Middle School Teacher Instructional Self-Efficacy and Job Satisfaction

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Abstract

The purpose of the study was to investigate the relationship between teacher instructional self-efficacy and job satisfaction of middle school teachers. This study was designed to determine the correlation between teacher instructional self-efficacy and job satisfaction and how the relationship changes based on a teacher's level of experience, content, and gender. Building upon work in teacher instructional self-efficacy and job satisfaction research question one examined the correlation of teacher instructional selfefficacy and job satisfaction. Research questions two through four were developed to determine the effect of teacher experience, teacher content area, and gender. The quantitative correlational design sample included 103 middle school teachers employed in District XYZ at the time of the study. The first finding indicates a relationship between instructional self-efficacy and job satisfaction. The study also suggests that the relationship between instructional self-efficacy and job satisfaction was not different based on years of experience. Also, findings indicate no statistical significance between female teachers and male teachers. Last, the study revealed that for both core and noncore teachers, difference in the correlation between the two variables was not statistically significant. Further research is needed to identify the factors leading to the differences in the relationship between teacher instructional self-efficacy and job satisfaction.

Dedication

To my wife, Jill, who has supported me through all endeavors big and small. Also, to my children Jack and Eli, anything is possible if you have the perseverance to succeed. Through their love and support, all things are possible.

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Chapter 1

Introduction

As a result of a social cognitive study conducted in 1977, Bandura defined selfefficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). Bandura (1986) later stated, "people regulate their level and distribution of effort in accordance with the effects they expect their actions to have. Concluding, their behavior is better predicted from their beliefs than from the actual consequences of their actions" (p. 129). Bandura established the study of self-efficacy and his research is the foundation of the current study.

Teacher self-efficacy can be defined as beliefs in one's capabilities as a teacher to successfully plan, organize, and implement classroom instruction to improve student achievement (Tschannen-Moran, Hoy, & Hoy, 1998). In education, teacher self-efficacy beliefs have been linked to student achievement, motivation, and learning (Hackett, 1995; Pajares, 1996; Schunk, 1991; Zimmerman, 1995). A teacher with a strong sense of self-efficacy tends to have superior levels of organization and planning, while also having the capacity to be resilient and persistent in the educational environment (Protheroe, 2008). Past researchers have hypothesized that teachers with higher self-efficacy have higher positive and productive job-related characteristics than teachers with lower self-efficacy, especially in the area of job satisfaction (Klassen & Chiu, 2010). Teacher self-efficacy can significantly affect classroom relationships, professional stress, and future professional decisions (Sass, Seal, & Martin, 2011). The teaching profession has long been considered extremely stressful due to the frequent and sometimes intense intense interactions with students, parents, peers, and administrators (Platsidou & Daniilidou,

2016). Teachers with high self-efficacy act, feel, and think in a different way than those teachers who lack high self-efficacy (Anthony & Kritsonis, 2006). This higher level of self-efficacy could help decrease the amount of stress in the teaching environment.

Bandura's research from 1977-1995 has provided evidence that using selfassessment of teacher success in the classroom were strong predictors of performance in the workplace (Pajares, 1995). Follow up studies investigated teacher self-efficacy in the academic setting and supported Bandura's research. In their study, Tschannen-Moran et al. (1998) reviewed and analyzed all research involving teacher self-efficacy. In general, researchers have established teacher self-efficacy as a predictor of academic performance and job satisfaction. Researchers for these studies used a teacher self-assessment as the basis for self-efficacy studies (Bores-Rangel, Church, Szendre, & Reeves, 1990; Multon, Brown, & Lent, 1991; Pajares & Johnson, 1994; Pajares & Miller, 1995; Wood & Locke, 1987).

As the United States industrialized in the late 1800s and the need for factory workers increased, researchers started to analyze employee job satisfaction and its relationship with employee retention. Industrialization led to factory-based jobs and the need to study employees, employee conditions, and employment issues (Spector, 1985). From the need of understanding factory employee job satisfaction research started examining other job sector employees, such as education. Perrachione, Rosser, and Peterson (2008) suggested that a school system's ability to fight teacher attrition through a professional supportive environment would keep classrooms staffed with highly effective instructional teaching. Maintaining qualified and effective teachers in schools is a key factor in fighting the debilitating rate of teacher attrition (Bozeman, Scogin, & Stuessy, 2013; Perrachione et al., 2008).

When analyzing relevant self-efficacy and job satisfaction research there were noticeable limitations. Most self-efficacy studies were completed in a laboratory setting and samples consisted of students and not employees of an organization (Harrison, Rainer, Hochwarter & Thompson, 1997). Other studies observed teachers in certain content areas such as math (Pajares & Miller, 1995) and academic performance (Wood & Locke, 1987).

Background

One issue plaguing the public-school system is teacher retention and mobility. According to the National Center for Education Statistics (NCES, 2016), 3.6 million teachers were employed for classroom instruction at a full-time equivalent (FTE) during the fall of 2016. Of those employed teachers, 8% left the teaching profession the next year. The NCES (2016) categorized types of retention areas in the profession. The first category of retention was classified as stayers. According to NCES (2016), stayers are teachers who were teaching in the same school the following year after base year. The base year was defined by NCES as the year previous to the current. The second category of retention was classified as movers. Movers are teachers who are still teaching during the current school year but have since moved to a different school after the base year. The third category of retention was classified as leavers. These are teachers who left the teaching profession after the base year. According to NCES (2016), of the approximately 3.5 million full-time and part-time public-school teachers who were teaching during the 2011–2012 school year, 84% remained at the same school (stayers), while 8.0% moved to a different school (movers), and the remaining 8.0% left the profession (leavers) the following year. Teacher job satisfaction has been linked to retention and previous researchers have concluded that positive job satisfaction of teachers means higher levels of retention (Bozeman et al., 2013; Perrachione et al., 2008). In addition, high enrollment in the Federal School Lunch Program reflects community socio-economic factors and research suggests high-poverty schools tend to struggle with teacher retention (Garcia & Weiss, 2019).

Teachers having high self-efficacy have been linked to instructional experimentation, willingness to attend professional development opportunities, and desire to find a better way of teaching (Tschannen-Moran et al., 1998). Furthermore, teachers having high self-efficacy predicts a teacher's willingness to work with students having academic difficulties rather than evaluated them for specialized education programs (Tschannen-Moran et al., 1998). In previous studies, researchers examined the benefits of high teacher self-efficacy and wanted to understand the positive and negative effects has on teachers (Ashton & Webb, 1986; Bandura, 1997; Holzberger, Phillipp, & Kunter, 2013; Pajares, 1996; Protheroe, 2008; Tschannen-Moran et al., 1998). Several factors have an effect on self-efficacy including work environment, leadership, colleagues, school climate, and school culture (Pedota, 2015). Other researchers studied teacher job satisfaction to determine if factors such as work environment, pay, benefits, professional relationships, and high self-efficacy would help keep quality teachers in schools (Anthony & Kritsonis, 2006; Berns, 1990; Bozeman et al., 2013). It was found, through studies, that higher teacher self-efficacy has positive effects on overall retention in the profession (Anthony & Kritsonis, 2006; Klassen & Chiu, 2010). Job satisfaction studies

indicated that quality work life helps employers maintain staff and reduce negative feelings in the workplace (Porter, Bigley, & Steers, 2013).

For the current study, the school district used for data collection was a suburban district located outside of the Kansas City metropolitan area. According to the Kansas Department of Education (KSDE, 2018) *K-12 Building Report Card*, the total student enrollment of grades K-12 in District XYZ at the time of the study was 12,106 students. Compiling middle school data, a total of 221 teachers from the four middle schools which contained sixth through eighth grades were selected to participate in the study. In the four middle schools, the student population ranged from 480 to 650 students. The ethnicity of students enrolled in schools A, B, and D were similar. The percentage of white students ranged from 68.71% to 73.24%, but minority populations differed on the make-up of the diversity, see Table 1. However, Middle School C was much lower percentage of white students at 58.25% and higher Hispanic student percentage of students claiming African-American ethnicity.

Table 1

	Ethnicity (%)			
School	White	Hispanic	African-American	Other
А	69.64	9.23	7.20	13.93
В	68.71	9.73	4.23	17.34
С	58.25	13.33	8.95	19.47
D	73.24	6.27	3.82	16.67

Middle School Student Ethnicity

Note: Data adapted from *K-12 Building Report Card,* by Kansas State Department of Education, 2017. Retrieved from https://ksreportcard.ksde.org/.

The middle schools in the study were even more different based on socioeconomic status. As noted in Table 2, in Middle Schools B and C, over 50% of students were classified as economically disadvantaged. According to KSDE (2017) economically disadvantaged students are defined as students enrolled in the Federal School Lunch Program and eligible for free or reduced meals. In comparison, KSDE (2017) defined a student as economically advantaged if the student does not qualify for free and reduce meals per federal guidelines. Enrollment in the Federal School Lunch Program includes over 50% of the student population at Middle School B and C (KSDE, 2017). These schools are disproportionately different when compared to Middle School D which shows only 19.27% of students enrolled in the federal program and Middle School A shows only 35.37% percent of students are considered economically disadvantage (KSDE, 2017).

Table 2

Middle	School	Student	Socio	-Econor	mic	Status

	Socio-Economic Status (%)			
School	Economically Advantaged	Economically Disadvantaged		
А	64.63	35.37		
В	42.07	57.93		
С	47.72	52.28		
D	80.73	19.27		

Note: Adapted from *K-12 Building Report Card*, by Kansas State Department of Education, 2016-2017. Retrieved from https://ksreportcard.ksde.org/.

In Table 3, the experience of district middle school teachers, is presented as years of professional experience. The district middle school teachers have a fairly balanced staff based on years of service among the four middle schools. Four different ranges of years of experience are presented in Table 3: less than or equal to five years, 6-10 years,

11-20 years, and 21 or more years. Middle Schools B and C had the highest number of teachers with less than ten years of teaching experience among the four middle school. In comparison, Middle Schools A and D employed more veteran teachers. According to (Assistant Director of HR, 2018) more than 50% of teachers in Middle Schools A and D had 11 or more years of teaching experience.

Table 3

		Ye	ears		
School	≤5	6-10	11-20	21+	Total
А	15	2	22	18	57
В	18	7	12	8	45
С	15	10	18	14	57
D	10	11	16	20	57
Total	58	30	68	60	216

Middle School Teacher Experience

Note: Adapted from Assistant Human Resource Director (personal communication, April 8, 2018).

In addition, an important factor in the current research was the teacher gender. Table 4 provides information on the number of teachers and their gender per school building. As in many schools around the country, District XYZ employed more than twice as many female teachers in middle schools as compared to males. The largest difference based on gender was at Middle School D with a greater than 4 to 1 ratio.

Table 4

	Gender		
School	Male	Female	Total
А	19	38	57
В	13	32	45
С	18	39	57
D	10	47	57
Total	60	156	216

Number of Middle School Teachers by Gender

Note: Adapted from Assistant Human Resource Director (personal communication, April 8, 2018).

The last factor studied in relation to instructional self-efficacy and job satisfaction was the content area taught at the middle school level. Teachers were identified as core content area, non-core content area, and special education. Core content was identified as the areas of English, math, science, and social studies. Non-core content was identified as elective areas of fine arts, technology, family and consumer sciences, world language, physical education, business, and career technical education (CTE) courses. Table 5 provides the number of respondents at each school who reported teaching in each content area.

Table 5

	Content Areas			
School	Core	Non-core	SPED	Total
А	26	18	13	57
В	21	12	12	45
С	25	17	15	57
D	26	18	13	57
Total	98	65	53	216

Number of Middle School Teachers by Content Area

Note: Adapted from Assistant Human Resource Director (personal communication, April 8, 2018).

Statement of the Problem

Several researchers have conducted studies on teacher self-efficacy (Bandura, 1977, 1997; Cervone, 2000; Choi, Fuqua, & Griffin, 2001; Pajares, 1996; Tschannen-Moran et al., 1998). However, these studies have not filled the research void at the middle school level. There is also a gap in the research regarding how teacher gender, instructional content, and experience impact teacher instructional self-efficacy and teacher job satisfaction. Job satisfaction researchers have conducted studies in various settings that included educators (Epps & Foor, 2015; Klassen & Chiu, 2010; Maslow, 1954; Murtedjo & Suharningsih, 2016; Porter et al., 2003; Porter & Steers 1973; Spector, 1985, 1997; Tuttle & Hazel, 1974; Vroom, 1964; Yildirim, 2015). Additional research is needed to understand teacher instructional self-efficacy and teacher job satisfaction at the middle school level. There hasn't been targeted and focused research on the relationship between middle school teacher instructional efficacy and job satisfaction.

Purpose of the Study

The purpose of this quantitative study was to determine if a relationship exists between teacher instructional self-efficacy and job satisfaction. In addition, the study was designed to determine how variables, such as teacher experience (0-5, 6-10, 11-15, 16-20, or 21 plus years), content area (core or non-core courses), and teacher gender (female or male) at the middle school level, affect the relationship between instructional selfefficacy and job satisfaction.

Significance of the Study

The findings of the current study with regard to the relationship between teacher instructional self-efficacy and job satisfaction can benefit the educational field by improving the retention, instruction, climate, and culture of a school. It is important for building and district administration to understand the impact teacher instructional selfefficacy has on job satisfaction. As the demand to fill teaching positions increases due to shortages in the work force, understanding the relationship between teacher self-efficacy and job satisfaction could help employers find areas of improvement to reduce turnover. Specifically, the current study examined the relationship between teacher instructional self-efficacy and job satisfaction as related to years of service, instructional content, and teacher gender in middle school education. This research could help close gaps in previous research areas. As the education profession continues to deal with unsolved teacher shortages, the current study could help building leaders understand the impact of self-efficacy and job satisfaction on schools. Findings from this study could offer educational leaders' insight on how to improve instructional self-efficacy and job satisfaction for the benefit of teachers and students.

Delimitations

According to Lunenburg and Irby (2008), "Delimitations are self-imposed boundaries set by the researcher on the purpose and scope of the study" (p. 134). The delimitations for the current study were as follows:

- The study was limited to one mid-size urban school district.
- The sample was limited to District XYZ middle school certified teachers employed by the district during the 2018-2019 school year.
- A survey was used to measure instructional self-efficacy and job satisfaction of district teachers who agreed to complete the survey.

Assumptions

Assumptions are postulates, premises, and propositions which can be presumed to be true during the study (Lunenburg & Irby, 2008). The following assumptions were made for this study. First, all respondents understood the survey questions. Second, all respondents answered the survey questions honestly and without preconceived intentions to provide false data.

Research Questions

Research questions should guide the direction of the study, give it focus, and help extend previous research. According to Lunenburg and Irby (2008), research questions serve as the "directional beam for the study" (p. 126). The research questions for the current study were:

RQ1. To what extent is there a relationship between teacher instructional selfefficacy and teacher job satisfaction? **RQ2.** To what extent is the relationship between teacher instructional selfefficacy and teacher job satisfaction affected by teacher experience?

RQ3. To what extent is the relationship between teacher instructional selfefficacy and teacher job satisfaction affected by teacher instructional content area?

RQ4. To what extent is the relationship between teacher instructional selfefficacy and teacher job satisfaction affected by teacher gender?

Definition of Terms

This section provides definitions for key terms that are used throughout the study.

Core content. The content area falls into two main categories, core and non-core. Core content subject areas include math, language arts, science, and social studies (Glatter, Deruy & Wong, 2016). For this study, special education teachers were grouped with core content because they provide intervention levels of math and language arts.

Gender. According to the World Health Organization (2019), gender refers to the socially constructed characteristics of women and men. For this study, gender is measured as female or male.

Non-core content. According to Bauer and Wise (2016), non-core subject areas include elective courses such as physical education, fine arts, business and computers, and family and career sciences.

Teacher instructional self-efficacy. Instructional self-efficacy is a teacher's belief and self-awareness in their ability to create successful learning opportunities with varied instructional strategies to raise the achievement and success level of all students (Christian, 2017).

Teacher Experience. For this study teacher experience is job experience. This can be defined as years of experience in the classroom (McDaniel, Schmidt, & Hunter, 1988). Teacher experience equals time employed in a classroom delivering curricular instruction in the school district of study (McDaniel, Schmidt, & Hunter, 1988). For this study, teacher experience was divided into four groups of 0-5 years, 6-10 years, 11-20 years, and 20 plus years of teacher experience.

Organization of the Study

The current study was organized into five chapters. Chapter 1 was dedicated to background information relevant to the current study and the statement of the problem. This chapter includes the purpose and significance of the study, research questions, delimitations, assumptions, and relevant terms. Chapter 2 provides a discussion of the review of literature relevant to the study including teacher instructional self-efficacy theory and teacher job satisfaction as it pertains to experience, content area, and gender. Chapter 3 is dedicated to research methodology. This chapter includes research design, population and sample, and sampling procedures. Also, Chapter 3 includes the survey instrument, measurement, validity and reliability, data collection and analysis, hypothesis testing, and limitations of the study. Chapter 4 presents the results of the data analysis and hypothesis testing. This chapter provides descriptive statistics for the data and the results of the hypothesis testing. Chapter 5 contains a summary of all previous chapters, the findings as related to the literature, implications, recommendations for further research, and the researcher's conclusions.

Chapter 2

Review of Literature

The review of literature for this study provided evidence on teachers' self-efficacy and its related influences on job satisfaction. The review also examines ways selfefficacy differs between teachers based on factors of years of experience, instructional content area, and gender. The following review of literature includes an examination of studies in the area of the relationship between self-efficacy and job satisfaction.

Foundations of Self-Efficacy

Researchers in the 1960s and 1970s began studying the role of social modeling in the cognitive development of children (Zimmerman & Schunk, 2001). Social cognitive and modeling theory laid the foundation for the development of the self-efficacy theory. However, the theory of self-efficacy cannot be reviewed without referencing and examining the foundation of social learning research. Social learning theory postulates people learn by observation, imitation, and modeling (Eidoo et al., 2011). In 1961, Albert Bandura conducted an experiment called the Bobo Doll Experiment to study patterns of behavior. His major finding and observation centered around children imitating observed behavior without reinforcement or reward (as cited in Eidoo et al., 2011). Bandura defined the conditions for the behavior modeling process which includes attention, retention, replication, and motivation. Condition one of the modeling process is the behavior that must gain a person's attention. According to Eidoo et al. (2011), "The more striking or different something is the more likely it is to gain our attention" (p. 10). Condition two is retention of learning. The observer must be able to remember the modeled behavior in order to repeat (Eidoo et al., 2011). After retention, the third

condition is replication, which is the ability to repeat the behavior (Eidoo et al., 2011). The last condition is motivation, which is the desire to demonstrate the learned behavior (Eidoo et al., 2011). Bandura's later experiments expanded on social learning theory and includes aspects of cognition. The aspects include, but were not limited to, attention, perception, memory, learning, and problem-solving.

Social cognitive learning theory is based on the cognitive and social influences of the learning process. Bandura (1986), evaluated the cognitive, self-regulatory, and self-reflective process of human behavior. The evaluation of the learning process and human behavior developed his social learning theory. According to Grusec (1992), Bandura's social learning theory was influenced by Skinners' operant theory which states learning takes place through reinforcement and punishment. However, Bandura's research diverted from Skinner's operant theory when he observed the learning conditions of modeling. Bandura foundational experiences in social cognitive learning theory, operant theory and learning theory led him to research in the area of self-efficacy.

Albert Bandura was the founding researcher of self-efficacy theory with his 1977 article, "Self-efficacy: Toward a Unifying Theory of Behavioral Change" which appeared in *Psychological Review*. Bandura (1977) stated "Efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences" (p. 194). The stronger the sense of a teacher's perceived selfefficacy, the more active role the teacher takes in the school environment (Bandura, 1977). Self-efficacy was found to be an important element of behaviors and attitudes in the workplace (Bandura, 1978). If a person views an activity as exceeding their capabilities, they avoid the activity, but if they perceive themselves as capable of completing a task, they will be successful at the task (Bandura, 1978). Continued research expanded the definition of self-efficacy to include a "beliefs in one's capabilities to mobilize the motivation" to complete a certain task as related to a job function" (Wood & Bandura, 1989, p.408). Research has indicated that efficacy and self-efficacy theory is directly related to personal motivation and teacher motivation theories (Bandura 1986; Klassen & Chui, 2010; Schwarzer & Hallum, 2008).

Teachers coping with the pressure of their jobs experience emotional stress, detachment, negative perceptions of students and self, and show signs of stress (Chang, 2009). The teaching profession is considered stressful due to the frequent and intense interaction with students, parents, and peers (Hakanen, Bakker & Schaufeli, 2006). Teachers with a low sense of self-efficacy will not accept responsibility for low student performance. Also, teachers with low self-efficacy will use other factors as excuses for students' poor performance such as poverty, inefficient support at home, and limited English proficiency (Protheroe, 2008). Other adverse effects include teacher absenteeism, declined job performance, and poor relationships with colleagues and students (Winters, 2014).

To build up a person's sense of perceived self-efficacy a person must acquire their beliefs through one or more efficacy principles (Bandura, 1977). The first efficacy principle presented by Bandura was mastery experiences. Mastery experiences are influential in the development of self-efficacy. Having successful mastery experiences will build the internal belief that one can have success. Whereas, negative mastery experiences can erode one's self-efficacy. The success or failure of mastery experiences affects the development of self-efficacy, through experience a person will develop positive or negative self-efficacy (Bandura, 1995). People with high self-efficacy tend to experience multiple mastery experiences in the past (Porter et al., 2003).

The second Bandura efficacy principle is vicarious experiences. After mastery experiences, vicarious experiences are powerful in building self-efficacy. Vicarious experiences come from the observation of another person's activity or experience and adopts their success or failure into their own personal ability (Bandura, 1997). An example of the vicarious experience principle of building self-efficacy is the modeling of the skill, task, or procedure by an individual considered a master at the activity that needed to complete (Porter et al., 2003).

The third efficacy principle Bandura offered is verbal persuasion. This principle does not have the same impact as mastery experience or vicarious experiences due to the human factor of trust. Verbal persuasion is the feedback and expression of confidence in a person having mastery experience in a task, process, or activity (Bandura, 1997). This persuasion fails if the person with mastery experience fails (Zeldin & Pajares, 2000). Verbal persuasion to develop self-efficacy is successful when offered by a leader or colleague, or someone the individual trusts or views as competent (Porter et al., 2003).

The final principle of efficacy development is the physiological and psychological state of the individual. Bandura considered this the weakest of the four principles (Bandura, 1977, 1997). Bandura (1997) described this principle as, if the individual thinks or believes they will fail, that assumed failure creates stress which impacts the performance of the task or activity. The impact on self-efficacy occurs during the physiological reaction individuals experience during times of stress and often viewed by others as weakness and vulnerability (Bandura, 1982). Principle four details the more

teacher engagement or involvement in professional development activities, the less teachers would focus on and notice stressful distractions (Porter et al., 2003).

Social cognitive learning theory research was imperative to the body of work and foundation of self-efficacy because it merged the concepts of self-beliefs and selfconcept. Bandura's (1986) 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). Bandura's extensive research on self-efficacy was a major component of his social cognitive theory. Social cognitive theory presented that a person's behaviors are influence by one's own internal drive (Bandura, 1986). Bandura completed observations and analysis of people behavior in a natural environment. Bandura examined the relationship between efficacy and performance and how perceived self-efficacy could be a behavior predictor (Bandura, 1986). Bandura's self-efficacy model noted there was a relationship between self-efficacy and performance (Bandura, 1986). Bandura (1986) stated, "People regulate their level and distribution of effort in accordance with the effects they expect their action to have. As a result, their behavior is better predicted from their beliefs than from the actual consequences of their actions" (p. 129). Bandura's social cognitive theory observations showed a correlation between actual behavior and self-assessment of efficacy (Wood & Bandura, 1989).

Bandura continued constructing models in 1997 with the publication of *Self-efficacy: The Exercise of Control*. First, Bandura clarified the difference between perceived self-efficacy and an earlier concept from Julian B. Rotter (1966) called locus of control. Rotter defined the locus of control concept through two categories. First, the internal locus of control states that a person's success is due to their ability and drive.

Second, the external locus of control states that a person contributes success to luck or fate (Rotter, 1966). Tschannen-Moran et al., (1998) investigated the concept of locus of control and self-efficacy and concluded "self-efficacy and locus of control bear little or no empirical relationship to one another, and, moreover, perceived self-efficacy is a strong predictor of behavior, whereas locus of control is typically a weak predictor" (p. 211). Bandura (1997) theorized that personal beliefs and efficacy contributed to an individual's self-knowledge. Bandura's self-efficacy beliefs operated through four constructed principles which affect one's self perception.

As Pajares (1995) investigated and compiled notable research in the area of selfefficacy, he discussed the contributions of Bandura's social cognitive theory which examined how human behavior and motivation are influenced by efficacy. First, selfefficacy influences individuals' choice behavior (Pajares, 1995). Second, self-efficacy determines how much time and effort a person will devote to an activity. Self-efficacy also determines a person's perseverance and persistence. These attributes are related to a higher sense of efficacy (Pajares, 1995). Finally, efficacy influences thoughts and emotions of individuals, a lower sense of efficacy creates stress and limits problemsolving ability (Pajares, 1995). Subsequent research noted by Pajares found individuals with a low perceived efficacy tend to avoid more difficult tasks and then become more stressed about not completing the task (Pajares, 1996). According to Henson (2001), self-efficacy beliefs influence our choices, our effort, and our persistence through adversity and emotions.

Self-Efficacy in Education

Self-efficacy theory research ventured into the education profession in the 1980's with the Gibson and Dembo (1984) research study, Teacher Efficacy: A Construct Validation. Gibson and Dembo (1984) conducted a study examining teachers with high perceived instructional self-efficacy and their belief that all students can learn, even the most difficult learners. They found that teachers using appropriate instructional strategies, detailed plans to facilitate the learning process, and support from the students' family had higher self-efficacy. Furthermore, teachers with low self-perceived instructional efficacy believed they could not reach all learners and that the influence of intellectual development is limited by influences at home or school community (Bandura, 1997). Through observations, Gibson and Dembo (1984) concluded that teachers with a high sense of efficacy devoted more time to academic learning activities and used positive praise statements of support for their students. Also, researchers observed teachers with low efficacy often spent more time on nonacademic learning activities, ignored students having learning difficulties, and criticized students for failures (Gibson & Dembo, 1984). Gibson and Dembo (1984) discovered that self-efficacy was an important factor in successful school improvement efforts.

As research on teacher self-efficacy has continued to emerge, it has become an important concept in education. Coladarci (1992) examined teacher perceived instructional self-efficacy as a predictor of longevity and commitment to the profession of education. Factors found not to influence professional commitment included co-worker relationships, support, salary, and experience (Coladarci, 1992). However, researchers have found self-efficacy to be an excellent predictor of teacher behaviors including, attendance, perseverance through difficult situations and job satisfaction (Hoy & Woolfolk, 1993). The higher the teacher self-efficacy, the more resilient and persistent teachers become during their career (Yost, 2006). Teachers with strong self-efficacy beliefs do not avoid the challenges that affect our public schools but are more likely to be determined to face them and complete actions for the good of the school and student (Bandura, 1997). Teachers with a strong sense of self-efficacy are better planners and more organized for the instructional day (Shunk, 1995). They take calculated risks and are more willing to try new methods to meet student needs, and are more resilient and persevere when things get difficult and while being less critical of student errors (Protheroe, 2008).

Since the development of Albert Bandura's (1997) Teacher Self-Efficacy Scale the tool has been used in numerous studies in the field of education. It was developed to gain an understanding of the difficulty's teachers face every day in schools. In the field of education, research has explored self-efficacy relationships with many attributions including, teaching and teacher education and academic performance across the curriculum (Bandura, 1993; Zimmerman & Bandura, 1994), teaching, teacher mentoring, and teacher education (Ashton & Webb, 1986), and career development (Lent & Hackett, 1987). Ultimately, teacher self-efficacy is related to academic achievement, student performance, and the creation of self-regulated learners (Pajares & Schunk, 1991).

Through research Bandura found there was a difference between the self-efficacy and the locus of control theories. Bandura pointed out that beliefs about one's ability to produce outcomes are conceptually different between the theories. In difference, Rotter's theory says the ability to produce the outcome is related to internal and external controls. When it seems improbable for teachers to make a difference in student learning, whether it is beliefs or expectancy, the teacher feels the lack of accomplishment (Lunenburg & Cadavid, 1992). Bandura (1997) created his instrument to research teacher self-efficacy across six efficacy areas. Each self-efficacy area used items on a Likert scale for respondents to identify 1 (cannot do at all) to 9 (highly certain can do) on each item. The six teacher self-efficacy areas adapted from Bandura (1997) Teacher Self-Efficacy Scale are as follows:

- Efficacy to influence decision making area allows respondents to express their influence in matters of decisions, freedom to express views, and get the resources needed for the classroom.
- Efficacy to influence instructional self-efficacy which allows respondents to rate areas of working with day to day activities in the classroom. This involves difficult students, motivating students, and getting students to complete school related work.
- Disciplinary self-efficacy area allows teachers to rate their ability to control the educational environment.
- Efficacy to enlist parental involvement section asks teachers about their influence on getting parents to work collaboratively with the school.
- Efficacy to enlist community involvement area respondents are asked to rate the effectiveness it brings the school community into the learning environment.

• Efficacy to create a positive school climate allows teachers to rate the climate in areas of absenteeism, student trust, school dropouts, and teacher collaboration.

Teachers with lower self-efficacy beliefs experience tension and aversion to performing tasks (Betoret, 2006). Researchers observed teachers with low self-efficacy experience professional burnout, daily attendance issues, and leaving the profession (Betoret, 2006; Caprara et al., 2003). Research has supported the influence of selfefficacy across different settings including, sports, business, personal health, and education (Bandura, 1997). The research also has shown there is less commitment to a professional education career (Knobloch & Whittington, 2003). Teachers with low selfefficacy experience greater difficulties in the classroom, a low sense of professional accomplishments, low job satisfaction, and high levels of professional stress (Betoret, 2006). It was also found that self-efficacy has a profound influence on achievement, student behavior, student motivation and teaching behaviors (Klassen & Chiu, 2010).

Self-Efficacy and Academics

Multon et al. (1991) conducted multiple correlational studies between 1977 and 1988 on the relationship between teacher self-efficacy and student academic performance. In an academic setting, teacher self-efficacy can be defined as the teachers' belief in their ability to positively reach all students and affect the learning and success of each individual, even those that can be considered difficult or unmotivated (Tschannen-Moran & Hoy, 2001). Instructional strategies, classroom management, and student engagement are three factors used by researchers to determine teachers' self-efficacy (Tschannen-Moran & Hoy, 2001). In research studies that looked at novice and pre-service teachers' self-efficacy, there has been a wide range of results. Yost (2006) stated, "An important aspect of this research on self-efficacy is its relationship to a novice teachers' ability to effectively think about, cope with, and solve problems that arise in the classroom setting" (p. 61). The data was gathered through an electronic survey of Ohio agricultural teachers. Validity of the instrument was determined by a panel of agricultural experts. A study of teacher candidates indicated self-efficacy increased during practicum experiences (Wolf, 2008). This study also supported other findings that noted supportive environments cause higher positive teacher self-efficacy (Swan, Wolf, & Cano, 2011).

A classroom foundation built on positive encouragement can increase students' connection to the learning environment and success. Likewise, student achievement and connectedness has been shown to be related to the increase in self-efficacy of the teacher or facilitator of the class (Pedota, 2015). Pedota also described strategies to support and develop a positive teacher self-efficacy starting with a school culture of encouragement and support for teachers and students. The first strategy is to set short and long-term goals with high student expectations. A teacher's ability to hold students to high expectations help teachers enjoy teaching daily (Pedota, 2015). The next strategy discussed the teacher focusing on verbal and non-verbal communication. Teachers control the conversation and message being delivered are responsible for student understanding. Without clear communication, it is harder to achieve at high levels (Pedota, 2015). Another strategy was to provide responsive environment to student questions, concerns and providing timely feedback on student work. This responsiveness allows teachers and students to clear misconceptions quickly and return to new learning.

The following suggested strategy was to provide differentiating instruction to meet student needs and increase student engagement in the learning environment (Pedota, 2015). Differentiation allows for student success at individual levels encouraging the use of relevant data and de-emphasizing grades. Teachers should not concentrate on letter grades for assignments and tests, but help students grow over time. Data allows teachers to see progress towards learning goals (Pedota, 2015). Also, the researcher stated that fair and consistent classroom management allows students and teachers to be successful. The policies must support a positive learning environment where students know what to expect (Pedota, 2015). The suggested strategy is to celebrate all the success with the students, parents, and community to help prevent educator apathy (Pedota, 2015). The last two strategies described by Pedota (2015) involve parents and community. According to the researcher, when teachers support parent involvement in their students' education it promotes student engagement in the classroom (Pedota, 2015). Pedota stated "Parent involvement also has a positive impact on student motivation and engagement which can lead to an increase in student achievement" (p. 58). The strategies provided by Pedota supported a relationship between teachers self-efficacy and retention of teachers.

Research has shown student achievement is influenced more by teacher selfefficacy than any other possible variables including student social-economic status and community demographics (Goddard, Hoy, & Hoy, 2004). In their conclusion, the researchers stated they had found a need to continue to research both teacher self-efficacy and collective efficacy of systems to truly understand the relationship (Goddard et al., 2004). The researchers indicated that teachers with a higher sense of instructional selfefficacy use learning strategies effectively in the classroom to meet the needs of all students, promote student achievement, and hold the belief that students control success. Research by John Hattie (2012) showed that socio-economic status has an affect on student achievement. According to his Visible Learning Chart, the effect size for socioeconomic status has the potential to affect student achievement positively for students from wealthy homes or negatively for students living below the poverty line (Hattie, 2012).

Swackhamer, Koellner, Basile and Kimbrough (2009) investigated science teachers' self-efficacy by using the Science Teaching Efficacy Belief Instrument, which was based on Bandura's self-efficacy theory and Gibson and Dembo's teacher efficacy scale. They found in-service teachers in the high efficacy range were likely to enroll in a high number of continuing education courses due to intrinsic or personal motivations to become more effective in the classroom. On the other hand, in-service teachers enrolled in foundational course groups did so because they valued the instructor or for increasing content knowledge (Swackhamer et al., 2009).

In a study conducted by Fisher and Rose (2011), music teachers' self-efficacy was analyzed using teacher's age, experience, and instructional ability. The study examined the strategy of using movement during an elementary music class. The researcher gathered data after intensive music movement training for teachers. A survey of 24 questions used a Likert scale, 0 (Cannot do at all) to 10 (Confident I can do). The survey rated different musical instructional strategies with students. Fisher and Rose (2011) concluded that teachers using this style of instruction for pre-K to second-grade students had a higher level of self-confidence in meeting student needs. The study noted a correlation between experience in the music classroom and instructional ability to higher

levels of self-efficacy. Researchers determined that as the age of children increased, the confidence of the teacher diminished.

A study conducted by Holzberger, Phillipp, and Kunter (2013) analyzed the relationship between teacher self-efficacy and instructional quality. The researchers found a strong relationship between teachers' self-efficacy and the quality of instruction (Holzberger, Phillip, & Kuner, 2013). The study used archival data from a professional competency survey of teachers to assess instructional quality and teacher self-efficacy. The national normed assessment reviewed the role of self-efficacy in a mathematics classroom. In the data analysis, they indicated teacher self-efficacy enhances instructional effectiveness through a positive learning environment, maintaining classroom management, effective student discipline practices, the establishment of a learning outcome with the support of appropriate educational resources, and the support of parents to help their children's efforts (Holzberger, Phillip, & Kuner, 2013).

Ozge Nurlu (2015) studied the perceived self-efficacy of mathematics teachers at multiple levels and found that 97% of elementary teachers had a high level of selfefficacy in teaching mathematics. The study used semi-structured interviews of teachers but was analyzed through quantitative methods and measures. Teachers' perception was that developing a positive student-teacher relationship helped students learn mathematics content. Also, teachers with high self-efficacy were compassionate which helped build a positive and productive relationship with students (Nurlu, 2015). Nurlu found some of the teachers believed in their ability to teach mathematics and felt their instruction helped students gain self-confidence in completing activities and tasks related to learning. Those teachers exhibiting low self-efficacy stated student learning was affected by how much they learned the previous year, how much work they were willing to complete at home, and if students were supported at home (Nurlu, 2015). The study also found teachers with high self-efficacy made more of an impact on teachers with low self-efficacy through collaboration and mentoring. The study was limited to the math instructional content area.

Rogers-Haverback and Mee (2015) studied middle school pre-service teachers' self-efficacy. According to Rogers-Haverback and Mee (2015), the problem was "over half of the middle-level teachers who worked in the city left their schools within the first 4 years" (p. 18). The sample consisted of a small number of participants, all in the same middle school education cohort starting a field practicum curriculum. The findings indicated that mastery learning experiences in the classroom provided an opportunity for the development of instructional self-efficacy before graduation and first teaching job (Rogers-Haverback & Mee, 2015). The researchers allowed participants to have mastery learning experiences with veteran teachers. The experience allowed pre-service teachers to become more knowledgeable in strategies that work with middle school students and developing successful strategies to meet individual needs. These learned strategies helped the pre-service teachers be prepared their first year of teaching. Findings from the study reinforced Bandura self-efficacy theory and the principle of mastery learning (Rogers-Haverback & Mee, 2015).

There are several studies related to the field of special education pertaining to teacher self-efficacy and career decisions. A study in the field of special education (Baglama & Uzunboylu, 2017) indicated that pre-service special education teachers need to be aware of trends and student needs to meet the educational needs of their students.
The study implemented the Career Decision Self-Efficacy Scale and Vocational Outcome Expectation Scale in a survey with a sample of 156 respondents. All respondents of the survey came from a sample of special education teachers. The researchers also found pre-service teachers with high self-efficacy benefited their students with special needs. Researchers recommended all teachers have more preparation and experience in the area of special education. In another study in the field of special education, teacher selfefficacy, and retention used the variables of educational levels, working hours, gender, and experience of daily contact with special education students (Nuri, Demirok, & Direktör, 2017). The results of the study showed a sufficient relationship between selfefficacy and experience in special education preparation classes. They found the selfefficacy of special education teachers was correlated to instructional efficacy and classroom management strategies.

Other studies were conducted to analyze the development of building teacher self-efficacy through professional development. Stevens, Aguiree-Munoz, Harris, Higgins, & Liu (2013) examined middle school teachers' self-efficacy growth through professional development. The researchers used a 24-item scale to assess teacher selfefficacy during professional development. They found that there was growth of selfefficacy for all teachers in the study no matter the participants' knowledge of instructional practice. Another study (Althauser, 2015), examined the impact professional development had on self-efficacy and student performance. According to Althauser (2015), "A high-quality, job embedded professional development program sustained over a two-year period did increase teachers general and personal efficacy in teaching mathematics" (pp. 221-22). The findings found correlation between teachers' general efficacy and student achievement. However, it was concluded that teacher's personal self-efficacy was not a factor directly impacting student achievement (Althauser, 2015). To increase student achievement, school districts should provide quality professional development to teachers in an organized program for growth (Althauser, 2015).

Job Satisfaction

During the 20th century, job satisfaction has been a subject of research to help industries understand the needs of a large and diverse workforce. Job satisfaction is frequently studied as a variable of organizational behavior in employees. Several job satisfaction surveys and studies have been developed over the years which commonly assess job perceptions. Hoppock (1935) first defined job satisfaction as a combination of psychological, physiological, and environmental circumstances causing an employee to be satisfied professionally (as sited in Jiang, 2005). This definition evolved by Vroom's definition which stated job satisfaction as affective alignments towards present work making up one's job (Vroom, 1964). Another famous researcher, Locke defined job satisfaction as a manifestation of excitement or emotional statement that it is a positive result of the assessment of one's job experiences (Locke, 1976). In a recently updated definition of job satisfaction it is the perception of one's job as a result of feelings and actions (Gibson, Ivancevich, & Donnelley, 1991). Paul Spector (1997) has defined job satisfaction as, "simply how people feel about their jobs and different aspects of their jobs. It is the extent to which people like or dislike their jobs" (p. 2). Conclusively, all job satisfaction definitions include how a person feels and thinks, positively or negatively, about their job. During his career, Hoppock published over 300 articles in

professional journals in the fields of industry and education (Heifer Foundation, 2018). Hoppock's original job satisfaction survey had a scaled response from which respondents detailed extreme dissatisfaction to extreme satisfaction (McNichols, Stahl, & Manley, 1978).

Not until the late 1800's was there a need for job satisfaction studies. When the world economies changed from farm producing foundations to a material producing foundation, there became a need to understand employment and employment issues (Spector, 1985). With new urban centers developing, factory-based jobs became prominent causing an influx of workers from rural to urban areas. Following Hoppock, other important researchers in the job satisfaction field included, but were not limited to, Maslow (1954); Herzberg, Mausner, & Snyderman (1959), Vroom (1964), Locke (1969), Porter and Steers (1973), and Spector (1985, 1997).

Maslow (1954), focused on the theory of the hierarchy of needs. Maslow's theory says a person must first meet their physiological needs for food, air, and water before moving to the next level of the hierarchy. Once basic physiological needs were met, a person moved to the next level of the hierarchy which was their security needs, then social needs, esteem needs, and finally to the highest level of the hierarchy, selfactualization. Once self-actualization is achieved, the person can reach their highest potential. Companies have used the lens of Maslow's hierarchy framework to improve employee motivation, performance, and job satisfaction. Maslow's hierarchy of needs is an important construct to many later job satisfaction studies.

Following up on the Maslow's hierarchy of needs theory, Herzberg & Mausner (1959) developed two categories of motivation. The first category was intrinsic

motivators, that include a sense of achievement, recognition, interesting work, advancement, and personal growth. These motivators produced a positive attitude towards the individual's work and a sense of accomplishment. The second category developed was extrinsic motivators which included, company policies, supervision, relationships, working conditions, salary, personal life, status, and job security. Extrinsic motivators, which he described as hygiene factors, were aspects surrounding the work environment and if negative, could create dissatisfaction in employees if not adequately addressed.

Victor Vroom continued research in the field of job satisfaction and followed up on Maslow workplace motivation research. Vroom (1964) defined work motivation theory, which found that job satisfaction and the probability of resignation as opposites. As a researcher, he created a job motivation hypothesis and reviewed a large body of research. Vroom's effort created order and stability to a field of study that was struggling with focused research (Tuttle & Hazel, 1974). After Vroom's review of the literature, he indicated many fields of study within job satisfaction and employee motivation needed to be addressed.

Edwin Locke (1969), defined job satisfaction and dissatisfaction in his work. Locke (1969) stated, "job satisfaction is a non-pleasurable emotional state resulting from appraisal once a job is achieving or facilitating the achievement of one's jobs values" (p. 10). He went on to describe job dissatisfaction as an un-pleasurable emotional state due to the frustration blocking one's jobs values (Locke, 1969). In addition, Locke described both satisfaction and dissatisfaction as functions of the perceived relationship between the actual job and what a person perceives their job should be (Locke, 1969). Locke described the elements of the job satisfaction appraisal process for an employee in the following manner:

- 1. How one perceives their job (p. 316)
- 2. How one perceives the implicit or explicit functions of the job (p. 317).
- 3. How one perceives value in the job (p. 317).

Locke concluded that to understand job satisfaction a researcher must know how to measure what they're studying, not just defining what they're studying (Locke, 1969). To properly conduct a job satisfaction study, the researcher must identify specific attributes and characteristics of the entity being investigated before it can be measured.

Porter and Steers (1973) surveyed groups of employees doing the same job and the attitudes they held towards their job. The researchers found that the attitudes an individual has towards a certain job are explainable when looking at that employees' group of coworkers (Porter & Steers, 1973). The study showed a link between employee attitudes and how they formed because of the organizational variables. Their findings confirmed the results from other studies on the relationship between job satisfaction and job complexity, organizational impact, motivation, and supervision. The study's conclusion found 65% of the employee attitude about their job is formed by the group of employees in the same work location.

Paul Spector (1985), developed the Job Satisfaction Survey (JSS) during his long career as a researcher and analyst in the field. The JSS survey has been used in education, public service, and nonprofit organizations to improve employee experiences at their jobs. Spector's survey gathers information on motivators such as pay, supervision, benefits, promotion, operating procedures, communication, type of work, contingent rewards, and coworkers (Spector, 1997). Spector continued to add research and analysis to the field of job satisfaction. Spector (1997), stated "Job satisfaction is simply how people feel about their jobs and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs" (p. 2). Spector provided an evaluation on research of job satisfaction and provided current researchers with tools to conduct further studies.

Job satisfaction in Education

When conducting research on teacher self-efficacy, job satisfaction becomes an important factor due to the work environment relationship. Caprara, Barbbaranelli, Borgogni, & Steca (2003) stated, "the relevance of job satisfaction for organizations and researchers, due to its impact on outcomes such as performance, turnover, and absenteeism and on individual outcomes such as commitment, health, psychological wellbeing cannot be challenged" (p. 822). A teachers' success in the classroom could impact job enjoyment and student learning. Researchers adding to the field of study in job satisfaction in education have included, but are not limited to Blackburn and Robinson (2008), Conklin & Cano (1999), Caprara et al. (2003), Klassen & Chui (2010), Epps & Foor (2015), Yildirim (2015), Skaalivik & Skaalivik (2015), Iqbal, Aziz, Farooqi, & Ali (2016), Murtedjo & Suharningsih (2016), Afshar & Doosti (2017), and Türkoglu, Cansoy, & Parlar (2017).

Conklin & Cano (1999) studied the job satisfaction and dissatisfaction of agricultural teachers in the state of Ohio. This study included more than 290 participants who taught agricultural content in Ohio schools. The researchers investigated factors of achievement, advancement, recognition, and the work of being an agriculture teacher. Although many of the participants were males, the results showed both male and female teachers were highly satisfied with their current position (Conklin & Cano, 1999). The study concluded that female agriculture teachers ranked the factor of student achievement the highest and job responsibilities the lowest, while male teachers rated recognition and job responsibility the highest and the work itself the lowest (Conklin & Cano, 1999). Male teachers ranked supervision and working conditions factors the highest categories of job dissatisfaction, while female teachers ranked policy as the highest job dissatisfaction (Conklin & Cano, 1999). For administrative officials, this study provides some insight into what motivates male and female teachers in the same field of teaching in order to build positive job satisfaction.

Caprara et al. (2003), analyzed job satisfaction as related to self and collective efficacy of over 100 junior high school teachers. The focus of the study centered around teachers perceived self-efficacy and teacher self-efficacy beliefs. The results of the study showed teachers within the same schools had the same perceptions of the work environment as their colleagues (Caprara et al., 2003). The findings also suggested a colleagues' behavior and an individual's job satisfaction were influenced by school leadership. Lastly, they concluded the effect of job satisfaction was greatly impacted by the level of teachers' self-efficacy and the collective efficacy of the building.

Blackburn and Robinson (2008) assessed teachers' self-efficacy and job satisfaction in Kentucky agricultural teachers. The findings of their research suggest that teachers with the ability to deal with classroom issues, such as student refusal to follow directions and lack of student motivation, had higher self-efficacy. They pointed to two possibilities for a teacher's higher sense of self-efficacy. One possibility discussed by the researchers stated veteran teachers have years of experience and have mastered dealing with these issues in the classroom. Another possibility by the researchers was that teachers with lower self-efficacy left the profession, leaving only experienced teachers for their sample (Blackburn & Robinson, 2008).

Klassen and Chui (2010) examined prior research related to job satisfaction. They stated prior researchers' findings on job satisfaction was a significant element in influencing attitudes and efficacy (Klassen & Chui, 2010). The researchers stated, "teachers who are dissatisfied with their work display lower commitment and had greater risk for leaving the profession" (Klassen & Chui, p. 742). The researchers discovered teachers can continue to gain personal satisfaction, even though the work environment creates job stresses. Teachers reported that they continue in the profession because of student progress and seeing students achieve at higher levels, along with collegial support and positive school climate. It was found that there was a correlation between higher jobrelated stress and lower job satisfaction (Klassen & Chui, 2010). In addition, the study referenced teacher motivation and self-efficacy improving through professional development and a willingness to learn new teaching strategies. Through a professional development program focused on individual needs of a teacher depending on career experience (Klassen & Chui, 2010). Professional development opportunities for new teachers should be directed and instructionally intensive to provide them with additional strategies to meet student needs. Mid-career teachers should have professional development geared towards expanding instructional strategies (Klassen & Chui, 2010). Late-career educators should have a professional development program that provides an opportunity for self-learning.

Epps and Foor (2015) evaluated the differences between novice and experienced agriculture teachers in the secondary classroom. They set out to describe differences in teacher self-efficacy, job satisfaction, and the relationship between the variables when analyzing the effect of teacher experience. The researchers reported that self-efficacy differences for novice and veteran teachers scores were small. However, the largest difference was in the area of instructional self-efficacy. The researcher reported that overall job satisfaction was also similar between new and experienced teachers. For the study, two instruments were used, one constructed by Berns (1990) and the second was modified from Bennett, Iverson, Rohs, Langone & Edwards (2002) to determine teachers job satisfaction (Epps & Foor, 2015). To determine the level of self-efficacy the researchers used the 24-item Sense of Efficacy Scale, developed by Tschannen-Moran and Woolfolk Hoy (2001). Major findings from the study were that the highest level of self-efficacy was found primarily for experienced teachers who returned the survey. However, both novice and experienced teachers reported high levels of job satisfaction. The researchers stated, "A quality and a well thought out mentoring program can serve to increase the pedagogical-based development of new teachers" (Epps and Foor, p.163), which is consistent with other studies. Helping with the development of classroom management strategies, instructional strategies, and student engagement techniques could also increase job satisfaction for novice teachers.

Yildirim (2015) examined self-efficacy and job satisfaction of secondary and elementary physical education teachers. The sample was made up of 306 physical education teachers between the ages of 22 and 50 years old. For the study, the Minnesota Job Satisfaction Questionnaire was adapted to measure the correlation between selfefficacy and job satisfaction. Yildirim (2015) found that physical education teachers with high self-efficacy devoted more time to the profession, had high levels of motivation, had low work absences, and met job requirements (Yildirim, 2015). He concluded that a correlation exists between self-efficacy and job satisfaction of physical education teachers which led to the enhancement of teaching performance. Yildirim (2015) stated, "performance of the teacher will go up, which will eventually end in an increased quality of the education" (p. 484). This study aligned with previous studies on job satisfaction and self-efficacy in the field of education.

Skaalivik and Skaalivik (2015) studied job satisfaction and work-related stress. This study included strategies used by teachers in Norway to cope with work-related stresses. According to the study, participants were of varying ages and in different stages of their educational careers and developed different coping strategies to deal with professional stress (Skaalivik & Skaalivik, 2015). The researchers asked teachers to describe job satisfaction and the sources of their job satisfaction. Teachers described four main reasons why they were satisfied with teaching. The reasons stated were working with children, cooperation and collaboration, the variation in the unpredictability of the workday, and the autonomy the job provided (Skaalivik & Skaalivik, 2015). The authors' conclusions indicated that all the teachers in the Norway study had high job satisfaction but also found that the job of educating students is very stressful and demanding on one's physical and mental abilities. The study provided evidence of different coping strategies among different teacher groups. Young teachers, for instance, worked hard and worked late, but said they felt weekends and vacations allowed them to recuperate (Skaalivik & Skaalivik, 2015). Teachers from the mid-career group had high

ambitions and worked long hours, but the age group did not sufficiently recover from work-related stress during vacation and weekends. Teachers in the senior group no longer worked long hours and had lowered their ambitions. They also worked less at home and used more time for personal activities (Skaalivik & Skaalivik, 2015). Research found that physical and mental stresses of the of the job made individuals consider leaving the teaching profession at some point during their career (Skaalivik & Skaalivik, 2015).

Iqbal et al. (2016) investigated the correlation between job satisfaction and student academic success in secondary schools. The study sample consisted of over 300 secondary school teachers in Pakistan who completed a job satisfaction scale survey. The researchers then compared satisfaction surveys to 9th and 10th-grade achievement scores (Iqbal et al., 2016). The researchers concluded there was a strong correlation between job satisfaction and the student's achievement test scores. The study concluded that job satisfaction of teachers correlated with working conditions, supervisor, and coworkers (Iqbal et al., 2016). Evidence shows consistencies with previous studies on job satisfaction and student achievement.

Murtedjo and Suharningsih (2016) researched the possible relationship of organizational culture, work motivation, and job satisfaction in primary schools to improve teacher performance. The sample population in the study was primary school teachers. The study research designed was to test the hypothesis of the inner-relationship between organizational culture, work motivation and job satisfaction. According to the authors, a correlation was found between organizational culture and teacher performance but no direct connection to job satisfaction (Murtedjo & Suharningsih, 2016). The researchers deduced the following conclusions and made suggestions. One conclusion of the study was no direct relationship between organizational culture and job performance, culture could be supported through improvements in teacher motivation and job satisfaction (Murtedjo & Suharningsih, 2016). Two, teacher motivation was concluded to be a factor in improving the performance of teachers. Meaningful action and goal-setting can help performance and satisfaction (Murtedjo & Suharningsih, 2016). Motivation is an intrinsic teacher quality that helps teachers preservere through negative situations. Educational leaders should have an investment in a teacher's overall job satisfaction because it will lead to teacher commitment and effectiveness in the classroom instruction (Murtedjo & Suharningsih, 2016).

Afshar and Doosti (2017) investigated job satisfaction as it pertains to English teachers at the secondary school level. The study was conducted in 35 secondary schools involving 64 English teachers participating in the survey questionnaire. The study investigated the job performance of teachers who were dissatisfied with their teaching job and reasons for the dissatisfaction. Teachers in the study believed because they were dissatisfied with the job it hindered their performance, how they perceived the profession negatively, and their willingness to leave the profession. The researchers found that teachers job performance and job satisfaction were connected (Afshar & Doosti 2017). The second part of the study defined the reasons for teachers' job dissatisfaction. The top factors for job dissatisfaction were low salaries, demanding work, having to work a second job, and receiving no praise. Other factors identified include, educational system flaws, lack of a system of teacher promotion, principal's discrimination towards teachers,

student low motivation and doing the same professional duties every day (Afshar & Doosti 2017).

Türkoglu et al. (2017) analyzed the relationship of self-efficacy to job satisfaction for a sample of teachers at the elementary, middle and high school levels. The sample consisted of 295 teachers with experience ranging from 1 to 29 years in a school district located in Istanbul. The results showed a strong correlation between job satisfaction and self-efficacy (Türkoglu et al. 2017). According to Türkoglu et al. (2017) "multiple regression analysis was conducted to reveal the predictive power of self-efficacy over job satisfaction" (p. 770). Researchers stated teacher self-efficacy was a significant predictor of job satisfaction and the results of the study could help school-based practices of hiring and retaining teachers through the building of teacher self-efficacy (Türkoglu et al. 2017). **Summary**

Chapter 2 served as a review of literature for the current study and detailed important works including Bandura's self-efficacy theory and the review of Spector's job satisfaction research. Other works presented were on self-efficacy theory, efficacy in education, job satisfaction, and job satisfaction in education. Some of the important topics discussed in Chapter 2 were Albert Bandura's self-efficacy theory and its foundation leading to the research of teacher efficacy and a review of job satisfaction research and Paul Spector's job satisfaction contributions. Chapter 3 presents the study methodology used in the collection and analysis of data related to teacher instructional efficacy and job satisfaction from four middle schools at the district under study.

Chapter 3

Methods

The purpose of this quantitative study was to determine if there was a relationship between teacher instructional self-efficacy and job satisfaction. The study was also designed to examine if there was a difference in the relationship between instructional self-efficacy and job satisfaction based on variables of years of experience, instructional content, and gender. Chapter 3 is organized into sections including research design, selection of participants, measurement, data collection, data analysis and hypothesis testing, limitations, and summary.

Research Design

For the current study, the researcher utilized a correlational research design using surveys developed from Bandura's Self-Efficacy Scale and the Spector Job Satisfaction Survey to gather data. According to Lundberg and Irby (2008), correlational research "is grounded in interactions of one variable to another; for example, as scores on one variable go up the related scores on another variable go down" (p. 35). The research for the present study was used to find the degree of relationship between the variables, but not to find the root cause of the teacher retention problem (Lundberg & Irby, 2008). Correlational studies are a rigorous type of quantitative study and this research design can be a detailed process due to the multiple variables being tested (Creswell, 2009). The current study was designed to examine the correlation of teacher instructional self-efficacy and job satisfaction and analyzing the relationship based on categorical variables of years of experience, instructional content, and gender.

Selection of Participants

The population for this study consisted of certified teachers employed in the middle schools of District XYZ. A total of 221 teachers from instructional core content areas, non-core content areas, and special education from four middle schools containing 6th, 7th, and 8th grade students were invited to participate in the study. For this study, the researcher used purposive sampling due to the availability of participants close to the research location.

Measurement

This study utilized items from two surveys, the Teacher Self-Efficacy Scale (Bandura, 2006), and the Job Satisfaction Survey (Spector, 1985). Bandura's Teacher Self-Efficacy Scale was developed to be used in the professional educator setting to determine how teachers rate their perceived self-efficacy. For the purpose of this study only the instructional self-efficacy portion of Bandura's Teacher Self-Efficacy Scale was utilized. Spector's Job Satisfaction Survey (JSS) was developed to determine factors related to an employee's satisfaction in their current job role.

The variables of teacher experience, content area and gender were measured through a Fisher's z test to determine the effect on the relationship between teacher instructional self-efficacy and job satisfaction. For this study, teacher experience was defined as years of experience in the classroom. The category was broken down in into groups of less than five years experience, six to ten years experience, eleven to twenty years experience and twenty-one plus years experience. The instructional content variable was defined as core content areas and non-core content areas. The gender variable determined the difference between female and male teachers. **Teacher Self-Efficacy Scale.** Bandura's Instrument of Teacher Self-Efficacy scale is a 28-question survey designed to understand teacher self-efficacy as related to job functions and work environment (Bandura, 1997). Permission for the use of the survey was granted under a statement of fair use through the University of Kentucky website ("Publications by Albert Bandura," 2017). The instrument can be used for scholarly research, with proper citations, and the website gives permission for downloads of documents in electronic form ("Publications by Albert Bandura," 2017). The purpose of the survey was to evaluate the level of teacher self-efficacy, specifically in the area of instruction.

The Bandura instrument focuses on the internal emotional feelings of teachers and how they feel they can change the education environment. Participants responded to the survey on a scale from 1 (cannot do at all) to 9 (highly certain can do) (see Appendix A). The original Bandura survey included a list of 28 questions on teacher self-efficacy and each participant used the same scaled response. Section 1 of the Bandura Teacher Self-Efficacy Scale requests teachers identify their perceived level of involvement in student instructional outcomes. Section 2 determines teachers perceived level of influence on students' enjoyment and desire to come to school. Subsequently, section 3 addressed the perceived influence teachers' have in securing trust of students. In continuation, section 4 identifies the perceived self-efficacy on amount of positive feedback given to other teachers on their instructional skills. Section 5 determines perceived teachers' selfefficacy as related to the level of effectiveness of administration management of the school. Next, section 6 measures the level teachers perceive they can reduce school dropout rate. Section 7 determines how teachers perceive they can help with student absenteeism. Finally, section 8 identifies the teachers' perceived self-efficacy in the ability to increase student confidence and drive to succeed in school. Each item is scored with a number between 1 and 9 and a total score for teacher instructional self-efficacy can be determined by averaging the item response. For the current study, participants were asked only to provide answers to Section 2. This section covers instructional self-efficacy to determine the participant's confidence level in the area. The score range of this section is from 9-81, the higher the score the higher the teacher's instructional self-efficacy.

According to Creswell (2009), "validity means that the researcher checks for the accuracy of the findings by employing certain procedures" (p. 190). Bandura's Teacher Self-Efficacy Scale was developed in 1977 and has been used consistently in research over the years. The original Bandura survey was administrated three times to teachers and provided consistent results to optimize its validity (Daytner, Schmitz, & Schwarzer, 1999). According to Bandura (2006), the self-efficacy scales are valid because they measure what they intend to measure. Validity should be maintained for this study because the instructional self-efficacy portion of Bandura's Teacher Efficacy Scale was used from the copyrighted scale.

Hoy & Spero (2005) evaluated the reliability for the entire Bandura's Teacher Efficacy Scale and found coefficients of reliability were .94, .95, and .92 on three administrations. Items of the scale are scored and a higher total score indicates greater efficacy in each area of the Bandura Survey (Rashidi & Moghamadam, 2014). The items used were the originally worded items from the Bandura instrument so reliability and validity established previously is sufficient for the study.

Job Satisfaction Survey. The second survey instrument used for the study was Paul Spector's Job Satisfaction Survey (JSS) (Spector, 1985). The JSS was originally developed for use in human service organizations (Spector, 1997). However, the JSS was later found to be useful in the education profession as a way to study job satisfaction of teachers (Spector, 1997). According to Spector's website, hosted by the University of South Florida, permission to use the JSS survey was granted as long as the researcher follows two conditions: one, use of the survey for noncommercial educational or research purposes. Two, the researcher must share results with the creator Paul Spector (Spector, 2011). A Likert-type scale involving ratings from 1 (disagree very much) to 6 (agree very much) is used to assess employee satisfaction in the workplace. This instrument measures nine facets of satisfaction with four items used to measure each facet. The nine facets measured by the JSS are pay, promotion, supervision, fringe benefits, contingent rewards (performance-based rewards), operating procedures (required rules and procedures), coworkers, nature of work, and communication. The JSS uses a 6-point Likert-type scale, where 1 = disagree very much, 2 = disagree moderately, 3 = disagreeslightly, 4 =agree slightly, 5 =agree moderately, and 6 =agree very much. There is no neutral option, so participants are required to choose to agree or disagree. The JSS survey can be found in Appendix B.

If a question on the JSS is worded positively, the chosen number represents the score for that question and is added together to obtain each facet score and adding the facets together for the overall job satisfaction score. If the question is worded negatively, the points are reversed (Spector, 1997, 1999). For example, if a participant answers questions 4, 6, 8, and other questions denoted in Table 6 as negatively worded items, it is

scored opposite of a positive item. If the participant answers disagree very much, which is scored 1, the response is reverse coded to a 6. Table 6 identifies the survey questions that related to each facet of job satisfaction. To score each facet of the JSS the researcher sums the responses to each of the items and then sums all facets for a total satisfaction score. See Table 6 for item numbers, facets, and reverse scored items.

Table 6

Facet	Item numbers
Pay	1, 10n 19n, 28
Promotion	2*, 11, 20, 33
Supervision	3, 12n, 21n, 30
Fringe benefits	4n, 13, 22, 29n,
Contingent rewards	5, 14n, 23n, 32n,
Operating conditions	6n, 15, 24n, 31n,
Coworkers	7, 16n, 25, 34n,
Nature of work	8n, 17, 27, 35
Communication	9, 18n, 26n, 36n,
Total satisfaction	1-36

Scoring and Reverse Scoring Alignment for the Job Satisfaction Survey

Note Adapted from "Instructions for Scoring the Job Satisfaction Survey, JSS", by P. Spector, 2011. Retrieved from http://shell.cas.usf.edu/~pspector/scales/jssscore.html.

ⁿ Negatively worded items reverse scored prior to calculation of the job satisfaction score.

Creswell (2009) stated, "reliability indicates that the researcher's approach is consistent across different researchers and different projects" (p. 190). Spector (1997) stated the JSS is a copyrighted scale. The nine sub-scales to establish reliability are related moderately to each other, internal consistency; a score of 0.06 for coworker to 0.91 for the total scale. On average 0.70 for internal consistency was obtained. According to the Van Saane, Sluiter, Verbeek, and Frings-Dresen (2003) previous research stated shows the JSS reliability. According to Astrauskaite, Vaitkevicius, & Perminas (2011) the inconsistent definition and description of job satisfaction may influence construct validity. Also, Astrauskaite et al. (2011) stated, "The instrument (JSS) provides sufficient reliability, validity and normative data measurements" (p. 44).

Data Collection Procedures

Permission to conduct the study was received through the District XYZ Department of Teaching and Learning on January 28, 2019. The Executive Director of Student Services provided a letter of authorization to conduct research within the district (see Appendix C). The next step was to receive permission from the Baker University Institutional Review Board (IRB) by a request submittal on March 1, 2019 by electronic mail. Baker University granted permission to conduct research from the IRB committee on March 19, 2019 (Appendix D). An electronic survey was established on Google Forms to facilitate data collection for the current study. The researcher collected teacher demographic data of years of experience, instructional content, and gender. All eligible middle school teachers in District XYZ were invited to complete the survey, from that group 106 volunteered to complete the survey. This electronic tool allowed for quick access for participants and ease of data collection for the researcher.

Data was collected during the 2018-2019 school year. The survey was adapted into a digital format using Google Forms to collect the data from teachers within the district in the designated survey group. The survey was available to participants over a 10-day period May 9, 2019 through May 22, 2019. The researcher sent out an email of introduction to all District XYZ middle school teachers describing the study, purpose,

and process. During this time, the researcher provided contact information to teachers if they had questions or concerns. An email was sent to the middle school teachers providing the link to Google Forms and asked for responses to be completed within five days. The survey email included an informed consent and confidentiality of information statement (see Appendix E). At the end of the collection time frame for survey completion, the researcher uploaded data into SPSS 25 for statistical analysis. The researcher looked for missing or duplicated answers provided in the same survey.

Data Analysis and Hypothesis Testing

The use of a given statistical approach depends on the capability of the procedure to address the studies research questions and hypotheses (Lunenburg & Irby, 2008). The study's hypotheses should be directly related to the research questions. Hypotheses are statements of expected results of the study (Steinberg, 2011). The research questions are stated below and followed by the hypothesis.

RQ1. To what extent is there a relationship between teacher instructional selfefficacy and teacher job satisfaction?

H1. There is a relationship between teacher instructional self-efficacy and teacher job satisfaction.

A correlation coefficient was calculated to index the strength and direction of the relationship between the two variables. When appropriate, an effect size was calculated. The calculation of the correlation used to address RQ1 indicated a moderately weak positive relationship between teacher instructional self-efficacy and teacher job satisfaction, r = .205. The hypothesis test revealed the correlation is statistically significant, p = .038, df = 101. H1 was supported. The effect size index, $r_2 = .042$, indicated that 4.2% of the variability in job satisfaction is explained by instructional selfefficacy this is considered a small effect.

RQ2. To what extent is the relationship between teacher instructional selfefficacy and teacher satisfaction affected by teacher experience?

H2. The relationship between teacher instructional self-efficacy and teacher satisfaction is affected by teacher experience.

Prior to conducting the hypothesis testing, the data was disaggregated by teacher years of experience. A sample correlation between teacher instructional self-efficacy and job satisfaction was calculated for teachers with \leq 5 years, 6-10 years, 11-20 years, and 21+ years of experience. Six Fisher's *z* tests were conducted to address RQ2. The sample correlations for teachers with \leq 5 years, 6-10 years, 11-20 years, and 21+ years of experience were compared. The level of significance was set at .05. The correlations for teachers with \leq 5 years, 11-20 years, and 21+ years of experience indicated moderately weak positive relationships between the two variables. The correlation for teachers with 6-10 years of experience indicated no relationship between the two variables. Despite these differences, the results of the Fisher's *z* tests indicated that none of the correlations that were compared were significantly different based on teacher years of experience. See Table 12 for the correlations, correlation *p*-values, Fisher's *z* values, and the Fisher's *p*-values.

RQ3. To what extent is the relationship between teacher instructional selfefficacy and teacher satisfaction affected by teacher gender?

H3. The relationship between teacher instructional self-efficacy and teacher satisfaction is affected by teacher disaggregated by gender.

Prior to conducting the hypothesis testing, the data was disaggregated by teacher gender. A sample correlation between teacher instructional self-efficacy and job satisfaction was calculated for female teachers and male teachers. The correlation for teachers identifying as female indicated a moderately weak positive and statistically significant relationship between instructional self-efficacy and job satisfaction. The correlation for teachers identifying as male indicated a no significant relationship between instructional self-efficacy and job satisfaction. A Fisher's *z* test was conducted to address RQ3. The two sample correlations were compared. Despite the difference between the two correlations, the results of the Fisher's *z* test indicated that the correlations were not significantly different between the two groups. See Table 13 for the correlations, correlation *p*-values, Fisher's *z* values, and the Fisher's *p*-values.

RQ4. To what extent is the relationship between teacher instructional selfefficacy and teacher satisfaction affect by teacher instructional content area?

H4. The relationship between teacher instructional self-efficacy and teacher satisfaction is affected by teacher disaggregated by instructional content area.

Prior to conducting the hypothesis testing, the data was disaggregated by core content. A sample correlation between teacher instructional self-efficacy and job satisfaction was calculated for teachers of core content and teachers of non-core content. A Fisher's *z* test was conducted to address RQ4. The two sample correlations were compared. The results of the Fisher's *z* test indicated that the correlation that were not significantly different between the two groups. See Table 14 for the correlations, correlation *p*-values, Fisher's *z* values, and the Fisher's *p*-values.

Limitations

According to Lunenburg and Irby (2008), "Limitations are factors that may have an effect on the interpretation of the findings or on the generalizability of the results" (p. 133). These limitations may develop in the study from the methodology, data collections, or researcher's analysis of the data (Lunenburg & Irby, 2008). The limitations for the current study were as follows:

- The small sample size because population was limited to the teachers in middle school of District XYZ. The convenience sample may not have represented the population accurately.
- External factors such as, building climate and culture, could sway teacher perception of instructional efficacy and job satisfaction that cannot be controlled in research conditions.
- The findings of this research only pertain to District XYZ.
- Some teachers had missing data on survey and were removed.
- Scope of study was intended for middle school teachers and cannot be generalized to other groups.

Summary

Chapter 3 presented the research design, selection of participants, measurement, data collection, research questions and hypothesizes being investigated by the researcher. In addition, research collection timelines were reviewed. The chapter defined the research analysis and hypothesis testing conducted. Finally, the limitations of study were discussed and defined. Results are presented in Chapter 4.

Chapter 4

Results

The purpose of this research study was to analyze the correlation between instructional self-efficacy and job satisfaction of middle school teachers. The research was conducted to determine if this relationship is effected by teacher experience, instructional content, and gender. Presented in Chapter 4 are the descriptive statistics for the sample and the results of the data analysis for each hypothesis associated with the four research questions.

Descriptive Statistics

An electronic survey was distributed to middle school teachers in District XYZ during the 2018-2019 school year. One hundred and six middle school teachers responded to the survey. For data analysis the responses from three survey participants were not used because they did not respond to several items on the survey limiting the sample to 103 total surveys. Respondents in core content had a higher return rate on the survey than non-core. However, one respondent failed to answer the question about content area. This limited data collection and the researcher used 102 respondents as noted in Table 7.

Table 7

	Frequency	
Content Area	n	%
Core	61	59.8
Non-Core	41	40.2

Frequency and Percentage by Teacher Content Area

Survey respondents were overwhelmingly female for this study. This occurred because District XYZ employs more female teachers at the middle school level. As a profession, women become teachers more than males (Mayhew, 2014). The number of respondents based on gender can be seen in Table 8.

Table 8

Frequency and Percentage by Teacher Gender

	Frequency	
Gender	n	%
Female	77	74.8
Male	26	25.2

Both in core and non-core content areas more female teachers participated in the survey. Female teachers completed the survey more than male teachers. A cross tabulation of gender and content is presented in Table 9.

Table 9

Cross Tabulation of Content Area by Gender

	Gender	
Content Area	Female	Male
Core	47	14
Non-Core	29	12

The cross tabulation of experience and gender shows that female teachers with 21+ years of experience were the majority of the survey sample. The other three experience groups were consistent when looking at female participants. However, male

teachers were consistent in all experience groups. Table 10 contains the cross tabulation between experience and gender.

Table 10

Cross Tabulation of Experience and Gender

	Gender	
Years of Experience	Female	Male
< 5	14	8
6-10	13	8
11-20	18	3
21+	35	7

The cross tabulation indicates equal number of participants of core and non-core teacher with ≤ 5 and 11 - 20 years of experience groups. In years of experience group 6-10, non-core teachers were underrepresented. However, 21+ years of experience group again shows high levels of participation for the sample, but content groups are nt similar. Table 11 includes the cross tabulation of experience and content.

Table 11

Cross Tabulation of Experience and Content Area

	Content	
Years of Experience	Core	Non-Core
< 5	11	10
6-10	16	5
11-20	10	11
21+	25	17

Hypothesis Testing

In this section, the result of the hypothesis testing addresses the four research questions used to guide this study. Research questions are followed by corresponding hypothesis statements. The testing method for each hypothesis is described with the results.

RQ1. To what extent is there a relationship between teacher instructional selfefficacy and teacher job satisfaction?

H1. There is a relationship between teacher instructional self-efficacy and teacher job satisfaction. A correlation coefficient was calculated to index the strength and direction of the relationship between the two variables. When appropriate, an effect size was calculated. The calculation of the correlation used to address RQ1 indicated a moderately weak positive relationship between teacher instructional self-efficacy and teacher job satisfaction, r = .205. The hypothesis test revealed the correlation is statistically significant, p = .038, df = 101. H1 was supported. The effect size index, $r_2 = .042$, indicated that 4.2% of the variability in job satisfaction is explained by instructional self-efficacy this is considered a small effect.

RQ2: To what extent is the relationship between teacher instructional selfefficacy and teacher job satisfaction affected by teacher experience?

H2: The relationship between teacher instructional self-efficacy and teacher job satisfaction is affected by teacher experience. Prior to conducting the hypothesis testing, the data was disaggregated by teacher years of experience. A sample correlation between teacher instructional self-efficacy and job satisfaction was calculated for teachers with \leq 5 years, 6-10 years, 11-20 years, and 21+ years of experience. Six Fisher's *z* tests were

conducted to address RQ2. The sample correlations for teachers with \leq 5 years, 6-10 years, 11-20 years, and 21+ years of experience were compared. The level of significance was set at .05. The correlations for teachers with \leq 5 years, 11-20 years, and 21+ years of experience indicated moderately weak positive relationships between the two variables. The correlation for teachers with 6-10 years of experience indicated no relationship between the two variables. Despite these differences, the results of the Fisher's *z* tests indicated that none of the correlations that were compared were significantly different based on teacher years of experience. See Table 12 for the correlations, correlation *p*-values, Fisher's *z* values, and the Fisher's *p*-values. H2 was not supported.

Table 12

Years of Experience Comparison Categories		Test Statistics	
Years Category 1, r, p, n	Years Category 2, r, p, n	Z.	р
≤ 5, .212, .343, 22	6-10,083, .726, 20	0.90	.680
	11-20, .188, .441, 19	0.07	.944
	21+, .250, .111, 42	-0.14	.443
6-10,083, .726, 20	11-20, .188, .441, 19	-0.78	.435
	21+, .250, .111, 42	-1.17	.242
11-20, .188, .441, 19	21+, .250, .111, 42	-0.22	.826

Comparison of Sample Correlations Based on Teacher Experience

RQ3: To what extent is the relationship between teacher instructional self-

efficacy and teacher satisfaction affected by teacher gender?

H3: The relationship between teacher instructional self-efficacy and teacher job satisfaction is affected by teacher gender. Prior to conducting the hypothesis testing, the data was disaggregated by teacher gender. A sample correlation between teacher

instructional self-efficacy and job satisfaction was calculated for female teachers and male teachers. The correlation for teachers identifying as female indicated a moderately weak positive and statistically significant relationship between instructional self-efficacy and job satisfaction. The correlation for teachers identifying as male indicated a non-significant relationship between instructional self-efficacy and job satisfaction. A Fisher's *z* test was conducted to address RQ3. The two sample correlations were compared. Despite the difference between the two correlations, the results of the Fisher's *z* test indicated that the correlations were not significantly different between the two groups. See Table 13 for the correlations, correlation *p*-values, Fisher's *z* values, and the Fisher's *p*-values. H3 was not supported.

Table 13

Comparison of Sample Correlations Among Teacher Gender

Gender Comparison Categories		Test Statistics	
Gender Category 1, <i>r</i> , <i>p</i> , <i>n</i> Gender Category 2, <i>r</i> , <i>p</i> , <i>n</i>		Z.	р
Male, .011, .958, 26	Female, .256, .025, 77	-1.05	.294

RQ4: To what extent is the relationship between teacher instructional selfefficacy and teacher satisfaction affect by teacher instructional content area?

H4: The relationship between teacher instructional self-efficacy and teacher job satisfaction is affected by teacher instructional content area. Prior to conducting the hypothesis testing, the data was disaggregated by core content categories. A sample correlation between teacher instructional self-efficacy and job satisfaction was calculated for teachers of core content and teachers of non-core content. A Fisher's *z* test was conducted to address RQ4. The two sample correlations were compared. The results of the Fisher's *z* test indicated that the correlation was not significantly different between

the two groups. See Table 14 for the correlations, correlation p-values, Fisher's z values, and the Fisher's p-values. H4 was not supported.

Table 14

Comparison of Sample Correlations Among Teacher Content Area

Years of Experience Comparison Categories		Test Statistics	
Content Area 1, r, p, n	Content Area 2, r, p, n	Z,	р
Core, .057, .663, 61	Non-Core, .265, .094, 41	-1.03	.303

Summary

Chapter 4 included research descriptive statistics and hypothesis testing of the current study. The results of the survey were analyzed using IBM® SPSS® Faculty Pack 25 for Windows. Research questions were addressed by a hypothesis test. Results of the hypothesis testing concluded a strong correlation between teacher instructional self-efficacy and job satisfaction. However, the Fisher's z tests concluded the variables of experience, content, and gender were non-significant. Chapter 5 presents the implications of findings, connections to the literature review and future research recommendations.

Chapter 5

Interpretation and Recommendations

One issue plaguing public schools in the United States, according to the National Center of Education Statistics (NCES, 2016), is teacher retention and mobility. NCES (2016) reported that over 250,000 teachers leave the profession every year. Research shows that teachers with high self-efficacy will be instructionally sound, attend professional development, and look for better ways of teaching and reaching student academic needs (Tschannen-Moran et al., 1998). Focusing on teacher job satisfaction could help educational leaders fight the negative outcome of poor teacher performance, turnover, absenteeism, and individual commitment to the profession (Caprara et al., 2003). Education leaders and boards of education need to understand the relationship between teacher instructional self-efficacy and job satisfaction to maintain quality certified staff. Improved instruction in the classroom is beneficial to student achievement. In turn, raising student achievement could create positive teacher instructional self-efficacy and high job satisfaction. The results of the research could contribute to the growing body of research in the areas of teacher instructional selfefficacy and job satisfaction. Chapter 5 provides a summary of findings, overview of the problem, pupose statement and research questions, review of methodology, major findings, findings related to research, conclusions, implications for action, recommendations for future research in the area of self-efficacy and job satisfaction. Chapter 5 ends with concluding remarks.

Study Summary

This study examined the relationship between teacher instructional self-efficacy and job satisfaction of middle school teachers. The study also investigated the difference in the relationship between teacher self-efficacy and job satisfaction in areas as related to teacher experience, teacher instructional content, and teacher gender. Finally, researcher notes an overview of the problem, the purpose of the study, a review of the methodology, the study's findings, conclusions, and recommendations for possible future research.

Overview of the problem. Several researchers have conducted studies on teacher self-efficacy since the original work by Albert Bandura. Multiple studies after Bandura established teacher self-efficacy as a predictor of job satisfaction (Blackburn & Robinson, 2008; Epps & Foor, 2015; Klassen & Chui, 2010; Türkoglu, 2017; Yildirim, 2015). However, these studies did not focus on middle school teachers as a sample. There is also a gap in the research regarding middle school teacher instructional self-efficacy and teacher job satisfaction. Additional research is needed to examine if a relationship exists between teacher instruction self-efficacy and job satisfaction at the middle school level. To further the research of middle school teacher instructional self-efficacy and job satisfaction future studies must expand to include larger quantitative studies. In addition, qualitative studies would further research to include teacher perspectives.

Purpose statement and research questions. The purpose of this quantitative study was to determine if a relationship exists between teacher instructional self-efficacy and job satisfaction. In addition, the study was designed to determine if categories teacher experience (0-5, 6-10, 11-15, 16-20, or 21 plus years), instructional content (core

vs. non-core courses), and teacher gender (female vs. male) at the middle school level, affect the relationship between instructional self-efficacy and job satisfaction. Four research questions were developed to address those purposes.

Review of the methodology. Using a non-experimental, quantitative research design District XYZ middle school teacher's perceptions of instructional self-efficacy and job satisfaction were collected through survey data. The sample of the study consisted of 106 middle school teachers employed by District XYZ during the 2018-2019 school year. Responses to the survey items were analyzed to address the research questions in the study.

Major findings. Findings were presented for each of the research questions. The first hypothesis test was conducted to assess the relationship between teacher instructional self-efficacy and job satisfaction. The data results show a weak positive correlation between instructional self-efficacy and job satisfaction. This data indicates that middle school teachers in District XYZ with perceived high instructional self-efficacy have positive job satisfaction. In addition, if a middle school teacher is highly satisfied with their current position, they also have high perceived instructional self-efficacy in the classroom.

The second hypothesis test was conducted to assess how the relationship between teacher instructional self-efficacy and job satisfaction is affected by teacher experience. Review of this data showed the hypothesis was not supported. Findings indicated that the relationship between instructional self-efficacy and job satisfaction is not different based on years of experience. The third hypothesis test was conducted to assess how the relationship between teacher instructional self-efficacy and job satisfaction is affected by teacher gender. Findings indicated that for female teachers there was a moderately weak positive and statistically significant correlation and no correlation for male teachers. Despite the differences between the correlations, the hypothesis test using the Fisher's z did not support the difference as statistically significant.

The fourth hypothesis test was conducted to assess how the correlation between teacher instructional self-efficacy and job satisfaction is affected by the instructional content area. An analysis of the data revealed that for both core and non-core teachers, the correlation between the two variables was not statistically significant. The Fisher's z indicated there was not a significant difference in the correlations between the two groups.

Findings Related to the Literature

The findings of this study support previous studies by Albert Bandera (1997), which found teacher self-efficacy is a predictor of longevity, and job performance. Specifically, this study supports prior research (Blackburn & Robinson, 2008; Epps & Foor, 2015; Klassen & Chui, 2010; Türkoglu, 2017; Yildirim, 2015) on the correlation between teacher self-efficacy and job satisfaction. Examined in this section are the findings of the study related to the body of literature.

In terms of Bandura's original research on self-efficacy theory, efficacy expectations determine how much effort people will invest to persevere over obstacles (Bandura, 1977). Instructional self-efficacy determines how much time teachers will devote to their students and classroom lessons (Pajaras, 1995). Developing high instructional self-efficacy also increases job satisfactions and reduces the number of teachers leaving the profession (Knobloch & Whittington, 2003; Skaalvik & Skaalvik, 2015). Teacher instructional self-efficacy influences teacher job satisfaction and how they feel about the profession.

Prior research on self-efficacy in the field of education has shown that teachers with high instructional efficacy have students who perform better academically (Goddard et al., 2004; Multon et al., 1991). However, teachers with low instructional self-efficacy believe they cannot influence students in a classroom, often spend time on non-academic skills, criticize students for failing, and make excuses for the reason a student cannot learn (Protheroe, 2008). Prior research has found it imperative to build teacher selfefficacy from the very beginning when teachers are entering the profession (Swan et al.,2011). The researchers suggested building a supportive environment for teachers through professional development, mentorship, modeled teaching opportunities, and coping strategies for job-related stress (Swan et al., 2011). Teacher self-efficacy should be built to improve students' success and connectedness to the school community (Pedota, 2015). Providing all teachers with supportive environments through collaboration, professional development, and mentorship allows teacher self-efficacy to increase (Conklin & Cano, 1999). Relevant research on instructional self-efficacy and job satisfaction have indicated a closely tied relationship of influence.

The current study findings showed a correlation between the teachers perceived instructional self-efficacy and job satisfaction. The current study also supports the previous research which indicated that teacher self-efficacy was a predictor for job satisfaction because of the correlation revealed by the data (Türkoglu et al., 2017;
Yildirim, 2015). The study expands on the Yidirum (2015) research on the self-efficacy and job satisfaction of physical education teachers to encompass all middle school teachers. Also, the current study also narrows the focus of Türkoglu (2015) study because the research sample included teachers at all levels.

The study findings on the question involving teacher years of experience as it relates to the relationship between teacher instructional self-efficacy and job satisfaction support previous research. Epps and Foor (2015) found high levels of self-efficacy in both novice and veteran teachers. However, Blackburn and Robinson (2008) found veteran agriculture teachers in Kentucky had a higher sense of self-efficacy than novice teachers with less than three years experience which the current study did not support because there was no difference between teacher experience categories. One item discussed in both studies was that many teachers with a lower self-efficacy exit the profession leaving more veteran teacher with high efficacy with a continued passion for education.

The study findings on the question involving teacher gender as it relates to the relationship between teacher instructional self-efficacy and job satisfaction supports previous research. Conklin & Cano (1999) investigated factors of job satisfaction for male and female agriculture teacher. The researchers concluded that male and female teachers had different areas they each rated to job satisfaction. Female teachers ranked the factor of student achievement the highest and job responsibilities the lowest, while male teachers rated recognition and job responsibility the highest and the work itself the lowest (Conklin & Cano, 1999). The current study indicates that for female teachers their

instructional self-efficacy and job satisfaction is strongly connected while there was no correlation for male teachers.

The study findings on the question involving teacher content area as it relates to the relationship between teacher instructional self-efficacy and job satisfaction supports previous research. This study indicated there is a difference in the correlation of instructional self-efficacy and job satisfaction when analyzing the difference between core-and non-core. As with Goddard et al., (2004) the current study concludes that more research is needed to understand the relationship between teacher instructional selfefficacy and job satisfaction.

The literature review supported the need to evaluate the teacher instructional selfefficacy of teachers. Researchers acknowledge the importance of teacher instructional self-efficacy and the impact it has on the school environment and student achievement. The literature review also supported the need to evaluate the perceptions of job satisfaction of teachers. The findings of this study supported the positive relationship between teacher instructional self-efficacy and teacher job satisfaction as was found in previous studies (Türkoglu, 2017; Yildirim, 2015).

Conclusions

In this section, conclusions drawn from the current study related to the correlation between teacher instructional self-efficacy and job satisfaction. The current study also looked at the effect teacher experience, instructional content, and gender has on the relationship. Implications for action and recommendations for future research are provided with final concluding remarks to complete this section. **Implications for action.** The current study could be used by school district leaders to understand the relationship between teacher instructional self-efficacy and job satisfaction. This study confirmed the correlation between teacher instructional selfefficacy and job satisfaction for middle school teachers. School districts leaders need to understand teacher instructional self-efficacy and overall job satisfaction. District leaders and buildings level administration should find ways to hire teachers with high instructional self-efficacy, this could improve job satisfaction and retention of teachers. District and building work environment factors are important in creating high instructional self-efficacy for teachers and needs to be studied. However, the teacher years of experience did not have an impact of instructional self-efficacy and job satisfaction so a unified and consistent support system can be implemented across the district. Finally, boards of education and supporting organizations should have the training to develop a sense of instructional self-efficacy and job satisfaction with all teachers and provide learning opportunities for school and community leaders.

Recommendations for future research. The current study evaluated the relationship between teacher instructional self-efficacy and job satisfaction. The study examined how that relationship was affected by teacher years of experience, instructional content, and gender. Due to the statistical non-significance in the category of experience, mild statistical significance for non-core content area, and a strong statistical significance for female teachers, it could be concluded that more research needs to be done in all categories as it relates to teacher instructional self-efficacy and job satisfaction. The following recommendations are made for future studies:

- It is recommended future studies include teachers from the elementary and high school level. The expansion of the study would allow researchers to gather results from the other levels of a school system.
- 2. It is recommended future studies include teachers from a larger sampling of the state level population of middle school teachers. The expansion of the study would allow researchers to gather results outside District XYZ and determine if the outcomes are comparable.
- 3. It is recommended future studies include teachers from a larger sampling from a additional states and internationally. The expansion of the study would allow researchers to gather results and determine if the outcomes are comparable.
- 4. It is recommended future studies evaluate the relationship between instructional self-efficacy and job satisfaction based on teacher gender for larger participation of male teachers. This would allow researchers to generalize the findings.
- It is recommended that future research use a qualitative or mixed-methods approach in the area of gender related to teacher instructional self-efficacy and job satisfaction. Researchers could capture teacher's perspectives on gender perception differences.
- 6. It is recommended for future studies to further disaggregate core and non-core content areas into individual subjects. By further disaggregating content areas, the researcher could analyze each content area and expand upon the current research.

- 7. It is recommended future researchers conduct research throughout the school year and see if the correlation between teacher instructional self-efficacy and job satisfaction varies over the course of the school year.
- 8. It is recommended future studies be conducted on instructional efficacy and job satisfaction of classified instructional staff. The expansion of the study would allow researchers to gather results from para-professionals and other staff providing student support.

Concluding remarks. This study examines the relationship between teacher instructional self-efficacy and job satisfaction of middle school teachers. The findings of the study offer important insight into teacher instructional self-efficacy and job satisfaction as it relates to experience, instructional content area, and gender. The findings of the study add to the body of work of previous research in the field of teacher self-efficacy and job satisfaction. The importance of understanding teachers' instructional self-efficacy and job satisfaction help administrators support teachers in the education profession

The results of this study should create an interest in school leaders to understand relationship between the level of certified staff's instructional self-efficacy and job satisfaction. An understanding of the connection between teacher self-efficacy and job satisfaction could help leaders fight attrition, poor teacher performance, and build a supportive climate. This understanding could ultimately lead to a stronger school system and higher student achievement.

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Appendices

Appendix A: Bandura Teacher Self-Efficacy Scale

BANDURA'S INSTRUMENT TEACHER SELF-EFFICACY SCALE

This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinions about each of the statements below by circling the appropriate number. Your answers will be kept strictly confidential and will not be identified by name.

Efficacy to Influence Decision making

How much can you influence the decisions that are made in the school?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influe	ence	Quite a Bit		A Great Deal

How much can you express your views freely on important school matters?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influe	nce	Quite a Bit		A Great Deal

Efficacy to Influence School Resources

How much can you do to get the instructional materials and equipment you need?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	So	me Influ	ence	Quite a Bit		A Great Deal

Instructional Self-Efficacy

How much can you do to influence the class sizes in your school?

How much can you do to get through to the most difficult students?

How much can you do to promote learning when there is lack of support from the home?

How much can you do to keep students on task on difficult assignments?

How much can you do to increase students' memory of what they have been taught in previous lessons?

How much can you do to motivate students who show low interest in schoolwork?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influ	ence	Quite a Bit		A Great Deal

How much can you do to get students to work together?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	So	me Influ	ence	Quite a Bit		A Great Deal

How much can you do to overcome the influence of adverse community conditions on students' learning?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	Se	ome Influe	ence	Quite a Bit		A Great Deal

How much can you do to get children to do their homework?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	Se	ome Influe	ence	Quite a Bit		A Great Deal

Disciplinary Self-Efficacy

How much can you do to get children to follow classroom rules?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influ	ence	Quite a Bit		A Great Deal

How much can you do to control disruptive behavior in the classroom?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influ	ence	Quite a Bit		A Great Deal

How much can you do to prevent problem behavior on the school grounds?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influ	ence	Quite a Bit	:	A Great Deal

Efficacy to Enlist Parental Involvement

How much can you do to get parents to become involved in school activities?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influe	ence	Quite a Bit		A Great Deal

How much can you assist parents in helping their children do well in school?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influe	nce	Quite a Bit		A Great Deal

How much can you do to make parents feel comfortable coming to school?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influe	nce	Quite a Bit		A Great Deal

Efficacy to Enlist Community Involvement

How much can you do to get community groups involved in working with the schools?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	Se	ome Influ	ence	Quite a Bit		A Great Deal

How much can you do to get churches involved in working with the school?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influe	ence	Quite a Bit		A Great Deal

How much can you do to get businesses involved in working with the school?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influ	ence	Quite a Bit		A Great Deal

How much can you do to get local colleges and universities involved in working with the school?

Efficacy to Create a Positive School Climate

How much can you do to make the school a safe place?

How much can you do to make students enjoy coming to school?

How much can you do to get students to trust teachers?

How much can you help other teachers with their teaching skills?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influe	nce	Quite a Bit		A Great Deal

How much can you do to enhance collaboration between teachers and the administration to make the school run effectively?

1 2 3 4 5 6 7 8 9 Nothing Very Little Some Influence Quite a Bit A Great Deal

How much can you do to reduce school dropout?

1 2 3 4 5 6 7 8 9 Nothing Very Little Some Influence Quite a Bit A Great Deal

How much can you do to reduce school absenteeism?

How much can you do to get students to believe they can do well in schoolwork?

1	2	3	4	5	6	7	8	9
Nothing		Very Little	S	ome Influ	ence	Quite a Bit		A Great Deal

Appendix B: Spector Job Satisfaction Survey (JSS)

	JOB SATISFACTION SURVEY Paul E. Spector Department of Psychology University of South Florida Copyright Paul E. Spector 1994, All rights reserved.	
	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.	Disagree very much Disagree moderately Disagree slightly Agree slightly Agree very much
1	I feel I am being paid a fair amount for the work I do.	1 2 3 4 5 6
2	There is really too little chance for promotion on my job.	1 2 3 4 5 6
3	My supervisor is quite competent in doing his/her job.	1 2 3 4 5 6
4	I am not satisfied with the benefits I receive.	1 2 3 4 5 6
5	When I do a good job, I receive the recognition for it that I should receive.	1 2 3 4 5 6
6	Many of our rules and procedures make doing a good job difficult.	1 2 3 4 5 6
7	I like the people I work with.	1 2 3 4 5 6
8	I sometimes feel my job is meaningless.	1 2 3 4 5 6
9	Communications seem good within this organization.	1 2 3 4 5 6
10	Raises are too few and far between.	1 2 3 4 5 6
11	Those who do well on the job stand a fair chance of being promoted.	1 2 3 4 5 6
12	My supervisor is unfair to me.	1 2 3 4 5 6
13	The benefits we receive are as good as most other organizations offer.	1 2 3 4 5 6
14	I do not feel that the work I do is appreciated.	1 2 3 4 5 6
15	My efforts to do a good job are seldom blocked by red tape.	1 2 3 4 5 6
16	I find I have to work harder at my job because of the incompetence of people I work with.	1 2 3 4 5 6
17	I like doing the things I do at work.	1 2 3 4 5 6
18	The goals of this organization are not clear to me.	1 2 3 4 5 6

	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT. Copyright Paul E. Spector 1994, All rights reserved.	Disagree very much	Disagree moderately				
19	I feel unappreciated by the organization when I think about what they pay me.	1	2	3	4	5	6
20	People get ahead as fast here as they do in other places.	1	2	3	4	5	6
21	My supervisor shows too little interest in the feelings of subordinates.	1	2	3	4	5	6
22	The benefit package we have is equitable.	1	2	3	4	5	6
23	There are few rewards for those who work here.	1	2	3	4	5	6
24	I have too much to do at work.	1	2	3	4	5	6
25	I enjoy my coworkers.	1	2	3	4	5	6
26	I often feel that I do not know what is going on with the organization.	1	2	3	4	5	6
27	I feel a sense of pride in doing my job.	1	2	3	4	5	6
28	I feel satisfied with my chances for salary increases.	1	2	3	4	5	6
29	There are benefits we do not have which we should have.	1	2	3	4	5	6
30	I like my supervisor.	1	2	3	4	5	6
31	I have too much paperwork.	1	2	3	4	5	6
32	I don't feel my efforts are rewarded the way they should be.	 1	2	3	4	5	6
33	I am satisfied with my chances for promotion.	1	2	3	4	5	6
34	There is too much bickering and fighting at work.	1	2	3	4	5	6
35	My job is enjoyable.	1	2	3	4	5	6
36	Work assignments are not fully explained.	1	2	3	4	5	6

Appendix C: Research Authorization



Vie!

Lawrence Public Schools 110 McDonald Dr. Lawrence, KS 60044 Office: 785-832-5000 Fax: 785-832-5017

28 January 2019

Dear Institutional Review Board of Baker University,

As chair of the Unified School District 497 (Lawrence Public Schools) Institutional Review Board, I am providing this letter granting permission to Mr. Brad Kempf to recruit, to survey, to collect data, and to perform all steps in the data collection process that involves the middle schools within Lawrence Public Schools.

Once Mr. Kempf has received permission from the University IRB to conduct his research, he will have permission to engage in her defined processes to collect data. While the USD 497 IRB widely grants research permission based on feasibility and ethical factors, building principals provide access to school buildings, personnel, and students for the researcher.

Mr. Kempf has the support of the Unified School District 497 (Lawrence Public Schools) IRB to fully pursue his research proposal with the Baker University IRB.

Respectfully,

Kevin Harrell Executive Director of Student Services USD 497 Lawrence

Appendix D: Baker University Institutional Review Board



Baker University Institutional Review Board

March 18th, 2019

Dear Brad Kempf and Verneda Edwards,

The Baker University IRB has reviewed your project application and approved this project under Expedited Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

- Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
- Notify the IRB about any new investigators not named in original application.
- When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
- If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
- If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.

Please inform this Committee or myself when this project is terminated or completed. As noted above, you must also provide IRB with an annual status report and receive approval for maintaining your status. If you have any questions, please contact me at npoell@bakeru.edu or 785.594.4582.

Sincerely,

Nathan D. Pen

Nathan Poell, MA Chair, Baker University IRB

Baker University IRB Committee Scott Crenshaw Jamin Perry, PhD Susan Rogers, PhD Joe Watson, PhD **Appendix E: Consent Form**

Dear Participant,

I am a doctoral candidate at Baker University in the Educational Leadership program. A questionnaire was created to aid in the study of job satisfaction and teacher self-efficacy to be included in data collected for my dissertation. Your participation will provide important case study insight on the topic.

There are 3 parts to this survey and should take about 20-30 minutes to complete. Participation is voluntary and responses are anonymous. The risks to your physical, emotional, professional, or financial well-being are considered minimal. Submission of the completed survey will as your informed consent to participate, that you are at least 18 years of age, and work in the school district of study.

The link below will provide more information about the study and a link to the questionnaire. (Include Link here)

This research project is overseen by the School of Professional and Graduate Studies at Baker University. If you have any questions about the research, please contact Brad Kempf at bradleyrkempf@stu.bakeru.edu or Dr. Verneda Edwards at verneda.edwards@bakeru.edu. If you would like a summary of the findings, please contact Brad Kempf at the email address above. Responses for the survey will be answered after the dissertation is complete.

Sincerely,

Brad Kempf Doctoral Candidate Baker University