Levels of Demographic Data

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Item Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>1, 10r, 19r, 28</td>
</tr>
<tr>
<td>Promotion</td>
<td>2r, 11, 20, 33</td>
</tr>
<tr>
<td>Supervision</td>
<td>3, 12r, 21r, 30</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>4r, 13, 22, 29r</td>
</tr>
<tr>
<td>Contingent Rewards</td>
<td>5, 14r, 23r, 32r</td>
</tr>
<tr>
<td>Operating Conditions</td>
<td>6r, 15, 24r, 31r</td>
</tr>
<tr>
<td>Coworkers</td>
<td>7, 16r, 25, 34r</td>
</tr>
<tr>
<td>Nature of Work</td>
<td>8r, 17, 27, 35</td>
</tr>
<tr>
<td>Communication</td>
<td>9, 18r, 26r, 36r</td>
</tr>
</tbody>
</table>


To convey uniformity in the scoring, Spector (1999) provides advise in the event a participant does not answer one or more questions, however, the researcher selected the option within SurveyMonkey to direct the participant that a response must be made before proceeding to the next question. Thus, all questions in the Job Satisfaction Survey were answered.

Instrument Consistency and Reliability

Psychometrics is the culmination of the survey research wherein it quantifies the survey’s results and helps researchers determine if a survey instrument is creditable (Litwin, 1995). Only through the thorough examination of the survey instrument can an assessment and interpretation of the survey data be made for it is not about the quantitative data, but rather “how well the survey performs” (Litwin, 1995, p.4). Therefore, the reliability and validity of the survey instrument is crucial.

The JSS “was developed, normed, and validated on human service personnel making it of specific applicability to human services” (Spector, 1985, p. 708). Norms for the Job Satisfaction
Survey were from 19 separate samples with 3,148 human service employee participants (Spector, 1985). Table 8 provides a comprehensive display of Spector’s 1985 samples and is comprised of the sample number, the number of participants, a descriptor of the participating organization, the source of the data, and the rate of return.
Table 8:
Description of Spector’s Samples

<table>
<thead>
<tr>
<th>Sample</th>
<th>N</th>
<th>Description</th>
<th>Source</th>
<th>Return % Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>241</td>
<td>State welfare office</td>
<td>Michaels, 1983</td>
<td>67%</td>
</tr>
<tr>
<td>2</td>
<td>92</td>
<td>Public health department</td>
<td>Michaels, 1983</td>
<td>67%</td>
</tr>
<tr>
<td>3</td>
<td>205</td>
<td>Mental health facility</td>
<td>Michaels, 1983</td>
<td>67%</td>
</tr>
<tr>
<td>4</td>
<td>42</td>
<td>State juvenile detention</td>
<td>Michaels, 1983</td>
<td>67%</td>
</tr>
<tr>
<td>5</td>
<td>73</td>
<td>Food stamp office</td>
<td>Michaels, 1983</td>
<td>67%</td>
</tr>
<tr>
<td>6</td>
<td>788</td>
<td>State social service office</td>
<td>Michaels, 1983</td>
<td>67%</td>
</tr>
<tr>
<td>7</td>
<td>83</td>
<td>Mental health clinic</td>
<td>Michaels, 1980</td>
<td>N/A</td>
</tr>
<tr>
<td>8</td>
<td>124</td>
<td>Mental health clinic</td>
<td>Spector &amp; Michaels, 1982</td>
<td>67%</td>
</tr>
<tr>
<td>9</td>
<td>86</td>
<td>Mental health clinic</td>
<td>Unknown</td>
<td>62%</td>
</tr>
<tr>
<td>10</td>
<td>157</td>
<td>Mental health facility</td>
<td>Unknown</td>
<td>71%</td>
</tr>
<tr>
<td>11</td>
<td>80</td>
<td>Mental health clinic</td>
<td>Spector &amp; Michaels, 1983</td>
<td>49%</td>
</tr>
<tr>
<td>12</td>
<td>116</td>
<td>State welfare office</td>
<td>Michaels, 1979</td>
<td>N/A</td>
</tr>
<tr>
<td>13</td>
<td>32</td>
<td>Mental health clinic</td>
<td>Unknown</td>
<td>64%</td>
</tr>
<tr>
<td>14</td>
<td>93</td>
<td>Mental health facility</td>
<td>Unknown</td>
<td>42%</td>
</tr>
<tr>
<td>15</td>
<td>94</td>
<td>Mental health conference</td>
<td>Weinberg &amp; Marlowe, 1983</td>
<td>63%</td>
</tr>
<tr>
<td>16</td>
<td>193</td>
<td>State psychiatric hospital</td>
<td>Marlowe &amp; Weinberg, 1983</td>
<td>100%</td>
</tr>
<tr>
<td>17</td>
<td>485</td>
<td>Nursing homes</td>
<td>Nelson, Mullins, Weiner &amp; Busciglio, 1983</td>
<td>100%</td>
</tr>
<tr>
<td>18</td>
<td>63</td>
<td>Mental health clinic</td>
<td>Unknown</td>
<td>63%</td>
</tr>
<tr>
<td>19</td>
<td>101</td>
<td>Mental health clinic</td>
<td>Unknown</td>
<td>63%</td>
</tr>
<tr>
<td>Total</td>
<td>3,148</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


From this compilation of 3,148 responses, Spector (1985) was able to establish validation for the scale’s reliability and construct validity. Spector (1997) emphasized that for assessing a
scale, two forms of reliability estimates are vital. The first is the internal consistency reliability estimates which indicate how well items of a scale relate to one another and the second is the test-retest reliability which indicates a scale’s reliability over time (Creswell, 2015; Spector, 1997). Litwin (1995) advocated that the most generally applied index or gauge of a survey instrument’s reliability is the test-retest reliability aspect. The test-retest reliability is data provided by measuring the responses of the participants at two different points in time using the same instrument (Creswell; 2015, Litwin, 1995). A coefficient score of .70 and higher is an indication of instrument stability and reliability (Litwin, 1995).

As seen in Table 9, Spector validated the initial Job Satisfaction Survey’s internal consistency and reliability in each subscale with a minimum coefficient alpha of .60 or greater and a total average coefficient of 0.91 overall. This data was compiled from a sample size of 2,870 with only three of the nine subscales scoring below a coefficient of .73. Table 9 also shows the test-retest reliability indicating the survey’s reliability over time and administration (Creswell, 2015; Litwin, 1995). Spector (1985) re-administered the survey to the same 43 participants 18 months apart and found the correlation coefficients at .71 overall, a correlation he found to be notably large. Consistent with accepted statistical standards the Job Satisfaction Survey established acceptable levels of reliability based upon the initial testing of these 2,870 respondents (Spector, 1985; Nunnally, 1967). The overall coefficient total of .91 is considered very high (Spector, 1985).
Table 9: Internal Consistency and Reliability for the Job Satisfaction Survey

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Internal Consistency</th>
<th>Test-Retest Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Coefficient Alpha)</td>
<td></td>
</tr>
<tr>
<td>Pay</td>
<td>0.75</td>
<td>.45</td>
</tr>
<tr>
<td>Promotion</td>
<td>0.73</td>
<td>.62</td>
</tr>
<tr>
<td>Supervision</td>
<td>0.82</td>
<td>.55</td>
</tr>
<tr>
<td>Benefits</td>
<td>0.73</td>
<td>.37</td>
</tr>
<tr>
<td>Contingent rewards</td>
<td>0.76</td>
<td>.59</td>
</tr>
<tr>
<td>Operating procedures</td>
<td>0.62</td>
<td>.74</td>
</tr>
<tr>
<td>Coworkers</td>
<td>0.60</td>
<td>.64</td>
</tr>
<tr>
<td>Nature of work</td>
<td>0.78</td>
<td>.54</td>
</tr>
<tr>
<td>Communication</td>
<td>0.71</td>
<td>.65</td>
</tr>
<tr>
<td>Total</td>
<td>0.91</td>
<td>.71</td>
</tr>
<tr>
<td>Sample size</td>
<td>2,870</td>
<td>43</td>
</tr>
</tbody>
</table>


While the Job Satisfaction Survey was created in 1985, Spector has continued to compile statistical data each time the survey’s results are provided to him. Over the past 30 years, he has received over 300 requests per year to utilize the Job Satisfaction Survey; thus, it is estimated that it has been administered over 10,000 times (P.E. Spector, personal communication, March 31, 2015). Researchers across the globe have continued to administer the survey to a wide variety of human service employees ranging from law enforcement to educators thus continuing to provide corroboration of its internal consistency and reliability (Spector, 1997).

To help safeguard for consistency and reliability for this study, the researcher will make certain the test administration is synonymous from site to site, and ensure the participants are given the survey in a professional setting that is as relaxed and comfortable as possible.
(Creswell, 2015). To further provide for consistency and reliability the researcher also utilized a coefficient alpha test, the calculations for which are presented and discussed in Chapter IV, Results and Findings. A coefficient alpha test, also known as a Cronbach’s alpha, is engaged to assess for internal consistency based upon the average correlation of all items within the scale (Cronbach, 1960).

**Validity**

While reliability seeks to show consistency in scores, validity seeks to provide evidence that an instrument is actually measuring what it is designed to measure (Creswell, 2015). Creswell (2015) reported that “reliability and validity are bound together in complex ways,” sometimes they overlap and sometimes they are mutually exclusive (p. 158). The more reliable a score is the more valid the test is, hence, “scores need to be stable and consistent before they can be reliable” (Creswell, 2015, p. 158). Like reliability, a validity correlation coefficient of .70 and higher is an acceptable rate of validity (Litwin, 1995).

To initially establish validity for the Job Satisfaction Survey (JSS), Spector (1985) conducted tests of the JSS against the Job Descriptive Index (JDI) designed by Smith, Kendall, and Hulin (1969). While the JDI was primarily focused on extrinsic job satisfaction (a time before an interest in intrinsic factors surged) it was a well-recognized instrument as it had been reported in over 100 published studies (Cook, Hepworth, Wall, & Warr, 1981). Thus, Spector (1985) selected it for comparison because it was the leading validated scale on job satisfaction at the time. Spector (1997) reported that five of the nine subscales (pay, promotion, supervision, coworkers, and nature of work) correlated well with JDI’s corresponding subscales ranging from .61 for coworkers to .80 for supervision. “Consistent with the literature, the JSS was most strongly correlated with perceptual and attitudinal variables” (Spector, 1985, p. 705). “Job
satisfaction and its effects are the result of complex interactions between individuals and organizations” (Spector, 1985, p.708).

The Job Satisfaction Survey has established itself as a reliable and valid survey instrument that has been tailored to the human services employee, administered worldwide over the last 30 years to a variety of human service personnel including teachers. Because of these factors, it makes it an appropriate job satisfaction survey for elementary school teachers. While the survey has been administered in numerous educational studies, Cui-Callahan (2012) felt a shortcoming to the survey was that it was not specifically written for educators, thus it may be considered to have nonspecific questions; conversely, she also noted it would take many years to develop a customized survey instrument that would have as solid a reputation.

**Data Collection**

The compilation of the data has followed an attentively mapped plan to ensure the accuracy, confidentiality and security of the data collected. Permission from the University of Nevada, Reno’s Institutional Review Board (IRB) office was obtained to administer the Job Satisfaction Survey to a portion of the elementary schools of a particular district located within a western state located in the United States (Appendix A). Upon IRB approval (Appendix E) permission to conduct the survey was also obtained from the Office of Accountability and Performance at the school district (Appendix F).

The researcher invited twelve elementary schools within the school district to participate based upon an equal number of schools from three socioeconomic status (SES) sectors: (a) low social-economic, (b) median economic, and (c) affluent status. The goal was to have between 250 and 300 survey participants. The survey resulted in 296 usable participant scores from teachers working at ten schools.
An introductory e-mail was sent to the principals of twelve identified elementary schools meeting the SES criteria to explain the purpose and significance of the study, seek their permission to access their schools, and invite their teachers to voluntarily participate in the study (Appendix G). It was suggested to the principals that the surveys would optimally be administered just prior to commencing a staff meeting or professional development workshop. Follow-up contact was to be made to principals who did not reply within seven business days (Appendix H).

Following successful contact with the ten principals who provided permission to access their schools, an e-mail was sent to the principals to establish a date and time for the survey to be administered at his/her school (Appendix I). Thereafter, a follow-up letter of confirmation was issued to each principal confirming their permission along with the agreed upon date and time for the administration of the survey (Appendix J).

In order to administer the surveys and accommodate principals’ calendars, one assistant (or survey proctor) was trained to assist the researcher and serve as an additional survey proctor in case of a scheduling conflict or illness on the part of the researcher. This procedure was approved through the IRB. The survey proctor was never a teacher or supervisor within the district where the survey was administered.

One week prior to each school’s survey date, an introductory e-mail was sent to every teacher on staff inviting them to voluntarily participate in the survey in the upcoming week and explain its importance. The e-mail was initially sent to each school’s principal wherein the administrative secretary or principal forwarded the e-mail to the respective teachers (Appendix K).
On the day of the survey the administrative secretary sent a reminder *invitation to participate* e-mail to the teaching staff (Appendix L). The researcher/survey proctor arrived approximately one hour before the designated survey time to set-up the school’s computer classroom for the survey. This ensured the survey could take place on-time and minimize the interruption of the staff. At the designated time, the principal invited the teaching staff (typically through the school’s intercom) to come to the staff meeting or professional development session in the school’s computer lab to voluntarily participate in the survey. Once the staff was seated in the lab, the principal introduced the researcher/survey proctor. The researcher/survey proctor, read a script welcoming the participants, explained the survey, its importance, its potential benefits and risks, ensured anonymity, and reiterated that participation is voluntary. In this manner, all participants received the directions by the researcher/survey proctor at the same time. These same directions were read to all participants at each school ensuring accuracy and congruence from site to site (Appendix M). The survey was administered on computer via SurveyMonkey within each school’s computer lab so that participants in each school could take part in the survey simultaneously. The Job Satisfaction Survey and the Demographic Survey took between four and 10 minutes to complete, including directions. As the surveys were conducted on computer, the survey results were available immediately for analysis.

**Data Analysis**

After each survey was administered, the data was downloaded from SurveyMonkey to an Excel spreadsheet keeping data from each school site independent as well as building an aggregate file. A codebook was developed to organize the data and an initial set of descriptive statistics was compiled for each school. When all participants had been surveyed, descriptive statistics for the entire participant population was generated. The descriptive statistics contain the
means, standard deviations, and correlations for the overall job satisfaction, both intrinsic and extrinsic job satisfactions as well as the demographic results of the entire survey population. The data analysis was conducted through the Statistical Package for Social Sciences (SPSS) software.

Scoring guidelines written by Spector (1985) for the JSS were followed paying particular attention to ensuring reverse scoring was applied to the appropriate questions. Its nine subscales were divided into two dependent variable categories of intrinsic satisfiers and extrinsic dissatisfiers. The intrinsic subscale variable was composed of contingent rewards, coworkers, nature of work, and communication while the extrinsic subscale variable was composed of pay, promotional opportunities, supervision, fringe benefits, and operating conditions.

The intrinsic satisfier and extrinsic dissatisfiers, composed from the nine subscales, served as the two dependent variables and were measured against the 12 demographic and professional practice components (the independent variables) of age, ethnicity, marital status, highest level of educational attainment, licensure level, salary, number of schools taught at, years of teaching experience, belief in professional development, classroom autonomy, achievement of students, and mentor teacher experience.

In order to provide a detailed analysis of the data collected, researchers need to “account for the impact of each variable” in a study (Creswell, 2015, p. 349). While an analysis of variance (ANOVA) is designed to test for one dependent variable, a study such as this with two correlated dependent variables is more efficiently accomplished using a multivariate analysis of variance (MANOVA) (Creswell, 2015; Field, 2015; Salkind, 2011). The MANOVA is a single statistical test providing advantages over ANOVAs when the dependent variables are related (Carey, 1998; Field, 2015). For one, it has a higher likelihood of discovering which independent variable is most important because it can detect multivariate response patterns; thus, it is also
more powerful as it can identify small differences that would otherwise be missed by an
ANOVA (French, Macedo, Poulson, Waterson, & Yu, n.d.; Frost, 2014). Next, it can protect
against Type I errors that can occur in ANOVA tests, and testing all response variables
concurrently maintains the family error rate equal to the set significance level (Field, 2015;
French et al., n.d.; Frost, 2014). The alpha or significance level, of $p < .05$ was applied throughout
the analysis (Field, 2015, Mertler & Vannata, 2005). Succinctly, the MANOVA in this study
allowed for analyzing the dependent variables of the intrinsic satisfiers and the extrinsic
dissatisfiers in Spector’s (1985) Job Satisfaction Survey against the independent variables of the
demographic data. The MANOVA analysis determined if there were any significant differences
between the dependent and independent variables. If an independent variable held only two
choices a T-test would have been run to cross-check the MANOVA, however, this was not
needed.

Table 10 provides a summary of the data for the MANOVA calculations.
**Table 10:**
Summary of MANOVA tests to be conducted

<table>
<thead>
<tr>
<th>Questions</th>
<th>Levels of Independent Variables</th>
<th>Categories of Independent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is there any significant difference among the teachers’ <em>Age</em> group in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?</td>
<td>4 Levels</td>
<td>➢ 21-30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 31-40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 41-50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 51+</td>
</tr>
<tr>
<td>2. Is there a significant difference among <em>Ethnicity</em> teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?</td>
<td>2 Levels</td>
<td>➢ White</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Non-white</td>
</tr>
<tr>
<td>3. Is there a significant difference among <em>Marital Status</em> in the teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?</td>
<td>2 Levels</td>
<td>➢ Married</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Not Married</td>
</tr>
<tr>
<td>4. Is there a significant difference among <em>Highest Level of Education</em> teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?</td>
<td>3 Levels</td>
<td>➢ Bachelor’s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Bachelors +</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Graduate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Degree</td>
</tr>
<tr>
<td>5. Is there a significant difference among <em>Level of Teaching Licensure</em> based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?</td>
<td>3 Levels</td>
<td>➢ Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Secondary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Both Levels</td>
</tr>
<tr>
<td>6. Is there a significant difference among the <em>Number of Schools Taught</em> teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?</td>
<td>4 Levels</td>
<td>➢ 1 school</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 2-3 schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 4-5 schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ 6+</td>
</tr>
<tr>
<td>Questions</td>
<td>Levels of Independent Variables</td>
<td>Categories of Independent Variables</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td>-------------------------------------</td>
</tr>
</tbody>
</table>
| 7. Is there a significant difference among Salary teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | 4 Levels                        | ➢ $35,000 - $42,999  
➢ $43,000 - $49,999  
➢ $50,000 - $58,999  
➢ $59,000 + |
| 8. Is there a significant difference among the Total Years of Teaching Experience teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | 3 Levels                        | ➢ 0-6 years  
➢ 7-15 years  
➢ 16-41 years |
| 9. Is there a significant difference among the teachers who believe Professional Development opportunities are meaningful teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | 3 Levels                        | ➢ Not at all  
➢ Sometimes  
➢ Most of the time |
| 10. Is there a significant difference among teachers who have Classroom Autonomy teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | 2 Levels                        | ➢ Yes  
➢ No  
➢ Some of the Time |
| 11. Is there a significant difference between teachers who believe they can improve the Achievement of Students teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | 3 Levels                        | ➢ Few to Some  
➢ Most  
➢ All |
| 12. Is there a significant difference between those teachers who had a Mentor Teacher teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | 2 Levels                        | ➢ Yes  
➢ No |
A study’s outcome is only as good as its input (Salkind, 2011); consequently, prior to conducting a MANOVA analysis, screening the data occurred through four stages. First, it was reviewed for missing data; from a participant failing to answer a question(s) to a computer/technical anomaly causing missing figures (Mertler & Vannata, 2005). Second, using the SPSS frequencies procedure, the frequency distributions and the descriptive statistics were examined to be sure all values were within range (Mertler & Vannata, 2005). Third, examined for outliers, the extreme values on one or more variables, by observing the histogram for the frequency of numerical results of the intrinsic and extrinsic data (Mertler & Vannata, 2005). And fourth, through the use of SPSS software, evaluated for the assumption of normality, linearity and homoscedasticity (Mertler & Vannata, 2005).

Such analysis indicates the statistical significance of the differences between the groups (Laerd, 2015). Per SPSS linearity plots, the data in this study had good linearity (Appendix N). However, for a few groups the data violated normality (Appendix O) per Shapiro-Wilk test and homogeneity (Appendix P) per Levine’s test. With such violations, the Pillai-Bartlett (or Pillai’s trace) was utilized because it is known for its robustness to violations of these assumptions (Field, 2015).

If the Pillai’s trace resulted in no significance of difference ($p > .05$), then the independent variable did not have a statistically significant effect on the dependent variable and no further tests were required. If differences were present, wherein $p < .05$, then an ANOVA was performed to ascertain if it was the intrinsic or extrinsic dependent variable that had the statistically significant difference for that independent variable. The ANOVA results are reported as follows: (Hypothesis degrees of freedom, Error degrees of freedom) = F-ratio, significance; partial eta squared.
Partial eta squared is a measure of the effect size reported in this study. It is the proportion of variance for a variable when excluding other variables in the analysis (Field, 2015). “Nowadays, partial eta squared is overwhelmingly cited as a measure of effect size in the educational research literature,” (Richardson, 2011, p. 136). A rule of thumb for the effect sizes measured by partial eta squared as derived by Cohen (1977) from his effect size index $f$ are: small effect = .01; medium effect = .06; and large effect = .14.

While differences can be indicated in ANOVA results, they cannot be specifically identified without after-the-fact testing or post hoc tests (Salkind, 2011). Therefore, post hoc tests were performed to precisely discover between which groups these differences existed (Salkind, 2011; Starkweather, n.d.). This analysis employed a Tukey post hoc test which calculated and identified statistically significant differences between groups. The Tukey method is conservative even when there are unequal sample sizes (Laerd, 2015).

When a Levine’s Test for Equality produced a score with a significance of $p < .05$, the assumption of homogeneity was violated (Appendix P), and when this occurred, the complete MANOVA process was rerun using equal sample sizes (Field, 2015). This was accomplished by balancing the sample sizes through the SPSS random sample function. While equal sample sizes are smaller and less powerful, the significance is more accurate (Field, 2015). In conclusion of the analysis, the final data was interpreted for those questions resulting in statistically significant differences.

**Summary**

Chapter III provides a synopsis of the procedures followed in administration of a survey on job satisfaction among elementary school teachers in a western state of the United States. Its methodology discusses the details of conducting this survey and serves to provide a
comprehensive discussion of the specific mechanics involved in the data collection. The methodology includes a restatement of the problem, research design, participants, instrumentation, dependent and independent variables, JSS scoring, consistency and reliability of the instrument (both internal consistency and test retest reliability), validity, data collection, and data analysis.
CHAPTER IV

Presentation and Analyses of Data

Introduction

The goal of this study was to explore the job satisfaction of elementary school teachers in an urban school district located in a western state and examine which selected professional practices influence their job satisfaction. The methodology applied was a quantitative design employing 12 discrete multiple analyses of variance (MANOVA) tests. Chapter IV is presented in three parts: 1) overall descriptive statistics and summary results of the Demographic Questionnaire and Job Satisfaction Survey, 2) the summary findings of the overall job satisfaction score, the results of the nine subscales, and the scores of the intrinsic and extrinsic job satisfaction subscales, and 3) a summary of the chapter.

Presentation and Analyses of Data

The Job Satisfaction Survey (Spector, 1994) was administered to 296 elementary school teachers from 10 schools within a large school district located in a western state during the months of October and November 2016. The ten schools were composed of a cross-section of socioeconomic status to provide a balanced socio-economic representation of the district, not to compare individual schools against another on their economic status. However, as a group the lowest socioeconomic group was most satisfied overall, followed by the median socioeconomic category. The affluent category reported the lowest in overall satisfaction. Table 1 provides a depiction of the distribution of the participants by the socio-economic level of their schools.
Table 11:
Descriptive distribution of participants by socio-economic status of each school.

<table>
<thead>
<tr>
<th>Economic Status</th>
<th>School</th>
<th>Participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>School 1</td>
<td>32</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>School 2</td>
<td>30</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>School 3</td>
<td>28</td>
<td>9%</td>
</tr>
<tr>
<td>Total Low</td>
<td></td>
<td>90</td>
<td>30%</td>
</tr>
<tr>
<td>Median</td>
<td>School 4</td>
<td>46</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>School 5</td>
<td>19</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>School 6</td>
<td>28</td>
<td>9%</td>
</tr>
<tr>
<td>Total Median</td>
<td></td>
<td>93</td>
<td>31%</td>
</tr>
<tr>
<td>Affluent</td>
<td>School 7</td>
<td>22</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>School 8</td>
<td>21</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>School 9</td>
<td>33</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>School 10</td>
<td>27</td>
<td>9%</td>
</tr>
<tr>
<td>Total Affluent</td>
<td></td>
<td>103</td>
<td>35%</td>
</tr>
<tr>
<td>Total Participants</td>
<td></td>
<td>296</td>
<td></td>
</tr>
</tbody>
</table>

Demographic Questionnaire Results

The demographic and professional practices questionnaire portion of the survey was devised of twelve questions. The participants’ responses have been divided into two sections composed of personal and professional characteristics.

Personal Characteristics. The personal characteristics of the demographic questionnaire were age, ethnicity, marital status, and salary. In a recent study conducted in the same district by another researcher he found there were too few male teachers to provide statistical analysis (Parks, 2014) therefore, gender was not a demographic question. Teacher participants reported in four age categories (see Figure 4) with the largest (almost 31%) response category for those aged 41-50 years.
Figure 4: Ages of Participant Teachers by Percentage of Total.

The ethnic composition of the teachers was White at 89.8% and married at 64.4%. Only 20.4% of the teachers reported they made over $59,000 while nearly 30% made under $43,000. Table 12 details the personal demographic responses.

Table 12 details the personal demographic responses.
Table 12: Personal Demographic Characteristics

<table>
<thead>
<tr>
<th>Personal Demographic Characteristic (Variable)</th>
<th>Percent (%)</th>
<th>Participants (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 - 30 years</td>
<td>20.6%</td>
<td>61</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>26.7%</td>
<td>79</td>
</tr>
<tr>
<td>41-50 years</td>
<td>30.7%</td>
<td>91</td>
</tr>
<tr>
<td>51+ years</td>
<td>22.0%</td>
<td>65</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>89.8%</td>
<td>265</td>
</tr>
<tr>
<td>Non-White</td>
<td>10.2%</td>
<td>30</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>64.4%</td>
<td>188</td>
</tr>
<tr>
<td>Not Married</td>
<td>35.6%</td>
<td>104</td>
</tr>
<tr>
<td><strong>Salary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$35,000 – $42,999</td>
<td>29.4%</td>
<td>85</td>
</tr>
<tr>
<td>$43,000 - $49,999</td>
<td>26.0%</td>
<td>75</td>
</tr>
<tr>
<td>$50,000 - $58,999</td>
<td>24.2%</td>
<td>70</td>
</tr>
<tr>
<td>$59,000 +</td>
<td>20.4%</td>
<td>59</td>
</tr>
</tbody>
</table>

Total Participants 296

**Professional Characteristics.** The professional characteristic questions were composed of the highest level of educational attainment, teacher licensure level, number of schools taught at, years of teaching experience, belief in meaningfulness of professional development, classroom autonomy, belief in the ability to improve the achievement of students, and mentor teacher experience. Table 13 details the professional demographic responses except the question about the number of years’ experience. This particular demographic asked the participants to provide an exact number of years of experience. Teacher experience ranged from 1 to 41 years with a mean of 12.5 years for all participants. For the purposes of the MANOVA calculations later in the analysis the survey respondents were categorized into three groups: (a) 1–6 years, (b) 7-15 years, and (c) 16–41 years yielding nearly equally sized participant groups. The largest pool
of teachers has 1-6 years of experience. Figure 5 portrays the number of years’ experience for all participants.

![Figure 5: Years of Experience of Teachers](image)

**Figure 5: Total Years of Teaching Experience (K-12), 296 Participants.**

Figure 5 provides a visual representation of the number of surveyed teachers by years of experience. Note as the years of experience increase the number of teachers employed with experience decreases.

While all teachers held a minimum of a bachelor’s degree, 58.1% held a graduate degree with 74.8% being licensed in elementary school and 24.5% maintained both an elementary and secondary license. Forty-nine percent of the teachers have only taught at two to three schools, while 19.9% have taught at four to five schools. Of the teachers surveyed 67.2% had the impression that professional development opportunities were sometimes meaningful while 20.3% recognized it as being meaningful most of the time. Teachers also indicated by 41.2% that they had classroom autonomy and 46.3% felt they had at least some autonomy. The belief in one’s ability to improve the achievement of most students was 61.8% while only 30.4%
indicated they could improve the achievement of all students. A majority of teachers (57.1%) did not have a mentor teacher.

*Table 13:* Professional Demographic Characteristics

<table>
<thead>
<tr>
<th>Professional Demographic Characteristic (Variable)</th>
<th>Percent (%)</th>
<th>Participants (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Attainment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>15.2%</td>
<td>45</td>
</tr>
<tr>
<td>Bachelor’s + Graduate Credit</td>
<td>26.7%</td>
<td>79</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>58.1%</td>
<td>172</td>
</tr>
<tr>
<td>Teaching Credential/License</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only Elementary</td>
<td>74.8%</td>
<td>220</td>
</tr>
<tr>
<td>Only Secondary</td>
<td>0.7%</td>
<td>2</td>
</tr>
<tr>
<td>Both Elementary &amp; Secondary</td>
<td>24.5%</td>
<td>72</td>
</tr>
<tr>
<td>Number of Schools Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 school</td>
<td>21.3%</td>
<td>63</td>
</tr>
<tr>
<td>2 - 3 schools</td>
<td>49.0%</td>
<td>145</td>
</tr>
<tr>
<td>4 – 5 schools</td>
<td>19.9%</td>
<td>59</td>
</tr>
<tr>
<td>6 or more schools</td>
<td>9.8%</td>
<td>29</td>
</tr>
<tr>
<td>Meaningfulness of Professional Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at All</td>
<td>12.5%</td>
<td>37</td>
</tr>
<tr>
<td>Sometimes</td>
<td>67.2%</td>
<td>199</td>
</tr>
<tr>
<td>Most of the Time</td>
<td>20.3%</td>
<td>60</td>
</tr>
<tr>
<td>Have Classroom Autonomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>41.2%</td>
<td>122</td>
</tr>
<tr>
<td>No</td>
<td>12.5%</td>
<td>37</td>
</tr>
<tr>
<td>Some of the Time</td>
<td>46.3%</td>
<td>137</td>
</tr>
<tr>
<td>Belief in Ability to Improve the Achievement of Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Few to Some</td>
<td>7.8%</td>
<td>23</td>
</tr>
<tr>
<td>Most</td>
<td>61.8%</td>
<td>183</td>
</tr>
<tr>
<td>All</td>
<td>30.4%</td>
<td>90</td>
</tr>
<tr>
<td>Mentor Teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>42.9%</td>
<td>127</td>
</tr>
<tr>
<td>No</td>
<td>57.1%</td>
<td>169</td>
</tr>
</tbody>
</table>

*Total Participants 296*
Descriptive Data of Intrinsic, Extrinsic, and Overall Job Satisfaction

The Table 14 is a presentation of the means and standard deviation of the nine sub-scales, the intrinsic factors, the extrinsic factors, and the overall Job Satisfaction scores. The scores are based on the Likert scale of 1 to 6 wherein a score of 1 is for disagree very much, 2 points disagree moderately, 3 points disagree slightly, 4 points agree slightly, 5 points agree moderately, and 6 points agree very much. For those questions that were written in the negative orientation, reverse scoring was applied. This was explained in detail in Chapter III, under JSS Scoring.
Table 14: Mean and Standard Deviations

Mean and standard deviations of the nine sub-scales, the intrinsic factors, the extrinsic factors, and the overall Job Satisfaction scores. Scores are based on a score of 1 to 6 where 1 is low satisfaction and 6 is high satisfaction.

<table>
<thead>
<tr>
<th>Sub-Scales of Job Satisfaction</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>2.38</td>
<td>1.43</td>
</tr>
<tr>
<td>Promotion</td>
<td>2.92</td>
<td>1.36</td>
</tr>
<tr>
<td>Supervision</td>
<td>5.39</td>
<td>1.10</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>3.34</td>
<td>1.44</td>
</tr>
<tr>
<td>Operating Conditions</td>
<td>2.39</td>
<td>1.41</td>
</tr>
<tr>
<td>Contingent Rewards</td>
<td>3.48</td>
<td>1.54</td>
</tr>
<tr>
<td>Co-Workers</td>
<td>5.00</td>
<td>1.28</td>
</tr>
<tr>
<td>Nature of Work</td>
<td>5.02</td>
<td>1.13</td>
</tr>
<tr>
<td>Communications</td>
<td>3.92</td>
<td>1.56</td>
</tr>
<tr>
<td>Intrinsic (Contingent Rewards, Co-workers, Nature of Work, &amp; Communications)</td>
<td>4.355</td>
<td>0.78</td>
</tr>
<tr>
<td>Extrinsic (Pay, Promotion, Supervision, Fringe Benefits, and Operating Conditions)</td>
<td>3.284</td>
<td>1.24</td>
</tr>
<tr>
<td>Overall</td>
<td>3.76</td>
<td>1.15</td>
</tr>
</tbody>
</table>

When observing the mean results (see Figure 6) three of the sub-scales, supervision, co-workers, and nature of work all reported 5 or above in satisfaction. When examining the intrinsic and extrinsic subscales, the intrinsic means scored higher comprehensively than the extrinsic
The participants’ job satisfaction score of 3.76 indicates slightly satisfied towards their current job satisfaction.

![Figure 6: Means of Job Satisfaction Survey Results](image)

**Figure 6: Means by Sub-Scales, Intrinsic and Extrinsic Factors, and Overall Job Satisfaction.**

A score of 1 indicates low satisfaction while a score of 6 indicates high satisfaction.

**Internal Consistency**

In maintaining consistency and reliability for this study, the researcher ensured the test administration was as synonymous as possible from site to site that the survey was given in a professional yet comfortable setting. To further provide for consistency and reliability the researcher employed a coefficient alpha test, also known as a Cronbach’s alpha (Table 15). Cronbach’s alpha assessed for internal consistency based upon the average correlation of all items within the scale (Cronbach, 1960).

The survey overall had a good level of internal consistency at 0.765, as determined by a Cronbach’s alpha, Operating Conditions scored the lowest at 0.546. However, it is of note that Spector (1997) also found Operating Conditions scored low in his test for internal consistency.
Table 15: Cronbach’s Alpha (Internal Consistency) results for this study.

<table>
<thead>
<tr>
<th>Individual Sub-Scales</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>0.764</td>
</tr>
<tr>
<td>Promotion</td>
<td>0.755</td>
</tr>
<tr>
<td>Supervision</td>
<td>0.869</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>0.784</td>
</tr>
<tr>
<td>Operating Conditions</td>
<td>0.546</td>
</tr>
<tr>
<td>Contingent Rewards</td>
<td>0.806</td>
</tr>
<tr>
<td>Co-Workers</td>
<td>0.750</td>
</tr>
<tr>
<td>Nature of Work</td>
<td>0.822</td>
</tr>
<tr>
<td>Communications</td>
<td>0.791</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>0.765</strong></td>
</tr>
</tbody>
</table>

**Results of MANOVA Data on Research Questions**

The following section presents the major findings as they relate to each of the survey questions. A MANOVA was employed with each demographic and professional practice question (independent variable) and the intrinsic and extrinsic groups of the Job Satisfaction Survey (dependent variables) to determine if differences existed. Each question was evaluated and reported employing the same method. Each question has been restated just prior to providing the results. To culminate each question, a summary of its analysis is provided.

As discussed in Chapter Three, four stages of the data were reviewed before accepting the data for MANOVA calculations. First, data was reviewed for missing data; missing data was not possible in the job satisfaction section of the survey because the “must answer” function was employed through SurveyMonkey. In the demographic and professional practice survey section, if more than two answers were missing the survey was removed (discarded). Second, using the SPSS frequency procedure, the frequency distributions and the descriptive statistics were reviewed to ensure all values were within range. Third, the method employed does not lend itself to outliers because all answers are in a valid range of 1 to 6. Forth, the data was reviewed for the
assumption of normality, linearity and homoscedasticity. As displayed by the scatterplot matrices, there was assumption of linearity; a linear relationship between the dependent variables (Appendix N), but assumptions were violated for normality (Appendix O) and homoscedasticity (or homogeneity) (Appendix P) in a few cases.

While the Shapiro-Wilk test can indicate a violation of assumptions for normality such violations can be of false significance when sample sizes are large (Field, 2015). Because all samples were greater than 30 the central limit theorem was invoked and Shapiro-Wilk results reported that a violation of assumption were not of concern. The central limit theorem states that when sample sizes “get large (…greater than 30), the sampling distribution has a normal distribution with a mean equal to the population mean, and a standard deviation of $\sigma_x = \frac{S}{\sqrt{N}}$” (Field, 2015, p. 54).

When an independent variable had a Pillai’s trace of $p < .05$ and congruently violated the assumption of homogeneity in the Levene’s Test the MANOVA was rerun with equal sample sizes (Field, 2015) balancing the sample sizes through the SPSS random sample function. This occurred in only three cases: Salary, Years of Experience, and Professional Development.

An overall summation of the MANOVA test results can be seen in Figure 7.
**Figure 7: Overall MANOVA Test Results**

| Research Questions                                                                 |  
|-------------------------------------------------------------------------------------|---
| **1)** Was there any significant difference among the teachers’ *Age* groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Significant* (Extrinsic Only)  
| **2)** Was there a significant difference among *Ethnicity* groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Not Significant*  
| **3)** Was there a significant difference among *Marital Status* groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Not Significant*  
| **4)** Was there a significant difference among *Highest Level of Education* groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Not Significant*  
| **5)** Was there a significant difference among *Level of Teaching Licensure* groups based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Not Significant*  
| **6)** Was there a significant difference among the *Number of Schools Taught* at groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Significant* (Extrinsic Only)  
| **7)** Was there a significant difference among *Salary* groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Significant*  
| **8)** Was there a significant difference among the *Total Years of Teaching Experience* groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Significant*  
| **9)** Was there a significant difference among the teachers who believe *Professional Development* opportunities are meaningful groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Significant*  
| **10)** Was there a significant difference among teachers who have *Classroom Autonomy* groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Significant*  
| **11)** Was there a significant difference between teachers who believe they can improve the *Achievement of Students* groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Significant*  
| **12)** Was there a significant difference between those teachers who had a *Mentor Teacher* groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey? | *Not Significant*  

*Figure 7: Overall MANOVA Test Results.*
Summary of Research Questions and Corresponding Tests

Question 1: Was there any significant difference among the teachers’ Age groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if Age groups had statistically significant differences in job satisfaction. Two measures of job satisfaction were assessed: intrinsic job satisfaction means and extrinsic job satisfaction means. There were four age group categories: 1) 21-30 years, 2) 31-40 years, 41-50 years, 4) 51+. The MANOVA results indicated that statistically significant differences existed among the Age group categories, Pillai’s trace = .052, F(6, 584) = 2.612, p = .017. A post hoc analysis ANOVA was then conducted on each dependent variable. The results indicated that Age group differences were significant only for extrinsic job satisfaction: F(3, 292) = 3.424, p = .018; partial eta squared = .034 (See Table 16).

Table 16: One-way MANOVA of the Effects of Age Groups on the Extrinsic Job Satisfaction Survey Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Extrinsic J.S. Mean</td>
<td>3</td>
<td>1.544</td>
<td>3.424</td>
<td>.018</td>
<td>.034</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>292</td>
<td>.451</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tukey post hoc tests indicate significant differences exist only among the extrinsic job satisfaction factors. The results indicated that for extrinsic job satisfaction, Age group 1 had a statistically significant different mean score than participants from Age group 3 (p = .012), but not between Age groups 2 (p = .069) or 4 (p = .116). There was no statistically significant differences between Age group 2 to 3 (p = .938) group 2 to 4 (p = .999), or group 3 to 4 (p = .907).
Table 17 demonstrates the means and standard deviations for extrinsic job satisfaction by Age groups.

Table 17:
Means and Standard Deviations for Extrinsic Job Satisfaction Mean by Age Groups

<table>
<thead>
<tr>
<th>Extrinsic Job Satisfaction Mean</th>
<th>Group</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1) 21 – 30 years</td>
<td>3.999</td>
<td>.577</td>
</tr>
<tr>
<td></td>
<td>2) 31 – 40 years</td>
<td>3.718</td>
<td>.706</td>
</tr>
<tr>
<td></td>
<td>3) 41 – 50 years</td>
<td>3.658</td>
<td>.735</td>
</tr>
<tr>
<td></td>
<td>4) 51 + years</td>
<td>3.731</td>
<td>.614</td>
</tr>
</tbody>
</table>

Question 2: Was there a significant difference among Ethnicity teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if Ethnic groups had statistically significant differences in job satisfaction. Two measures of job satisfaction were assessed: intrinsic satisfaction means and extrinsic satisfaction means. There were two Ethnic group categories: 1) White and 2) non-White. The MANOVA results did not indicate any statistically significant differences existed among Ethnic teacher groups and the dependent variables of intrinsic and extrinsic job satisfaction, Pillai’s trace = .010; F(2, 292) = 1.417, p = .244.

Question 3: Was there a significant difference among Marital Status in the teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if Marital Status groups had statistically significant differences in job satisfaction. Two measures of job satisfaction were assessed: intrinsic satisfaction means and extrinsic satisfaction means. There were two Marital group categories: 1) married and 2) Not married. The MANOVA results did not indicate any statistically significant differences existed among Marital Status groups and the dependent
variables of intrinsic and extrinsic job satisfaction, Pillai’s trace = .015; F(2, 289) = 2.129, \( p = .121 \).

Question 4: Was there a significant difference among *Highest Level of Education* teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if *Highest Level of Education* groups had statistically significant differences in job satisfaction. Two measures of job satisfaction were assessed: intrinsic satisfaction means and extrinsic satisfaction means. There were three levels of *Highest Level of Education* groups: 1) Bachelor’s Degree, 2) Bachelor’s + Graduate Credit, and 3) Graduate Degree (MA, MS, Ed.S, Ed.D, Ph.D). The MANOVA results did not indicate any statistically significant differences existed among *Highest Level of Education* teacher groups, Pillai’s trace = .023; F(4, 586) = 1.671, \( p = .155 \).

Question 5: Was there a significant difference among *Level of Teaching Licensure* groups based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if *Level of Teacher Licensure* groups had statistically significant differences in job satisfaction (this did not include endorsements). Participants were provided three choices 1) Elementary license, 2) Secondary license, and 3) Both Elementary and Secondary licenses. Only two participants indicated “secondary” thereby providing too small of a sample and were removed from the data set. Two measures of job satisfaction were assessed: intrinsic satisfaction means and extrinsic satisfaction means. The MANOVA results did not indicate any statistically significant differences existed among *Level of Teaching Licensure* groups and the dependent variables of intrinsic and extrinsic job satisfaction, Pillai’s trace = .007; F(4, 582) = .512; \( p = .727 \).
Question 6: Was there a significant difference among the Number of Schools Taught at teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if Number of Schools Taught at groups had statistically significant differences in job satisfaction. Two measures of job satisfaction were assessed: intrinsic satisfaction means and extrinsic satisfaction means. The Number of Schools Taught at group categories were: 1) 1 school, 2) 2-3 schools, 3) 4-5 schools, 4) 6+ schools. The MANOVA results indicated that statistically significant differences existed among Number of Schools Taught at teacher groups, Pillai’s trace = .046; F(6, 584) = 2.279, p =.035. A post hoc analysis ANOVA was then conducted on each dependent variable. The results indicated that Number of Schools Taught at group differences were significant for only the extrinsic job satisfaction. Extrinsic job satisfaction mean: F(3, 292) = 3.099, p = .027; partial eta squared = .031 (See Table 18).

Table 18:
One-way MANOVA of the Effects of Number of Schools Taught at Groups on the Extrinsic Job Satisfaction Survey Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Sch.</td>
<td>Extrinsic JS Mean</td>
<td>3</td>
<td>1.402</td>
<td>3.099</td>
<td>.027</td>
<td>.031</td>
</tr>
<tr>
<td>Error</td>
<td>Extrinsic JS Mean</td>
<td>292</td>
<td>.452</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tukey post hoc tests indicate significant differences exist only among the extrinsic job satisfaction factors. The results indicated that for extrinsic job satisfaction Number of Schools Taught at group 1 had a statistically significant different mean score than participants from Number of Schools Taught at group 4 (p = .044), but not between Number of Schools Taught at
groups 2 (\(p = .139\)) or 3 (\(p = .077\)). There was no statistically significant differences between

*Number of Schools Taught at* group 2 to 3 (\(p = .887\)) group 2 to 4 (\(p = .562\)), or group 3 to 4 (\(p = .907\)). Table 19 demonstrates the means and standard deviations for extrinsic job satisfaction by

*Number of Schools Taught at* groups.

**Table 19:**
Means and Standard Deviations for Extrinsic Job Satisfaction Mean by Number of Schools Taught at Groups.

<table>
<thead>
<tr>
<th>Extrinsic Job Satisfaction Mean</th>
<th>Group</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1) 1 school</td>
<td>3.965</td>
<td>.643</td>
</tr>
<tr>
<td></td>
<td>2) 2 – 3 schools</td>
<td>3.746</td>
<td>.702</td>
</tr>
<tr>
<td></td>
<td>3) 4 – 5 schools</td>
<td>3.671</td>
<td>.685</td>
</tr>
<tr>
<td></td>
<td>4) 6 + schools</td>
<td>3.568</td>
<td>.547</td>
</tr>
</tbody>
</table>

Question 7: Was there a significant difference among *Salary* teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if *Salary* groups had statistically significant differences in job satisfaction. Two measures of job satisfaction were assessed: intrinsic job satisfaction means and extrinsic job satisfaction means. The *Salary* group categories were: 1) $35,000 - $42,999, 2) $43,000 - $49,999, 3) $50,000 - $58,999, 4) $59,000 +. The MANOVA results indicated that statistically significant differences existed among the *Salary* group categories, Pillai’s trace = .067, \(F(6, 570) = 3.317, p = .003\). A post hoc analysis ANOVA was then conducted on each dependent variable. The results indicated that *Salary* group differences were significant for both intrinsic and extrinsic job satisfaction. Intrinsic job satisfaction mean: \(F(3, 285) = 5.265, p = .002\); partial eta squared = .053. Extrinsic job satisfaction mean: \(F(3, 285) = 6.561, p < .001\); partial eta squared = .065 (See Table 20).
Table 20:
One-way MANOVA of the Effects of Salary Groups on the Intrinsic and Extrinsic Job Satisfaction Survey Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>Intrinsic JS Mean</td>
<td>3</td>
<td>3.533</td>
<td>5.265</td>
<td>.002</td>
<td>.053</td>
</tr>
<tr>
<td>Error</td>
<td>Intrinsic JS Mean</td>
<td>285</td>
<td>.671</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary</td>
<td>Extrinsic JS Mean</td>
<td>3</td>
<td>2.889</td>
<td>6.561</td>
<td>&lt;.00</td>
<td>.065</td>
</tr>
<tr>
<td>Error</td>
<td>Extrinsic JS Mean</td>
<td>285</td>
<td>.440</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tukey post hoc tests indicated that for intrinsic job satisfaction Salary group 1 had a statistically significant different mean score than participants from Salary group 3 (p = .001), but not between Salary groups 2 (p = .491) or 4 (p = .947). Salary group 2 did not have any statistically different mean scores between 3 (p = .093) and 4 (p = .875). Salary group 3 indicated it had a statistically significant different mean score than participants from Salary group 4 (p = .019).

Tukey post hoc tests indicated that for extrinsic job satisfaction Salary group 1 had a statistically significant different mean score than participants from Salary group 3 (p < .001), but not between Salary groups 2 (p = .337) or 4 (p = .760). Salary group 2 had a statistically significant different mean score between group 3 (p = .048), but not 4 (p = .940). Salary group 3 indicated it had a statistically significant different mean score than participants from Salary group 4 (p = .015).

The results indicate significant differences exist among the Salary groups in both intrinsic and extrinsic job satisfaction factors. Table 21 demonstrates the means and standard deviations for intrinsic and extrinsic job satisfaction by Salary groups.
Table 21: Means and Standard Deviations for Intrinsic and Extrinsic Job Satisfaction Mean by Salary Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Intrinsic Job Satisfaction Mean</th>
<th>Extrinsic Job Satisfaction Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>$35,000 - 42,999$</td>
<td>4.541</td>
<td>.696</td>
</tr>
<tr>
<td>$43,000 - 49,999$</td>
<td>4.358</td>
<td>.802</td>
</tr>
<tr>
<td>$50,000 - 58,999$</td>
<td>4.040</td>
<td>.954</td>
</tr>
<tr>
<td>$59,000+$</td>
<td>4.465</td>
<td>.832</td>
</tr>
</tbody>
</table>

The assumption for homogeneity for Salary was violated so a second MANOVA with equal sample sizes was conducted.

The equal sample size MANOVA results indicated that statistically significant differences existed among the Salary group categories, Pillai’s trace = .061, $F(6, 464) = 2.444, p = .025$. A post hoc analysis ANOVA was then conducted on each dependent variable. The results indicated that Salary group differences were significant for both intrinsic and extrinsic job satisfaction. Intrinsic job satisfaction mean: $F(3, 232) = 4.395, p = .005$; partial eta squared = .054. Extrinsic job satisfaction mean: $F(3, 232) = 4.573, p = .004$; partial eta squared = .056 (See Table 22).

Table 22: One-way MANOVA of the Effects of Salary Groups on the Intrinsic and Extrinsic Job Satisfaction Survey Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>$df$</th>
<th>Mean Square</th>
<th>$F$</th>
<th>$p$</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>Intrinsic JS Mean</td>
<td>3</td>
<td>3.153</td>
<td>4.395</td>
<td>.005</td>
<td>.054</td>
</tr>
<tr>
<td></td>
<td>Extrinsic JS Mean</td>
<td>3</td>
<td>2.188</td>
<td>4.573</td>
<td>.004</td>
<td>.056</td>
</tr>
<tr>
<td>Error</td>
<td>Intrinsic JS Mean</td>
<td>232</td>
<td>.717</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extrinsic JS Mean</td>
<td>232</td>
<td>.479</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tukey post hoc tests indicated that for intrinsic job satisfaction Salary group 1 had a statistically significant different mean score than participants from Salary group 3 ($p = .007$), but not between Salary groups 2 ($p = .414$) or 4 ($p = .993$). Salary group 2 did not have any statistically different mean scores between 3 ($p = .323$) or 4 ($p = .583$). Salary group 3 indicated it had a statistically significant different mean score than participants from Salary group 4 ($p = .017$).

Tukey post hoc tests indicated that for extrinsic job satisfaction Salary group 1 had a statistically significant different mean score than participants between Salary group 3 ($p = .004$), but not between Salary groups 2 ($p = .521$) or 4 ($p = .969$). Salary group 2 did not have any statistically different mean scores from 3 ($p = .176$) or 4 ($p = .796$). Salary group 3 indicated it had a statistically significant different mean score than participants from Salary group 4 ($p = .018$).

The results indicate significant differences exist among the Salary groups in both intrinsic and extrinsic job satisfaction factors. Table 23 demonstrates the means and standard deviations for intrinsic and extrinsic job satisfaction by Salary groups.

*Table 23:*
Means and Standard Deviations for Intrinsic and Extrinsic Job Satisfaction Mean by Salary Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Intrinsic Job Satisfaction Mean</th>
<th>Extrinsic Job Satisfaction Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>$35,000 - $42,999</td>
<td>4.507</td>
<td>.736</td>
</tr>
<tr>
<td>$43,000 - $49,999</td>
<td>4.267</td>
<td>.814</td>
</tr>
<tr>
<td>$50,000 - $58,999</td>
<td>4.001</td>
<td>.987</td>
</tr>
<tr>
<td>$59,000+</td>
<td>4.465</td>
<td>.832</td>
</tr>
</tbody>
</table>

The ANOVA results for intrinsic and extrinsic job satisfaction factors for Salary with unequal and equal sample sizes were statistically significant in both cases.
Question 8: Was there a significant difference among the *Total Years of Teaching Experience* groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if *Total Years of Teaching Experience* groups had statistically significant differences in job satisfaction. Two measures of job satisfaction were assessed: intrinsic job satisfaction means and extrinsic job satisfaction means. There were three *Total Years of Teaching Experience* group categories: 1) 1 – 6 years, 2) 7 – 15 years, and 3) 16 – 41 years. The MANOVA results indicated that statistically significant differences existed among the *Total Years of Teaching Experience* group categories, Pillai’s trace = .064, \(F(4, 578) = 4.784, p = .001\). A post hoc analysis ANOVA was then conducted on each dependent variable. The results indicated that *Total Years of Teaching Experience* group differences were significant for intrinsic and extrinsic job satisfaction. Intrinsic job satisfaction mean: \(F(2, 289) = 6.249, p = .002\); partial eta squared = .041. Extrinsic job satisfaction mean: \(F(2, 289) = 9.200, p < .001\); partial eta squared = .060 (See Table 24).

*Table 24:* One-way MANOVA of the Effects of Total Years of Teaching Experience Groups on the Intrinsic and Extrinsic Job Satisfaction Survey Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>(F)</th>
<th>(p)</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Years Teaching Exp.</td>
<td>Intrinsic J.S. Mean</td>
<td>2</td>
<td>4.217</td>
<td>6.249</td>
<td>.002</td>
<td>.041</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic J.S. Mean</td>
<td></td>
<td>289</td>
<td>.675</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Years Teaching Exp.</td>
<td>Extrinsic J.S. Mean</td>
<td>2</td>
<td>4.024</td>
<td>9.200</td>
<td>&lt;.001</td>
<td>.060</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td>289</td>
<td>.437</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrinsic J.S. Mean</td>
<td></td>
<td>289</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tukey post hoc tests indicated that for intrinsic job satisfaction Total Years of Teaching Experience group 1 had a statistically significant different mean score than participants from Total Years of Teaching Experience group 2 \( (p = .006) \) and group 3 \( (p = .007) \). There was no significant difference between group 2 to group 3 \( (p = .998) \).

Tukey post hoc tests indicated that for extrinsic job satisfaction Total Years of Teaching Experience group 1 had a statistically significant different mean score than group 2 \( (p = .001) \) and group 3 \( (p = .001) \). There was no statistically significant difference between group 2 to group 3 \( (p = .990) \).

The results indicate significant differences exist among the Total Years of Teaching Experience group and the intrinsic and extrinsic job satisfaction factors. Table 25 demonstrates the means and standard deviations for intrinsic and extrinsic job satisfaction by Total Years of Teaching Experience groups.

*Table 25:*

<table>
<thead>
<tr>
<th></th>
<th>Intrinsic Job Satisfaction Mean</th>
<th>Extrinsic Job Satisfaction Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>( M )</td>
<td>( SD )</td>
</tr>
<tr>
<td>1 – 6 years</td>
<td>4.601</td>
<td>.728</td>
</tr>
<tr>
<td>7 – 15 years</td>
<td>4.237</td>
<td>.805</td>
</tr>
<tr>
<td>16 – 41 years</td>
<td>4.243</td>
<td>.920</td>
</tr>
</tbody>
</table>

The assumption for homogeneity for Total Years of Teaching Experience was violated so a second MANOVA with equal sample sizes was conducted.

The equal sample size MANOVA results indicated that statistically significant differences existed among the Total Years of Teaching Experience group categories, Pillai’s trace = .063, \( F(4, 576) = 4.711, p = .001 \). A post hoc analysis ANOVA was then conducted on each dependent variable. Participants answers were divided equally into one of three groups.
The results indicated that Total Years of Teaching Experience group differences were significant for intrinsic and extrinsic job satisfaction. Intrinsic job satisfaction mean: F(2, 288) = 6.165, \( p = .002 \); partial eta squared = .041. Extrinsic job satisfaction mean: F(2, 288) = 9.000, \( p < .001 \); partial eta squared = .059 (See Table 26).

Table 26:
One-way MANOVA of the Effects of Total Years of Teaching Experience Groups on the Intrinsic and Extrinsic Job Satisfaction Survey Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Years Teaching Exp.</td>
<td>Intrinsic J.S.</td>
<td>2</td>
<td>4.172</td>
<td>6.165</td>
<td>.002</td>
<td>.041</td>
</tr>
<tr>
<td>Error</td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic J.S. Mean</td>
<td></td>
<td>288</td>
<td>.677</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Years Teaching Exp.</td>
<td>Extrinsic J.S.</td>
<td>2</td>
<td>3.929</td>
<td>9.000</td>
<td>&lt;.001</td>
<td>.059</td>
</tr>
<tr>
<td>Error</td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrinsic J.S. Mean</td>
<td></td>
<td>288</td>
<td>.437</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tukey post hoc tests indicated that for intrinsic job satisfaction Total Years of Teaching Experience group 1 had a statistically significant different mean score than participants from Total Years of Teaching Experience group 2 (\( p = .007 \)) and group 3 (\( p = .008 \)). There was no significant difference between group 2 to group 3 (\( p =1.000 \)).

Tukey post hoc tests indicated that for extrinsic job satisfaction Total Years of Teaching Experience group 1 had a statistically significant different mean score than participants from Total Years of Teaching Experience group 2 (\( p = .001 \)) and group 3 (\( p = .001 \)). There was no significant difference between group 2 to group 3 (\( p =.972 \)).

The results indicate significant differences exist among the Total Years of Teaching Experience group and the intrinsic and extrinsic job satisfaction factors. Table 27 demonstrates the means and standard deviations for intrinsic and extrinsic job satisfaction by Total Years of Teaching Experience groups.
Table 27:
Means and Standard Deviations for Intrinsic and Extrinsic Job Satisfaction Mean by Total Years of Teaching Experience Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Intrinsic Job Satisfaction Mean</th>
<th>Extrinsic Job Satisfaction Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1 – 6 years</td>
<td>4.601</td>
<td>.728</td>
</tr>
<tr>
<td>7 – 15 years</td>
<td>4.240</td>
<td>.809</td>
</tr>
<tr>
<td>16 – 41 years</td>
<td>4.243</td>
<td>.920</td>
</tr>
</tbody>
</table>

The ANOVA results for intrinsic and extrinsic job satisfaction factors for Total Years of Teaching Experience with unequal and equal sample sizes were statistically significant in both cases.

Question 9: Was there a significant difference among the teachers who believe Professional Development opportunities are meaningful groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if Professional Development groups had statistically significant differences in job satisfaction. Two measures of job satisfaction were assessed: intrinsic job satisfaction means and extrinsic job satisfaction means. There were three belief in Professional Development group categories: 1) Not at all, 2) Sometimes, and 3) Most of the time. The MANOVA results indicated that statistically significant differences existed among the Professional Development group categories, Pillai’s trace = .253, F(4, 586) = 21.169, p < .001. A post hoc analysis ANOVA was then conducted on each dependent variable. The results indicated that belief in Professional Development group differences were significant for intrinsic and extrinsic job satisfaction. Intrinsic job satisfaction mean: F(2, 293) = 44.726, p < .001; partial eta squared = .234. Extrinsic job satisfaction mean: F(2, 293) = 47.407, p < .001; partial eta squared = .244 (See Table 28).
Table 28:
One-way MANOVA of the Effects of belief in Professional Development Groups on the Intrinsic and Extrinsic Job Satisfaction Survey Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Development Error</td>
<td>Intrinsic J.S. Mean</td>
<td>2</td>
<td>24.155</td>
<td>44.726</td>
<td>&lt;.001</td>
<td>.234</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>293</td>
<td>.540</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Development Error</td>
<td>Extrinsic J.S. Mean</td>
<td>2</td>
<td>16.663</td>
<td>47.407</td>
<td>&lt;.001</td>
<td>.244</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>293</td>
<td>.351</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tukey post hoc tests indicated that for intrinsic job satisfaction belief in Professional Development group 1 had a statistically significant different mean score than participants from belief in Professional Development group 2 (p < .001) and group 3 (p < .001). Belief in Professional Development group 2 indicated it had a statistically significant different mean score than participants from Professional Development group 3 (p < .001).

Tukey post hoc tests indicated that for extrinsic job satisfaction belief in Professional Development group 1 had a statistically significant different mean score than participants from belief in Professional Development group 2 (p < .001) and group 3 (p < .001). Belief in Professional Development group 2 indicated it had a statistically significant different mean score than participants from Professional Development group 3 (p < .001).

The results indicate significant differences exist among the belief in Professional Development groups and the intrinsic and extrinsic job satisfaction factors. Table 29 demonstrates the means and standard deviations for intrinsic and extrinsic job satisfaction by belief in Professional Development groups.
Table 29:
Means and Standard Deviations for Intrinsic and Extrinsic Job Satisfaction Mean by belief in Professional Development Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Intrinsic Job Satisfaction Mean</th>
<th>Extrinsic Job Satisfaction Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Not at All</td>
<td>3.569</td>
<td>.797</td>
</tr>
<tr>
<td>Sometimes</td>
<td>4.309</td>
<td>.768</td>
</tr>
<tr>
<td>Most of the Time</td>
<td>5.001</td>
<td>.561</td>
</tr>
</tbody>
</table>

The assumption for homogeneity for Professional Development was violated so a second MANOVA with equal sample sizes was conducted.

The equal sample size MANOVA results indicated that statistically significant differences existed among the Professional Development group categories, Pillai’s trace = .415, F(4, 216) = 14.160, p < .001. A post hoc analysis ANOVA was then conducted on each dependent variable. The results indicated that belief in Professional Development group differences were significant for intrinsic and extrinsic job satisfaction. Intrinsic job satisfaction mean: F(2, 108) = 34.955, p < .001; partial eta squared = .393. Extrinsic job satisfaction mean: F(2, 108) = 35.412, p < .001; partial eta squared = .396 (See Table 30).

Table 30:
One-way MANOVA of the Effects of belief in Professional Development Groups on the Intrinsic and Extrinsic Job Satisfaction Survey Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>Intrinsic J.S.</td>
<td>2</td>
<td>19.212</td>
<td>34.955</td>
<td>&lt;.001</td>
<td>.393</td>
</tr>
<tr>
<td>Development</td>
<td>J.S. Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>Intrinsic J.S.</td>
<td>108</td>
<td>.550</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>Extrinsic J.S.</td>
<td>2</td>
<td>13.160</td>
<td>35.412</td>
<td>&lt;.001</td>
<td>.396</td>
</tr>
<tr>
<td>Development</td>
<td>J.S. Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>Extrinsic J.S.</td>
<td>108</td>
<td>.372</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>J.S. Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tukey post hoc tests indicated that for intrinsic job satisfaction belief in *Professional Development* group 1 had a statistically significant different mean score than participants from belief in *Professional Development* group 2 (*p* < .001) and group 3 (*p* < .001). Belief in *Professional Development* group 2 indicated it had a statistically significant different mean score than participants from *Professional Development* group 3 (*p* < .001).

Tukey post hoc tests indicated that for extrinsic job satisfaction belief in *Professional Development* group 1 had a statistically significant different mean score than participants from belief in *Professional Development* group 2 (*p* < .001) and group 3 (*p* < .001). Belief in *Professional Development* group 2 indicated it had a statistically significant different mean score than participants from *Professional Development* group 3 (*p* < .001).

The results indicate significant differences exist among the belief in *Professional Development* groups and the intrinsic and extrinsic job satisfaction factors. Table 31 demonstrates the means and standard deviations for intrinsic and extrinsic job satisfaction by belief in *Professional Development* groups.

*Table 31:*
Means and Standard Deviations for Intrinsic and Extrinsic Job Satisfaction Mean by belief in Professional Development Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Intrinsic Job Satisfaction Mean</th>
<th>Extrinsic Job Satisfaction Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>M</em></td>
<td><em>SD</em></td>
</tr>
<tr>
<td>Not at All</td>
<td>3.569</td>
<td>.797</td>
</tr>
<tr>
<td>Sometimes</td>
<td>4.314</td>
<td>.824</td>
</tr>
<tr>
<td>Most of the Time</td>
<td>5.010</td>
<td>.578</td>
</tr>
</tbody>
</table>

The ANOVA results for intrinsic and extrinsic job satisfaction factors for *Professional Development* with unequal and equal sample sizes were statistically significant in both cases.
Question 10: Was there a significant difference among teachers who have *Classroom Autonomy* groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if *Classroom Autonomy* groups had statistically significant differences in job satisfaction. Two measures of job satisfaction were assessed: intrinsic job satisfaction means and extrinsic job satisfaction means. There were three group categories: 1) Yes, 2) No, 3) Some of the Time. The MANOVA results indicated that statistically significant differences existed among the Classroom Autonomy group categories, Pillai’s trace = .165, F(4, 586) = 13.130, \( p < .001 \). A post hoc analysis ANOVA was then conducted on each dependent variable. The results indicated that *Classroom Autonomy* group differences were significant for intrinsic and extrinsic job satisfaction. Intrinsic job satisfaction mean: F(2, 293) = 28.428, \( p < .001 \); partial eta squared = .163. Extrinsic job satisfaction mean: F(2, 293) = 26.217, \( p < .001 \); partial eta squared = .152 (See Table 32).

Table 32:
One-way MANOVA of the Effects of Classroom Autonomy Groups on the Intrinsic and Extrinsic Job Satisfaction Survey Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Autonomy Error</td>
<td>Intrinsic J.S. Mean</td>
<td>2</td>
<td>16.784</td>
<td>28.428</td>
<td>&lt;.001</td>
<td>.163</td>
</tr>
<tr>
<td></td>
<td>Extrinsic J.S. Mean</td>
<td>293</td>
<td>.590</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom Autonomy Error</td>
<td>Intrinsic J.S. Mean</td>
<td>2</td>
<td>10.346</td>
<td>26.217</td>
<td>&lt;.001</td>
<td>.152</td>
</tr>
<tr>
<td></td>
<td>Extrinsic J.S. Mean</td>
<td>293</td>
<td>.395</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tukey post hoc tests indicated that for intrinsic job satisfaction *Classroom Autonomy* group 1 had a statistically significant different mean score than participants from *Classroom*
Autonomy group 2 \((p < .001)\) and group 3 \((p = .002)\). Classroom Autonomy group 2 indicated it had a statistically significant different mean score than participants from Professional Development group 3 \((p < .001)\).

Tukey post hoc tests indicated that for extrinsic job satisfaction Classroom Autonomy group 1 had a statistically significant different mean score than participants from Classroom Autonomy group 2 \((p < .001)\) and group 3 \((p = .002)\). Classroom Autonomy group 2 indicated it had a statistically significant different mean score than participants from Professional Development group 3 \((p < .001)\).

The results indicate significant differences exist among the Classroom Autonomy groups and the extrinsic and intrinsic job satisfaction factors. Table 33 demonstrates the means and standard deviations for the intrinsic and extrinsic job satisfaction by Classroom Autonomy groups.

<table>
<thead>
<tr>
<th></th>
<th>Intrinsic Job Satisfaction Mean</th>
<th>Extrinsic Job Satisfaction Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(M)</td>
<td>(SD)</td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4.647</td>
<td>.781</td>
</tr>
<tr>
<td>No</td>
<td>3.568</td>
<td>.838</td>
</tr>
<tr>
<td>Some of the Time</td>
<td>4.312</td>
<td>.737</td>
</tr>
</tbody>
</table>

Question 11: Was there a significant difference between teachers who believe they can Improve the Achievement of Students groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if Improve the Achievement of Students groups had statistically significant differences in job satisfaction. Two measures of job
satisfaction were assessed: intrinsic job satisfaction means and extrinsic job satisfaction means.
There were three group categories: 1) Few to Some, 2) Most, and 3) All. The MANOVA results indicated that statistically significant differences existed among the belief in the improvement of Achievement of Students group categories, Pillai’s trace = .115, F(4, 586) = 8.932, p < .001. A post hoc analysis ANOVA was then conducted on each dependent variable. The results indicated that belief in the improvement of Achievement of Students group differences were significant for intrinsic and extrinsic job satisfaction. Intrinsic job satisfaction mean: F(2, 293) = 17.740, p < .001; partial eta squared = .108. Extrinsic job satisfaction mean: F(2, 293) = 18.090, p < .001; partial eta squared = .110 (See Table 34).

Table 34:
One-way MANOVA of the Effects of belief in the improvement of Achievement of Students Groups on the Intrinsic & Extrinsic Job Satisfaction Survey Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement of Students J.S. Mean</td>
<td>Intrinsic J.S. Mean</td>
<td>2</td>
<td>11.155</td>
<td>17.740</td>
<td>&lt;.001</td>
<td>.108</td>
</tr>
<tr>
<td></td>
<td>Intrinsic J.S. Mean</td>
<td>293</td>
<td>.629</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement of Students J.S. Mean</td>
<td>Extrinsic J.S. Mean</td>
<td>2</td>
<td>7.491</td>
<td>18.090</td>
<td>&lt;.001</td>
<td>.110</td>
</tr>
<tr>
<td></td>
<td>Extrinsic J.S. Mean</td>
<td>293</td>
<td>.414</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tukey post hoc tests indicated that for intrinsic job satisfaction belief in the Improvement of Achievement of Students group 1 had a statistically significant different mean score than participants from belief in the Improvement of Achievement of Students group 2 (p < .001) and group 3 (p = .011). Group 2 had a statistically significant different mean score than group 3 (p = .011).
Tukey post hoc tests indicated that for extrinsic job satisfaction belief in the improvement of Achievement of Students group 1 had a statistically significant different mean score than participants from belief in the Improvement of Achievement of Students group 2 \((p < .001)\) and group 3 \((p < .001)\). Group 2 had a statistically significant different mean score than group 3 \((p = .022)\).

The results indicate significant differences exist among the belief in the Improvement of Achievement of Students group and the intrinsic and extrinsic job satisfaction factors. Table 35 demonstrates the means and standard deviations for the intrinsic and extrinsic job satisfaction by belief in the Improvement of Achievement of Students groups.

**Table 35:** Means and Standard Deviations for Intrinsic and Extrinsic Job Satisfaction Mean by belief in the improvement of Achievement of Students Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Intrinsic Job Satisfaction Mean</th>
<th>Extrinsic Job Satisfaction Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
</tr>
<tr>
<td>Few to Some</td>
<td>3.530</td>
<td>.803</td>
</tr>
<tr>
<td>Most</td>
<td>4.329</td>
<td>.805</td>
</tr>
<tr>
<td>All</td>
<td>4.624</td>
<td>.765</td>
</tr>
</tbody>
</table>

Question 12: Was there a significant difference between those teachers who had a Mentor Teacher groups in the elementary schools based on the intrinsic and the extrinsic means of the Job Satisfaction Survey?

A one-way MANOVA was run to determine if teachers who had a Mentor had statistically significant differences in job satisfaction. Two measures of job satisfaction were assessed: intrinsic satisfaction means and extrinsic satisfaction means. There were two Mentor group categories: 1) Yes (Mentor) and 2) No (No Mentor). The MANOVA results did not indicate any statistically significant differences existed among Mentor Teacher groups and the
dependent variables of intrinsic and extrinsic job satisfaction, Pillai’s trace = .012, F(2, 293) = 1.788, p = .169.

Summary

This chapter provides a summation of the results to the job satisfaction survey administered to 296 elementary school teachers working at 10 elementary schools in an urban school district in a western state. A MANOVA was employed to identify if differences existed among the intrinsic and extrinsic job satisfaction factors and eight demographic variables with four professional practice variables. The intrinsic and extrinsic job satisfaction factors were composed from nine job satisfaction factors.

The aggregate results of the personal demographics found that the mean participants were White, aged 41-50 years, married, and garnered a salary of $35,000 – $42,999. The professional demographics indicated that participants had taught between 1 and 41 years, with an overwhelming majority holding a graduate degree, licensed primarily in elementary education, and teaching in their second to third school. These participants also believed professional development was sometimes beneficial, that some of the time they had classroom autonomy, and that they could improve the achievement of students most of the time. A majority did not have a mentor teacher.

The job satisfaction survey used a Likert score of 1 to 6, with 6 indicating the highest level of satisfaction. The culminating results indicated that intrinsic job satisfaction (4.36) scored different than extrinsic job satisfaction (3.28) with an overall job satisfaction score of 3.76 indicating teachers were slightly more satisfied than not satisfied. The scores from the individual job satisfaction subscales indicated that teachers were very satisfied with their co-workers, nature
of work, and supervision where all reported a 5, 5.02, and 5.39 respectively. Pay and operating
conditions scored the lowest at 2.38 and 2.39 respectively.

The MANOVA results indicated no significant differences existed among the dependent
variables of intrinsic and extrinsic job satisfaction factors and the independent variables of
*ethnicity, marital status, highest level of education, level of licensure*, and if a teacher had a
*mentor*.

The MANOVA results indicated significant differences did exist among the dependent
variables of extrinsic job satisfaction factors and the independent variables of *age* and the
*number of schools in which a teacher has taught*. MANOVA results also indicated significant
differences existed among the dependent variables of intrinsic and extrinsic job satisfaction
factors and the independent variables of *salary, total years of teaching experience, one’s belief in
professional development*, having *classroom autonomy*, and one’s belief in the ability to *improve
student achievement*.

Significant results from this data suggest that the teachers earning $35,000 to $42,999, in
the early years of their career (1 - 6 years), believing in the value of professional development,
having classroom autonomy, and believing in the ability to improve the achievement of all
students are the most satisfied intrinsically and extrinsically. If considering only the extrinsic
factors, this group would also include those teachers aged 21 – 30 years and teaching at their first
school.

Conversely, those earning $50,000 to $58,999, who do not believe professional
development is of any value, do not feel they have classroom autonomy, and do not believe they
can improve the achievement of students reported the lowest in job satisfaction intrinsically and
extrinsically. If considering only extrinsic factors these teachers would also be 41 – 50 years old and have worked in six or more schools.
CHAPTER V

Summary, Discussion, and Conclusions

Overview

The prior chapter presented the data results from the analysis. Chapter 5 is comprised of a summary of the study, a discussion of the findings, implications for practice, recommendations for further research, and the conclusions to the study. With considerations of the professional practices influencing teacher job satisfaction, these final sections will review the practices studied, discuss their influence, and make suggestions for further research. Finally, the conclusions will bring together a summary of what this study accomplished.

Summary of the Study

Teacher job satisfaction is at its lowest rate since 1986 and continues to decline due to increased stress in the work place, reduced budgets, political mandates, and declining moral (Gray & Taie, 2015; Metropolitan Life Insurance Company, 2012). In combination with this, the United States continues to struggle with a significant teacher shortage, including a shortage of highly qualified teachers (Gray & Taie, 2015; Ingersoll, 2002). And every time a teacher leaves the education profession there are economic consequences because new teachers must be vetted, hired, and trained. The purpose of this quantitative study was to examine the job satisfaction of elementary school teachers in a large public school district located in a western state. The study used an established survey instrument, which identified the teachers current job satisfaction, in combination with a demographic and professional practices questionnaire. This information can contribute to the literature in seeking solutions to issues related to job satisfaction like teacher retention and reduction in attrition. Knowledge of these factors helps teachers, school administrators, and school districts improve satisfaction and help retain teachers. Ultimately it
could help to improve the lives and education of children because teachers remain in the profession.

**Theoretical Framework.** The theoretical framework guiding the study was a combination of Herzberg’s (Herzberg et al., 1959, 1997) Two-Factor Motivator-Hygiene Theory and Bandura’s (1977b) Self-Efficacy Theory. The combination was employed because people’s needs are fulfilled through a variety of facets from their world of work (Herzberg et al., 1959, 1997; Bandura, 1986).

Herzberg et al. (1959, 1997) identified the two-factor theory as consisting of physiological needs (the hygiene factors) and psychological growth (the motivational factors). The hygiene factors entail the physiological needs of pay, supervision, work conditions, interpersonal communications (between co-workers, subordinates, and supervisors), and organizational policies (Herzberg et al., 1959, 1997). When present, hygiene factors have a neutral effect on job satisfaction and are not motivational aides, but absent can lead to job dissatisfaction (Herzberg et al., 1959, 1997).

Psychological growth or motivational factors consist of achievement, recognition, and responsibility and are fundamental to the job (Herzberg et al., 1959, 1997). When these factors are present, motivation is high and contributes to high performance standards (Herzberg et al., 1959, 1997). Herzberg et al. (1959, 1997) held that combining the hygiene and motivation factors could provide a more productive employee and a more satisfying job environment.

Bandura’s (1977a) work in social cognitive theory identified self-efficacy as a person’s opinion and beliefs about one’s potential to achieve or accomplish a task. Self-efficacy develops through an individual’s persistence; attempting to seek solutions through trial and error, instituting a variety of behaviors and methods, until a solution is derived (Bandura, 1986).
Failure along this path is a vital part of building self-efficacy (Pajares, 2002). Self-efficacy ultimately helps regulate and determine one’s ability to persevere in the face of adversity whether those processes be productive, destructive, optimistic, or pessimistic (Pajares, 2002). It thereby also plays a critical role in one’s career and can hinder or promote it based on the strength of one’s efficacy (Bandura, 1997).

The theoretical foundation of Herzberg et al. work and Bandura’s self-efficacy is rooted in the survey instrument, the Job Satisfaction Survey (Spector, 1985) employed in this study. The survey was administered in conjunction with eight demographic and four professional practice questions. The survey consists of 36 multiple choice questions that address job satisfaction and are grouped into nine subscales of four questions each. Answers were provided in a Likert scale. The Job Satisfaction Survey’s nine subscales can be further compartmentalized into intrinsic and extrinsic job satisfaction factors.

**Intrinsic and Extrinsic Job Satisfaction.** The intrinsic factors consisting of contingent rewards, co-workers, nature of work, and communication incorporates Herzberg’s motivational factors of achievement, recognition and responsibility. When present, employees exhibit high performance. The extrinsic factors of pay, promotion, supervision, fringe benefits, and operating conditions encompass Herzberg’s hygiene factors of pay, supervision, work conditions, and organizational policies.

Bandura (1997) regarded the educational setting as a reflection of the broader society. Strong efficacy beliefs on the part of teachers support students in overcoming negative societal influences through sound teaching techniques, supportive administration, and an outlook of resolving problems (Bandura, 1997; Pajares, 1996). Teacher efficacy, manifested in the educational process also impacts a teacher’s professional outlook (Bandura, 1995; Gibson &
Dembo, 1984, Pedota, 2015) and research has established that teachers with high efficacy exhibit high job satisfaction (Karabiyik & Korumaz, 2014). Self-efficacy is woven into both intrinsic and extrinsic job satisfaction.

The intrinsic and extrinsic job satisfaction factors served as the two dependent variables while the eight demographic and four professional practice questions served as the independent variables. The questions were administered through SurveyMonkey, an online application, to 296 currently employed elementary school teachers in 10 schools.

The two central research questions in this study were:

1. What is the current level of job satisfaction of school teachers?
2. Which professional practices influence teacher job satisfaction?

These research questions were answered quantitively from the data gathered through SurveyMonkey. Question one examined job satisfaction through the composition of the means for the overall satisfaction scores, the intrinsic scale score, the extrinsic score, and all nine subscale scores. These results addressed the teachers’ current job satisfaction level.

Question two analyzed the dependent variables of the intrinsic and extrinsic satisfiers from the Job Satisfaction Survey against the independent variables of the eight demographic and four professional practice questions. These results determined if there were any significant differences in satisfaction between the groups for each independent variable.

Discussion of the Findings

**Research Question One.** What is the current level of job satisfaction of school teachers?

Generally, teachers were moderately satisfied with their co-workers, nature of work, and supervision. They were dissatisfied with their pay and operating conditions. Overall participants
were slightly more satisfied than dissatisfied, and they were more satisfied with their intrinsic job satisfaction factors than their extrinsic job satisfaction factors.

The following points are the average demographics for the survey participants:

1) Aged 41 – 50 years of age.
2) White.
3) Married.
4) Annual Salary range of $35,000 – $42,999.
5) Has taught in 2 – 3 schools.
6) Holds an elementary only teaching license.
7) Holds a graduate degree.
8) Has 12.5 years teaching experience.
9) They believe that sometimes professional development has meaning.
10) They believe that sometimes they have autonomy in their classrooms.
11) They believe they can improve the achievement of most students.
12) The majority did not have a mentor teacher.

Characteristics of the most satisfied teachers were:

1) Aged 21-30 years of age.
2) Non-White.
3) Not Married.
4) Holds a Bachelor’s degree.
5) Holds an elementary only teaching license.
6) Has taught in 1 school.
7) Annual Salary range of $35,000 – $42,999.
8) Has 1 - 6 years of teaching experience.
9) Believes professional development has meaning most of the time.
10) Has autonomy in his/her classroom.
11) Believes he/she can improve the achievement of all students.
12) Had a mentor teacher.

Those teachers with the least job satisfaction exhibited the following characteristics:

1) Aged 41-50 years of age.
2) White.
3) Married.
4) Holds a Bachelor’s degree plus graduate credits or a graduate degree.
5) Holds a secondary teaching license.
6) Has taught in 6 or more schools.
7) Annual Salary range of $35,000 – $42,999.
8) Has 1 - 6 years of teaching experience.
9) Believes professional development has no meaning at all.
10) Does not believe he/she has classroom autonomy.
11) Believes he/she can only improve the achievement of few to some students.
12) Did not have a mentor teacher.

**Research Question Two.** Which professional practices influence teacher job satisfaction?

MANOVA calculations were employed to determine if statistically significant differences existed between the intrinsic and extrinsic job satisfaction factors of the Job
Satisfaction Survey for each independent variable. A subsequent post hoc test was conducted when statistically significant differences were identified.

No significant differences were found within ethnicity, marital status, level of education, level of teacher licensing, or mentor experience groups. Conversely, significant differences were found extrinsically within age and what number of schools a teacher has taught. Both intrinsic and extrinsic significant differences were found in salary, total years of teaching experience, level of belief in professional development, feelings of classroom autonomy, and the level of belief in one’s ability to improve the achievement of students.

Within the seven variables that resulted in statistically significant differences, there were three that violated their assumptions of homogeneity: Salary, Years of Experience, and Professional Development. The MANOVA’s for these three variables were then re-run with equal sample sizes to determine if unequal sample sizes had any effect. While small differences in the calculations arose, there was no change to which variables had significance.

Specific findings were as follows for each of the significant demographic and professional practices questions:

1) Age: The Tukey post hoc test identified that significant differences existed only in the extrinsic subscale. Those teachers aged 21 – 30 years had the highest mean satisfaction while those aged 41 – 50 years were least satisfied. Interestingly, in the demographics, this least satisfied age group represented the overall mean age.

2) Number of Schools Taught at: The Tukey post hoc test identified that significant differences existed in only the extrinsic subscale. Extrinsically, those teachers teaching at their first school were the most satisfied while those who have taught at 6+ were the least satisfied.
3) Salary: The Tukey post hoc test identified that significant differences existed in both the intrinsic and extrinsic subscales. Intrinsically and extrinsically, those teachers earning the least amount, $35,000 to $42,999, were the most satisfied followed by those making the most at over $59,999+. The least satisfied were those teachers making $50,000 to $58,999.

4) Years of Teaching Experience: The Tukey post hoc test identified that significant differences existed in both the intrinsic and extrinsic subscales. Intrinsically and extrinsically, teachers in the early years of their career, years 1-6, were the most satisfied. Intrinsically, teachers become most dissatisfied in years 7-15, while extrinsically they are most dissatisfied in years 16-41.

5) Meaningfulness of Professional Development: The Tukey post hoc test identified that significant differences existed in both the intrinsic and extrinsic subscales. Both intrinsically and extrinsically, those teachers who believed that professional development opportunities were meaningful most of the time were the most satisfied while those who found it not at all meaningful were least satisfied.

6) Classroom Autonomy: The Tukey post hoc test identified that significant differences existed in both the intrinsic and extrinsic subscales. Both intrinsically and extrinsically, those teachers who felt that yes, they had classroom autonomy (where the teacher has the ability to personalize and structure their lessons based on their students’ personal experiences/needs) were the most satisfied followed closely by those who felt they had autonomy some of the time. Those who felt they had no autonomy were least satisfied.
Belief in the Ability to Improve the Achievement of Students: The Tukey post hoc test identified that significant differences existed in both the intrinsic and extrinsic subscales. Both intrinsically and extrinsically, those teachers who believed they could improve the achievement of all students were the most satisfied followed closely by those who believed they could improve most students’ achievement. Lagging pointedly behind were those who felt they could impact few to some students’ achievement.

This data analysis leads to some interesting conclusions about what demographics and professional practices appear to influence job satisfaction of teachers. The results from this study indicate 1) age, 2) number of schools a teacher has taught at, 3) salary, 4) total years of teaching experience, 5) professional development, 6) classroom autonomy, and 7) belief in the ability to improve the achievement of students have a significant effect on teacher job satisfaction.

The younger teachers, both in age and teaching experience, are more satisfied than their older and more experienced co-workers. As might be expected, age often factors into one’s level of education, experience, and salary, and so we often find these variables in combination. Young educators would have less experience and would likely earn less than those with more years. Those with more years of experience will be older. The term, young educators, however, can be misleading because while ‘young’ can denote age, it neglects second career teachers who are older in years, but are beginning teachers, young in their career.

These same results about young teachers have been reported in the two parallel studies on teacher job satisfaction (Bumgartner, 2013; Cui-Callahan, 2012); however, that data is misleading if the message is to only hire new, young teachers. Such advice would be neglecting some key mechanisms. First, young teachers will get older. Second, a large number of new
teachers leave the field of education in the first five years; some experts quote as high as 50% (Ingersoll et al., 2014). It is also important to note that while experienced teachers are more dissatisfied than the beginning teachers, it is the experienced teachers who bring continuity, knowledge, experience, and understanding to the classroom and these teachers become even more valuable to the academic success of students (Billingsley, 2004; Flynt & Morton, 2009; Gray & Taie, 2015; Ingersoll et al., 2014; Johnson, 2010).

Bandura (1997) pointed out that one’s self-efficacy can be highly motivational in the beginning of a new task, a major factor in a young teacher’s first years because it is not just about one’s proven ability, but also what one believes he/she can do (1977a). Tschannen-Moran and Woolfolk-Hoy (2007) found that educational resources and interpersonal support from administrators, fellow teachers, and the community also played a prominent role in supporting novice teachers. They found this support maintained and reinforced the self-efficacy of new teachers which in turn benefits job satisfaction (Tschannen-Moran & Woolfolk-Hoy, 2007).

Conversely, when a new teacher encounters more challenges than expected, the reality of the difficulty can impact his/her self-efficacy with self-doubt (Weinstein, 1988). Depending on the individual and the impact of the situation it will either further deteriorate one’s efficacy or motivate the teacher to seek solutions to the problem thus enhancing efficacy (Wheatley, 2002).

The number of schools a teacher has taught at corresponds with the teacher’s level of job satisfaction. The more schools a teacher had been at, the lower their satisfaction. The teachers at their first school were the highest satisfied, again pointing to the younger teachers. Those with experience at six or more schools were the least satisfied. For whatever reasons, these teachers are dissatisfied and likely have a low sense of efficacy (Raudenbush, Rowan, & Cheong, 1992).
When someone is underpaid for a job it often brings dissatisfaction. Most everyone would agree that teachers are underpaid and this results in dissatisfaction, but being dissatisfied is not a single result. Currall, Towler, Judge, & Kohn (2005) found in a study of over six thousand teachers that teacher satisfaction with pay was directly attributed to the academic performance of their students. If the teachers are dissatisfied with their salary, this may inhibit their self-efficacy which can negatively impact the performance of students.

From this study, there were three professional practices that had a significant effect on teacher job satisfaction. These professional practices were teachers who found professional development opportunities meaningful, felt they had classroom autonomy, and believed in their ability to improve the achievement of students. While mentoring may be beneficial to teachers, and while approximately half of the teachers in this study had received some form of mentoring, it did not result in a significant difference to job satisfaction in this study.

Professional development provides opportunities for professional and personal growth. Even when it is a “vicarious experience” it provides teachers with skill building opportunities which in turn bolster efficacy (Tschanen-Moran & Woolfolk-Hoy, 2007, p. 945). The impact or level of learning the opportunity provides is weighted against how much the teacher identifies with the presenter (Tschanen-Moran & Woolfolk-Hoy, 2007). And as discussed previously in this study, teachers with positive self-efficacy are more open to learning and applying new methods, thus these teachers usually find benefit in professional development opportunities.

Classroom autonomy also had a significant effect on teacher job satisfaction. Ingersoll et al. (2014) found when teachers feel they have decision-making discretion over what their students need and have a voice over what is best for their facility and faculty they are more satisfied. The ability to communicate and relate well with co-workers, organize and manage job
demands, exhibit leadership qualities, and be able to manage job stress all stem from strong self-efficacy traits and support autonomy (Hackett et al., 1985). The more autonomy teachers have in their professional decisions at school, the greater their self-efficacy (Tschannen-Moran & Woolfolk-Hoy, 2007) and the greater their satisfaction. 

Finally, job satisfaction is greater with those teachers who believe they can improve the academic achievement of their students. Teachers who have positive self-efficacy foster motivation and self-efficacy in their students (Ashton & Webb, 1986; Ross, Hogaboam-Gray, & Hannay, 2001) and students who have good self-efficacy tend to be more successful, in turn motivating their teachers and feeding their self-efficacy; it is a reciprocal effect (Raudenbush et al., 1992). Educators with commitment to student achievement are typically more dedicated and exhibit higher job satisfaction (Bandura, 1997; Caprara, Barbaranelli, Borgoñi, Petitta, Rubinacci, 2003).

**Implications for Practice**

**Professional Development.** The independent variable of professional development was shown to have implications for practice and influences several aspects of education; from administration, to teachers, to students. Professional development is wide-ranging, always dynamic, and can embrace nearly every aspect of job satisfaction. Its importance to job satisfaction cannot be underscored enough, as it drives so many elements. The majority of teachers in this study often found professional development meaningful; only 12.5% reported they did not believe it was meaningful. Professional development can address a myriad of growth factors for teachers from enhancing methodology, to autonomy, to improving student achievement. Karabiyik and Korumaz’s (2014) research noted that teachers not only approve of professional development, they documented it raised job satisfaction.
District resources for professional development opportunities can positively benefit a majority of educators versus some programs that only interface with a small selection of teachers, like mentoring. And professional development opportunities can be found in a variety of formats; from single presenter with a large audience, to collaborating teachers at a single school site. Professional development is not just hiring an outside consultant or speaker, schools in themselves, have proficient, experienced, professional educators who are enthusiastic and honored to share their knowledge. In fact, “teacher-led development also increases ownership and engagement among teachers of all levels” (Arnett, 2017, para. 9). In house or in district professional development opportunities are not only readily accessible and highly valuable tools they are also cost conscious. Arnett (2017) makes the same point and notes that even with funding cutbacks teacher-leaders can provide invaluable insight to new teachers and fellow colleagues. Professional development focused on collaborating and sharing education’s best practices builds professional expertise which in turn enhances teacher job satisfaction.

**Autonomy.** Autonomy was also shown to significantly improve job satisfaction. The professional practice of autonomy has been shown in other studies to be motivational and valued by teachers (Perrachione, Rosser, & Petersen, 2008). Perie & Baker (1997) found autonomy to be essential to a favorable work environment which resulted in higher job satisfaction; by contrast, when teachers perceive it is not present they were dissatisfied. This result was evidenced in this study.

A note of consideration is that the definition of autonomy may change as a teacher gains greater knowledge. What a first or second year teacher deems autonomous many vary greatly from what a 12th or 13th year teacher deems autonomous. It is therefore also important to consider how autonomy changes over time with experience.
Getting school principals and school district administrators to recognize teachers as the educational leaders of their students and classrooms and co-leaders of school-wide procedures, will lead to higher job satisfaction (Perie & Baker, 1997). Arnett’s (2017) article on teacher development cites several educational experts on the importance of having leadership opportunities within schools that empower teachers to lead from within; additionally, the article indicates that school administrators who support shared leadership are also more satisfied. Supporting and promoting opportunities of professional autonomy not only enhances professional growth, but improves job satisfaction.

**Improving Academic Achievement.** Teachers who believe they can improve the academic achievement of students were shown to be more satisfied and this belief influences positive student achievement. Mojavezia and Tamiz (2012) found in their study that student achievement was directly related to teachers’ self-efficacy because teachers with high efficacy want to teach and want their students to learn. These teachers employ innovative teaching methods which encourage student participation (Mojavezia & Tamiz, 2012). Students who are engaged are less likely to be off-task and disruptive, and engaged students are learning. Higher job satisfaction through believing in the ability to improve student achievement can actually reduce the achievement gap of students (Perrachione et al., 2008). Investing in teacher preparation and professional development are direct routes by which to improve teacher efficacy and student achievement (Perrachione et al., 2008). Another route to explore improving achievement are alternative pay options, wherein, teachers may receive a stipend for their leadership roles within a school and for their contributions to school wide achievement. This concurrently strengthens autonomy.
The information gathered in this study, while not intended to be generalizable, may be of some value under certain circumstances to those of other western states who share similar demographics.

**Recommendations for Further Research**

1. Gain a better understanding of which independent variables working in combination impact job satisfaction would provide greater depth to job satisfaction factors.

2. Examine methods to engage teachers who do not find professional development meaningful.

3. Include the examination of school climate as part of the professional practices that contribute to teacher job satisfaction (Lee, Dedick, & Smith, 1991; Tschannen-Moran & Woolfolk-Hoy, 2007).

4. Identify the cause from the effect for the dissatisfaction of teachers who have taught at over six schools: a) are these teachers dissatisfied because they have moved from school to school, or b) are these teachers moving from school to school because they dissatisfied, or c) are these teachers choosing to change schools or has administration moved them?

5. While self-efficacy has been studied at lengths in the 1980’s and 1990’s recent research has waned; continued research in the subject matter and its interaction with job satisfaction would be beneficial.

6. Expansion of the study of job satisfaction of other school professionals (counselors, school psychologists, school nurses, etc.) may also be valuable in building a more complete representation of job satisfaction within the field of education.
Conclusion

In this study, statistical significance was found among age, the number of schools a teacher had taught at, salary, total years of teaching experience, meaningfulness of professional development, the feelings of autonomy, and the belief in the ability to improve the academic achievement of students. This study’s results indicated job satisfaction can be improved through the professional practices of professional development, autonomy, and enriching teachers’ beliefs in their ability to improve student achievement. Mentoring was not shown to significantly effect job satisfaction.

Job satisfaction is key to retaining teachers and curbing attrition. In turn, it can support school districts on several fronts, from reducing employee costs to improving student achievement. Each district is different and each must consider the varying needs of their community’s teachers. This can only be accomplished by continuously monitoring the pulse of one’s school community along with understanding the changing needs of education and society. Teacher job satisfaction will never be a static topic.
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http://www.gse.upenn.edu/pdf/rmi/EL_TheWrongSolution_to_theTeacherShortage.pdf

Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs on 

Jackson, S. E., Schwab, R. L., & Schuler, R. S. (1986). Toward an understanding of the burnout 


http://www.watertownhistory.org/articles/kindergartenfirst.htm


APPENDICES
APPENDIX A

Demographic Profile of Elementary Schools

This table displays the student enrollment, number of teachers on staff, and the free and reduced lunch population percentage at each of the ten schools where the survey was administered. To provide anonymity schools are only identified through a number designation.

<table>
<thead>
<tr>
<th>School</th>
<th>Student Enrollment</th>
<th>Teachers on Staff</th>
<th>Free &amp; Reduced Lunch</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>487</td>
<td>32</td>
<td>99.4%</td>
</tr>
<tr>
<td>2</td>
<td>730</td>
<td>42</td>
<td>99.6%</td>
</tr>
<tr>
<td>3</td>
<td>507</td>
<td>31</td>
<td>99.4%</td>
</tr>
<tr>
<td>4</td>
<td>630</td>
<td>46</td>
<td>40.3%</td>
</tr>
<tr>
<td>5</td>
<td>533</td>
<td>28</td>
<td>59.1%</td>
</tr>
<tr>
<td>6</td>
<td>464</td>
<td>33</td>
<td>53.7%</td>
</tr>
<tr>
<td>7</td>
<td>436</td>
<td>22</td>
<td>4.8%</td>
</tr>
<tr>
<td>8</td>
<td>502</td>
<td>25</td>
<td>6.6%</td>
</tr>
<tr>
<td>9</td>
<td>710</td>
<td>36</td>
<td>19.1%</td>
</tr>
<tr>
<td>10</td>
<td>557</td>
<td>27</td>
<td>8.4%</td>
</tr>
</tbody>
</table>
The information requested in this section of the instrument is to help in the interpretation of the results of this study. The confidentiality of information provided here is assured. Read carefully, as some of the questions are worded positive and others are worded negative. Please complete the following by selecting the best answer.

**JOB SATISFACTION SURVEY**

Paul E. Spector  
Department of Psychology  
University of South Florida  
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<table>
<thead>
<tr>
<th>PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.</th>
<th>Disagree very much</th>
<th>Disagree moderately</th>
<th>Disagree slightly</th>
<th>Agree slightly</th>
<th>Agree moderately</th>
<th>Agree very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel I am being paid a fair amount for the work I do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>There is really too little chance for promotion on my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>My supervisor is quite competent in doing his/her job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>I am not satisfied with the benefits I receive.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>When I do a good job, I receive the recognition for it that I should receive.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Many of our rules and procedures make doing a good job difficult.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>I like the people I work with.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>I sometimes feel my job is meaningless.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Communications seem good within this organization.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Raises are too few and far between.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>Those who do well on the job stand a fair chance of being promoted.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>My supervisor is unfair to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>The benefits we receive are as good as most other organizations offer.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>I do not feel that the work I do is appreciated.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Statement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>15</td>
<td>My efforts to do a good job are seldom blocked by red tape.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>I find I have to work harder at my job because of the incompetence of people I work with.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>I like doing the things I do at work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>The goals of this organization are not clear to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>I feel unappreciated by the organization when I think about what they pay me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>People get ahead as fast here as they do in other places.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>My supervisor shows too little interest in the feelings of subordinates.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>The benefit package we have is equitable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>There are few rewards for those who work here.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>I have too much to do at work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>I enjoy my coworkers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>I often feel that I do not know what is going on with the organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>I feel a sense of pride in doing my job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>I feel satisfied with my chances for salary increases.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>There are benefits we do not have which we should have.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>I like my supervisor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>I have too much paperwork.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>I don't feel my efforts are rewarded the way they should be.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>I am satisfied with my chances for promotion.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>There is too much bickering and fighting at work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>My job is enjoyable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Work assignments are not fully explained.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

Letter of Permission to Use the Job Satisfaction Survey

Paul Spector
Department of Psychology
PCD 4118
University of South Florida
Tampa, Florida 33620
pspector@usf.edu

March 15, 2015

Dear Dr. Spector:

I would like to seek your permission to use your Job Satisfaction Survey as the survey instrument in my dissertation, *Aspects of Job Satisfaction in Urban Elementary School Educators*. I am a doctoral student at the University of Nevada, Reno, in the Educational Leadership Department where my Committee Chair is Dr. Kenneth Coll.

My goal is to interview the public elementary school teachers of the Washoe County School District and to complete the study before June 2015. The study will only focus on a maximum of 10 (out of sixty-four possible) elementary schools within the area and will not include the charter or private elementary schools.

I herein agree to follow your instructions as posted on the web site:

http://shell.cas.usf.edu/~pspector/scales/share.html

1. The use is for noncommercial educational or research purposes. This means no one is charging anyone a fee. If you are using any of my scales for consulting purposes, there is a fee.

2. You agree to share results with me. This is how I continue to update the norms and bibliography.”

In summary confirmation there will be no compensation involved in this research and I will share my results upon completion of the study.
Thank you for making such a valuable tool available for my educational research. Should you require any additional information, please contact me at: Jennifer@Synergytec.com

Sincerely,

Jennifer L. Queyrel-Bryan
Jennifer L. Queyrel-Bryan, Educational Leadership Doctoral Candidate
Dr. Spector’s Response, March 15, 2015:

Dear Jennifer:

You have my permission to use the JSS in your research. You can find copies of the scale in the original English and several other languages, as well as details about the scale's development and norms in the Scales section of my website http://shell.cas.usf.edu/~spector. I allow free use for noncommercial research and teaching purposes in return for sharing of results. This includes student theses and dissertations, as well as other student research projects. Copies of the scale can be reproduced in a thesis or dissertation as long as the copyright notice is included, "Copyright Paul E. Spector 1994, All rights reserved." Results can be shared by providing an e-copy of a published or unpublished research report (e.g., a dissertation). You also have permission to translate the JSS into another language under the same conditions in addition to sharing a copy of the translation with me. Be sure to include the copyright statement, as well as credit the person who did the translation with the year.

Thank you for your interest in the JSS, and good luck with your research.

Best,

Paul Spector, Distinguished Professor
Department of Psychology
PCD 4118
University of South Florida
Tampa, FL 33620
813-974-0357
pspector@usf.edu
http://shell.cas.usf.edu/~spector
August 25, 2016, Follow-up e-mail to Dr. Spector ensuring permission to administer the Job Satisfaction Survey via an on-line survey tool.

Good Morning Dr. Spector:

Thank you again for your permission to use the Job Satisfaction Survey in my dissertation. Additionally, I am seeking your permission to administer the survey via an on-line survey tool. Please acknowledge that the use of an on-line survey tool is permissible.

Sincerely,
Jennifer Queyrel-Bryan
Doctoral Candidate
University of Nevada, Reno

August 25, 2016 reply from Dr. Spector:

Dear Jennifer:

You have my permission to use the JSS online.

Best,

Paul Spector, Distinguished Professor
Department of Psychology
PCD 4118
University of South Florida
Tampa, FL 33620
813-974-0357
pspector [at symbol] usf.edu
http://shell.cas.usf.edu/~spector
APPENDIX D

Demographic Survey Questions

1. What is your age group?
   [ ] 21-30  [ ] 31-40  [ ] 41-50  [ ] 51+

2. What is your ethnicity:
   [ ] White   [ ] Non-White

3. What is your marital status?
   [ ] Married  [ ] Not married

4. What is the highest level of education you have completed?
   [ ] Bachelor’s Degree   [ ] Bachelors + Graduate Credit
   [ ] Graduate Degree (MA, MS, Ed.S, Ed.D, Ph.D)

5. Is your teaching credential/license:
   [ ] Only Elementary  [ ] Only Secondary  [ ] Both Elementary & Secondary

6. How many different schools have you taught in during your teaching career?
   [ ] 1   [ ] 2 - 3   [ ] 4 - 5   [ ] 6+

7. What is Your Salary?
   [ ] $35,000 - $42,999  [ ] $43,000 - $49,999  [ ] $50,000 - $58,999  [ ] $59,000 +

8. What are your total years of teaching experience (K-12)?
   [ ] Each respondent reports their actual years.

9. Do you feel Professional Development opportunities are meaningful?
   [ ] Not at All  [ ] Sometimes  [ ] Most of the Time

10. Do you feel you are able to personalize and structure your lessons based on your students’ personal experiences/needs? (autonomy)
    [ ] Yes  [ ] No  [ ] Some of the Time

11. Do you believe you can personally improve the achievement of _________ students?
    [ ] Few to Some  [ ] Most  [ ] All

12. Did you have a mentor teacher (either formally or informally) during the first year(s) of your career?
    [ ] Yes  [ ] No
APPENDIX E

IRB Approval

DATE: September 7, 2016
TO: Kenneth Coll, PhD
FROM: University of Nevada, Reno Institutional Review Board (IRB)

PROJECT TITLE: [935211-1] Job Satisfaction Survey for Elementary School Teachers
REFERENCE #: New Project
SUBMISSION TYPE: DETERMINATION OF EXEMPT STATUS
ACTION: September 7, 2016
DECISION DATE: Exemption Category #2

The Research Integrity Office, or the IRB reviewed this project and has determined it is EXEMPT FROM IRB REVIEW according to federal regulations. Please note, the federal government has identified certain categories of research involving human subjects that qualify for exemption from federal regulations. Only the Research Integrity Office and the IRB have been given authority by the University to make a determination that a study is exempt from federal regulations. The above-referenced protocol was reviewed and the research deemed eligible to proceed in accordance with the requirements of the Code of Federal Regulations on the Protection of Human Subjects (45 CFR 46.101 paragraph [b]).

Reviewed Documents

- Application Form - Exempt 2 Tests, Surveys, Interviews, or Observation of Public Behavior (UPDATED: 08/28/2010)
- Letter - Appendix C: Letter of Permission to use Job Satisfaction Survey (UPDATED: 08/28/2016)
- Letter - Appendix L: Day of Survey Invitation to Participate (UPDATED: 08/29/2016)
- Letter - Appendix G: Invitation to Principals for Teachers to Participate (UPDATED: 08/29/2016)
- Letter - Appendix J: Letter confirming date and time of survey (UPDATED: 08/16/2016)
- Letter - Appendix I: Agree to participate confirmation (UPDATED: 08/16/2016)
- Questionnaire/Survey - Appendix D: Demographic Survey (UPDATED: 08/27/2016)
- Questionnaire/Survey - Appendix B: Job Satisfaction Survey (UPDATED: 08/8/2016)
- Training/Certification - Conflict of Interest Training Completion Certificate (UPDATED: 08/9/2016)
- University of Nevada, Reno - Part I, Cover Sheet - University of Nevada, Reno - Part I, Cover Sheet (UPDATED: 08/15/2015)

If you have any questions, please contact Nancy Moody at 775.327.2367 or nmoody@unr.edu.
NOTE for VA Researchers: You are not approved to begin this research until you receive an approval letter from the VASNHCS Associate Chief of Staff for Research stating that your research has been approved by the Research and Development Committee.

Sincerely,

Richard Bjur, PhD
Co-Chair, UNR IRB
University of Nevada Reno

Janet Usinger, PhD
Co-Chair, UNR IRB
University of Nevada Reno

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Nevada, Reno IRB's record.
APPENDIX F

School District Research Request

Research Approval

September 20, 2016

Name of Proposed Study: Job Satisfaction Survey for Elementary School Teachers
Affiliation: University of Nevada, Reno
Principal Investigators: Kenneth Coll, PhD

Please be advised that approval to conduct the requested research has been granted by the Department of Accountability, with these five conditions:

1. Participation by any student, any teacher, any administrator, or any school is voluntary.
2. Student, teacher, administrator, school, and district anonymity shall be assured in the research project. The identity of students, teachers, administrators, schools, and the district shall not be revealed in any report of the study, except by prior written permission of this office.
3. The results of the study shall not be used for any purpose other than that specified in the research application, except by prior written permission of this office.
4. A copy of the report of the study shall be filed with this office and with the principal of any school that has participated in the study.
5. The study must conform to the federal Family Education Rights and Privacy Act (FERPA), and all federal regulations dealing with Protection of Human Subjects.

Approval to conduct this study within the [Redacted] School District expires:

September 19, 2017
APPENDIX G

Invitation to Principals to have Teachers Participate

Jennifer L. Queyrel-Bryan  
Graduate Student, University of Nevada, Reno  
College of Education  
(775) 742-1199  
Queyrelb@Nevada.UNR.edu

Date ____________

Dear Principal ___________:  

Teachers are a community’s most valuable asset and yet, high attrition rates and, issues plague the profession. We need to learn more about teacher job satisfaction in order to retain our educators. Thus, research is being conducted to investigate the job satisfaction of teachers in Washoe County School District and your teaching staff is invited to participate in the study. Your staff’s involvement is highly encouraged because their opinion and professional experience is central to understanding the significant factors of teacher job satisfaction. Participation is completely voluntary and confidential. All survey answers are anonymous. Participant names will not be associated in any way with the survey results nor will names be asked for on any portion of the survey. Survey results will be separated by school for processing, but not for coding purposes. In the event the study’s results are published, no personally identifying information will be released. Per IRB protocol, survey results will be stored in a secured location for three years and then destroyed.

The survey, presented through Survey Monkey, is in two parts and will take less than 10 minutes to complete, including directions. In order to minimize disruption, I would like to hold the survey just before a staff meeting or a staff professional development session. Should you desire to review the complete survey results, they should be available within six months.

As a token of my appreciation I will supply snacks and refreshments directly after the survey to the teachers. I will also provide a $25 gift certificate drawing to be awarded to one member of your participating staff directly after the survey.

If you have any questions, please feel free to contact the researcher, Jennifer Queyrel-Bryan at (775) 742-1199 or Dr. Kenneth Coll, at the University of Nevada, Reno (775) 784-4345. I look forward to meeting you any obtaining your staff’s input.

Sincerely,

Jennifer L. Queyrel-Bryan  
Jennifer Queyrel-Bryan  
Researcher
APPENDIX H

Reminder to Principals of Invitation to Participate in Survey

Jennifer L. Queyrel-Bryan
Graduate Student, University of Nevada, Reno
College of Education
(775) 742-1199

Queyrelb@Nevada.UNR.edu

Date __________

Dear Principal ____________:

I wrote to you a week ago requesting your permission to have your staff participate in a Teacher Job Satisfaction Survey. Your staff’s involvement is highly encouraged because their opinion and experience is central to understanding the significant factors of teacher job satisfaction.

Teachers are a community’s most valuable asset and yet, high attrition rates and retention issues plague the profession. We need to learn more about teacher job satisfaction to retain our educators. Thus research is being conducted to investigate the job satisfaction of teachers in Washoe County School District and your teaching staff is invited to participate in the study. Participation is completely voluntary and confidential. All survey answers are anonymous. Participant names will not be associated in any way with the survey results nor will names be asked for on any portion of the survey. Survey results will be separated by school for processing, but not for coding purposes. In the event the study’s results are published, no personally identifying information will be released.

The survey, presented through Survey Monkey, is in two parts and will take less than 10 minutes to complete. In order to minimize disruption, I would like to hold the survey just before a staff meeting or a staff professional development session. Should you desire to review the complete survey results, they should be available within six months.

If you have any questions, please feel free to contact the researcher, Jennifer Queyrel-Bryan at (775) 742-1199 or Dr. Kenneth Coll, at the University of Nevada, Reno (775) 784-4345. I look forward to meeting you any obtaining your staff’s input.

Sincerely,
Jennifer L. Queyrel-Bryan
Jennifer Queyrel-Bryan
Researcher
APPENDIX I

Thank you to Principal for Agreeing to Teacher Participation
& Planning of Date & Time of Survey

Jennifer L. Queyrel-Bryan
Graduate Student, University of Nevada, Reno
College of Education
(775) 742-1199
Queyrelb@Nevada.UNR.edu

Date__________

Dear Principal ______________:

Thank you for agreeing to allow your staff to voluntarily participate in the study on teacher job satisfaction. I hope the information garnered helps build stronger, more knowledgeable, and committed educators.

As I mentioned in my invitation letter, I would like to schedule the survey to be just prior to your next staff meeting or professional development session. Could you respond in an e-mail to me or through a telephone call to select the appropriate date for your convenience. I would like to confirm your date on or before ____________.

Sincerely,
Jennifer L. Queyrel-Bryan

Jennifer L. Queyrel-Bryan
Researcher
APPENDIX J

Confirmation of Permission with Date & Time of Survey

Jennifer L. Queyrel-Bryan
Graduate Student, University of Nevada, Reno
College of Education
(775) 742-1199
Queyrelb@Nevada.Unr.edu

Date ______

Dear Principal ________________:

Thank you for your confirmation to participate in the Teacher Job Satisfaction Survey. Per your request I have schedule your school, _________________ Elementary, to hold your teacher survey on _____day____, __month, day__, 2016 at __time__ in your school’s computer lab.

I will arrive one hour before the commencement of the survey so that the survey takes place on time and has as little impact as possible on your schedule.

As a thank you to your teachers, I would like to set-up the table of snacks and refreshments just outside the survey area based upon your recommended placement.

Should you have any questions, please contact me at your convenience.

Sincerely,
Jennifer L. Queyrel-Bryan
Jennifer L. Queyrel-Bryan
Researcher
APPENDIX K

Teacher Invitation to Participate

Jennifer L. Queyrel-Bryan
Graduate Student, University of Nevada, Reno
College of Education
(775) 742-1199

Queyrelb@Nevada.UNR.edu

Date ______

Dear Teacher:

Teachers are a community’s most valuable asset and yet, high attrition rates and retention issues plague the profession. Thus, we are conducting research to learn more about the factors that influence teacher job satisfaction in Washoe County School District and you are invited to participate in the study. Your involvement is highly encouraged because your opinion and experience are central to understanding the significant factors of teacher job satisfaction.

If you volunteer to be in this study, you will be asked to complete a two-part survey about job satisfaction and your demographics through Survey Monkey.

Your participation should take about 10 minutes.

This study is considered to be minimal risk of harm. This means the risks of your participation in the research are similar in type or intensity to what you encounter during your daily activities.

Benefits of doing research are not definite; but we hope to learn about the factors that influence teacher job satisfaction. There are no direct benefits to you in this study activity.

Your participation in this study is completely voluntary. You may stop at any time. Declining to participate or stopping your participation will not have any negative effects on your participation.
All survey answers are anonymous. Your name will not be associated in any way with your survey results nor will your name be asked for on any portion of the survey. The researchers and the University of Nevada, Reno will treat your identity and the information collected about you with professional standards of confidentiality and protect it to the extent allowed by law. You will not be personally identified in any reports or publications that may result from this study. Survey results will be separated by school for processing, but not for coding purposes. The US Department of Health and Human Services, the University of Nevada, Reno Research Integrity Office, and the Institutional Review Board may look at your study records.

You may ask questions of the researcher at any time by calling Jennifer Queyrel-Bryan at (775) 742-1199 or Dr. Kenneth Coll, at the University of Nevada, Reno (775) 784-4345. You may also contact the researcher by sending an email to QueyreB@Nevada.unr.edu

You may ask about your rights as a research participant. If you have questions, concerns, or complaints about this research, you may report them (anonymously if you so choose) by calling the University of Nevada, Reno Research Integrity Office at 775.327.2368. Should you desire to review them, the complete survey results should be available within six months.

Thank you for your participation in this study. Your time and professional opinion is appreciated. To thank you for your time a beverage and healthy snack will be available outside the survey room. Additionally, every survey participant will eligible to enter a drawing at for a $25 gift certificate to Trader Joes or a $25 movie pass. One certificate will be awarded at each participating school site.

Sincerely,

Jennifer L. Queyrel-Bryan
Jennifer Queyrel-Bryan
Researcher
APPENDIX L

Day of Survey: Invitation to Participate Announcement

Teachers, Good Morning / Afternoon:

Teachers are a community’s most valuable asset and yet, high attrition rates and retention issues plague the profession. Thus research is being conducted to investigate the job satisfaction of teachers in Washoe County School District and you are invited to participate in the study. Your involvement is highly encouraged because your opinion and experience are central to understanding the significant factors of teacher job satisfaction.

Your participation is completely voluntary and confidential. All survey answers are anonymous. Your name will not be associated in any way with your survey results nor will your name be asked for on any portion of the survey. The survey will be presented through Survey Monkey, is in two parts and will take less than 10 minutes to complete.

Please join us in the school’s computer lab at this time to participate in this brief, but valuable survey. Snacks and refreshments are provided along with a drawing for a $25 gift certificate.

If you have any questions, please feel free to contact the office at this time or you may meet with the researcher in the computer lab.
APPENDIX M

Verbal Survey Directions Script

Thank you for agreeing to voluntarily participate in the teacher job satisfaction survey written by Dr. Paul Spector. I believe teachers are our communities most valuable resource and therefore, it should behoove us to understand what satisfies teachers about their jobs. Your involvement is highly encouraged because your opinion and professional experience are central to understanding the significant factors of teacher job satisfaction.

The two-part survey on job satisfaction and your demographics is through Survey Monkey and should take about 10 minutes.

This study is considered to be minimal risk of harm. This means the risks of your participation in the research are similar in type or intensity to what you encounter during your daily activities.

Benefits of doing research are not definite; but we hope to learn about the factors that influence teacher job satisfaction. There are no direct benefits to you in this study activity.

Your participation in this study is completely voluntary. You may stop at any time. Declining to participate or stopping your participation will not have any negative effects on your participation.

All survey answers are anonymous. Your name will not be associated in any way with your survey results nor will your name be asked for on any portion of the survey. The researchers and the University of Nevada, Reno will treat your identity and the information collected about you with professional standards of confidentiality and protect it to the extent allowed by law. You will not be personally identified in any reports or publications that may result from this study. Survey results will be separated by school for processing, but not for coding purposes. The
US Department of Health and Human Services, the University of Nevada, Reno Research Integrity Office, and the Institutional Review Board may look at your study records.

You may ask questions of the researcher at any time by calling Jennifer Queyrel-Bryan at (775) 742-1199 or Dr. Kenneth Coll, at the University of Nevada, Reno (775) 784-4345. You may also contact the researcher by sending an email to QueyreB@Nevada.unr.edu (The contact information will also be posted in the room where the survey takes place.)

For your convenience the computers have been turned on and brought to the Job Satisfaction Survey page on Survey Monkey. Please answer each question to the best of your ability and with honesty. Please answer all questions. Upon completion on the survey please select “submit” and exit the room.

As a token of appreciation, please find snacks and refreshments just outside the survey room. Upon completing the survey please pick-up a drawing ticket for a $25 gift certificate to be awarded to one member of your staff today. I sincerely thank you for your time.
APPENDIX N

Linearity Plots

Age Groups

Age 21 - 30

Age: 31 - 40

Age: 41—50

Age: 51 + years
Ethnicity

Marital Status
Highest Level of Education

Bachelor’s

Bachelor’s + Graduate

Graduate Degree

Teaching Credential/License

Elementary Only

Secondary Only License

Elementary & Secondary
Number of Schools Taught at During One’s Career

1 School

2—3 Schools

4—5 Schools

6 + Schools
Salary

$35,000 – $42,999

$43,000 – $49,999

$50,000 – $58,999

$59,000 +
Total Years of Teaching Experience Represented in Three Groups

1 - 6 years

7 - 15 years

16 - 41 years
Belief in Professional Development

Not at All

Sometimes

Most of the Time

Ability to Structure Lessons / Autonomy

Yes

No

Some of the Time
Belief in the Achievement of Students

Few to Some

Most

All

Did Survey Participant have a Mentor

Yes

No
APPENDIX O

Tests for Normality – Intrinsic and Extrinsic

Intrinsic Normality

### Age

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* This is a lower bound of the true significance.
  a. Lilliefors Significance Correction

### Ethnic

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  a. Lilliefors Significance Correction

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* This is a lower bound of the true significance.
  a. Lilliefors Significance Correction

### Highest Education Level Attained

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  a. Lilliefors Significance Correction
Intrinsic Normality

**License**

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a. Lilliefors Significance Correction

**Number of Schools**

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a. Lilliefors Significance Correction

**Salary**

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a. Lilliefors Significance Correction

**Years of Experience**

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a. Lilliefors Significance Correction
Intrinsic Normality

### Professional Development

#### Tests of Normality

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#### Tests of Normality

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#### Tests of Normality

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a. Lilliefors Significance Correction
Extrinsic Normality

### Age

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### Highest Education Level Attained

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  a. Lilliefors Significance Correction
Extrinsic Normality

### License

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a. Lilliefors Significance Correction

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a. Lilliefors Significance Correction

### Salary

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* This is a lower bound of the true significance.

a. Lilliefors Significance Correction

### Years of Experience

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* This is a lower bound of the true significance.

a. Lilliefors Significance Correction
Extrinsic Normality

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* This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Autonomy

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* This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Improve Achievement

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* This is a lower bound of the true significance.

a. Lilliefors Significance Correction

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* This is a lower bound of the true significance.

a. Lilliefors Significance Correction
## APPENDIX P

### Tests for Homogeneity

#### Age

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Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + age

#### License Level

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a. Design: Intercept + LicenseLvl

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a. Design: Intercept + ethnic

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a. Design: Intercept + NumSchools

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a. Design: Intercept + marital

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a. Design: Intercept + Salary

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Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + highestEd

#### Years Experience

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Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + yrsexp3
### Professional

**Levene’s Test of Equality of Error Variances**

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Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + PD

### Improvement

**Levene’s Test of Equality of Error Variances**

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Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + ImproActv

### Autonomy

**Levene’s Test of Equality of Error Variances**

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a. Design: Intercept + Autono

### Mentor

**Levene’s Test of Equality of Error Variances**

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Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Mentor
Appendix Q

Comparisons to Parallel Studies in the Same Western State

Two other studies have been conducted in the same western state using the same research instrument, however, the demographic questions varied and the surveys were conducted in different settings. Cui-Callahan’s (2012) study, *An Examination of Job Satisfaction among Urban High School Teachers* was conducted in a single district while Bumgartner’s (2013) research, *A Study of Factors that Impact Teacher Job Satisfaction in Rural Schools*, was conducted in five rural school districts. Despite the differences in settings and demographic questions, there were several common findings between the studies. Similarities between the three included higher intrinsic job satisfaction over extrinsic job satisfaction.

![Job Satisfaction Survey Results Over 3 Studies](image_url)

Job satisfaction survey results over three studies.

When comparing the nine individual subscales, the highest satisfaction was found among supervision, co-workers, and the nature of work. The lowest scoring subscales were operating conditions and pay. Overall, the order, highest to lowest, of sub-scale results are quite similar.
The following table provides a representation of the order of the sub-scale results from all three studies.

Order of Results of all Three Studies by Subscales

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The demographic variables from the three studies had the same following questions: age, ethnicity, marital status, level of education, number of schools a teacher has taught at, salary, and years of experience. The results from all three studies had similarities in the following areas: age 41+ years, over 52%; ethnicity, white over 89%; marital status, married 64% - 75%; holding a bachelor’s degree with graduate credit 26% - 45%, holding graduate degrees 41% - 62%; and a majority have taught at 2 – 3 schools, 49% – 51%. However, the years of experience and salary range answers did not yield good comparisons. While all three studies used three category ranges to represent years of experience this study’s ranges were equally balanced at about 33% each while the other two studies used a different set of ranges thus greatly varying the range answers. The salary results were also not similar and could be due to differences in salary scales between the years when the studies were conducted, differing salary ranges between districts, and because this study had four salary groups versus the other two studies which used three salary group levels.

This study was different than the other two studies in that it additionally explored the implication of four professional practice aspects on job satisfaction. It revealed and illuminated
the importance that professional development, teacher autonomy, and the belief in the ability to improve student achievement has on teacher job satisfaction.