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Teacher Job Satisfaction as Related to Student Performance on State-Mandated Testing

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by

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Dr. Shelly Fransen, Dissertation Chair — Date: 6-14-17

Dr. Sherry DeVore, Committee Member — Date: 6-14-17

Dr. Shannon Snow, Committee Member — Date: 6-14-17

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree.

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Abstract

The growing demand placed upon educators has taken a toll on the profession (Walker, 2014). Teacher burnout, stress, and unhappiness may be predestined unless administrators recognize how to prevent these from happening (Elias, 2012). The intent of this quantitative study was to survey teachers in southwest Missouri to determine their level of job satisfaction as it relates to student performance on state-mandated assessments. The survey included items designed to collect data on overall level of teacher job satisfaction in relation to demographic areas of age range, gender, level of education, years of teaching experience, subject areas taught, and salary range. The first research question was designed to determine the correlation between high school teacher job satisfaction and high school student achievement. Based on this research, there was a relationship between teacher job satisfaction and Missouri Performance Index scores. The second research question was designed to determine the correlation between teacher job satisfaction and years of experience, salary, age, level of education, and gender. Based on the data collected, there was a correlation between teacher job satisfaction and years of experience and between teacher job satisfaction and the age of the educator. However, there was no correlation between teacher job satisfaction and level of education, nor between teacher job satisfaction and gender. Research question three was posed to determine if there was a difference in teacher job satisfaction between those teachers required to administer end-of-course (EOC) exams and teachers who were not required to administer EOC exams. The research determined there was no difference in job satisfaction between the two groups.

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Chapter One: Introduction

Student test scores and teacher job satisfaction continue to be a focal point of many educators across the country (Walker, 2014). Specifically, Missouri educators have increased pressures placed upon them because state and federal funding is directly tied to student performance (Singer, Lloyd, & Stanley, 2015). As a result, all educators continue to explore strategies to increase student performance (Walker, 2014). This has a direct impact on the stresses and pressures placed upon teachers and students (Chamundeswari, 2013). As these pressures mount, teacher job satisfaction becomes a clear concern, along with student performance (Chamundeswari, 2013).

According to Wang (2013), "Teachers' self-efficacy is an important predictor of adjustment in teachers with respect to burnout, job satisfaction, and intentions to quit" (p. 80). Furthermore, Wang (2013) determined, "The higher the level of teachers' beliefs that they are capable of engaging their students, using various instructional strategies, and managing the classrooms, the higher their level of their job satisfaction and lower the possibility of burnout and quitting" (p. 80). A teacher's ability to engage students is a major predictor of teacher job satisfaction (Wang, 2013).

Markow, Macia, and Lee (2013) stated, "Teachers are widely acknowledged as the most important school-related factor influencing student achievement. Second only to families, they may have the greatest influence on young lives and aspirations" (p. 41). The theoretical background and methodology of this research allowed the investigator to determine if there is a correlation between teacher job satisfaction and student achievement. Age, gender, and student performance were all areas of focus. Data were

collected to determine if teacher job satisfaction has a direct impact on student performance.

In this chapter, a background of the study, theoretical framework, and statement of the problem are presented. An explanation of the purpose of the study, research questions, definitions of key terms, and limitations and assumptions are also offered. Chapter One concludes with a summary and a description of highlights to come in subsequent chapters.

Background of the Study

Teacher satisfaction may impact student achievement; therefore, administrators may be able to improve student achievement by improving teacher satisfaction (DuFour & Mattos, 2013). Retention of teachers may also be impacted by improving teacher satisfaction (DuFour & Mattos, 2013). Markow et al. (2013) acknowledged, "It is important to note that 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, principals and schools" (p. 41). Improvement in teacher satisfaction may persuade teachers to stay on the job and prevent students from being left in the hands of underqualified or less-experienced teachers (OECD, 2016). Education is challenged by high teacher turnover rates (Morello, 2014). Teacher attrition and retention are directly related to job satisfaction and intrinsic variables (Perrachione, Petersen, & Rosser, 2008).

The intended purpose of this study was to determine if teacher job satisfaction has an impact on student academic achievement. Wang (2013) found, "When teachers had a stronger belief that they could motivate their students in the learning process, they tended

to be more satisfied with their job, less willing to leave the teaching profession, and had fewer burnout symptoms" (p. 86). According to Kraft and Papay (2014):

> As effective teachers remain in schools, opportunities for meaningful peer collaboration and a positive organizational culture become even more possible. This positive cycle can lead to effective school organizations, while the opposite pattern can occur in hard-to-staff schools. Poor working conditions may stifle teachers' efforts to improve their practice, promoting turnover and contributing to staffing challenges. (pp. 20-21)

The results of this study may be useful for school district administrators who wish to retain highly qualified teachers and increase student scores. A review of the literature revealed researchers have discussed student performance and teacher job satisfaction; however, researchers have not solidified a connection between student performance and teacher job satisfaction. It is important to localize results to determine if there are factors specific to Missouri public schools.

Theoretical Framework

Social identity theory, originated by Tajfel and Turner (2016), guided this study. According to Islam (2014), "Social Identity Theory is a classic social psychological theory that attempts to explain intergroup conflict as a function of group-based self-definitions" (p. 1781). Islam (2014) determined, "The creation of group identities involves both the categorization of one's 'in-group'; with regard to an 'out-group' and the tendency to view one's group with a positive bias vis-à-vis the out-group" (p. 1781). This research was conducted to determine how public school administrators can identify

with staff to help improve teacher job satisfaction. Ideally, the improvement of teacher job satisfaction will increase student performance on state-mandated testing.

Tajfel and Turner (2016) stated, "Social identity theory proposes that a person's sense of who they are depends on the groups to which they belong" (p. 115). Islam (2014) recognized:

> Cognitive grouping involves 'judgmental accentuation' where cognitive categories lead to the increased salience of distinguishing features between categories, exaggerating category differences. Applied to social groups, this principle could be used to explain biased and exaggerated perceptions of difference between groups. (p. 1781)

Furthermore:

> Tajfel and Turner's social identity theory explains that part of a person's concept of self comes from the groups to which that person belongs. An individual does not just have a personal selfhood, but multiple selves and identities associated with their affiliated groups. ("Social Identity Theory," 2016, para. 4)

Ashforth and Mael (1989) researched a deeper understanding of social identity theory. Ashforth and Mael (1989) surmised people are inclined to categorize themselves and others into a range of different social categories, such as membership in organizations, religious affiliation, age, and gender.

Islam (2014) discovered, "Because social identity effects are based on protection and enhancement of self-concepts, threat to the self-concept would intuitively be related to the strongest identity effects" (p. 1781). Organizational psychologists have found

social identity very useful in creating a focus on organizational commitment and organizational identification (Ashforth & Mael, 1989). Social psychology has been impacted by social identity theory ("Social Identity Theory," 2017). Social identity theory has been investigated in various fields and different surroundings ("Social Identity Theory," 2017). It is inclusive of "prejudice, stereotyping, negotiation and language use. The theory has also implications on the way people deal with social and organizational change" ("Social Identity Theory," 2017, para. 6). Islam (2014) confirmed, "Several laboratory and field studies have empirically confirmed that when groups pose a threat to one another, the effects of identification increase" (p. 1781). For this reason, negative depictions of one group by another group can cause competition between the groups (Islam, 2014).

Statement of the Problem

According to Markow et al. (2013), "In the classroom, teachers have developed as coaches of learning rather than as simply transmitters of knowledge" (p. 41). Teachers have become mentors to new educators and transfer a wealth of knowledge in areas such as instruction, professional development, and curriculum (Markow et al., 2013). Dickens (2010) suggested further study in this area in order to "provide information to narrow the findings of teacher job satisfaction to more distinct groups of individuals" (p. 149). This study involved data collection in the areas of teacher gender, subjects taught, years of experience, teacher age range, and student grade level.

Markow et al. (2013) suggested:

> In the context of additional challenges for leading schools toward greater improvement, the continuing decline in teacher morale identifies itself as an urgent priority. During a time when expectations and standards are increasing for effective teaching and learning, teacher morale is yet another declining resource, one that is associated with schools with diminished budgets and other resources, fewer students meeting standards and fewer colleagues highly rated for how well they are doing their job. Teacher leadership emerges as a potential resource for translating big challenges into opportunities, served by hybrid roles for teachers as leaders and as a method for addressing professional growth and satisfaction. (p. 51)

When teachers experience a high level of job satisfaction, morale is improved and student learning increases (Markow et al., 2013). Pendino (2012) recommended analyzing survey responses from teachers in different subject areas and with different years of experience. Wang (2013) suggested using professional development in such a way that teachers would have the opportunity to reflect not only on "how to teach and how to better regulate their students' behaviours, but more importantly, how to better motivate their students" (p. 87). Further study will help researchers determine more specific findings to connect teacher job satisfaction to student performance.

Purpose of the Study

The purpose of this study was to determine if there is a connection between teacher job satisfaction and student test scores. Teachers in a southwest Missouri conference were surveyed. Survey results were categorized based upon teacher

demographic information or teacher job satisfaction data. Data were then collected from the Missouri Department of Elementary and Secondary Education (MODESE) (2017). With new regulations placed upon teachers daily, it is difficult to maintain positive morale (Ravitch, 2016). Testing anxieties appear to be growing with the increased national emphasis on uniform testing (American Test Anxieties Association, 2017).

Research questions and hypotheses. The following research questions guided the study:

1. What is the correlation between high school teacher job satisfaction and high school student achievement?

$H1_0$: There is no correlation between high school teacher job satisfaction and high school student achievement.

$H1_a$: There is a correlation between high school teacher job satisfaction and high school student achievement.

2. What is the correlation between teacher job satisfaction and years of experience, salary, age, level of education, and gender?

$H2_0$: There is no correlation between teacher job satisfaction and years of experience, salary, age, level of education, and gender.

$H2_a$: There is a correlation between teacher job satisfaction and years of experience, salary, age, level of education, and gender.

3. What is the difference in job satisfaction between teachers who are required to administer end-of-course (EOC) exams and those who are not required to administer end-of-of-course exams?

$H3_0$: There is no significant difference in job satisfaction between teachers who are required to administer end-of-course (EOC) exams and those who are not required to administer end-of-of-course exams.

$H3_a$: There is a significant difference in job satisfaction between teachers who are required to administer end-of-course (EOC) exams and those who are not required to administer end-of-of-course exams.

Significance of Study

This research may support those faced with the daunting task of educating students in the future under specific guidelines. Gu (2016) suggested, "More demographic data could be included in the research to explore the relationship between other teacher characteristics and job satisfaction, such as teaching subject, gender, and education background" (p. 16). To date, there is little research showing a direct correlation between teacher job satisfaction and student achievement.

McNeill (2016) suggested further research in the area of the impact of teacher demographics on job satisfaction. In this current study, educator demographics were collected through a survey to determine if a correlation exists between teacher job satisfaction and years of service, salary, age, and gender to answer research question two. Teacher job satisfaction data and end-of-course exam data for Algebra I and English II from corresponding schools were used to answer research questions one and three.

Definition of Key Terms

For the purposes of this study, the following terms are defined:

Job satisfaction. Job satisfaction is a worker's attitude toward all aspects of work and the work environment (Bin, 2015).

Student achievement. Student achievement is quantified as the percentage of students scoring Advanced, Proficient, Basic, and Below Basic as measured by the Missouri end-of-course exam (Missouri Department of Elementary and Secondary Education [MODESE], 2014).

Limitations and Assumptions

The following limitations were identified in this study:

Sample demographics. Teachers and students affiliated with only one southwest Missouri conference participated in this study. The participants were from schools of similar size and demographics. Additional factors that may influence teacher job satisfaction and student performance on state-mandated assessments might be present for participants of other demographics.

Sample size. The small sample size is a limitation in comparison with the total number of Missouri public school districts.

Instrument. The survey was created by the researcher.

Timeframe. Due to the fact the Missouri end-of-course exam contents have varied over the years, Missouri Performance Index scores from multiple years may not generate valid or comparable results.

The following assumptions were accepted:

1. The responses of the participants were offered honestly and without bias.
2. District administration of state-wide assessments followed testing protocol.

3. The Missouri end-of-course exam is a measure of student achievement.

Summary

This quantitative study was guided by social identity theory. Social identity theory "is an individual-based perception of what defines the 'us' associated with any *internalized group membership*. This can be distinguished from the notion of personal identity which refers to self-knowledge that derives from the individual's unique attributes" ("Social Identity Theory," 2017, para. 2).

Chapter One included the background information and an historical basis for the research. The theoretical framework was presented and a relationship to the study was developed. The statement of the problem and purpose of the study were identified. The study was focused on three research questions and corresponding hypotheses, which were also introduced in Chapter One. Key terms were defined, and limitations and assumptions were detailed.

Chapter Two includes a review of the literature and a more thorough investigation of the theoretical framework for the research. Different studies are introduced to shed light on both job dissatisfaction and job satisfaction and how job performance is affected by each. The role of both high-stakes testing and administrative support are examined. Furthermore, the key factors affecting teacher job satisfaction are reviewed, and the role student behavior plays is investigated. Finally, teacher self-efficacy is discussed along with salary/benefits, teacher age and gender, and class size.

In Chapter Three, the methodology used in this quantitative study is described. An overview of the problem and purpose of the study is presented. Descriptions of the

population and sample are provided, as well as the instrumentation and analysis process. Chapter Four presents the results of the study, and Chapter Five includes conclusions and recommendations based on the results and data analysis.

Chapter Two: Review of Literature

In order to achieve school objectives, administrators must be willing to help individual staff members reach the highest possible level of achievement and performance (Cordeiro & Cunningham, 2012). Researchers Webb and Norton (2013) suggested the quality of education programs in large part depends upon (1) the quality of human resources within the system; (2) the extent productive human relationships are realized; and (3) the development, motivation, and utilization of existing human qualities. Administrators should hire high-quality people and keep them motivated through fulfilling relationships so quality educational programs can be developed (Webb & Norton, 2013).

For the purpose of this research, the literature review is focused on factors affecting job satisfaction and how job satisfaction relates to student performance and achievement. Factors influencing teacher job satisfaction such as administrative support, student behavior, school atmosphere, parental support, teacher autonomy, grade level taught, age of teacher, experience, teacher efficacy, workplace conditions, salary, and benefits are discussed in this chapter.

Theoretical Framework

Social identity theory, as interpreted by Sarbin (2013), is outlined in a three-dimensional model. The reader must first distinguish between ascribed and achieved status (Neeley, 2013). Ascribed status such as birth, age, and gender is given, while achieved status is earned through an election, promotion, or appointment (Brown, Richardson, Hargrove, & Thomas, 2016). Governmental organizations, military

establishments, and churches provide an idea of who one is and where one fits (Sarbin, 2013). People do not have the ability to choose whether they can obtain an ascribed status or achieved status (Neeley, 2013).

Sarbin (2013) proposed a second dimension of value or valuation. Feedback, whether negative, neutral, or positive, determines this dimension (Sarbin, 2013). School administrators and their choices determine if achieved status is valued as negative or positive (Seligman & Csikszentmihalyi, 2014). At times, the performance may be determined as neutral (Sarbin, 2013). The third dimension is defined by how involved a person is or was in the role (Sarbin, 2013). Sarbin (2013) referred to the fact a mother has acquired status and must retain this status constantly.

Teachers in today's society have mainly an attained status (Sarbin, 2013). A person chooses his or her career and gains attained status (Barrick, Mount, & Li, 2013). Teachers may change to achieved status based on their choices, which can lead to a richer learning environment (Nilson, 2016). If a choice is made and perceived as negative by a community, it may be interpreted as disrespect (Sarbin, 2013). The difference in grade level also determines the type of role a teacher may play (Dana & Yendol-Hoppey, 2014). The teacher who works with young students may reward with a hug, while the teacher who works with older children may reward with grades (Sarbin, 2013). Acceptable grades do not have the impact on younger students they do on older students (Brophy, 2013).

Students and teacher come to a compromise to build the relationship needed to be successful (Sarbin, 2013). The teacher's styles and differences also have in impact on the

esteem of the students (Schmeck, 2013). Sarbin (2013) believed lack of student success is not solely based on a student having a learning disability. Instead, Sarbin (2013) asserted lack of success, whether in remedial classes or regular education classes, is dependent on the relationship between the teacher and the student. The reaction of the teacher is what determines the success of each student (Burden, 2016).

Illeris (2014) detailed personal identity. Work, family, nationality, religion, and work identities are all a part of the individual (Illeris, 2014). Adults who are stable have an established identity (Steijn, 2014). According to Illeris (2014):

> In adulthood, when a relatively stable identity has been developed, motivation becomes a quite central issue in relation to possibilities of changes in the identity. The type and strength of the motivation involved is crucial: Adults do not transform elements of their identity if they do not have serious reasons for doing so. These reasons may be internal, external, or both, but analytically, the important thing is that transformations imply strong motivation and cannot be expected to occur without such motivation. (p. 159)

While keeping teachers in mind, adults do not change their identities unless the motivation is important to them (Bridges & Bridges, 2017). Teachers and their supervisors are aware of this either unconsciously or consciously; a teacher uses this knowledge to motivate students, and a supervisor uses this to motivate staff (Illeris, 2014).

Creating motivation instead of finding motivation is often a mistake made by both teachers and administrators (Pinder, 2014). Motivation that is powerful enough to change

learning must be genuinely engrained in a person; it cannot simply be created or imposed (Illeris, 2014). Illeris (2014) stated, "It is important to be aware that all learning, and especially more demanding learning, very often will have to overcome learning barriers in the form of defense or resistance" (p. 159). This is challenging, and in order for a transformation of identity to occur, the change must be so strong it can be justified and worth the energy (Illeris, 2014). Illeris (2014) also stated:

> An especially strong part of this defense system is identity defense, which protects us against too much transformative learning. This must be accepted, understood, and respected – and again, the way to deal with this is not to employ some cunning methods and activities but rather to try to detect whether the learners actually have any serious interest in the intended transformations and, if so, where these interests are subjectively rooted and how they can be addressed. (p. 160)

Learners naturally protect themselves from becoming overwhelmed or unstable due to constant changes, and teachers help them to overcome this by explaining how working together can create change (Oakes, Lipton, Anderson, & Stillman, 2015). Identity does not stand alone; rather, identity encompasses cognitive, emotional, social, and environmental learning (Illeris, 2014).

General Job Dissatisfaction

Markow et al. (2013) found, "Teacher satisfaction has declined 23 percentage points since 2008, from 62% to 39% very satisfied, including five percentage points since last year, to the lowest level in 25 years" (p. 6). However, other than the aforementioned

study by Markow et al. (2013), very few studies have focused specifically on teacher job satisfaction (Barlow, 2015). Markow et al. (2013) found:

- Half (51%) of teachers report feeling under great stress several days a week, an increase of 15 percentage points over 36% of teachers reporting that level in 1985.
- Less satisfied teachers are more likely than very satisfied teachers to be in schools where budgets declined in the last 12 months (61% vs. 47%) and to identify maintaining an adequate supply of effective teachers (58% vs. 43%) and creating and maintaining an academically rigorous learning environment (66% vs. 56%) as challenging or very challenging for school leaders.
- Less satisfied teachers are more likely to be located in schools that had declines in professional development (21% vs. 14%) and in time for collaboration with other teachers (29% vs. 16%) in the last 12 months.
- Nearly all teachers (97%) give high ratings to other teachers in their schools. (p. 6)

Herzberg (1966) studied job satisfaction specifically and indicated job satisfaction and job dissatisfaction are two separate factors. Workers find job satisfaction based on the kind of work performed and the achievement they receive; workers experience job dissatisfaction based on the circumstances affecting the work being performed (Herzberg, 1966). Addressing sources of dissatisfaction does not necessarily increase job satisfaction (Herzberg, 1966). Herzberg (2003) determined there are six key factors that influence job satisfaction (see Table 1).

Table 1

Herzberg's Motivation-Hygiene Theory Factors Impacting Job Attitudes

Intrinsic Motivators (Satisfaction)	Hygiene Factors (Dissatisfaction)
• Achievement • Recognition • Work itself • Responsibility • Advancement • Growth	• Company policy and administration • Supervision • Relationship with supervisor • Work conditions • Salary • Relationship with peers • Personal life • Relationship with subordinates • Status • Security

Note. Adapted from "One More Time: How Do You Motivate Employees?" by F. Herzberg, 2003, *Harvard Business Review, 81*(1), pp. 87-96.

Several factors have been identified that indicate job satisfaction or the contradictory concept of job dissatisfaction (Stello, 2011). Dissatisfaction was described by Herzberg (1966) as the result of circumstances in which work is conducted. Sources of dissatisfaction were labeled by Herzberg (1966), and he suggested if they are addressed and corrected, the amount of job dissatisfaction is reduced. Additional

researchers elaborated sources as intrinsic and extrinsic factors with the latter being the best predictor for job dissatisfaction (Mafini & Dlodlo, 2014).

Weiss (as cited in Riza, Ganzach, & Liu, 2015) indicated employee experiences at work, over time, can form job outlooks such as work satisfaction or work dissatisfaction. The setting where a teacher practices his/her craft does not impact dissatisfaction, but other factors play a bigger role (Webster, McNeish, Scott, Maynard, & Haywood, 2012). Professional fatigue can cause negative outcomes for schools, schoolchildren, culture, and educators (Bitsadze & Japaridze, 2014). Teachers who experience weariness depend on structure and routine (Bitsadze & Japaridze, 2014). Ward (2015) stated:

> A slew of policies and technologies promising to dramatically revolutionize teaching and education over the past decade has not only failed to produce desired results, it has also led to a decline in teacher morale, with large numbers leaving the profession. (para. 1)

A pleased, happy, and hardworking worker is the biggest asset of any institute (Pragya & Sandeep, 2015). Effective human resource management and the creation of a positive work atmosphere or culture effects not only the performance of a worker and the organization but similarly affects the growth and development of the entire economy (Cummings & Worley, 2014).

Organizational psychology, as well as the physical, mental, and social settings where staff work together, all play a role in the effectiveness of the organization and any increase in productivity (Jain & Kaur, 2014). The goal in creating job satisfaction is to form a setting which ensures ease of effort and removes all causes of frustration,

apprehension, and worry (London, 2014). If the environment is pleasant, weariness and boredom are minimized and work performance can be maximized (Jain & Kaur, 2014).

Work environment may be divided into three broad components: Physical Environment, Mental Environment, and Social Environment (Frumkin, 2016). The Physical Environment consists of noise, amenities, climate, and structures of the facilities (Jain & Kaur, 2014). The Mental Environment consists of boredom, fatigue, monotony, the behavior of colleagues, and the behavior of the supervisor (Jain & Kaur, 2014). The Social Environment consists of the general behavior of the employees and how they are expected to act (Jain & Kaur, 2014).

Job Satisfaction and Job Performance

Research involving Chinese employees indicated a caring climate predicts a number of significant organizational results like job satisfaction, organizational commitment, and job performance (Fu & Deshpande, 2014). The impact of a caring climate is both direct and indirect (Labrague, McEnroe-Petitte, Papathanasiou, Edet, & Arulappan, 2015). Fu and Deshpande (2014) undoubtedly reinforced the need for Chinese organizations to use different approaches to creating a caring climate.

A caring climate is based on a genuine interest in the well-being of others in the company (Labrague et al., 2015). Further research confirmed the positive, direct influence of job satisfaction on employees' organizational obligation and indirect influence on job performance (Fu & Deshpande, 2014). Fu and Deshpande (2014) supported the understanding it is meaningful for organizations to create strategies to increase job satisfaction.

The approaches in China will be more successful when employees are conscious the organization cares for them (Fu & Deshpande, 2014). Employees are more dedicated to their organization and perform better if they feel they have shared values with an employer who displays concern for them (Reijseger, Peeters, Taris, & Schaufeli, 2016). Concerned climate perceptions are not changed by age, schooling, sex, type of job, or experience at work; however, organizational commitment has a substantial direct influence on the job performance of Chinese employees (Fu & Deshpande, 2014).

Bakotić (2016) noted job satisfaction is an exceptionally complex notion subjective to different factors. More precisely, a group of elements that often have intermingled impact (Bakotić, 2016). Job satisfaction more strongly governs organizational performance than organizational performance governs job satisfaction (Bakotić, 2016).

The majority of job satisfaction factors impact organizational performance (Fu & Deshpande, 2014). Organizational success is something employees generally have no chance to concretely realize or to directly benefit from, because successful businesses are not required to give personnel any supplementary benefits arising from success of the organization (Bakotić, 2016). Workers often receive identical wages and benefits, regardless of how fruitful a company is (Okun, 2015). Bakotić (2016) made a substantial contribution to research on the connection between job satisfaction and organizational performance.

Javed, Balouch, and Hassan (2014) defined job satisfaction as "how content or satisfied employees are with their jobs" (p. 121). Job loyalty and job satisfaction were

found to have a significant positive association (Mowday, Porter, & Steers, 2013). Workplace environment was determined to have a significant impact on job satisfaction, and job satisfaction also had a significant negative relationship to employees with the intention of leaving the workplace (Javed et al., 2014).

Employees who feel empowered have a significant positive association with job satisfaction (Lamm, Tosti-Kharas, & King, 2015). However, there is no connection between employees with the intention to leave the workplace and employees who feel empowered (Javed et al., 2014). Furthermore, Javed et al. (2014) found job satisfaction has a direct correlation to job performance.

Managers who stress transparency, balanced processing, self-awareness, and elevated ethical standards increase perceptions of empowerment for employees, which in turn increases performance and job satisfaction (Wong & Laschinger, 2013). Leroy et al. (2012) surmised employees who show their true selves in their place of employment are more probable to feel their work-related performance resonates with who they truly are. Work atmospheres that offer open access to materials, resources, backing, and opportunities for learning and growth both empower and allow workers to accomplish their work (Wong & Laschinger, 2013). Leaders who are not as likely to engage in ego-defensive actions and instead put their real selves into play are more likely to fulfill an employee's basic needs (Leroy et al., 2012).

True and genuine leadership also makes it more probable workers will feel they are the controllers of their work-related behaviors through the gratification of rudimentary needs (Leroy et al., 2012). Genuine behavior on the part of employees is

more likely to be positively related to simple need satisfaction when those actions are supported by genuine leader behaviors (Fullan, 2014). True leader behavior has been shown to be synergistic, in that the mixture of genuine leadership and genuine employees is related with advanced levels of basic need satisfaction (Leroy et al., 2012). The fulfillment of these needs fosters motivation engrained within a core and stable sense of self (Fullan, 2014). Transformational leadership allows leaders to transform followers into leaders, and genuine leadership creates a framework in which employees can be true to self (Ogbonnaya & Nielsen, 2016). By focusing on genuine employees per se, researchers have shown preliminary insights into the distinctive processes whereby genuine leadership relates to employee outcomes (Leroy et al., 2012).

Testing

According to Markow et al. (2013), principals put more emphasis on test data than do teachers. Teachers focus more on the classroom experience (Markow et al., 2013). Markow et al. (2013) concluded:

> Principals are most likely to say that it is very important that a principal uses data about student performance to improve instruction (85%) and has the ability to lead the development of strong teaching capacity across the school (84%) in order to be an effective school leader. In contrast, teachers are most likely to say that having been a classroom teacher is very important (79%). Substantially fewer teachers than principals indicate that it is very important that a principal uses data about student performance to improve instruction in order to be an effective leader (53% vs. 85%). Teachers are also less likely than principals to rate the

> ability to lead the development of strong teaching capacity across the school as very important (69% vs. 84%). (p. 25)

This emerging discrepancy between teachers and principals may be caused by the lack of teaching experience of building principals (Simon & Johnson, 2015).

Most teachers and principals report students do not perform at or above grade level in mathematics or communication arts (Bernhardt, 2003). Markow et al. (2013) deduced, "Student performance at or above grade level varies widely based on school resources and demographic characteristics" (p. 61). Markow et al. (2013) also found, "Fewer educators in high-needs schools report that students perform at grade level" (p. 61). Finally, Markow et al. (2013) concluded, "Teachers and principals in schools where the educators are doing an excellent job and have high morale are also more likely to report higher levels of student performance" (p. 61). Educators with high job satisfaction are more likely to report students are performing at a proficient or advanced level than educators with low job satisfaction (Zee & Koomen, 2016).

Administrative Support

School leaders must be prepared to address the predictable questions and needs of staff (DuFour & DuFour, 2013). School staff look for clarity on how they engage at work (Earley & Porritt, 2014). The administrator must provide leadership about the nature of the work, why it is important, how progress will be measured, strategies to ensure success, confidence staff are doing the right work, and ways to avoid mistakes (Hopkins, 2015). According to Markow et al. (2013):

> Most principals say that their responsibilities today have changed compared to five years ago and that the job has increased in complexity. Seven in 10 (69%) principals disagree with the statement that a school principal's responsibilities today are very similar to his or her responsibilities five years ago. In schools where most students are not performing at or above grade level in English language arts and math, principals are more likely to hold this view than principals in schools where most students are performing at or above grade level (76% vs. 65%). (p. 23)

Furthermore, most principals feel the complexity of the job has become almost more than they can handle (Seligman & Csikszentmihalyi, 2014)

Teachers can profit from systematic time together for staff-to-staff learning that does not include planning specific instruction (Davis, 2015). Davis (2015) construed:

> Yet, often overlooked in gauging the impact of expanded-time schools on student learning is the equally beneficial effect that a longer day and year has on teachers. Within an expanded schedule, teachers typically have many more collaboration and professional-learning opportunities built into their workday. As teachers work together to strengthen their teaching skills, they also can augment instructional practice dramatically, and thus make their time with students even more valuable. (para. 5)

National Staff Development Council Executive Director Dennis Sparks suggested 10% of the school budget and 25% of teachers' time should be used for professional learning (Cordeiro & Cunningham, 2012).

Professional development is most effective when it relates to the interest and prior knowledge of the learner, allows the learner to make a contribution, and makes the learner feel he or she is an important part of something larger (Moon, 2013). According to Cordeiro and Cunningham (2012), "Effective programs are ongoing, collaborative, collegial and highly connected to what teachers are doing in their classrooms" (p. 317). Providing professional development opportunities that embed these characteristics not only makes learning effective for teachers, but also can increase teacher job satisfaction (Hopkins, 2014).

Specifically, teachers are interested in developing and improving pedagogical skills and classroom management strategies (Hopkins, 2015). The American Educational Research Association cited seven out of eight studies indicated a positive correlation between professional development and student achievement (Cordeiro & Cunningham, 2012). This correlation between professional development and student achievement ties in with the idea of teacher empowerment (Harris et al., 2013).

Administrators can also provide support in other ways such as employee assistance and wellness programs (Centers for Disease Control, 2013). Not only does this type of support encourage job satisfaction, it is also a smart alternative, as it is less expensive to provide help to good employees than it is to replace them (Cordeiro & Cunningham, 2012). According to Cordeiro and Cunningham (2012), statistics indicate a significant decrease in medical care costs and employee absenteeism as a result of wellness programs. Individuals are searching for a purpose in their work that resonates with who they are, is filling, and is appealing (Cormier, 2016). Therefore, from a social

identity theory perspective, organization-based self-esteem likely mediates the relationship between organizational commitment and status judgments (Tajfel & Turner, 2016).

Key Factors in Teacher Job Satisfaction

According to Thibodeaux, Labat, Lee, and Labat (2015), teacher observation data indicate more pressure is placed on subject areas tested by the state than on areas that are not state-tested. Teachers feel this pressure, also (Thibodeaux et al., 2015). In regard to intention, most teachers specify their plan is to continue in the teaching profession for the upcoming school year (Thibodeaux et al., 2015). Incidentally, in Thibodeaux et al.'s (2015) study, most teachers questioned were teachers who did not administer state-measured subject-area exams. When considering teacher job satisfaction, the majority of teachers responded the weight of high-stakes testing leads to teachers leaving the profession (Thibodeaux et al., 2015).

Principals are usually supportive of new teachers through mentoring (Thibodeaux et al., 2015). Teachers acknowledged to Thibodeaux et al. (2015) they found teaching at their current grade levels gratifying and an intrinsic motivator. According to the data collected by Thibodeaux et al. (2015), teachers seem to be more driven by the yearning to achieve goals than they are to obtain rewards. There is a significant variance in principal leadership styles and actions based on teachers' intent to continue in the teaching occupation (Thibodeaux et al., 2015). Findings have indicated principal leadership plays a crucial role in the retention of teachers; therefore, administrators should be mindful of

how their leadership styles and actions impact the teachers they lead (Thibodeaux et al., 2015).

Thibodeaux et al. (2015) showed there is no statistically noteworthy difference between state-measured and non-state-measured subject-area teachers when exploring teacher job satisfaction. Findings specified both non-state-measured teachers and state-measured subject-area teachers expressed comparable perceptions with regard to job satisfaction and their desire to remain in the teaching profession (Thibodeaux et al., 2015). A substantial relationship exists between teacher job satisfaction, teacher morale, and teacher mentoring programs and the desire to stay in the teaching profession (Thibodeaux et al., 2015). Teachers have stated they continue in education due to student success, satisfaction in their subject area, and the art of teaching (Thibodeaux et al., 2015).

A lack of administrative backing, high teacher caseloads, and student discipline are the three prominent reasons teachers leave the profession (Thibodeaux et al., 2015). Teachers depend heavily on administrative backing to provide an atmosphere where they experience a high level of job satisfaction (Kelly & Northrop, 2015). Most teachers exit the profession for personal reasons and a lack of job satisfaction (Struyven & Vanthournout, 2014). Teachers feel overwhelmed in completing their daily tasks to the extent they are prepared to exit the teaching profession completely (Thibodeaux et al., 2015). The primary reason people surveyed became teachers was for love of students and teaching (Danielewicz, 2014).

The most bothersome areas inherent in the teaching profession are student discipline, paperwork, and burdens of state testing (Thibodeaux et al., 2015). Teachers feel as if student discipline limits the effectiveness of their teaching due to the numerous behavioral concerns they often encounter (Gregory, Clawson, Davis, & Gerewitz, 2016). Teachers believe if they can focus primarily on teaching and not as much on required paperwork, they will be more effective (Thibodeaux et al., 2015). The pressure of state testing is frequently noted as a factor that bothers teachers (Cuenca, 2014). Teachers feel policymakers make decisions that affect educators, and teachers are concerned about the many mandates placed on them (Thibodeaux et al., 2015). Teachers also feel as if there is pressure to fulfill duties that sometime seem unattainable due to these mandates (Cuenca, 2014).

Principal leadership styles and behaviors have an impact on teachers' intent to continue in the teaching profession, and there is a significant connection between teacher job satisfaction and teacher mentoring on teachers' desire to remain in the profession (Thibodeaux et al., 2015). Principal leadership has the strongest weight on whether teachers will continue in the teaching profession (Simon & Johnson, 2015). Thibodeaux et al. (2015) found teacher mentoring and teacher job satisfaction have the smallest impact on teachers' desire to remain in the profession.

Student Behavior

Researchers must examine the lack of satisfactory preparation for dealing with learning and behavior difficulties teachers encounter in the classroom (Elias, 2012). Educators who feel a sense of achievement do not break down (Wang, Hall, & Rahimi,

2015). Difficult student behavior plays a crucial role in teacher burnout and satisfaction, and this factor is related to teacher preparation (Cherniss, 2016). Schoolchildren who lack the skill and/or enthusiasm to acquire what the educator is trying to teach them make it difficult for teachers to attain the sense of success so important for any professional (Elias, 2012). Teacher breakdown can be avoided as teachers improve classroom management skills and expand supports when they do experience difficult behaviors (Furrer, Skinner, & Pitzer, 2014).

The most effective classroom teachers accomplish more for students on a day-to-day basis than merely teaching a rigid set of math or reading skills (Ladd & Sorensen, 2016). If at all possible, these educators promote discipline, character, interest, and a plethora of other competencies referred to as non-cognitive skills (Arthur, Kristjánsson, Harrison, Sanderse, & Wright, 2016). Researchers have recognized non-cognitive competences in youth strongly influence academic achievement, employment, earnings, careers, substance abuse, and antisocial behavior in adulthood (Ladd & Sorensen, 2016). Student behaviors may be dependent in part on a student's home, or the student may imitate important facets of learned motivation, willpower, and self-control (Powell, Honey, & Symbaluk, 2016).

More proficient teachers create more positive outcomes, which greatly reinforces the argument administrators should develop and retain experienced teachers (Ladd & Sorensen, 2016). As individual teachers improve and become experienced in student discipline, they grow into more effective teachers (Ladd & Sorensen, 2016). Test scores increase as educators influence students to improve other desired behaviors, such as

attending and participating in class or reading for pleasure outside of school (Ladd & Sorensen, 2016). Educators are more productive in cultivating positive behaviors in students upon acquiring more experience in the field (Breeman et al., 2015).

School Atmosphere and Workplace Conditions

Characteristics of work environment are identified in four different areas (Jain & Kaur, 2014). Apparent and open communication addresses personnel who feel they are suitable in the organization (Jain & Kaur, 2014). It is vital for employees to intentionally believe in the organization's philosophy, mission, and values (Campbell & Tawadey, 2016).

Stability of work-life is the next characteristic (Jain & Haur, 2014). Jain and Haur (2014) speculated there had to be some sort of stability between work and private life, and this in turn would create a sense of balance and expand job satisfaction among staff (Jain & Kaur, 2014). The impartiality of personnel indicates employees want to be fairly rewarded based upon their performance (Campbell & Tawadey, 2016).

Consistency is the final characteristic and is related to predictability (Handford & Leithwood, 2013). According to Jain and Kaur (2014), staff want to know how their administrators will respond in a given situation. Consistency is one of the single-most effective standards leaders must create in an organization (Handford & Leithwood, 2013).

There are numerous factors within the workplace that can generate undesirable organizational and extra-organizational concerns which often end up damaging psychological and physical well-being of the entities (Dhanda, 2016). The first are issues

limited to the parts of the job and the roles constituents play (Dhanda, 2016). According to Dhanda (2016):

> The first are factors that are limited to the constituents of the job role… Factors such as workload (either overload or underload), extreme work pace (time pressures), meaningless jobs, low work authority, external turbulences (such as noise and congestion) and toxic work structures are few instances that can damage physical and mental well-being of employees employed in such unfortunate workplace atmosphere. (p. 478)

Situations like the aforementioned can contribute to poor physical and mental well-being of personnel (Dhanda, 2016).

Administrators hampered with complex responsibilities and without appropriate specification about the roles they are to play are more vulnerable to stress (Daresh & Alexander, 2015). Employees who are required to answer numerous demands of their supervisors and of others within the organization suffer advanced levels of stress (Bélanger et al., 2016). In such cases, role indistinctness and role conflicts lead individuals to role stress (Dhanda, 2016).

According to Richards, Levesque-Bristol, and Templin (2014), a situation wherein the workers' role is indistinct or is not appropriately perceived can be defined as role ambiguity. Role ambiguity was defined by Kahn et al. (as cited in Dhanda, 2016) as the degree to which pure information does not compare to the beliefs associated with a role. Conflicting roles take place when demands and expectations of those in the profession are incompatible and contrasting (Ackfeldt & Malhotra, 2013).

Teacher Self-Efficacy

Skaalvik and Skaalvik (2014) determined, “When studied separately, research shows that both teacher self-efficacy and teacher autonomy are associated with adaptive motivational and emotional outcomes” (p. 68). Bandura (as cited in Skaalvik & Skaalvik, 2014) defined self-efficacy as “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (p. 391). Bong and Skaalvik (2003) asserted efficacy findings are not general judgments of skills and capabilities, but judgments of what a person can do with the numerous skills and capabilities one possesses.

Self-efficacy is consequently often denoted as mastery expectations and self-perceived capability (Lu, 2016). In accordance with this conceptualization, Skaalvik and Skaalvik (2014) defined teacher self-efficacy as individual teachers’ beliefs about their own abilities to plan, organize, and carry out activities required to attain given educational goals. Examples of teacher self-efficacy include teachers’ expectations to involve all schoolchildren in educational activities, to control discipline, or to explain an arithmetic problem so even low-achieving students comprehend (Zee & Koomen, 2016).

Network centrality may be an indicator of teachers’ obligation to students (De Jong, Moolenaar, Osagie, & Phielix, 2016). The more an educator is asked for his or her opinion, the more the teacher is committed to improve a student’s education (Hopkins, 2014). This suggests the significance of fostering advice seeking and feedback among teachers; relationally oriented procedures attend to the social side of policy, above and beyond focusing on teachers’ knowledge and expertise (De Jong et al., 2016).

Close networks support feelings of obligation to the school, which may reduce staff turnover (Mowday et al., 2013). By promoting supportive rapport among teachers, schools can gain teacher commitment to the school society and may be better able to keep teachers inspired and devoted to improving the school (De Jong et al., 2016). Mowday et al. (2013) believed "that the strongest or most predictable behavioral outcome of employee commitment should be reduced turnover" (p. 38). Teachers who are committed to their positions are also committed to working toward the goals of the district (Mowday et al., 2013).

Self-efficacy research has revealed female prospective educators' beliefs about their own abilities in classroom management are greater than the beliefs of male prospective teachers (Sivri & Balci, 2015). The difference in male and female management could be grounded in the opinion female educators are more protective, stick to ground rules of the classroom, and are more determined to control unruly behaviors (Sivri & Balci, 2015). There is a link between potential teachers' opinions of their abilities in classroom management and the outcomes of their classroom practices (Ryan, Kuusinen, & Bedoya-Skoog, 2015). In other words, classroom management efficacy and classroom management outcome expectations are directly correlated (Sivri & Balci, 2015). As prospective teachers' opinions about their efficacy in the management of the classroom increase, so will their hopes in the effectiveness of classroom management application (Evertson & Weinstein, 2013).

Salary and Benefits

Miller (2014) concluded 60% of employees rated compensation or pay very important, and 36% ranked it important, making it the number one contributor to overall worker job satisfaction. The base rate of pay was rated as very important by 53% of employees, but 63% were satisfied with it (Miller, 2014). Merit pay was very important to 43% of employees, while 45% were merely satisfied with it (Miller, 2014).

Mertler (2016) found, "24% of teachers in the study at hand indicated that, if provided with the opportunity again, they would not choose a career as a teacher; another 45% indicated that they were not sure if they would or not" (p. 43). Mertler (2016) also found the number one reason teachers would potentially leave the field would be for a better salary. However, the most disconcerting data were the 45% of teachers who indicated if they had to make the decision again, they might not have chosen education (Mertler, 2016).

Miller (2014) established several factors play into what makes work enjoyable and meaningful. A competitive salary is a strong factor when it comes to employee satisfaction (Miller, 2014). An online survey of 600 participants directed by the Society for Human Resource Management (2016) revealed overall benefits were more vital to employee job satisfaction than actual compensation in 2014 (Ruhe, 2015). Results from a meta-analysis conducted by Judge, Piccolo, Podsakoff, Shaw, and Rich (2010) indicated the association between salary and job satisfaction is very weak. According to this research, satisfaction with pay is mostly autonomous of authentic salary (Judge et al., 2010).

Other studies on librarians revealed there is a relationship between employee payment and job satisfaction, as 66.75% of those involved in the study confirmed they were pleased with the pay they received (Odunlade, 2012). Compensation does play an important role in the employment and preservation of librarians (Odunlade, 2012). Though librarians in academic libraries have enjoyed significant increases in salaries, there is still room for improvement (Odunlade, 2012). Within studies of multiple occupations, level of pay demonstrates a positive, yet modest, relationship to job and pay satisfaction (Judge et al., 2010). There is little correlation between average pay and the average level of job or pay satisfaction (Judge et al., 2010).

Teacher Age and Gender

Students instructed by teachers between the ages of 21 and 34 accomplished an advanced grade compared to students with teachers of 49 years of age and older (Alufohai, 2015). Alufohai (2015) also found, learners educated by instructors between the ages of 36 and 48 obtained higher scores than those with teachers 21 to 34 years of age and 49 and older. It can be concluded, educator age has a considerable influence on academic performance (Alufohai, 2015).

However, educator gender does not significantly impact student academic growth (Alufohai, 2015). Reilly, Dhingra, and Boduszek (2014) determined "no significant differences in job satisfaction, self-efficacy, self-esteem and perceived stress between male and female primary school teachers" (p. 10). Alufohai (2015) discovered as teachers get older, they come to be more cynical and advance a psychological state of exhaustion, disparagement, and incompetence. In most circumstances, this is due to poor

compensation after many years of employment; however, if compensation is enhanced, negative attitudes may be reversed (Gupta, 2014).

Students rate male teachers as more effective than female teachers, no matter the age (MacNell, Driscoll, & Hunt, 2015). Of the education strategies, explaining concepts perhaps serves as the clearest sign of effective teaching (Joye & Wilson, 2015). It is clear student perceptions favor male instructors (MacNell et al., 2015).

According to Joye and Wilson (2015), in part, younger female teachers earn higher evaluations of appeal and rapport than older female teachers. This difference was not observed between younger and older male teachers (Joye & Wilson, 2015). Younger female teachers did not inspire higher grades (Joye & Wilson, 2015).

Students expect male teachers to be effective; however, they expect female teachers to spend time building supportive relationships with students (Joye & Wilson, 2015). Kierstead, D'Agostino, and Dill (as cited in Joye & Wilson, 2015) stated male teachers are perceived as more positive if they demonstrate competence. Moreover, female teachers have to prove both skill and warmth to obtain a positive perception (Kierstead et al., as cited in Joye & Wilson, 2015).

A teacher's age, gender, qualifications, and professional knowledge did not have a noteworthy outcome on academic achievement in secondary schools in Nyandarua County (Kimani, Njagi, & Kara, 2013). However, Kimani et al. (2013) determined a teacher's job group and workload affect academic growth. The regularity of issuing assignments, guaranteeing students finish assignments, and appropriate marking of assignments have a significant impact on academic achievement (Kimani et al., 2013).

Setting performance targets for students was also proven to be statistically significant in foretelling academic achievement (DuFour & Marzano, 2015). Teacher background characteristics and instructional practices do make a difference in the academic achievement of students (Kimani et al., 2013).

School/Class Size

Schanzenbach (2014) stated, "Public education has experienced major transformations in the last 30 years with the rise in high stakes testing, accountability, and charter schools, as well as the current shift toward Common Core Standards" (p. 1). During these changes, there are those who have claimed "that class size does not matter" (Schanzenbach, 2014, p. 1). According to Schanzenbach (2014), these critics are incorrect and the size of classes does matter.

Learners are more successful academically and educators are more productive in smaller classroom settings (National Council of Teachers of English, 2015). Classes with fewer students are more effective at increasing achievement levels of both minority and low-income minority students (Schanzenbach, 2014). Class size is a significant factor in student success and can be directly affected through reform or policy (Schanzenbach, 2014). Assuming all other variables stay the same, increasing class sizes will impair student success (Baker, Farrie, & Sciarra, 2016).

Increasing the number of students in a class could hurt not only a student's testing potential in the short term, but also the student's success in the long term as a participant in human capital development (Strauss, 2014). Financial savings due to increased class sizes will more than likely result in more extensively shared costs, both educationally and

socially, in the future (Schanzenbach, 2014). Both minority and low-income students reap the benefits of smaller class sizes, while increasing the number of students in a classroom is likely more detrimental to this demographic of students (Mathis, 2017).

Lawmakers should carefully consider the effectiveness of class-size policy compared to other potential uses of funds (Schanzenbach, 2014). Although placing fewer students in classrooms has an obvious cost, it may prove to save money in the long run (Mathis, 2017). Schanzenbach (2014) discovered, "Small increases in average class sizes can mask large class-size increases in some districts and schools" (p. 8). The importance of class size as a factor of student achievement can be directly changed or influenced by reform (Higgins, 2014).

Summary

School administrators must do all they can to help staff achieve their highest levels of performance possible (Cordeiro & Cunningham, 2012). Teachers have purposely chosen their career (Sarbin, 2013). Job satisfaction will help keep teachers in the field based upon the kind of work they perform and the achievements they experience daily (Herzberg, 1966).

The work environment is broken into three areas: Physical Environment, Mental Environment, and Social Environment (Jain & Kaur, 2014). Creating a genuine culture of caring is imperative to cultivate a positive work environment (Fu & Deshpande, 2014). Markow et al. (2013) determined, "Teacher leadership emerges as a potential resource for translating big challenges into opportunities, served by hybrid roles for teachers as leaders and as a method for addressing professional growth and satisfaction" (p. 51).

Working to strengthen this culture and bonding job satisfaction with organization performance are crucial (Bakotić, 2016).

Employees who are satisfied in their jobs are loyal to their workplaces, and this loyalty creates a positive work environment (Javed et al., 2014). Leaders must support staff, control workload, and help control student discipline (Thibodeaux et al., 2015). Giving employees access to materials, resources, support, and future learning opportunities will empower them and create increased student performance and job satisfaction (Wong & Laschinger, 2013).

Leaders must be clear in their expectations and must assure educators the work is productive and worthwhile (Thibodeaux et al., 2015). Leaders need to show correlations between the work of teachers and student growth (Cordeiro & Cunningham, 2012). The pressures of high-stakes testing will not seem as daunting and staff will not burn out if teachers see the validity in their work (Thibodeaux et al., 2015).

An effective teacher must not only teach grade-level content, he or she must teach character, enforce discipline, create interest, and remain at a high level of self-satisfaction (Ladd & Sorensen, 2016). Recognizing the factors that can damage an organization will help to retain the mission and value of a school (Dhanda, 2016). Teachers will begin to believe in what they do and believe all children can learn (Skaalvik & Skaalvik, 2014).

Teacher pay and benefits do help to improve satisfaction; however, compensation is not the primary reason a teacher has job satisfaction (Judge et al., 2010). Class size (Schanzenbach, 2014), age and gender (Alufohai, 2015), and general job satisfaction

(Herzberg, 1966) are all important factors in determining teacher job satisfaction as it relates to student performance on state-mandated testing.

A review of literature was included in Chapter Two. The theoretical framework was developed. Several topics were included detailing both job dissatisfaction and job satisfaction in relation to teacher demographics.

Chapter Three includes an overview of the methodology for this quantitative study. The problem and purpose are presented, and the research questions are reintroduced. The research design is thoroughly detailed, and the instrumentation, data collection, and data analysis are explained.

Chapter Four includes a thorough explanation of all data collected. The survey questions and Likert-type statements are reviewed. Various tables and figures are used to illustrate data analysis. The research questions are presented alongside the corresponding data gathered.

Chapter Five includes a presentation of the findings and conclusions drawn from this research. Each research question is answered and the hypotheses are either rejected or not rejected. Suggestions for implications for practice are provided. Finally, recommendations for further research are detailed.

Chapter Three: Methodology

This chapter includes an examination of the research design and methodology used to identify the correlation between teacher job satisfaction and student performance on state-mandated testing. The purpose of this chapter is to detail the specific processes and procedures used to draw these connections. This chapter presents the problem and purpose of the quantitative study. A review of the research questions and hypotheses is presented. The research design is detailed, along with a discussion of the ethical considerations of the study. The population and sample are defined. A survey containing both demographic questions about the participants and eight Likert-type statements about teacher job satisfaction is introduced as instrumentation for the study. Finally, a thorough description of the data collection process is presented, and the procedure for data analysis is described.

Problem and Purpose Overview

Teachers are given the great responsibility to educate youth (National Education Association [NEA], 2011). With new regulations introduced daily, it is difficult to maintain positive teacher morale (NEA, 2011). Strong educational leadership and high teacher satisfaction levels are important factors in achieving high-quality learning for students (Markow et al., 2013). The emphasis on state-mandated testing, reporting guidelines, administrator demands, and demands from parents create a high-stress environment (American Test Anxieties Association, 2017). This quantitative study was designed to determine if there is a correlation between teacher job satisfaction and state-mandated testing results.

Research questions and hypotheses. The following research questions guided this study:

1. What is the correlation between high school teacher job satisfaction and high school student achievement?

$H1_0$: There is no correlation between high school teacher job satisfaction and high school student achievement.

$H1_a$: There is a correlation between high school teacher job satisfaction and high school student achievement.

2. What is the correlation between teacher job satisfaction and years of experience, salary, age, level of education, and gender?

$H2_0$: There is no correlation between teacher job satisfaction and years of experience, salary, age, level of education, and gender.

$H2_a$: There is a correlation between teacher job satisfaction and years of experience, salary, age, level of education, and gender.

3. What is the difference in job satisfaction between teachers who are required to administer end-of-course (EOC) exams and those who are not required to administer end-of-of-course exams?

$H3_0$: There is no significant difference in job satisfaction between teachers who are required to administer end-of-course (EOC) exams and those who are not required to administer end-of-of-course exams.

$H3_a$: There is a significant difference in job satisfaction between teachers who are required to administer end-of-course (EOC) exams and those who are not required to administer end-of-of-course exams.

Research Design

Creswell (2014) stated correlational research can be defined as "procedures in quantitative research in which investigators measure the degree of association between two or more variables using the statistical procedure of correlational analysis" (p. 21). Quantitative analysis of results from a Likert-type statement Google survey (see Appendix A) administered to high school teachers from a southwest Missouri school conference was performed. End-of-course data for Algebra I, English II, Biology, and Government was gathered from the MODESE website for the 2013-2014, 2014-2015, and 2015-2016 school years for the corresponding districts.

Ethical Considerations

According to Fraenkel, Wallen, and Hyun (2015), "Once the data in a study have been collected, researchers should make sure that no one else (other than perhaps a few key research assistants) has access to the data" (p. 64). Furthermore, "All subjects should be assured that any data collected from or about them will be held in confidence" (Fraenkel et al., 2015, p. 64). In order to ensure anonymity, an email (see Appendix B) was sent to high school principals who then forwarded the email to teachers on their staff. The email included an explanation of the study, the informed consent form (see Appendix C), and an anonymous Google link to the survey.

Participants were given the opportunity to participate of their own free will. Electronic survey response data were stored in a password-protected computer in a locked space. Hard copies of the data were stored in a locked filing cabinet.

No names were gathered, and emails were not attached to survey results in order to keep the participants anonymous. The primary investigator gathered the survey results directly from a Google password-protected account. All data were secured; no identifiable information was included in the study. Both electronic and hard copies of data will be securely stored for three years and then destroyed.

Population and Sample

According to Fraenkel et al. (2015), "The first task in selecting a sample is to define the population of interest (p. 93). Fraenkel et al. (2015) reiterated, "The population, in other words, is the group of interest to the researcher, the group to whom the researcher would like to generalize the results of the study" (p. 93). The population for this study included all public high schools from a southwest Missouri conference.

Fraenkel et al. (2015) stated, "One of the most important steps in the research process is the selection of the sample of individuals who will participate (be observed or questioned). Sampling refers to the process of selecting these individuals" (p. 92). Fraenkel et al. (2015) listed numerous categories of sampling; however, a purposive sample was selected for this study. Purposive sampling was selected because the groups had unique characteristics which allowed a detailed examination of the research questions (Bryman, 2012).

Fraenkel et al. (2015) confirmed when using a purposive sample, researchers must "use their judgment to select a sample that they believe, based on prior information, will provide the data they need" (p. 101). However, Fraenkel et al. (2015) warned the major disadvantage of purposive sampling is that the researcher's judgment may be in error – he or she may not be correct in estimating the representativeness of a sample or their expertise regarding the information needed" (p. 101). A purposive sampling of 69 high school teachers from five school districts participated in this study. Algebra I, English II, Biology, and Government end-of-course Map Performance Index scores for the corresponding districts were gathered from the MODESE (2017) website for the 2013-2014, 2014-2015, and 2015-2016 school years.

Instrumentation

Teachers from participating districts were asked to complete a Google survey designed to elicit teacher demographic information and perceptions of job satisfaction. Fraenkel et al. (2015) acknowledged, "The major purpose of surveys is to describe the characteristics of a population. In essence what researchers want to find out is how the members of a population distribute themselves on one or more variables" (p. 391). The survey consisted of eight Likert-type statements along with a series of questions to determine demographics.

Survey questions were field-tested by a sample group of public school teachers in order to ensure validity and reliability. Fraenkel et al. (2015) addressed issues that can be revealed and corrected through field-testing questions such as "ambiguities, poorly worded questions, questions that are not understood, and unclear choices; it can also

indicate whether the instructions to the respondents are clear" (p. 401). The survey was generated through Google forms, and a seven-point scale was utilized with 1 representing strongly disagree and 7 representing strongly agree. Boone and Boone (2012) stated:

> A Likert scale is composed of a series of four or more Likert-type items that are combined into a single composite score/variable during the data analysis process. Combined, the items are used to provide a quantitative measure of a character or personality trait. Typically, the researcher is only interested in the composite score that represents the character/personality trait. (p. 2)

According to Boone and Boone (2012), standard deviations and mode are the recommended descriptive statistics used for interval scale items. The secondary student data for this study were collected from the MODESE (2017) website for each of the participating districts.

Data Collection

Upon approval of the Lindenwood University Institutional Review Board (see Appendix D), district superintendents were contacted by email (see Appendix E) to obtain permission to conduct research in their districts. After permission was granted (see Appendix F), each high school principal was emailed an electronic copy of the informed consent and a link to the survey through email. The Google survey was generated, and an email was sent to each teacher including a copy of the informed consent form and the survey link. Participants indicated their consent by completing the survey. Secondary data were collected from the MODESE (2017) website.

Data Analysis

School districts in Missouri from the same conference affiliation were identified and selected. Schools with a Map Performance Index of 0.0% were omitted based on the lack of statistical data. The participants were not disaggregated by student population, race, gender, or ethnicity. The end-of-course Map Performance Index scores in Algebra I, English II, Biology, and Government were gathered for the participating schools from the MODESE (2017) website.

The survey included a series of questions designed to collect data needed to acquire information to determine teacher job satisfaction. The research sample included both rural and urban districts. End-of-course exam data were collected for the 2013-2014, 2014-2015, and 2015-2016 school years.

The ratings of the eight statements for each participant regarding teacher satisfaction were totaled for a teacher satisfaction score from 0 to 56. A Chi-square test of independence was performed to examine the relation between job satisfaction and five other independent variables. Those variables included years of experience, salary, age, gender, and level of education. According to Garczynski (2016), "Chi-square is a statistical test that tests for existence of a relationship between two variables. This test can be used with nominal, ordinal, or scale variables, so it is a very versatile test" (para. 1). Furthermore, the sample size of 69 is greater than 40 and therefore is sufficient to perform a Chi-square analysis (Sigma Centre, 2017).

A Chi-square statistic was computed and then compared to a contingency table to determine the correlation between teacher job satisfaction and years of experience, salary, age, level of education, and gender. According to Stockburger (2017):

> Frequency tables of two variables presented simultaneously are called contingency tables. Contingency tables are constructed by listing all the levels of one variable as rows in a table and the levels of the other variables as columns, then finding the joint or cell frequency for each cell. The cell frequencies are then summed across both rows and columns. (para. 3)

After a Chi-square statistic was calculated and a contingency table was created for each of the demographics, a determination of significance was used to answer each portion of research question two.

The end-of-course Map Performance Index scores for each participating district were then compared to teacher job satisfaction scores. A Chi-square test of independence was also used to determine the relationship between the three-year average district Map Performance Index scores for the 2013-2014, 2014-2015, and 2015-2016 school years and teacher job satisfaction scores. A scatterplot graph was generated and a line of best fit drawn to determine if a linear correlation existed between the two variables for each sample population (Bluman, 2015). A p value of $<.05$ indicated significance for this study.

Finally, an independent sample *t*-test was performed to analyze the difference, if any, in the job satisfaction scores of teachers who are required to administer end-of-course exams and those who are not. This statistical analysis was selected because it

compares two means (Statistics Solutions, 2016). The dependent variable for the *t*-test was job satisfaction and the independent variable was administration of end-of-course exams.

Summary

According to Markow et al. (2013), "Teachers today play a key part in the leadership of their schools" (p. 4). Most teachers are not only involved in traditional teaching roles, but also find themselves serving as department chairs, acting as mentors for young teachers, or taking on various other leadership responsibilities (Markow et al., 2013). Furthermore, Markow et al. (2013) found:

> These teacher leaders are more likely than others to feel that an effective principal should be able to develop a strong teaching capacity across a school, share leadership with teachers and other staff, and evaluate teachers using multiple measures. Few teachers want to become principals, but half are interested in hybrid, part-time classroom teaching combined with other roles in their school or district. (p. 4)

This study included examination of these aspects of teacher responsibilities and the effect they have on teacher job satisfaction.

Chapter Three provided a detailed description of the methodology of the study. An overview of the problem and purpose and a review of the research questions were provided. The research design was described, and the instrumentation, data collection, and data analysis were detailed. A description of the statistical tests used for this study was introduced. An explanation of contingency tables and Chi-square statistics, which

were used to answer research question one, were included. Scatterplot graphs were used with Chi-square analysis to answer research question two. Also included was an explanation of a *t*-test, used to answer research question three.

Chapter Four includes the results of the study. Tables and figures are included to better present the data. Teacher demographics are analyzed and correlated with teacher job satisfaction. A determination of the difference in job satisfaction between teachers required to administer the end-of course exams and those teachers not required to administer the end-of-course exams is presented.

Chapter Five offers a discussion of the findings and conclusions from the data collected. The relationship of findings with the theoretical framework that guided this study and the literature review is identified. The implications of the study are detailed. Finally, recommendations for further research are provided offering future suggestions to enhance this area of study.

Chapter Four: Analysis of Data

The purpose of this study was to determine if there is a connection between teacher job satisfaction and student test scores. With new regulations placed upon teachers daily, it is difficult to maintain positive morale (Ravitch, 2016). Testing anxieties appear to be growing with the increased national emphasis on uniform testing (American Test Anxieties Association, 2017).

Data were collected in the areas of teacher gender, subjects taught, years of experience, teacher age range, and student grade level. During a time when expectations and standards are increasing for effective teaching and learning, teacher morale is a declining resource (Markow et al., 2013). Schools with diminished budgets and resources, fewer students meeting standards, and fewer colleagues highly rated for how well they are doing their jobs are all factors associated with this phenomenon (Markow et al., 2013). When educators experience a high level of job fulfillment, morale is enhanced and student knowledge increases (Markow et al., 2013). Pendino (2012) recommended analyzing survey responses from teachers in different subject areas and with different years of experience.

A survey instrument was part of the research and elicited demographic data used to determine independent variables. School district superintendents from a southwest Missouri conference were contacted to obtain permission to conduct research in their districts. After permission was granted, each high school principal was emailed an electronic copy of the informed consent and a link to the survey through email. The Google survey was generated, and an email was sent to each teacher including a copy of

the informed consent form and the survey link. Participants indicated their consent by completing the survey.

Secondary data were collected from the MODESE (2017) website. The population for this study included all public high schools in Missouri. A purposive sampling of 69 high school teachers from five school districts was selected for this study. Algebra I, English II, Biology, and Government end-of-course Map Performance Index scores for the corresponding districts were gathered from the MODESE (2017) website for the 2013-2014, 2014-2015, and 2015-2016 school years.

Teacher Demographic Information

Teacher demographic data were collected through the survey. Participants were asked to provide demographic information in regard to age, gender, level of education, years of experience, and subjects taught. The following series of tables displays demographic data for each category.

Age. Participants were asked to select one of four age categories. These included under 30 years of age, 31-40 years of age, 41-50 years of age, and over 50 years of age. Forty-six percent of the teachers who administered the end-of-course exam were between 41 and 50 years of age. Only 21% of the teachers who were not required to administer the end-of-course exam were between 41 and 50 years of age (see Table 2).

Table 2

Percentage of Teachers by Age

Teaching Assignment	Under 30	31-40	41-50	Over 50
Administer EOCs	8%	23%	46%	23%
Do Not Administer EOCs	30%	32%	21%	16%

Note. $n = 69$.

Gender. Of the 69 participants, there were 53 females, 15 males, and one participant who did not answer this question. The same percentage (77%) of female teachers were required to administer the end-of-course exam as the percentage (77%) of those not required to administer the end-of course exam (see Table 3).

Table 3

Percentage of Teachers by Gender

Teaching Assignment	Female	Male	No Response
Administer EOCs	77%	15%	8%
Do Not Administer EOCs	77%	23%	0%

Note. $n = 69$.

Level of education. Level of education was divided into four common categories. Those categories included bachelor's degree, master's degree, specialist degree, and doctoral degree. The highest percentage of teachers who administered end-of-course exams had earned their master's degree (69%). Fifty-five percent of teachers

who did not administer the end-of-course exams had earned their master's degree. Only one participant had earned a doctoral degree (see Table 4).

Table 4

Percentage of Teachers by Level of Education

Teaching Assignment	Bachelor's	Master's	Specialist	Doctorate
Administer EOCs	23%	69%	0%	8%
Do Not Administer EOCS	39%	55%	5%	0%

Note. $n = 69$.

Years of experience. The participants were classified into four different groups based upon years of experience. The categories were 1-3 years, 4-6 years, 7-10 years, and 11+ years of teaching experience. The highest percentage of participants acknowledged they had taught for 11+ years. Seventy-seven percent of the teachers who administer the end-of-course exam responded they had taught for 11+ years. Only 48% of the participants who were not required to administer the end-of-course exams had taught 11+ years (see Table 5).

Table 5

Percentage of Teachers by Years of Experience

Teaching Assignment	1-3	4-6	7-10	11+ Years
Administer EOCs	15%	0%	8%	77%
Do Not Administer EOCs	20%	18%	14%	48%

Note. $n = 69$.

Research Question One

Research question one was developed to determine the correlation between high school teacher job satisfaction and high school student achievement. In order to collect data in regard to research question one, it was necessary to determine teacher job satisfaction. This was accomplished by creating a series of eight Likert-type statements. Participating teachers were asked to assign a score of one to seven on each. The following statements were used:

1. I am generally satisfied with being a teacher as a profession.
2. I plan to remain in this position.
3. I plan to remain in this school.
4. I plan to remain in this profession.
5. The school administration's behavior toward me is supportive and encouraging.
6. I feel there is a great deal of collaboration among staff members.
7. Collaboration with my peers is a priority in my school.
8. The duties I perform beyond my contract time have a positive effect on my job.

Each of the participant's scores were then added together and the sum was designated as that participant's job satisfaction score. Fifty-six was the highest score possible, and zero was the lowest. Sixty-nine teachers participated in the survey.

Survey statement one asked respondents to measure on a scale of 1-7 (1- strongly disagree to 7- strongly agree) if they were generally satisfied with being a teacher as a profession. Twenty-nine teachers responded by marking a six on the seven-point scale. Two teachers marked one, two teachers marked two, and two teachers marked three on this same statement. Overall, the majority of teachers, 59 out of the 69 surveyed, marked five, six, or seven (see Figure 1).

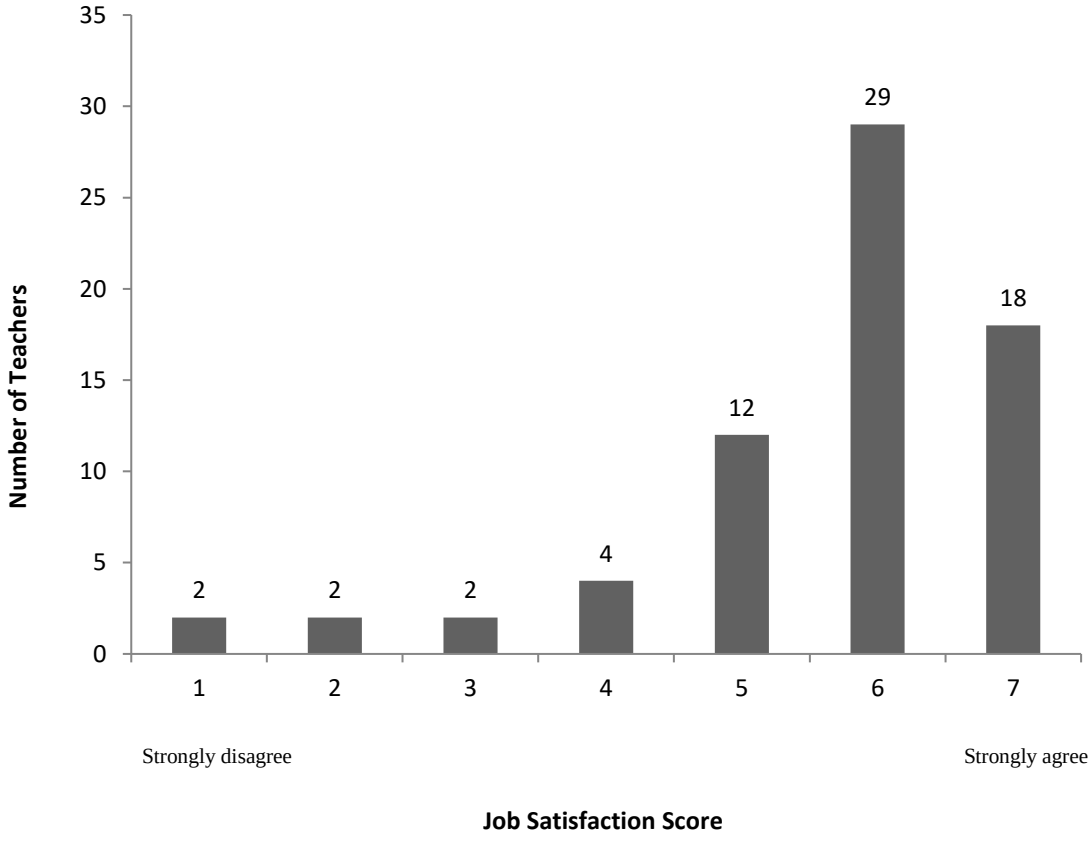

Figure 1. Job satisfaction scores for survey statement one.

Survey statement two asked teachers to rate their plans to remain in their current positions, using the same seven-point scale. The majority of teachers, 48 out of 68 (one teacher did not respond to this statement) marked either a six or a seven, signaling they were fairly positive they were going to remain in their current positions (see Figure 2).

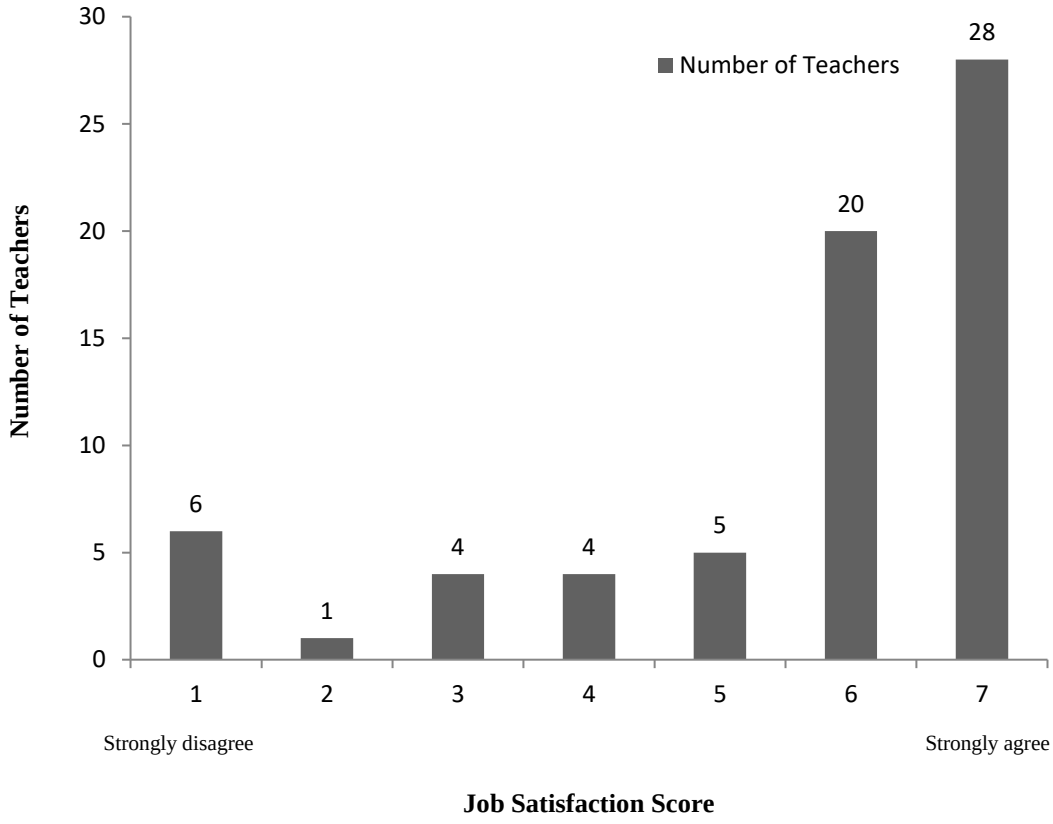

Figure 2. Job satisfaction scores for survey statement two.

Survey statement three asked teachers to rate the statement, "I plan to remain in this school," using the same seven-point scale. The majority of teachers, 45 out of 69, marked either a six or a seven, signaling they were fairly positive they were going to

remain at their current schools. Ten participants responded by marking a one, signifying they were highly likely move to a different school (see Figure 3).

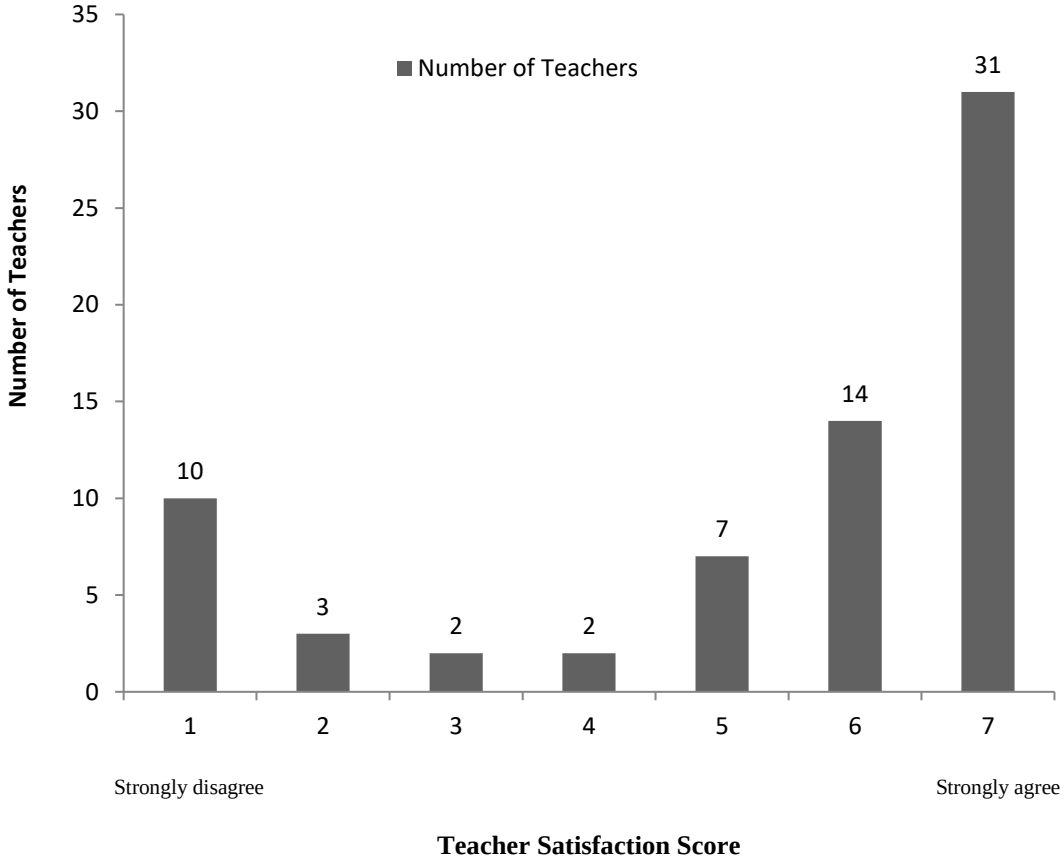

Figure 3. Job satisfaction scores for survey statement three.

Survey statement four asked teachers to rate their plans to remain in the profession, using the same seven-point scale. The majority of teachers, 54 out of 69, marked either a six or a seven, signaling they were positive they were going to remain in the teaching profession. Only three participants marked a one, and only three participants

marked a three, with no participants marking a two. Most teachers felt positive they would remain in the teaching profession (see Figure 4).

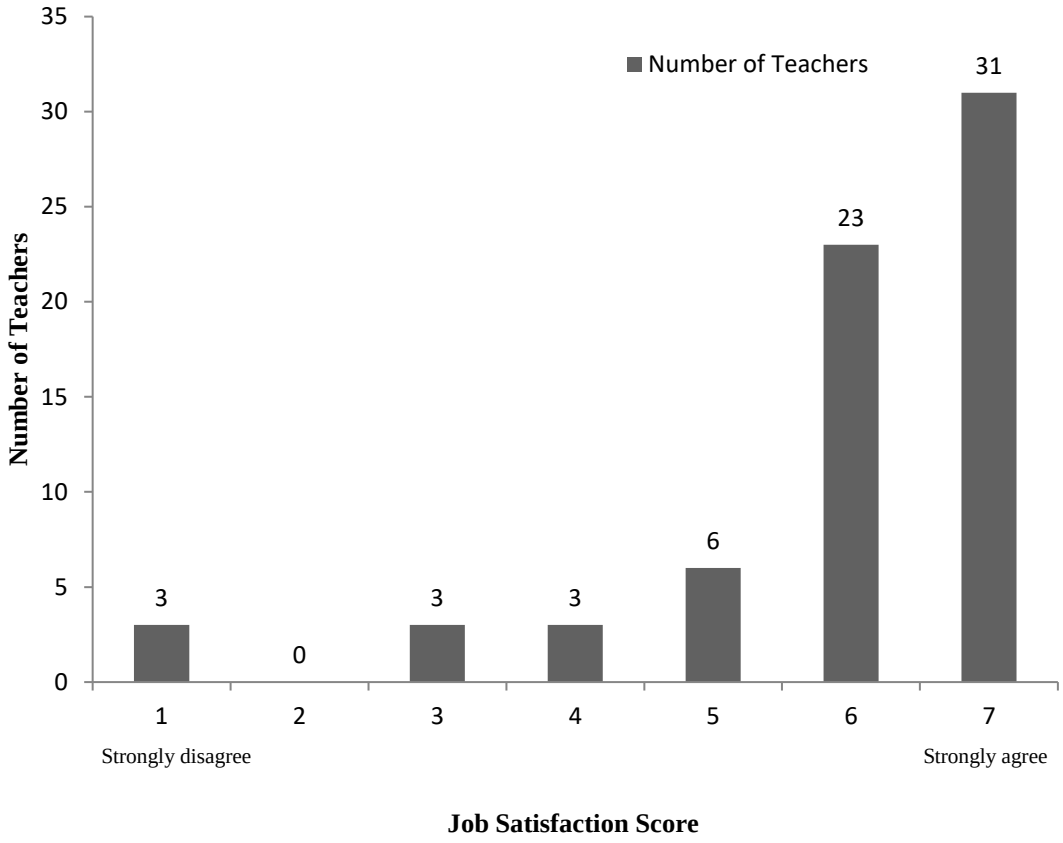

Figure 4. Job satisfaction scores for survey statement four.

Survey statement five asked teachers to rate the school administration's behavior, in terms of being supportive and encouraging, using the same seven-point scale. The majority of teachers, 45 out of 69, marked either a six or a seven, signaling they felt positive the school administration's behavior toward them was supportive and encouraging. Only two participants marked a one, and only two participants marked a

two, signifying they did not feel the school administration was supportive and encouraging (see Figure 5).

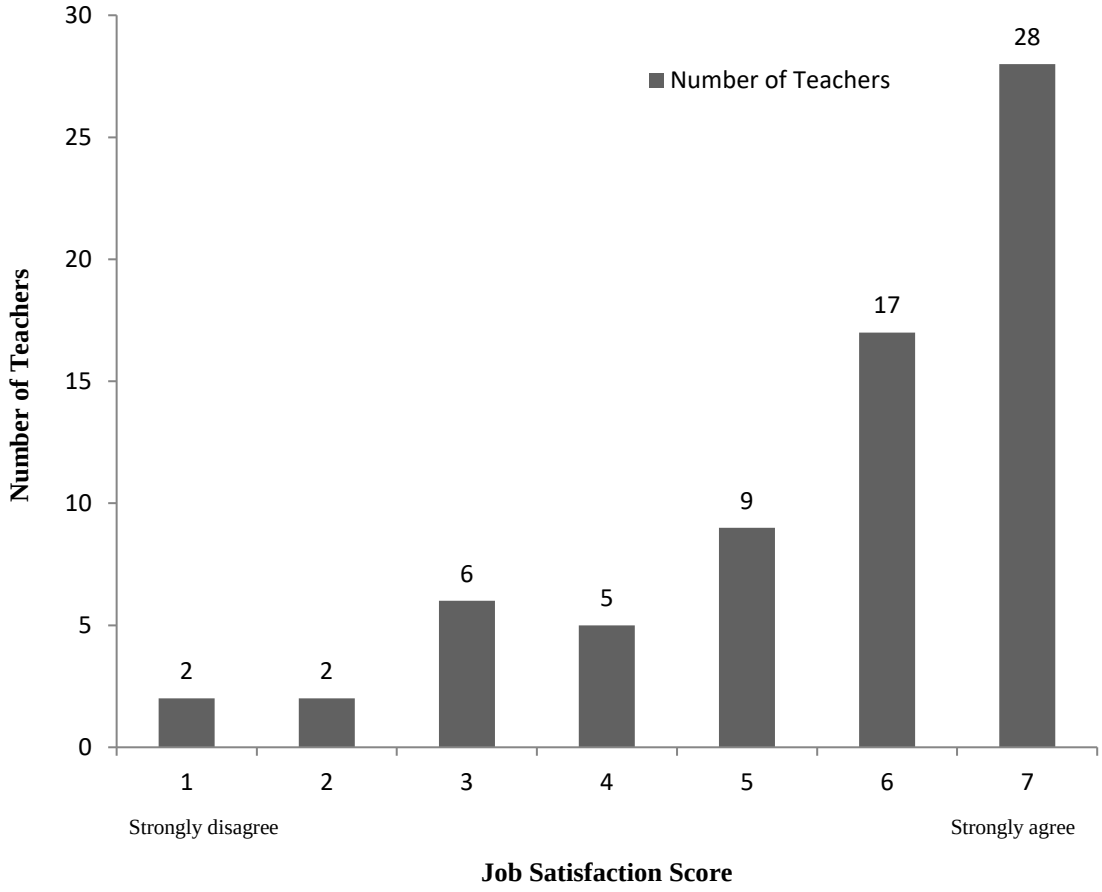

Figure 5. Job satisfaction scores for survey statement five.

Survey statement six asked teachers to rate the statement, "I feel there is a great deal of collaboration among staff members," using the same seven-point scale. The majority of teachers, 50 out of 69, marked either a five, six, or seven, signaling they felt positive there was a great deal of collaboration among staff members. Only one

participant marked a one, and four participants marked a four, signifying they did not feel there was a great deal of collaboration among staff members (see Figure 6).

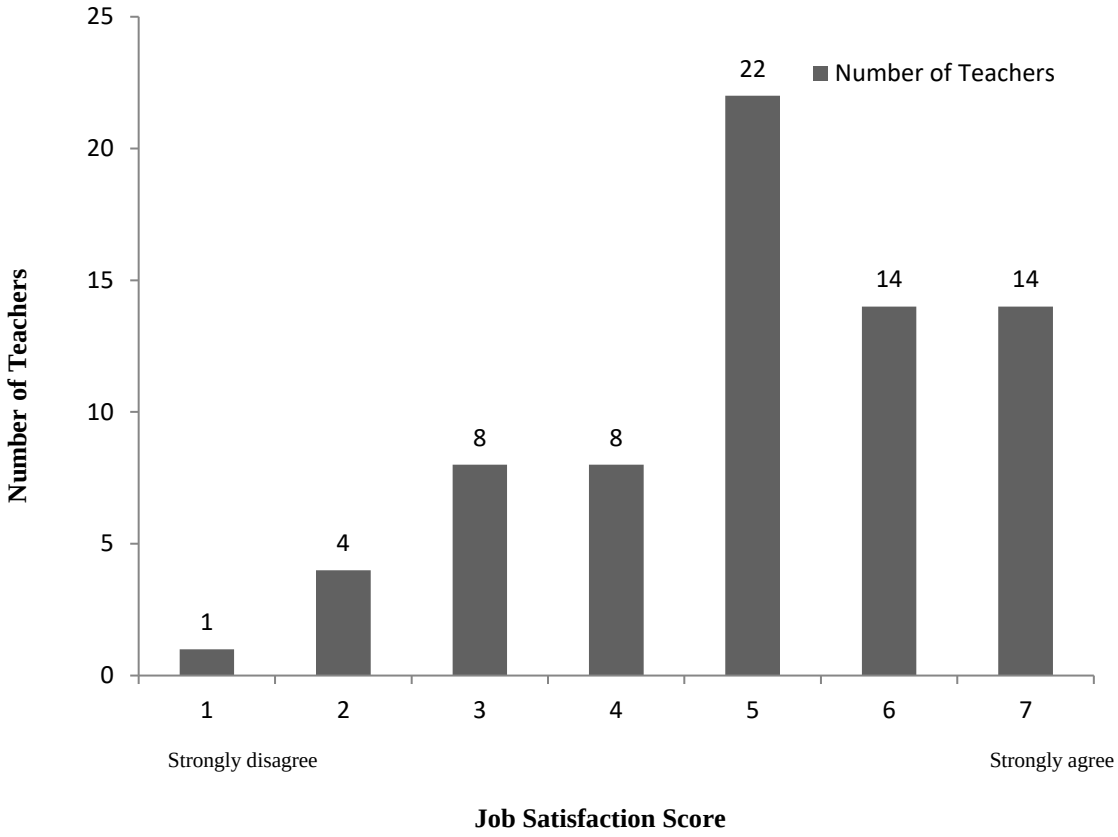

Figure 6. Job satisfaction scores for survey statement six.

Survey statement seven asked teachers to rate the statement, "Collaboration with my peers is a priority in my school," using the same seven-point scale. The majority of teachers, 50 out of 69, marked either a five, six, or seven, signaling they felt positive collaboration with their peers was a priority in their school. No participants marked a one, and only three participants marked a two, signifying they did not feel collaboration with their peers was a priority in their school (see Figure 7).

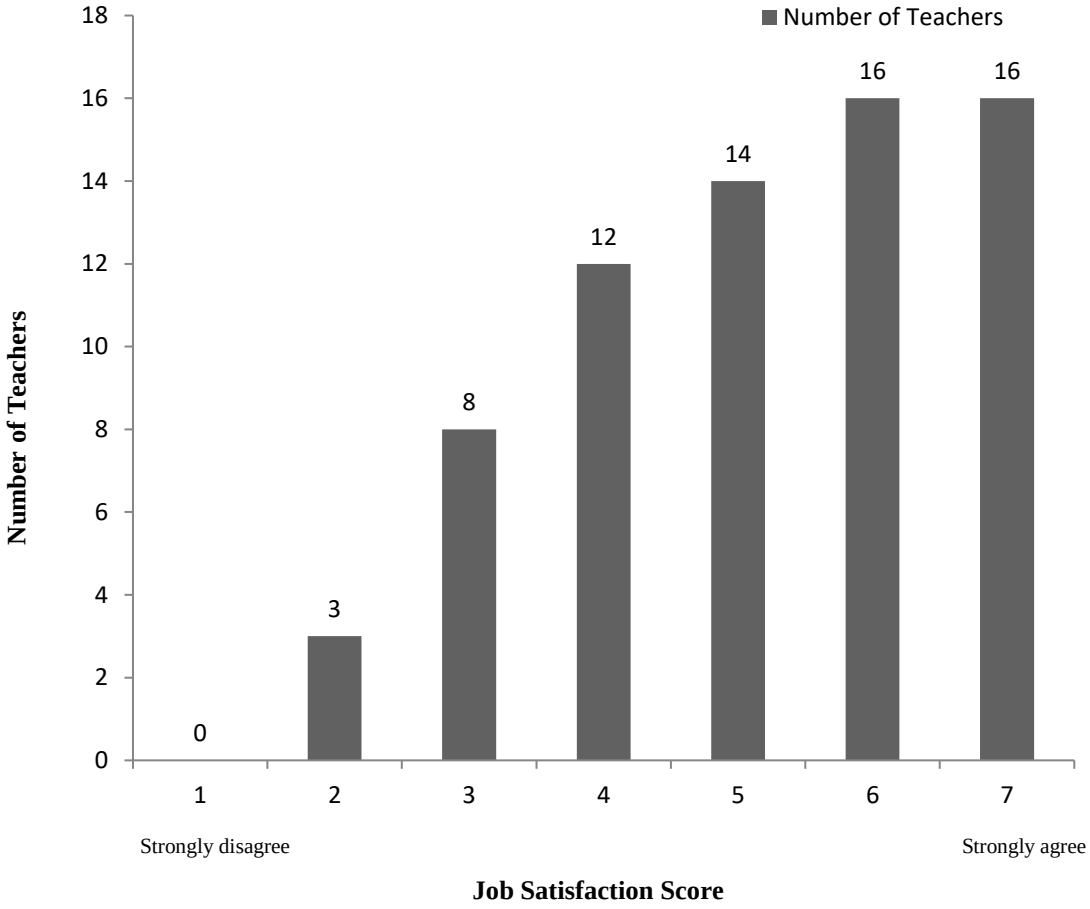

Figure 7. Job satisfaction scores for survey statement seven.

Survey statement eight asked teachers to rate the statement, "The duties I perform beyond my contract time have a positive effect on my job," using the same seven-point scale. The majority of teachers, 47 out of 69, marked either a five, six, or seven, signaling they felt positive the duties they performed beyond their contract time had a positive effect on their job. Ten participants marked either a one or a two, and 12 participants marked either a three or a four (see Figure 8).

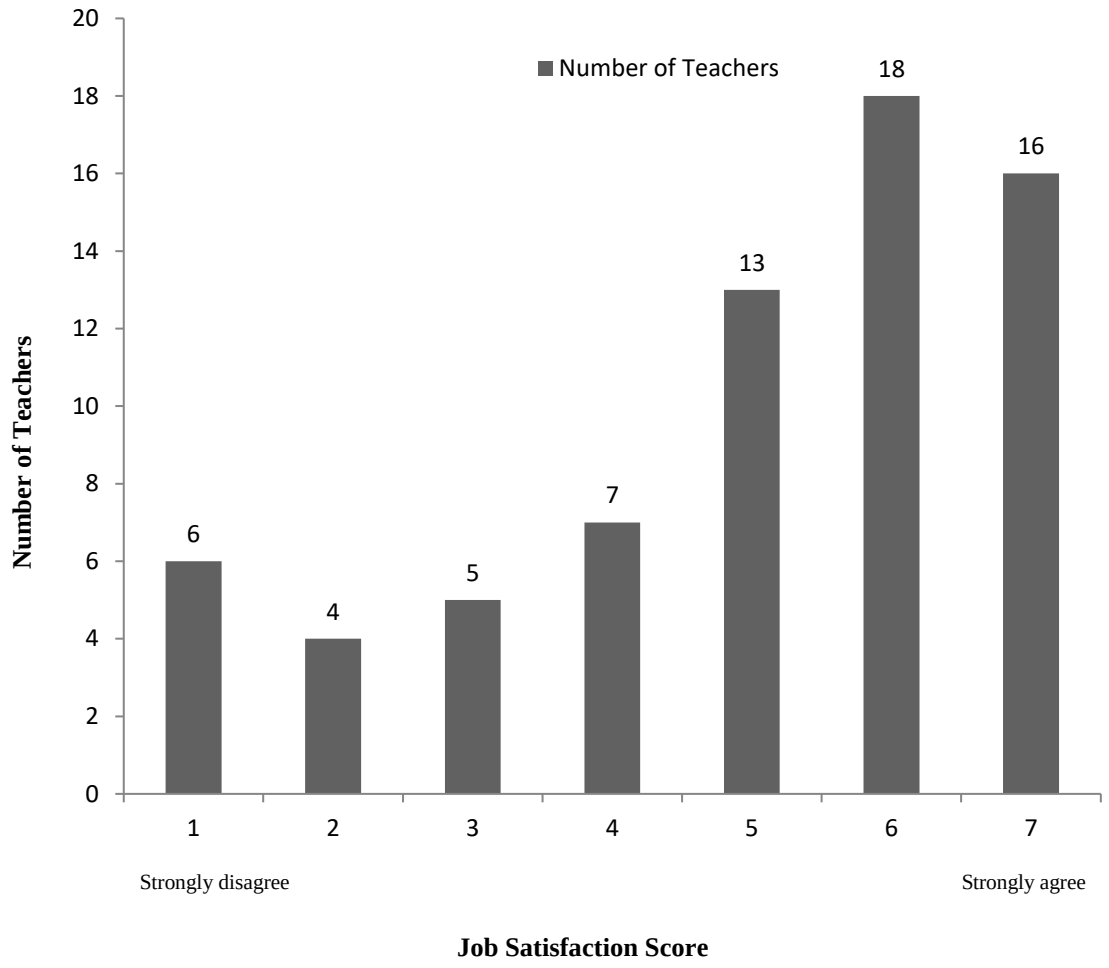

Figure 8. Job satisfaction scores for survey statement eight.

Total teacher job satisfaction scores from participants showed the majority of teachers indicated a high level of job satisfaction. Twenty-four of 69 participants scored in the 50-56 range, and 25 respondents scored in the 40-49 point range (see Figure 9).

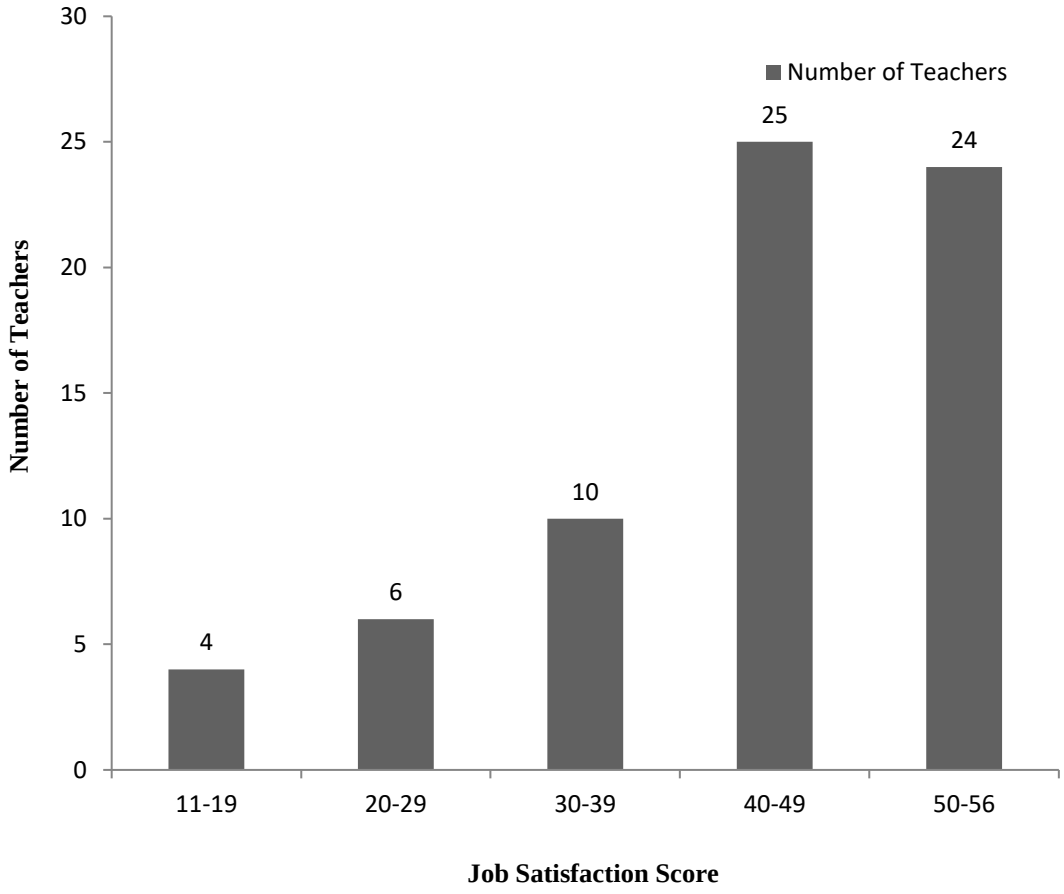

Figure 9. Total job satisfaction scores for teachers participating in the survey. The highest possible score was 56, while the lowest possible score was zero. The lowest score indicated by a participant was 11.

After teacher job satisfaction scores were collected and analyzed, high school student achievement was calculated using district Missouri Performance Index scores for corresponding districts. According to the MODESE (2014):

> The MAP Performance Index (MPI) is used to develop scores within the Status and Progress metrics and to set academic achievement targets for LEA, school

> and student group achievement. Student performance on tests administered through the MAP is reported in terms of four (4) achievement levels (Below Basic, Basic, Proficient and Advanced) that describe a pathway to proficiency. The MPI is a single composite number that represents the MAP assessment performance of every student by awarding points to each student based on the four (4) achievement levels. The points for all students in the LEA, school or student group in a subject area are summed together, divided by the number of students in the group being measured and then multiplied by 100 rounded to the tenth. The result is the MPI for that group and subject. All assessment results from a single accountability year and for a single subject/content area are combined when generating the LEA, school, or student group MPI. (p. 15)

The Missouri Performance Index data were collected from the MODESE (2017).

End-of-course Missouri Performance Index scores were gathered for the 2013-2014, 2014-2015, and 2015-2016 school years. The end-of-course exam scores gathered were from Algebra I, Biology, English II, and Government. The scores were then correlated with the teacher job satisfaction scores from corresponding districts.

A positive trend line was drawn indicating the correlation coefficient of 0.1463. The null hypothesis ($H1_0$) was rejected, and the alternative hypothesis ($H1_a$) was supported. There was a relationship between teacher job satisfaction and Missouri Performance Index scores (see Figure 10).

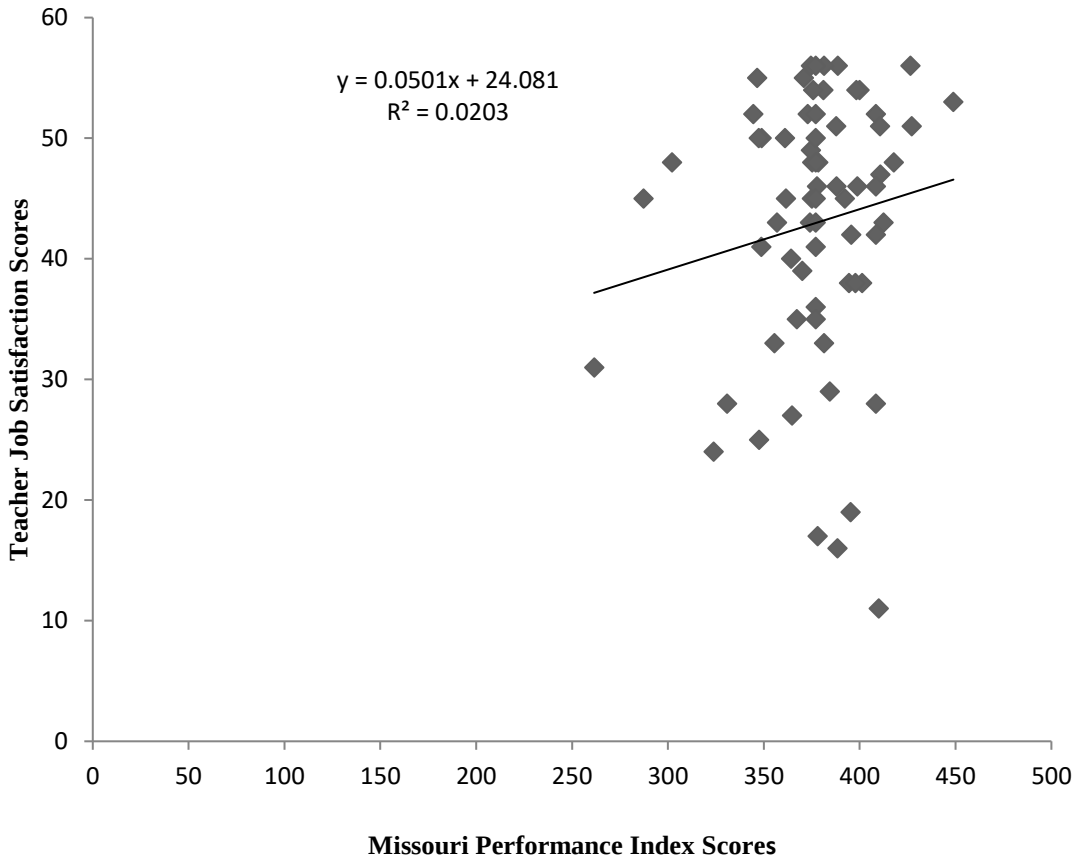

Figure 10. Scatterplot of correlation between teacher job satisfaction scores and Missouri Performance Index scores. The line represents the trend line of the data for the equation $y = 0.0501\ x + 24.081$.

Research Question Two

Research question two was developed to determine the correlation between teacher job satisfaction and years of experience, salary, age, level of education, and gender. Data from teacher job satisfaction were correlated with years of experience. A contingency table was created. For this analysis, years of experience were divided into four categories: 1-3 years, 4-6 years, 7-10 years, and 11+ years of experience. A Chi-square test was performed to determine the *p*-value. A *p*-value of 0.577 was calculated,

which is greater than .05. Therefore, the null hypothesis was rejected, and the alternative hypothesis was supported. There was a correlation between teacher job satisfaction and years of experience.

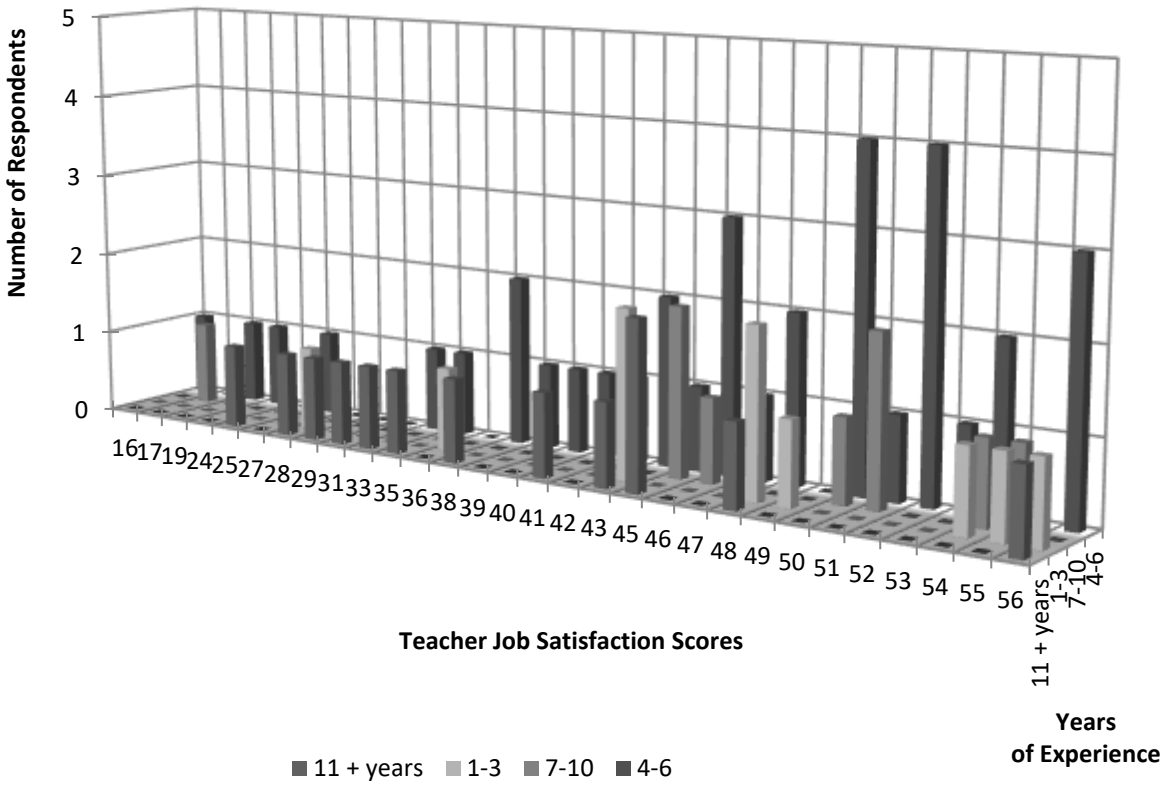

Figure 11. 3D view of the contingency table for teacher job satisfaction and years of experience. Each bar represents the number of respondents for each teacher job satisfaction score by years of experience.

The average teacher job satisfaction score was then calculated for each of the four categories for years of experience. The participants who stated they taught 7-10 years

had the highest average teacher job satisfaction score at 46. Beginning teachers, those teaching 1-3 years, only scored an average teacher job satisfaction score of 38.23 (see Figure 12).

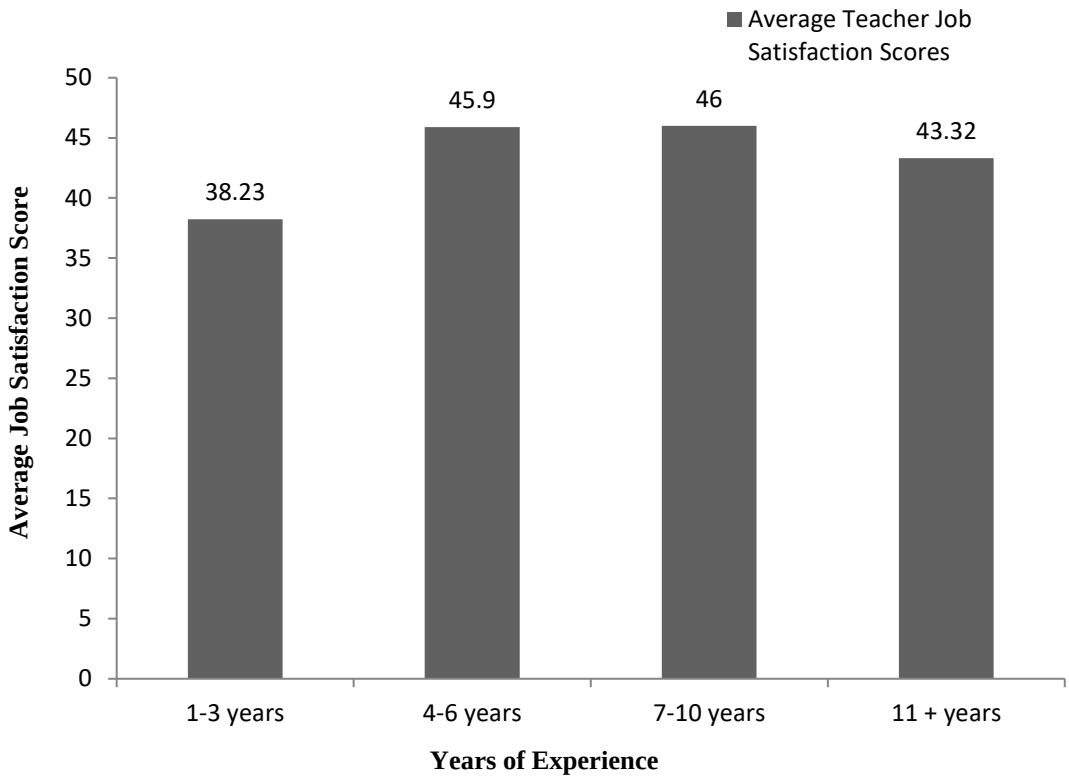

Figure 12. Average teacher job satisfaction score by years of experience.

Salary was the next factor analyzed. Salary was divided into the following categories: $31,000-$35,000, $36,000-$40,000, $41,000-$45,000, $46,000-$50,000, and $51,000 or above. Data from teacher job satisfaction were then correlated with salary. A contingency table was created. A Chi-square test was performed between teacher job satisfaction and salary to determine the *p*-value. A *p*-value of 0.913 was calculated, which is greater than .05. Therefore, the null hypothesis is rejected, and the alternate

hypothesis is not rejected. There is a correlation between teacher job satisfaction and salary (see Figure 13).

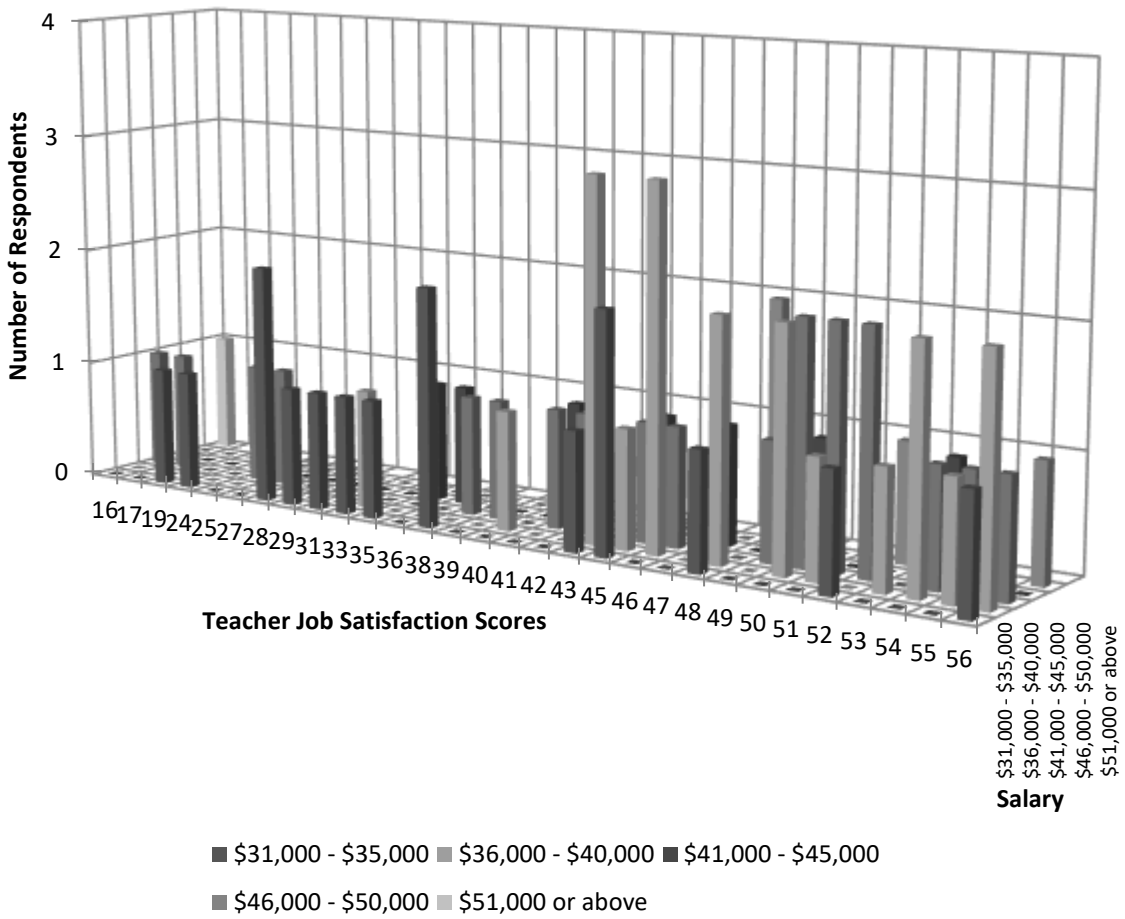

Figure 13. 3D view of the contingency table for teacher job satisfaction and salary. Each bar represents the number of respondents for each teacher job satisfaction score by salary.

The average teacher job satisfaction score was then calculated for each of the six categories for salary. The participants earning the most, $51,000 or above, indicated the

highest average teacher job satisfaction score (49.4). The participants earning the lowest salary, $30,000 or less, indicated the lowest teacher job satisfaction score. There was only one participant who earned $30,000 or less (see Figure 14).

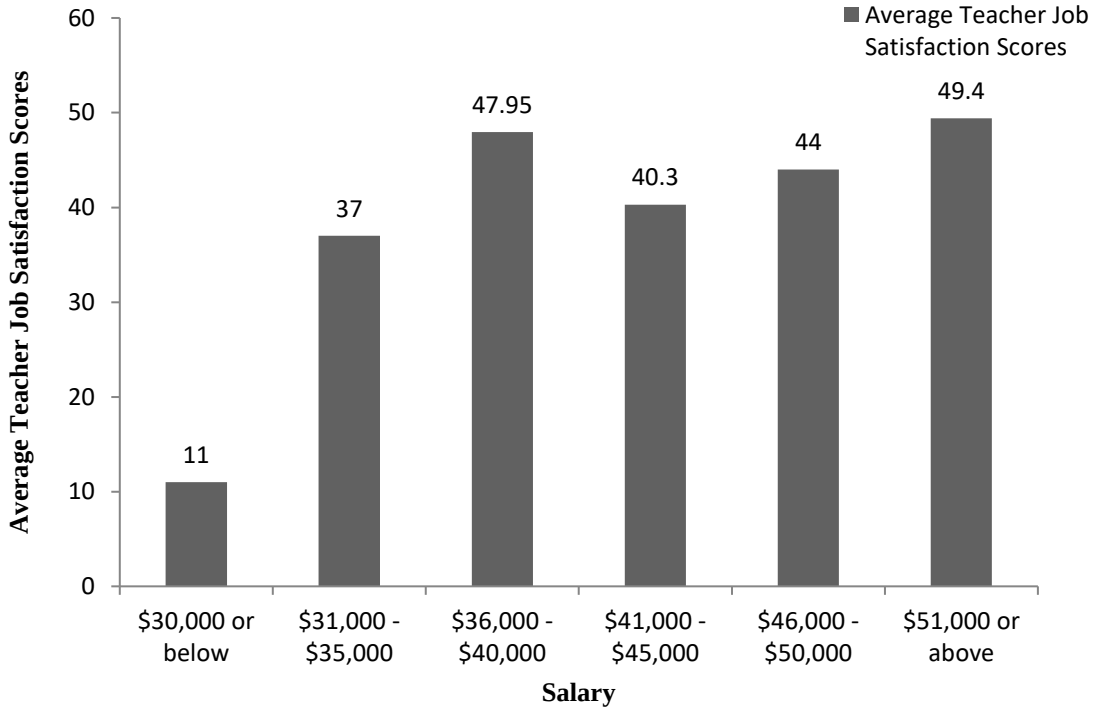

Figure 14. Average teacher job satisfaction scores by salary.

The next factor considered in research question two was age of the participant. Age was divided into four categories: under 30, 31-40, 41-50, and over 50. Data from teacher job satisfaction were then correlated with age. A contingency table was created. A Chi-square test was performed between teacher job satisfaction and age to determine the *p*-value. A *p*-value of 0.487 was calculated, which is greater than .05. Therefore, the

null hypothesis is rejected, and the alternate hypothesis is not rejected. There is a correlation between teacher job satisfaction and age (see Figure 15).

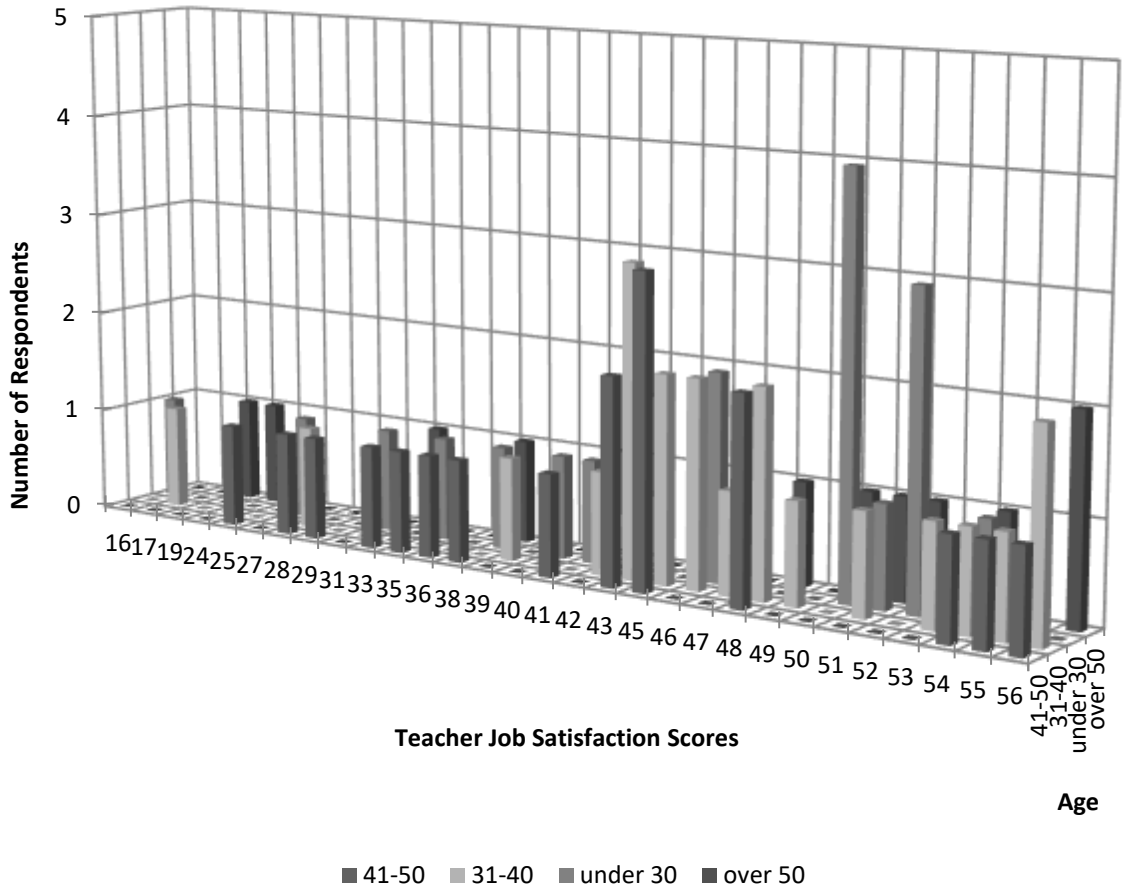

Figure 15. 3D view of the contingency table for teacher job satisfaction and age. Each bar represents the number of respondents for each teacher job satisfaction score by age.

The average teacher job satisfaction score was then calculated for each of the four categories for age. The participants in the 31-40 age range had the highest average

teacher job satisfaction score (45.43). The participants in the 50 and older age range scored the lowest teacher job satisfaction score (see Figure 16).

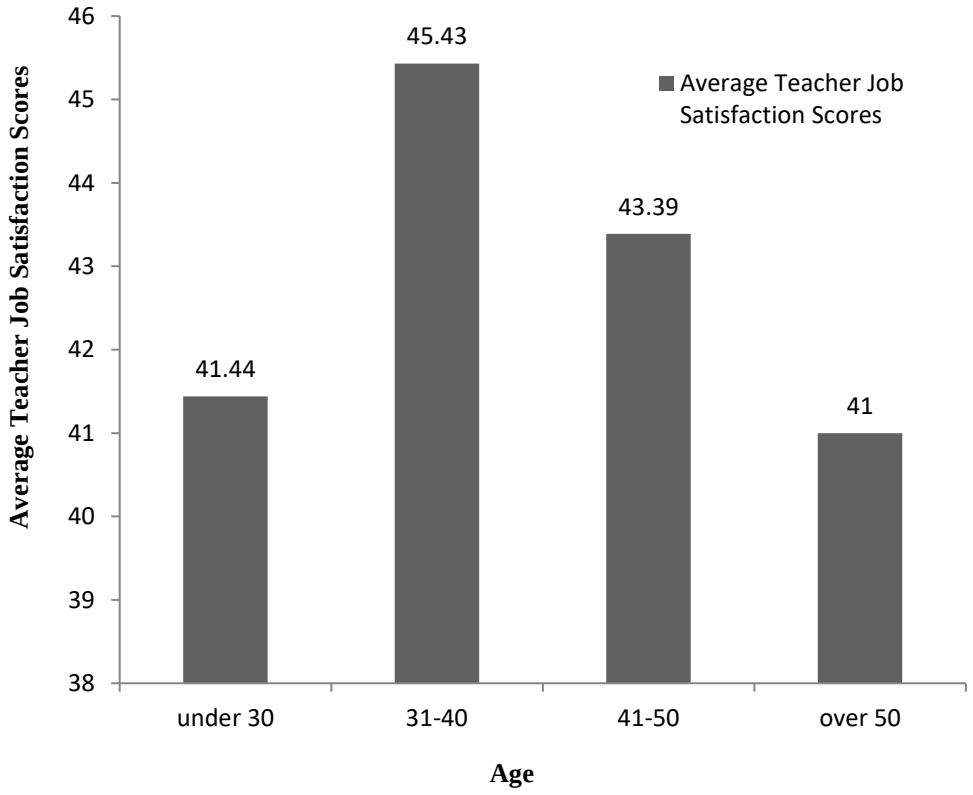

Figure 16. Average teacher job satisfaction scores by age.

Level of education was divided into the following categories: Bachelor's, Master's, Specialist, and Doctorate. Data from teacher job satisfaction were then correlated with level of education. A contingency table was created. A Chi-square test was performed between teacher job satisfaction and level of education to determine the *p*-

value. A *p*-value of 0.028 was calculated, which is less than .05. Therefore, the null hypothesis is not rejected. There is no correlation between teacher job satisfaction and level of education (see Figure 17).

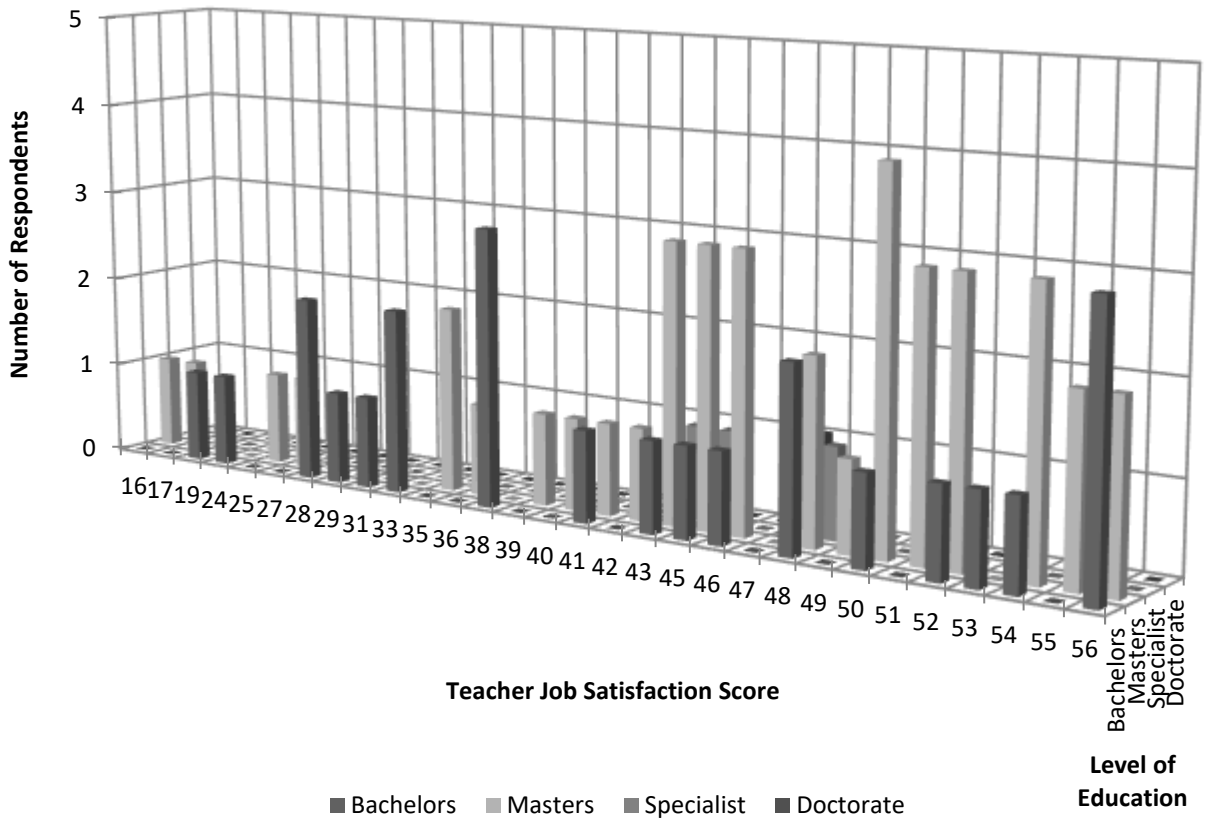

Figure 17. 3D view of the contingency table for teacher job satisfaction and level of education. Each bar represents the number of respondents for each teacher job satisfaction score by Level of Education.

The average teacher job satisfaction score was then calculated for each of the four categories for level of education. There was only participant with a doctorate degree. This category had the highest average teacher job satisfaction score (47). The lowest average teacher job satisfaction score was from those participants with only a bachelor's degree (39.92) (see Figure 18).

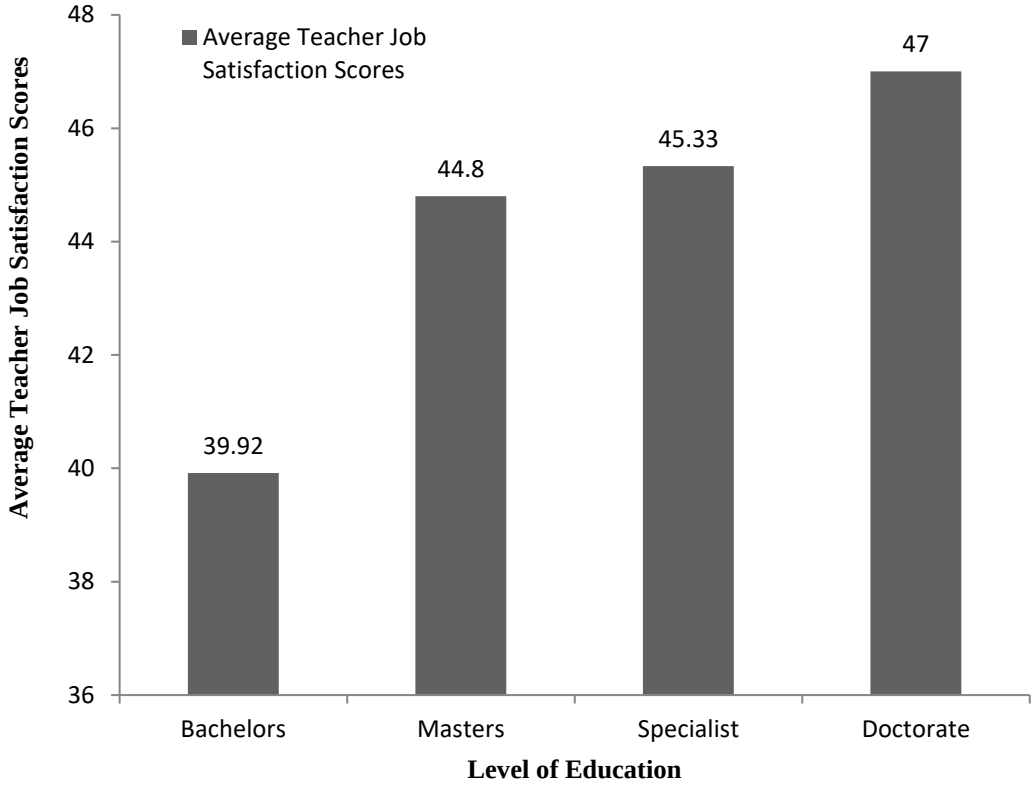

Figure 18. Average teacher job satisfaction scores by level of education.

The final factor analyzed was whether there was a correlation between teacher job satisfaction and gender. Data from teacher job satisfaction were correlated with gender.

A contingency table was created. A Chi-square test was performed between teacher job satisfaction and gender to determine the *p*-value. A *p*-value of 0.000 was calculated, which is less than .05. Therefore, the null hypothesis is not rejected. There is no correlation between teacher job satisfaction and gender (see Figure 19).

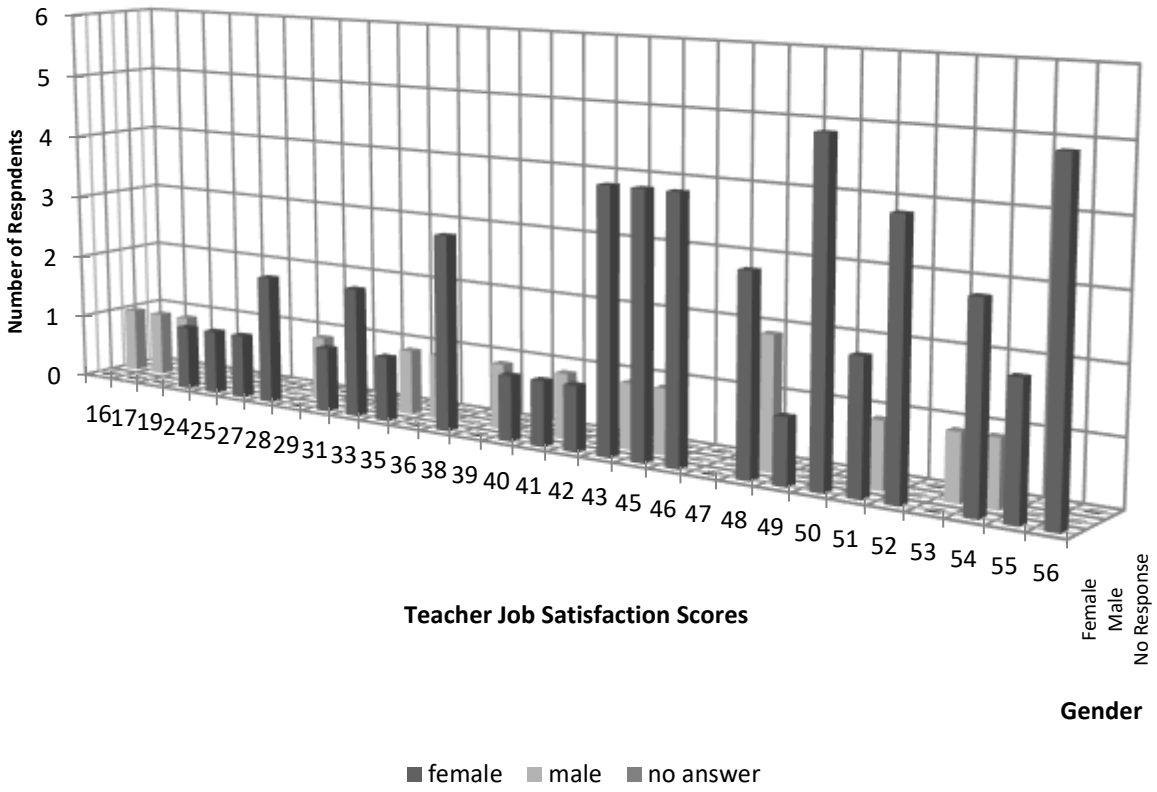

Figure 19. 3D view of contingency table for teacher job satisfaction and gender. Each bar represents the number of respondents for each teacher job satisfaction score by gender.

The average teacher job satisfaction score was then calculated for gender. There was one participant who chose not to respond to this question. The female participants averaged a higher teacher job satisfaction score than the males. The average teacher job satisfaction score for females was 44.38, while the male average teacher job satisfaction score was 38.27 (see Figure 20).

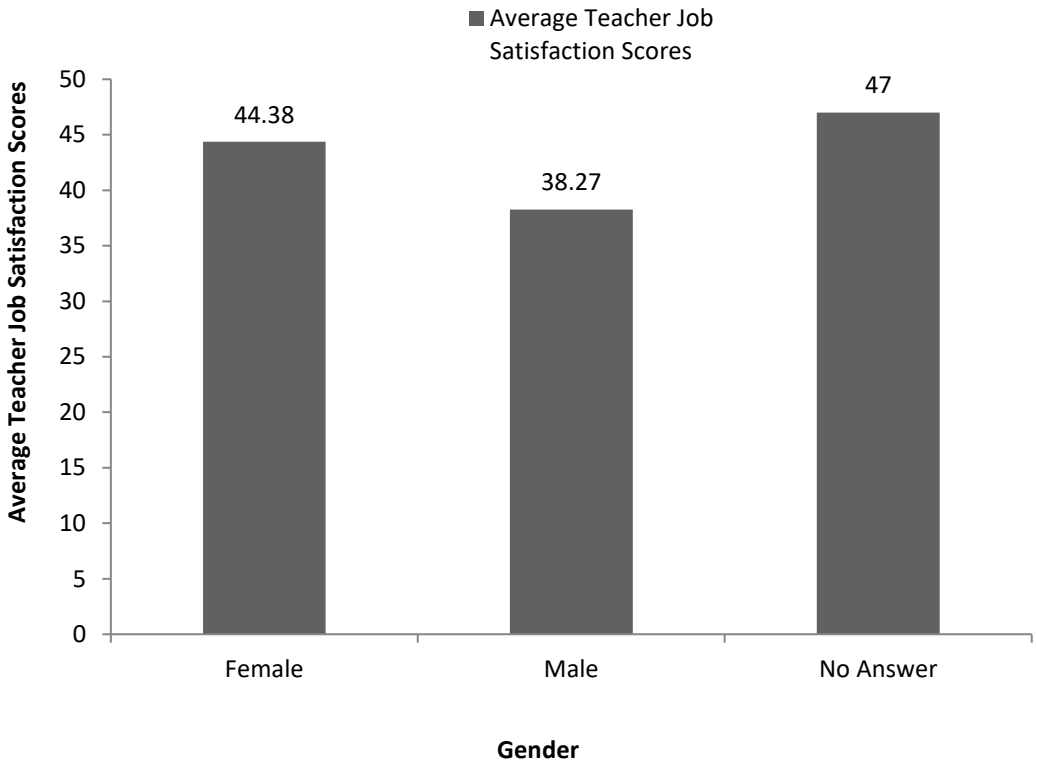

Figure 20. Average teacher job satisfaction scores by gender.

Research Question Three

Research question three was developed to determine the difference in job satisfaction between teachers who are required to administer end-of-course exams and those who are not. Participants were divided into two categories, those who administered end-of-course exams and those who did not. According to Bluman (2015), "A *t* test is used to test the difference between means when the two samples are independent and when the samples are taken from two normally or approximately normally distributed populations" (p. 480). Bluman (2015) also stated, "Samples are independent samples when they are not related. Also it will be assumed that the variances are not equal" (p. 480). Furthermore, *t* tests were created to evaluate small samples (de Winter, 2013).

First, the overall teacher job satisfaction scores were calculated. The level for significance for this assessment was 0.05, which leaves a less than 5% probability of the results being due to chance (Garczynski, 2016). This resulted in the critical value of ±2.110; *t* values must be greater than ±2.110 to reject the null hypothesis. The obtained *t* statistic was -0.58, which did not fall in the critical region; therefore, the null hypothesis was not rejected. There was no difference between the two groups.

However, variance, which signifies the level of spread among scores, was 146.26 for teachers administering end-of-course exams and only 111.45 for those not required to administer the exam (Bluman, 2015). This indicates teacher job satisfaction scores had a larger deviation (see Table 6) among those required to administer the test than those not required to administer EOCs.

Table 6

Central Tendency Data for Teacher Job Satisfaction

Teaching Assignment	Mean	Median	Standard Deviation
Administer EOCs	41.38	47	12.09
Do Not Administer EOCS	43.5	45	10.56

Note. $n = 56$.

Summary

Teacher job satisfaction and student performance on state-mandated testing are both vital components in the world of education (Chamundeswari, 2013). Teacher job satisfaction is related to intrinsic motivating factors (Herzberg, 2003). Herzberg (2003) established "that motivators were the primary cause of satisfaction, and hygiene factors the primary cause of unhappiness on the job" (p. 7). Furthermore, Herzberg (2003) concluded:

> Not all jobs can be enriched, nor do all jobs need to be enriched. If only a small percentage of the time and money that is now devoted to hygiene, however, were given to job enrichment efforts, the return in human satisfaction and economic gain would be one of the largest dividends that industry and society have ever reaped through their efforts at better personnel management. (p. 7)

The increased demands placed upon teachers have created a high-stress work environment (Orange, 2014). The importance of student performance is what drives districts to make decisions, hold teachers accountable, and hold students accountable ("11 Ways to Improve," 2014).

Chapter Four included an explanation of how teacher demographic data were collected. A series of tables were used to present the teacher demographic data collected through the survey. An explanation was also included for how teacher job satisfaction scores were determined. Figures were used to illustrate the responses of participants to eight Likert-type statements which determined teacher job satisfaction. A Chi-square analysis was performed to answer research question two. Finally, a *t* test was performed to answer research question three.

The findings and conclusions are presented in Chapter Five. The three research questions are answered. Several areas of educator demographics in a specific southwest Missouri conference were used to determine research results.

An overall conclusion was determined based on data collected from the survey completed by a total of 69 educators. In Chapter Five, the findings are examined and supported by the earlier findings from the literary review in Chapter Two. Implications for practice are discussed to help support administrators as they grapple with the struggles of teacher satisfaction and student performance on state-mandated testing. Recommendations for future research are provided to strengthen the efforts, practices, and philosophies of students, teachers, and administrators.

Chapter Five: Summary and Conclusions

The purpose of this study was to determine the connection between teacher job satisfaction and student test scores. This study was guided by social identity theory, originated by Tajfel and Turner (2016). Sixty-nine public school teachers were surveyed to determine if there is a connection between teacher job satisfaction and student test scores. Previous studies have implicated when staff have a high level of job satisfaction, student learning increases, as well as morale (Markow et al., 2013).

Several areas of demographic data were collected from educators who taught in a specific southwest Missouri conference. The demographic data collected included age, gender, level of education, years of experience, subject areas taught, and salary. Within the survey, all educators were asked to respond to eight statements. They were asked to rate these statements on a 1-7 scale, one indicating strongly disagree and seven indicating strongly agree. Educators were asked to rate the following:

1. I am generally satisfied with being a teacher as a profession.
2. I plan to remain in this position.
3. I plan to remain in this school.
4. I plan to remain in this profession.
5. The school administration's behavior toward me is supportive and encouraging.
6. I feel there is a great deal of collaboration among staff members.
7. Collaboration with my peers is a priority in my school.

8. The duties I perform beyond my contract time have a positive effect on my job.

Data were collected to determine the influence of all factors involved in teacher and employee satisfaction, along with the impacts of teacher job satisfaction on student achievement. A thorough review of literature was provided including valuable research and knowledge about general job satisfaction, job satisfaction and job performance, testing, administrative support, key factors in teacher job satisfaction, student behavior, school atmosphere and workplace conditions, teacher self-efficacy, salary and benefits, teacher age and gender, and school/class size.

Findings

There were a total of three research questions tested in this research project. The first research question was designed to determine the correlation between high school teacher job satisfaction and high school student achievement. The alternative hypothesis was not rejected in light of the findings. There is a relationship between teacher job satisfaction and Missouri Performance Index scores.

The second research question was designed to determine the correlation between teacher job satisfaction and years of experience, salary, age, level of education, and gender. A Chi-square test was performed to determine the *p*-value of each demographic. Based on the data collected from the survey of educators, there is a correlation between teacher job satisfaction and years of experience.

The second demographic area was salary and benefits. The data gathered supported the alternate hypothesis there is a correlation between teacher job satisfaction

and the salary of educators. The alternate hypothesis was also supported in regard to age of the educator. There is a correlation between teacher job satisfaction and educator age. However, based on the survey of educators, there is no correlation between teacher job satisfaction and the level of education held by the educator, nor is there a correlation between teacher job satisfaction and the gender of the educator. The null hypothesis was not rejected for both of these demographics.

The final purpose of the overall study was to determine if a difference existed in teacher job satisfaction between teachers who are required to administer end-of-course exams and those who are not required to administer end-of-course exams. As mentioned in Chapter Four, the obtained *t* value was -0.58, which did not fall in the critical region; therefore, the null hypothesis was not rejected. However, teacher job satisfaction scores did have a larger deviation among those required to administer the end-of-course exam than those not required to administer the end-of-course exam.

Conclusions

There was a direct connection between teacher job satisfaction and Missouri Performance Index scores. In order to attain school goals, administrators must be prepared to help individual educators obtain the highest possible level of success and performance (Cordeiro & Cunningham, 2012). Based on previous research and data collected from the survey, it is believed creating teachers who are satisfied in their jobs will improve student test scores on state-mandated testing.

This study resulted in data indicating there is a correlation between teacher job satisfaction and years of experience. More capable teachers produce more positive

results, which significantly reinforces the dispute administrators should develop and keep experienced teachers (Ladd & Sorensen, 2016). As individual staff members improve and become skilled in student discipline, they develop into more effective teachers; student performance improves as these educators inspire students to increase other behaviors, such as attendance, classroom participation, and the desire to read for pleasure (Ladd & Sorensen, 2016). Teachers are more productive in facilitating desired behaviors in students as educators become more experienced in their specific field (Ladd & Sorensen, 2016).

There were also indications that there is a connection between teacher job satisfaction and salary. Mertler (2016) found, "24% of teachers showed that, if given the opportunity again, they would not have chosen education as a career and another 45% indicated that they were not sure if they would or not" (p. 43). Mertler (2016) also asserted the main reason teachers would possibly leave education would be for a better salary.

There was a correlation between teacher job satisfaction and age in this study. Students taught by teachers between 21 and 34 years of age demonstrated an advanced achievement level compared to students who had teachers over the age of 49, while students who were instructed by teachers between 36 and 48 years of age attained higher scores than those with teachers from 21 to 34 years of age and 49 years and older (Alufohai, 2015). Alufohai (2015) conducted research and determined as teachers get older, they inherently become more cynical and enter into a psychological state of fatigue, become more critical, and ultimately show a level of incompetency. In most

situations, this is directed toward poor compensation after many long years of employment; however, if a teacher's salary is increased, destructive attitudes can be averted (Alufohai, 2015).

There was no correlation between teacher job satisfaction and level of education in this study. Demographics such as teacher's age, gender, qualifications, and professional knowledge do not have a significant outcome on student academic achievement in secondary schools in Nyandarua County (Kimani et al., 2013). However, Kimani et al. (2013) determined a teacher's job group and assignment dramatically affect academic growth. Consistently issuing homework, assuring students complete assignments, and appropriately grading assignments have a substantial impact on students' academic achievement (Kimani et al., 2013).

There was no correlation between teacher job satisfaction and teacher gender in this study. Previous researchers concluded educator age has a considerable influence on academic performance in English (Alufohai, 2015). However, the gender of a teacher does not show a significant impact on student academic growth (Alufohai, 2015).

Despite the fact that teacher job satisfaction scores had a larger deviation among those required to administer the EOC than those that were not required to administer the EOC. This study determined there was no significant difference between the two demographics. According to Markow et al. (2013), building administrators place more of an emphasis on test data than teachers do. Teachers tend to focus more on the overall classroom experiences of students (Markow et al., 2013). Administrators inherently

place more pressure on those teachers who are directly instructing students who will take a state-mandated test (Markow et al., 2013).

Connections of this study are supported by the social identity theory. A teacher, just by choosing his/her career, has entered an attained status (Sarbin, 2013). Understanding how this status affects teachers is important in promoting teacher job satisfaction (Illeris, 2014). As educators develop and become competent or incompetent, they may bounce between attained status and achieved status (Sarbin, 2013). A building-level administrator can play a huge role in guiding or facilitating teachers through this process. As teachers work through conflict among themselves and the community, their feelings of satisfaction will improve or lessen (Sarbin, 2013).

The same is true when teachers work through struggles in the classroom (Sarbin, 2013). This looks different depending on the age of students (Sarbin, 2013). Teachers who work with younger students may be very content with a hug after an exhausting day in the classroom, while teachers of older students may be gratified by students performing better in the classroom or on specific skills (Sarbin, 2013). Fostering a relationship with students is similar vertically no matter what grade levels are taught (Sarbin, 2013). Given all of this, teachers will not change unless they see or feel a significant purpose in what they are doing (Illeris, 2014). An administrator cannot create motivation in staff members; teachers must find their own motivation (Illeris, 2014).

Implications for Practice

This research was designed to support those faced with the daunting task of educating students in the future under specific guidelines. While looking at previous

literature, McNeill (2016) suggested further research in the area of the impact of teacher demographics on job satisfaction. After collecting and analyzing the data to respond to the three research questions, the following implications were suggested.

Create an overall climate that promotes teacher job satisfaction. This study showed there was a connection between teacher job satisfaction and student achievement. Therefore, students, teachers, and administrators must realize the factors that play into teacher job satisfaction and overall student performance (Stello, 2011). Administrators must recognize the effects of different demographics on teacher job satisfaction (Fu & Deshpande, 2014). Knowing how each factor of demographics plays into the overall level of teacher job satisfaction and how students perform based on these roles will help improve teacher job satisfaction and student performance on state-mandated testing (Fu & Deshpande, 2014).

Previous research by Fu and Deshpande (2014) indicated the overall climate of a building must be examined; the administrator needs to assess the current climate. Survey question five in this research dealt directly with climate. Results of this study showed the majority of teachers ranked this area highly. A connection can be made that a high level of satisfaction in this area results in higher student test scores on state-mandated tests. Sarbin (2013) concluded administrators help determine whether a teacher will reach the achieved status.

Collaboration. Data collected in this research showed the highest level of uncertainty when it comes to a teacher's satisfaction is teacher collaboration. Staff must feel collaboration is a priority in their building (Markow et al., 2013). Creating a

collaborative culture can be very difficult and time-consuming; however, Kraft and Papay (2014) determined effective teachers stay in schools due to meaningful collaboration. There are several things that can be done to help this process. Establishing group goals, while keeping in mind the size of a group, will help to create a positive collaborative atmosphere (Clifford, 2016). Administrators must create an environment of trust by dealing with emotional issues immediately and doing so before moving on to other things (Clifford, 2016).

Becoming a Professional Learning Community allows districts to incorporate team-building activities in planning meetings (Provini, 2017). Professional Learning Communities allow for the creation of a common vision, mission, and goals supported by all staff (Mireles, 2015). Creating a Professional Learning Community can help to develop ownership and establish boundaries with groups (Mireles, 2015). Professional development centered around conflict resolution can give teachers the tools to work through conflict (Provini, 2017).

Collaboration is not an internal action that only occurs in the school setting; all stakeholders must be involved. To increase collaboration between the community and school, steps must be taken to involve community members in the process (Rabadi, 2014). It is helpful to work with local businessmen and women when possible to ensure families have access to resources (Epstein et al., 2009; Ohio Department of Education, 2017). Administrators and teachers can also help to build collaboration by listening to students and allowing students to help in the decision-making process (Rabadi, 2014).

Recognize if teachers are happy with what they are doing. According to this current study, there are some teachers who are not satisfied in their current roles. However, there are many who are satisfied and wish to remain in the teaching profession. While staff members may be talented teachers, they may not be content in the grade level or with the subject they are currently teaching. The administrator's job is to recognize this in observation and conversation and to look for signs of burnout. According to research presented in *The Perspectives of Irreplaceable Teachers* (Jacob, Carroll, & Cho, 2013):

> Many respondents cited burnout as a major concern, and told us that teaching at an elite level can be physically and emotionally exhausting. Twenty-two percent talked about an excessive workload, lack of time or exhaustion in their description of what they like least about teaching (the most popular response), and about 60 percent said they can't see themselves maintaining the amount of energy and time they devote to their job over the long run. Forty percent said they work more than 60 hours a week, and when we asked for an adjective to describe how they feel when they are teaching, one of the most popular answers was "tired." (p. 18)

Administrators cannot always move a teacher to another teaching position. This research revealed 70% of the teachers surveyed were happy with their current positions in their districts. Administrators must find ways to challenge staff in what they are currently doing and help staff to embrace what and who they are as teachers (Prather, 2015). Allowing teachers the opportunity to become experts in their own classrooms and placing them in leadership roles can build upon their expertise (Prather, 2015).

The theoretical framework of this study supports this thought when understanding the social identity of teachers. Teachers have an attained status once they are successful in their content areas (Sarbin, 2013). Administrators need to encourage teachers to be reflective of their instructional process (Prather, 2015). Administrators need teachers to become leaders in areas such as instruction, policy, and association (Center for Teaching Quality, 2014)

Administrators must be supportive, and more importantly, teachers must feel supported. This research showed administrative support is demonstrated in many ways. The Society for Human Resource Management (2016) stated support from administration in areas such as classroom discipline, professional development, individual staff family needs, teacher ideas, and teacher incentives helps build teacher job satisfaction. Giving staff the opportunities to reward and support one another and encouraging staff to feel comfortable with making important decisions are also vital (Pautler, n.d.). Administrators must be open and honest with staff about how they, as administrators, feel (Meador, 2013). It is also helpful to provide snacks, drinks, and chocolate, encouraging teachers to give feedback and embracing their thoughts and ideas (Meador, 2013).

The majority of staff recognize and feel extracurricular duties have a positive effect on their jobs. Administrators recognize they cannot be everywhere and do everything; they must ask for help. Based on the data collected in this research, teachers see the benefits in extra-curricular activities when it comes to students. Teachers need to convey enthusiasm for their profession (Gatens, 2014).

Teachers believe being involved in extra-curricular activities is directly related to the academic achievement of students (Kirsch, 2013). Being involved in these activities will build connections that support what teachers are doing in the classroom during the school day (Gatens, 2014). While staff are taking the time to attend these activities, they must make sure students see them having fun (Gatens, 2014). Kirsch (2014) stated:

> Generally, students who participate in extracurricular activities benefit academically. Students, school administration, teachers, and parents all need to be aware of the effects that participation in extracurricular activities have on the academic performance of students. Furthermore, they also need to be aware of the specific extracurricular activities available to them and the effects of each specific activity on performance. Not every child will benefit from or be impaired in the same manner that studies revealed concerning extracurricular activities. Each student performs at his or her own level of ability and one cannot expect excessive amounts of academic abilities from a child solely because he or she is actively involved in several extracurricular activities. (p. 25)

Staff must try to seek out the children who may be struggling in the classroom and understand that while not every child may profit from an extracurricular experience, many will (Kirsch, 2014).

Teachers are satisfied when students score well on state-mandated testing.

This research has revealed teachers do gain satisfaction when their students are successful on state testing. The theoretical framework of this research, social identity theory, shows support for the success of teachers when they have reached an achieved status.

Successful test scores on state-mandated tests will help to accomplish the achieved status desired by the classroom teacher (Sarbin, 2013).

State-mandated testing places many burdens on teachers (Walker, 2014). Teachers surveyed feel testing creates too much pressure, has a negative impact on the classroom, is time wasted, punishes teachers, and has a negative impact on teacher morale (Walker, 2014). Administration, staff, parents, and students should contact their local and state representatives to discuss concerns about the impact of testing on teachers, students, and parents (Long, 2014).

Data show the more years a teacher has the less they are satisfied in their job. The data collected in this study revealed the more years a teacher has in the profession, the less satisfied they are. There are many things administrators can look at to help resolve this issue. Gray and Taie (2015) discussed many issues school districts can address in this area. Teacher salary and guidance by administration in the form of mentors are the two main areas of support that can be offered (Fensterwald, 2015).

Salary and benefits have an impact on teacher job satisfaction. Muguongo, Muguna, and Muriithi (2015) determined teachers who have a higher salary base have a higher level of teacher job satisfaction. School boards and superintendents need to do what they can to stay up with inflation and the cost of living, because compensation is one of the main motivators for teachers (Muguongo et al., 2015). Muguongo et al. (2015) stated:

> The study further concludes that insurance cover greatly affects job satisfaction among teachers. It was deduced that they are greatly satisfied with medical

> insurance. The bonuses only affect the job satisfaction of teachers slightly. The performance bonus makes teachers care more about teaching well, pay incentives motivate them and pay incentives schemes' objectives are achievable. The study finally concludes that the nonfinancial compensation that affect the teacher's satisfaction include psychic rewards (acknowledgement of teaching competence), reasonable work load and administrative support. (p. 57)

Working conditions and environments are worsening across the nation (Nyamubi, 2017). Resources, competitive salaries, and workplace conditions must be enhanced to help support teacher job satisfaction (Nyamubi, 2017).

Gender has no effect on job satisfaction. As administrators think about the hiring process, they need to realize an unhappy staff will not be changed by increasing the number of males or females on staff. While this has no effect on teacher job satisfaction, male and females may offer different perspectives to students and may be able to relate differently to individual students (Ferlazzo, 2013).

Administrators should understand what factors have an effect on teacher job satisfaction. This researcher surveyed teachers on specific questions about teacher job satisfaction. A strong collaborative culture, administrator support, and involving staff in extra-curricular activities with students have an overall positive impact on teacher job satisfaction.

Teacher turnover rates and teacher retention are crucial to school districts (Simon & Johnson, 2015). Teachers with strong academic backgrounds have tendencies to move to school districts that pay more and have better student achievement (Simon & Johnson,

2015). Teacher self-efficacy and teacher autonomy can predict student engagement, teacher job satisfaction, and teacher burnout (Skaalvik & Skaalvik, 2014).

Poor working conditions and low salary also have an effect on teacher job satisfaction (Nyagaya, 2015). The working conditions of staff also have direct connection to teacher job satisfaction (Nyagaya, 2015). A connection can also be found with the size of the school. Teachers who work in larger school districts have less job satisfaction than those who work in smaller school districts (Song & Mustafa, 2015). Applying this research along with prior research may help administrators promote teacher job satisfaction at higher levels in order to improve student achievement.

Recommendations for Future Research

There are really no boundaries or limitations on the areas or types of future research in the field of teacher job satisfaction as it relates to student performance on state-mandated testing. For future research, one recommendation would be to disaggregate data from specific school districts to determine how leadership has a connection to teacher job satisfaction. The surveyed sample was not disaggregated in a way to compare types of administrative leadership with teacher job satisfaction. By doing so, data could be collected directly related to the perception of whether or not the administration's behavior is supportive and encouraging.

The timing of this survey could have skewed the outcome. Administering this survey to the same educators at the beginning of the school year versus the end of the school year may indicate different results. Teacher job satisfaction early in the school

year might be different than teacher job satisfaction as the stresses and pressures of state-mandated testing are in full swing during the spring semester.

A researcher could add a qualitative component to this study. Qualitative research is intended to attain a deeper understanding of a precise group or occurrence, rather than a basic report of a large sample of teachers (Silverman, 2016). Teacher, administrative, and even student perceptions on teacher job satisfaction and the role it plays in student achievement could be invaluable.

Along those same lines, interviewing teachers instead of having them complete a survey could allow the participants to provide greater detail on the subject. This might elicit different results when asking participants to answer questions in person versus completing them online with no face-to-face accountability. False conclusions can sometimes be drawn when a survey participant answers a question online (Davies & Hughes, 2014). Face-to-face interviews allow participants to expand on answers and to provide deeper details on the subject matter.

This research only involved a survey of classroom teachers. Further research involving surveys and interviews of building-level administrators may be useful in gathering information based on different perceptions between these two groups. Perceptions of the community in regard to teacher job satisfaction and its effect on student achievement were not a part of this research. Future researchers could interview patrons and other stakeholders. This may help to build a stronger understanding of the culture and climate of a school district and the effect school culture has on the community.

Given the data collected, further research could be conducted with those in higher education. Surveying teachers by asking questions about what colleges could do to better prepare educators might result in useful data.

Summary

The overarching purpose of this study was to determine the connection between teacher job satisfaction and student performance on state-mandated testing. To accomplish that goal, it was necessary to look at several factors. The first was to define job satisfaction. Related to that effort, it became necessary to survey teachers and to gain demographic information from those teachers. It was also necessary to gather student data from state-mandated testing results.

The background for this study revolved around improving student achievement and improving teacher satisfaction. Focusing on these two areas will help administrators in both of these areas (DuFour & Mattos, 2013). The review of literature revealed current research was lacking in the connection between student performance and teacher job satisfaction.

An understanding of the social identity theory, developed by Tajfel and Turner (2016) in 1979, is relevant when working through the understanding of how teachers are satisfied in their jobs. How individuals fit into groups makes a difference in helping to create teacher job satisfaction and improvement in student test scores (Tajfel and Turner, 2016). People subconsciously identify themselves with certain groups and create a sense of belonging (Ashforth & Mael, 1989). When groups of people compete with one another, it is detrimental to the success of an organization (Ashforth & Mael, 1989).

This research was designed to help with the realization there may be an impact on student test scores in relation to teacher job satisfaction. Improved morale and high levels of job satisfaction should in turn create improved student learning (Markow et al., 2013). A survey was developed and emailed to the faculty members of school districts affiliated with a southwest Missouri conference. Prior to doing this, each district-level superintendent was contacted to gain permission to survey his/her staff. State-mandated testing data were collected from the MODESE (2017).

There were three research questions involved with this study. The first was designed to determine if there is a correlation between high school teacher job satisfaction and high school student achievement. The second question was designed to determine if there is a correlation between job satisfaction and five teacher demographic areas. Finally, the third question was designed to determine if there is a difference in job satisfaction between teachers who are required to administer an end-of-course state assessment and those who are not.

The researcher defined job satisfaction as a worker's attitude toward all aspects of work and the work environment (Bin, 2015). Student achievement was explained using proficiency levels created by the MODESE (2014). The Missouri Performance Index scores were collected, and each performance level was assigned a number. Below basic was one point, basic was two points, proficient was three points, and advanced was four points (MODESE, 2014).

Within this study, limitations were identified. Only one conference in southwest Missouri was surveyed. This represents a small percentage of the total population of

teachers and students in Missouri. Another limitation was the changing of the state-mandated test; Missouri changed the assessment in the three-year window data were collected.

Several areas of literature were reviewed while preparing for this research, with general job dissatisfaction being one. Since 2008, there has been a decline in teacher job satisfaction (Markow et al., 2013). The only recent research found on teacher job satisfaction prior to this study was by Markow et al. in 2013. Prior to Markow et al.'s (2013) research, Herzberg (1966) studied job satisfaction. Workplace environment plays a significant role in job satisfaction (Fu & Deshpande, 2014).

Literature in regard to required testing and administrative support was also reviewed. Markow et al. (2013) stated teachers are more concerned with classroom experiences, and administrators are concerned with student test data. Administrators must provide support for their staff (DuFour & DuFour, 2013). An emphasis on testing is putting pressure on teachers, and this is one reason teachers are leaving the profession (Thibodeaux et al., 2015). Large class sizes, student discipline issues, and lack of administrative support are the three main reasons teachers leave the profession altogether (Thibodeaux et al., 2015). Teacher self-efficacy helps teachers feel connected and committed to the profession (De Jong et al., 2016).

Several demographic areas were researched as well. An understanding of salary and benefits, teacher age, teacher gender, school size, and class size was necessary for this research. These areas may or may not have an impact on teacher job satisfaction and student performance on state-mandated testing.

This quantitative study involved collection of survey data from teachers employed in schools located in a southwest Missouri conference as well as student test data from the MODESE (2017). The schools surveyed were both rural and urban. There were a total of 69 participants in the survey.

The specific dates of state-mandated testing were between 2013 and 2016, and the specific tested areas were Algebra I, English II, Biology, and Government. A Chi-square statistical test was used to answer research questions one and two, and a *t*-test was performed to answer research question three. A Chi-square test is a statistical test that determines the existence of a relationship between two variables (Garczynski, 2016). A *t*-test is used to examine two means (Statistics Solutions, 2016). All respondents were asked to rate their levels of satisfaction based on eight statements.

Research question one was developed to determine the correlation between high school teacher job satisfaction and high school student achievement. A correlation was shown, and the null hypothesis was rejected. There is a relationship between teacher job satisfaction and Missouri Performance Index scores.

Research question two was developed to determine if there is a correlation between teacher job satisfaction and years of experience, salary, age, level of education, and gender. A correlation between teacher job satisfaction and years of experience, salary, and age was indicated. Data did not indicate a correlation between teacher job satisfaction and the teacher's gender or level of education.

Research question three was developed to determine the difference in job satisfaction between teachers who are required to administer an end-of-course exam and

those who are not required to. The data collected indicated there is a larger deviation in teacher job satisfaction among those required to administer the test than those not required to administer the EOC. However, the *t* test determined there is no difference in job satisfaction between teachers who are required to administer the EOC exam and those that are not.

Administrators can learn from this research and create a higher level of teacher job satisfaction as well as improve student performance on state-mandated testing. This researcher suggests the following:

1. Create an overall climate that promotes teacher job satisfaction.
2. Build a collaborative culture.
3. Recognize if teachers are happy with what they are doing.
4. Realize teachers are generally satisfied with teaching as a profession.
5. Support staff.
6. Recognize the importance of getting staff involved with students and extra-curricular activities.
7. Understand teachers are satisfied when students score well on state-mandated tests.
8. Realize the more years of experience a teacher has, the less satisfied they are.
9. Support increased salaries and benefits for staff.
10. Promote furthering teacher education.
11. Realize hiring a variety of different genders will not affect job satisfaction.
12. Recognize the pressures placed on staff who administer a state-mandated test.

13. Look at the research and have an understanding of the factors that play a role in job satisfaction.

In conclusion, there are numerous strategies that can be employed by school districts to increase teacher job satisfaction and in turn increase student achievement. It is important for administrators to be aware of teacher demographics and the effect they may have on both teacher job satisfaction and student performance.

Appendix A

Teacher Job Satisfaction Survey

1. Age Range
____under 30
____31-40
____41-50
____over 50

2. Gender
____male
____female

3. Level of Education
Mark only one.
____Bachelors
____Masters
____Specialist
____Doctorate

4. Years of teaching experience
____1-3
____4-6
____7-10
____11+ years

5. I teach one of the following:
____Algebra I
____English II
____Biology
____Government
____None of the above

6. Salary Range
____$30,000 or below
____$31,000-$35,000
____$36,000-$40,000
____$41,000-$45,000
____$46,000-$50,000
____$51,000 or above

Mark only one oval for each question.

1. I am generally satisfied with being a teacher as a profession.

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

2. I plan to remain in this position.

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

3. I plan to remain in this school.

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

4. I plan to remain in this profession.

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

5. The school administration's behavior toward me is supportive and encouraging.

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

6. I feel there is a great deal of collaboration among staff members.

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

7. Collaboration with my peers is a priority in my school.

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

8. The duties I perform beyond my contract time have a positive effect on my job.

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

Appendix B

Teacher Participant,

My name is Doug Crawford, and I am a Doctoral Student with Lindenwood University. I am in the process of gathering information for my research project. The title of the project is, **Teacher Job Satisfaction As Related to Student Performance on State-Mandated Testing.** I have permission from your superintendent to use your information in this research project. **The survey will only take five minutes** and will help greatly in my project. An informed consent is attached that provides you protection. Please click on the survey link below to complete the survey.

Thank you for your help in my project.

Doug Crawford

TEACHER JOB SATISFACTION SURVEY

Appendix C

LINDENWOOD

INFORMED CONSENT FOR PARTICIPATION IN RESEARCH ACTIVITIES

Teacher job satisfaction as it relates to student performance on state-mandated testing

Principal Investigator _James D. Crawford___
Telephone: [redacted] E-mail: [redacted]

Participant_____ Contact info _____

1. You are invited to participate in a research study conducted by James D. Crawford under the guidance of Dr. Shelly Fransen. The purpose of this research is to determine the impact teacher job satisfaction has on student performance on state-mandated testing.

2. a) Your participation will involve **completing an anonymous survey.**

   b) The amount of time involved in your participation will be **approximately 10 minutes.**

   Four Missouri school districts, with 25 teachers surveyed from each, will be involved in this research.

3. There are no anticipated risks associated with this research.

4. There is no possible benefit to you from participating in this research.

5. Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

6. We will do everything we can to protect your privacy. As part of this effort, your identity will not be revealed in any publication or presentation that may result from this study, and the information collected will remain in the possession of the investigator in a safe location.

7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Doug Crawford, at [redacted] or the Supervising

Faculty, Dr. Shelly Fransen, at [redacted]. You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Marilyn Abbott, Provost, at mabbott@lindenwood.edu or 636-949-4912.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above by completing the survey.

Appendix D

LINDENWOOD

LINDENWOOD UNIVERSITY ST. CHARLES, MISSOURI

DATE: April 29, 2016

TO: James Crawford
FROM: Lindenwood University Institutional Review Board

STUDY TITLE: [877823-1] Teacher Job Satisfaction as it Relates to Student Performance on State Mandated Testing
IRB REFERENCE #:
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: April 29, 2016
EXPIRATION DATE: April 29, 2017
REVIEW TYPE: Expedited Review

Thank you for your submission of New Project materials for this research project. Lindenwood University Institutional Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to the IRB.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the completion/amendment form for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of April 29, 2017.

Please note that all research records must be retained for a minimum of three years.

Appendix E

March 21, 2016

[redacted]

Re: Permission to obtain and use MLC High School Teacher emails in order to conduct a Research Study on Teacher Job Satisfaction as it Relates to Student Performance on State-Mandated Testing

Dear [redacted],

I am writing to request permission to obtain and use a list of MLC High School teacher email addresses. I am currently enrolled at Lindenwood University in St. Charles, MO, and am in the process of writing my dissertation for a doctoral degree in Educational Administration. The study is titled, *Teacher Job Satisfaction as it Relates to Student Performance on State-Mandated Testing.*

The intended purpose of this study is to determine if teacher job satisfaction has an impact on student academic achievement. This study may be useful for school district administrators to help increase student scores and retain highly qualified teachers. A review of the literature reveals researchers have discussed student performance and teacher job satisfaction; however, researchers have not created a connection between the differences in performance of schools based on teacher job satisfaction. A direct connection between the variables is not a possibility. The desire is to localize the results to determine if there are factors specific to Missouri public schools.

Teachers in the MLC Conference will be identified and surveyed electronically regarding teacher job satisfaction. Results will be collected electronically, and all participants will remain anonymous.

If approval is given, MLC superintendents will be contacted via email after contact information is collected from DESE. The superintendents will be informed of the research, and a survey link will be attached to the email. Through the link, the superintendents will agree to participate in the research and will answer the survey questions. No one will be forced to participate. The survey will be anonymous. No cost

will be incurred other than the 5-10 minutes the survey will take. Participants will be asked about their subject levels, years of experience, salary, gender, and overall job satisfaction.

Approval to conduct this study will be greatly appreciated. Please do not hesitate to contact me with any questions or concerns about participation at [redacted] or [redacted]. You may also contact Dr. Shelly Fransen at [redacted] or [redacted]. A copy of this letter and your written consent should be retained by you for future reference.

Thanks you for your consideration,

Doug Crawford
Doctoral Candidate

Appendix F

Permission Letter

I, [redacted], grant permission for Doug Crawford to obtain email addresses from MLC High School teachers in order to study teacher job satisfaction as it relates to student performance on state-mandated testing. By signing this permission form, I understand that the following safeguards are in place to protect the participants:

1. I may withdraw my consent at any time without penalty.

2. The identity of the participants will remain confidential and anonymous in the dissertation or any future publications of this study.

I have read the information above, and any questions that I have posed have been answered to my satisfaction. Permission, as explained, is granted.

Superintendent	Date

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Vita

James Douglas Crawford was born in Osceola, Arkansas, on December 19, 1973. He attended grade school and high school all in the same location. After finishing high school, he attended College of the Ozarks. Immediately following graduation, he took his first teaching job and quickly started to doubt if education was where he wanted to spend the rest of his days. After three short years in education, he left the field to go into retail management. His love for students and changing lives quickly took him back into the education field.

During his tenure, James has played many roles. He has taught K-8 physical education, 5-8 science, high school at-risk students, and elementary students, and has served in administration K-12. During his time in education, he has slowly been earning several degrees to better himself. He earned a Master's Degree in 2007 and a Specialist Degree in 2012.