

JOB SATISFACTION AND SELF-EFFICACY SCORE DIFFERENCES IN GENERAL AND
SPECIAL EDUCATION TEACHERS AS MEASURED BY THE JOB SATISFACTION
SURVEY AND TEACHERS' SENSE OF EFFICACY SCALE

by

Angela Jean Alford Carswell

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2018

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ABSTRACT

Teacher turn over has been a concern over the last 30 years in the United States. The implementation of No Child Left Behind Act in 2002 impacted the accountability of teachers. This quantitative, correlation study endeavors to determine the relationship between teacher self-efficacy and job satisfaction. Within this study, teachers of a Title I school in the largest school district in a southern state were surveyed via hard copy. The Tschannen-Moran instrument, Teachers' Sense of Efficacy Scale (2001), was used to identify three subscales: student engagement, instructional strategies, and classroom management. The Job Satisfaction Survey collected participants' general satisfaction by analyzing nine subscales resulting in one unique satisfaction score. Finding a positive correlation between self-efficacy and job satisfaction will be beneficial to resource managers and principals as they attempt to lessen teacher turnover and increase resiliency in the field.

Keywords: self-efficacy, job satisfaction, professional development, teacher, correlation

Dedication

I would like to thank God for the faith, courage and the creativity to evolve. I pray that the completion of this journey is a testament to His presence in my life. In all things God's will is supreme, loving, and propels me to the place I will prosper. He allows me to be faithful to the journey, courageous in my aspirations, and look for ways to live in God's name.

The admiration and wonder that I have in my mother, Beulah Jean Warren, means this labor of love must be dedicated to her. As much as she reminded, asked, encouraged, sought to understand, and grew in patience, I appreciate her just that much. In all ways you impact my experiences by your admiration. Your traveler's heart, spirit of ingenuity, and always being a woman of action gives me the wind beneath my wings. You breathe life into my dreams; the dreams that I had and those I have yet to imagine. You and your new partner-in-crime, Phillip. I thank both of you.

Lastly, but the greatest of these, I must thank my children, Sheridan and Devin. The crazy ways that you view life let me know that we've done a great job with you two. From a shop owner in Italy, to a trouper through Canada, you two have the love within you to achieve every good desire. I pray that we are examples to you of how to live your life with 360° awareness of the present. I am thankful to everyone in your circle; I pray that you always choose dreams that inspire, evolve and bring you peace. You two were great motivators; thank you.

As we look with gratitude on all future endeavors, I pray we dedicate our journey to enlightenment in whichever forms it takes: "It is paradoxical, yet true, to say, that the more we know, the more ignorant we become in the absolute sense, for it is only through enlightenment that we become conscious of our limitations. Precisely one of the most gratifying results of intellectual evolution is the continuous opening up of new and greater prospects", Nikola Tesla.

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List of Abbreviations

General Self-Efficacy Scale (GSES)

General Teacher Efficacy (GTE)

Gwinnett County Public Schools (GCPS)

Individual Education Plan (IEP)

Individuals with Disabilities Education (IDEA)

Job Descriptive Index (JDI)

Job Satisfaction Survey (JSS)

Minnesota Satisfaction Questionnaire (MSQ)

National Commission on Teaching and America's Future (NCTAF)

No Child Left Behind (NCLB)

Ohio State Teacher Efficacy Scale (OSTES)

Outcome Expectancy (OE)

Personal Teaching (PTE)

Posttraumatic Stress Disorder (PTSD)

Responsibility for Student Achievement (RSA)

Self-Efficacy (SELF-EFFICACY)

Socio-Economic Status (SES)

Teacher Efficacy (TE)

Teacher for America (TFA)

Teacher Sense of Efficacy Scale (TSES)

CHAPTER ONE: INTRODUCTION

Overview

A teacher's self-efficacy is determined to be related to perceptions on job demands. Past research have determined that self-efficacy and job satisfaction are related (Alessandri, Borgogni, Schaufeli, Caprara, & Consiglio, 2014; Libano, Llorens, Salanova, & Schaufeli, 2012; Simbula, Guglielmi, & Schaufeli, 2011). Therefore, this study will examine whether such relationship exists when dealing with special education teachers. This chapter provides the brief background of existing literature and theories on self-efficacy and job satisfaction. This chapter also presents the research questions, purpose statement, and the significance of the study. This chapter ends with the definition of key terms and a summary.

Background

The issue of teacher burnout has steadily increased since the implementation of the No Child Left Behind (NCLB) Act in 2002 and the Individuals with Disabilities Education (IDEA) Act of 2004 (Grissom, Nicholson-Crotty, & Harrington, 2014). Both NCLB and IDEA effectively scaled up the federal role in holding schools accountable for student outcomes (including outcomes for disadvantaged and special students) that resulted to the increase of stress among teachers (Byrd-Blake et al., 2010). However, as the stress among teachers increase it leads to the decline of their job performance and thus affecting the quality of service given to the students (Boujut, Dean, Grouselle, & Cappe, 2016; von der Embse, Sandilos, Pendergast, & Mankin, 2016).

There are two cohorts of teachers namely general education and special education teachers. General education teachers are teachers who handle students given the standard curriculum. General education teachers handle classrooms with students who are within the

normal range of academic capacity. Special education teachers on the other hand are teachers who handle students with special needs. Special education teachers are equipped to communicate and impart knowledge to students with learning or physical disabilities. In general, teachers experience burnout because of stress from day to day activities not only within the classroom but also in preparing for teaching materials. Burnout results to a decline in job performance as well as job satisfaction. Kucuksuleymanoglu (2011) compared the burnout among teachers in general education versus special education and found out that the emotional exhaustion and depersonalization of the former are significantly higher compared to the latter; more so, the personal accomplishment of the former are significantly lower than the latter. General education teachers handle bigger classes because their students are well equipped to perform tasks independently while special education teachers handle smaller classes to ensure one-to-one correspondence to the needs of their students. According to Boujutet al. (2016), class size is one of the factors that affect burnout among teachers. A smaller class size typically leads to lower burnout levels. However, class size is not related to job satisfaction of teachers.

According to Bandura's (1997) cognitive theory, a person's beliefs about their own attitudes, abilities, and cognitive skills play a major role in how a person perceives and behaves in different situations. Self-efficacy is essential as it shapes a person's goals, behaviors, actions, and their influences by the conditions of the environment (Aldridge & Fraser, 2016; Klassen & Chiu, 2010; Sahertian & Soetjipto, 2011). Williams (2010) asserted that self-efficacy – defined as perceived capability to perform a behavior – causally influences outcomes of behavior, but not vice versa. For instance, in order to expect improvement on teacher and student outcomes, former's self-efficacy must be strong and must possess continuous improvement. This indicates that the professional development of teacher should work towards in enriching the teacher-

student relationship or work engagement and later on job satisfaction through improving the curriculum being taught and teaching strategies (Klassen, Yerdelen, & Durkson, 2013).

Self-efficacy is a concept derived from social cognitive theory and was first proposed by Bandura (1977). Self-efficacy is defined as a person's belief in his or her ability to complete a task or reach a specific goal (Bandura, 2006). Self-efficacy has three dimensions: magnitude, strength, and generality (Lunnenberg, 2011). Magnitude refers to the perceived degree of task difficulty. Strength refers to the conviction or level of belief that an individual can accomplish objectives. Lastly, generality refers to the degree to which this belief in oneself can apply to different situations.

Self-efficacy influences behavior and job performance in three ways (Bandura, 2006). First, the goals that employees choose to adopt are influenced by self-efficacy. The level of goal setting corresponds to the level of self-efficacy. This level shows that higher goals correspond with higher self-efficacy. Second, self-efficacy influences learning and the level of effort an individual exerts; a person uses more effort and acquires more skills as the level of self-efficacy increases. Finally, self-efficacy influences the persistence with which an individual attempts and completes new and more difficult tasks. Employees with high levels of self-efficacy possess more confidence in their abilities and are more likely to progress towards goal completion when confronted with adverse conditions. Because of the relevance of self-efficacy to job performance albeit job satisfaction, it is important to identify situations, or processes in which employee self-efficacy can be developed.

Individuals high in self-efficacy are known to place high levels of energy and satisfaction in their work ethic (Klassen, Yerdelen, & Durkson, 2013). This leads to positive effects, and they display longer work engagement and higher job satisfaction in their task. Along with this comes

a self-motivating mechanism that helps mobilize efforts and persist overtime. According to Li, Wang, Gao, and You (2015), the association between proactive personality and teacher's job satisfaction can be partially mediated by self-efficacy. Along with self-efficacy will come the many stressors associated with work burnout as an important marker of employee mental well-being.

Teacher burnout is described as a syndrome that entails exhaustion and cynicism such as disengagement. In a sense a teacher will switch off from the demands of work, which in turn causes the students to suffer academically (Shen et al., 2015). The challenges associated with teacher self-efficacy and job satisfaction can be many if the teacher is not comfortable in their teaching environment. The challenges of teachers also vary based on the population of students they teach. Teachers are generally classified into two groups: general and special education teachers. General education teachers are focused on teaching students who are within normal physical and cognitive conditions while special education teachers are focused on teaching students with physical or cognitive needs. Special education teachers receive additional training to specifically handle the different needs of their students (Sarıçam & Sakız, 2014). General education teachers also face a wide range of students with different behaviors and personalities (Fackler & Malmberg, 2016). On the other hand, in terms of job satisfaction, general and special education also have different sources of satisfaction. Satisfaction may be based on their relationship with their students as well as their colleagues or it may be based on rewards such as compensation and awards (Boujut et al., 2016). While both general and special education teachers find satisfaction upon knowing the difference they have made in the lives of their students, special education teachers tend to be more attached to their students (Guo, Dynia, Pelatti, & Justice, 2014).

Over the last few decades, Beverborg, Slegers, Endedijk, and Van Veen (2015), believe self-efficacy has been identified as a crucial component of educational reform, effective teaching and teacher attitude. Research has also shown that teachers' satisfaction in their job contributes to the improvement of instructional practices and thus academic achievement of students (Beverborg et al., 2015). Past research indicated teachers with low self-efficacy tend to have lower job satisfaction and thus produces lower student outcomes (Fackler & Malmberg, 2016; Shen et al., 2015). Therefore, development programs should focus on helping general education teachers and special education teachers increase self-efficacy in order to improve job satisfaction, which will have an impact on academic achievement of students. This indicates that in order to increase student outcomes, self-efficacy of teachers must also be increased which will then affect their job satisfaction.

Problem Statement

The problem is that there is no study on examining the difference in the relationship of self-efficacy and job satisfaction between general and special education teachers. Teacher self-efficacy influences student outcomes (Kelm & McIntosh, 2012; Kilday, Lenser, & Miller, 2016; Mintzes, Marcum, Messerschmidt-Yates, & Mark, 2013). However, it has been observed that self-efficacy is declining among teachers especially in special education teachers (Guo, Dynia, Pelatti, & Justice, 2014; Sarıçam & Sakız, 2014). Self-efficacy is a critical factor that determines the goal-oriented behaviors and perceptions of an individual towards a task (Bandura, 1997). A teacher's self-efficacy may influence how job demands such as work responsibility, work pressure, and job satisfaction are perceived. Given that past research indicates self-efficacy and job satisfaction are related (Alessandri, Borgogni, Schaufeli, Caprara, & Consiglio, 2014; Libano, Llorens, Salanova, & Schaufeli, 2012; Simbula, Guglielmi, & Schaufeli, 2011), there is

a possibility that such relationship exists when dealing with special education teachers. Several studies have been conducted that focus on special education teachers teaching students with special needs but few that focus on students diagnosed with specific conditions such as autism spectrum disorder (Ruble, Toland, Birdwhistell, McGrew, & Usher, 2013), attention-deficit/hyperactivity disorder (ADHD; Martin, 2014), or blindness (Hartmann, 2012). The education of special students identified with the aforementioned conditions is affected not only by social thinking but also executive thinking. These challenges affect the performance of student in the classroom, and subsequently entail the need for special education teachers to provide more attention, which may be demanding at most times (Carnahan, Williamson, & Christman, 2011; Ricketts, 2011; Whalon & Hart, 2011). Therefore, it is critical to examine the difference in the relationship of self-efficacy and job satisfaction between general and special education teachers in order to develop appropriate programs to enhance self-efficacy and job satisfaction. Specifically, this study will focus on how self-efficacy affects job satisfaction among special education teachers who teach students diagnosed with specific conditions such as autism spectrum disorder, ADHD, or blindness to expand existing literature on self-efficacy and job satisfaction of teachers.

Purpose Statement

The purpose of this quantitative correlational study is to examine the difference in the relationship of job satisfaction and self-efficacy between general and special education teachers in a southeastern school district in the United States. The variables under study are job satisfaction and self-efficacy. Job satisfaction will be measured through Spector's (1985) Job Satisfaction Survey while self-efficacy will be measured using Tschannen-Moran and Hoy's (2001) Teachers' Sense of Self-Efficacy survey. Specifically, self-efficacy will be measured

according to three constructs and these are: student engagement, instructional strategy, and classroom management. The target population for this study will be general and special education teachers within a southeastern school district in the United States. There are 72 general education teachers, 18 in each of the 4 content areas of Language Arts, Math, Science and Social Studies, and 20 special education teachers in the target southeastern school district. However, at least 128 teachers are necessary to achieve a power of 80% as determined through the sample size calculation in G*Power. Specifically, at least 64 general education and 64 special education teachers are suggested for the study (Gall et al., 2010). A convenience sampling technique will be used to gather participants for the study. If insufficient number of samples is available, a post hoc power analysis will be conducted to determine the post hoc power considered in the study. Participants will be asked to respond to a survey questionnaire to gather data for the variables considered in the study. The data will be analyzed using descriptive and inferential statistics such as correlation analysis and independent samples t-test. A significance level of .05 will be used for all analyses. The findings of the study will be able to determine differences between the relationship of self-efficacy and job satisfaction of general and special education teachers.

Significance of the Study

This study will add to the growing consensus of knowledge regarding self-efficacy and work engagement skills as well as job satisfaction of teachers. Measuring teachers' sense of self-efficacy in an education setting where the achievement outcomes of students are often times linked to how teachers teach and communicate with the students as well as how teachers are satisfied with their job can be challenging (Lee, Cawthon, & Dawson, 2013; Mahasneh, 2016; Vieluf, Kunter, & Vijver, 2013). Therefore, knowing how teachers' satisfaction affects their self-efficacy in performing their job is of utmost importance (Timms & Brough, 2013). This study

will empirically address the hypothesis that teachers' job satisfaction is significantly related to teachers' self-efficacy in terms of student engagement, instructional strategy, and classroom management.

The findings of this study may also lay the groundwork for further research on satisfaction and self-efficacy with a focus on special education teachers who handle students diagnosed with special needs, a cohort which is often neglected (Carnahan et al., 2011; Ricketts, 2011; Whalon & Hart, 2011). Further, the findings of this study may provide ideas for other researchers to explore the relationship between satisfaction and self-efficacy of special education teachers handling students with other specific condition such as down syndrome (Dolva Gustavsson, Borell, & Hemmingsson, 2011), attention-deficit/hyperactivity disorder (Martin, 2014), and blindness (Hartmann, 2012) among others, as each condition requires different attention and needs thus might affect the satisfaction and self-efficacy of teachers. Lastly, the findings of this study may provide assistance to educational administrators in two ways: (a) offer a better understanding of how the different constructs of self-efficacy, that is classroom management, instructional strategies, and student engagement, relates to job satisfaction and (b) use the insights derived from this study to develop guidelines and protocols to help teachers achieve the right level of self-efficacy to maintain a high level of job satisfaction. Research has shown that self-efficacy is related to job satisfaction in general (Lee, Cawthon, & Dawson, 2013; Mahasneh, 2016; Vieluf, Kunter, & Vijver, 2013). However, the difference in the relationship of self-efficacy and job satisfaction between general and special education teachers is continued to be unexplored (Carnahan et al., 2011). If learning communities continue to ignore the potential difference between the two cohorts of teacher, then teacher development programs may continue to neglect specific needs of special education teachers.

Research Questions

The following are the research questions help in addressing the objective of this study:

RQ1: Is there a difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in student engagement, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers?

RQ2: Is there a difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in instructional strategy, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers?

RQ3: Is there a difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in classroom management, as measured through Teachers' Sense of Efficacy Scale, between general education and special education teachers?

Null Hypotheses

The following are the null hypotheses associated to each of the aforementioned research question:

H₀₁: There is no significant difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in student engagement, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers.

H₀₂: There is no significant difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in instructional strategy, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers.

H₀₃: There is no significant difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in classroom management, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers.

Definitions

Burnout. Fatigue, frustration, or apathy resulting from prolonged stress, overwork, or intense activity (Freudenberger, 1974).

Classroom management. Refers to the wide variety of skills and techniques that teachers use to keep students organized, orderly, focused, attentive, on task, and academically productive during a class (Tschannen-Moran & Hoy, 2001).

Instructional strategies. Range of techniques or methods that a teacher can adopt to meet various learning objectives of the education institutions, the teacher themselves, and the students (Tschannen-Moran & Hoy, 2001).

Job satisfaction. Refers to the extent to which employees exhibit a positive orientation toward their jobs (Huang, You, & Tsai, 2012).

Self-efficacy. Refers to the perception and confidence in an individual's cognitive abilities, resolution paths, motivations, and capacity to affectively resolve problems (Bandura, 1993).

Student engagement. Refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education (Tschannen-Moran & Hoy, 2001).

Summary

Teacher self-efficacy influences student outcomes (Kelm & McIntosh, 2012; Kilday, Lenser, & Miller, 2016; Mintzes, Marcum, Messerschmidt-Yates, & Mark, 2013). However, it has been observed that self-efficacy is declining among teachers especially in special education teachers (Guo, Dynia, Pelatti, & Justice, 2014; Sarıçam & Sakız, 2014). Self-efficacy is a critical factor that determines the goal-oriented behaviors and perceptions of an individual towards a task (Bandura, 1997). A teacher's self-efficacy may influence how job demands such as work responsibility, work pressure, and job satisfaction are perceived. Given that past research indicates self-efficacy and job satisfaction are related (Alessandri, Borgogni, Schaufeli, Caprara, & Consiglio, 2014; Libano, Llorens, Salanova, & Schaufeli, 2012; Simbula, Guglielmi, & Schaufeli, 2011), there is a possibility that such relationship exists when dealing with special education teachers. The problem is that there is no study on examining the difference in the relationship of self-efficacy and job satisfaction between general and special education teachers.

The purpose of this quantitative correlational study is to examine the difference in the relationship of job satisfaction and self-efficacy between general and special education teachers in a southeastern school district in the United States. This study will empirically address the hypothesis that teachers' job satisfaction is significantly related to teachers' self-efficacy in terms of student engagement, instructional strategy, and classroom management. The findings of this study may also lay the groundwork for further research on satisfaction and self-efficacy with a focus on special education teachers who handle students diagnosed with special needs, a cohort which is often neglected (Carnahan et al., 2011; Ricketts, 2011; Whalon & Hart, 2011).

CHAPTER 2: LITERATURE REVIEW

Overview

The social learning theory proposed by Bandura (1997) developed into the theory of self-efficacy (SE). One can better focus on tasks with higher levels of self-regulation, and therefore self-efficacy, through the ability to achieve incremental and consistent growth. Consequently, those who respond favorably to trauma and persist past feelings of helplessness and fear successfully have higher levels of self-efficacy by applying more effective self-regulation in their reactions (Benight & Bandura, 2004). The remainder of Chapter Two is divided into three sections: Theoretical Framework, Literature Review of Teacher Self-Efficacy and Job Satisfaction, and Summary. The theoretical framework identified that metacognitive awareness is an epistemological view that facilitates the potential to improve “self-efficacy perceptions”. The literature review asserts that the intrinsic motivation is much higher in those with elevated self-efficacy, allowing a slower depletion of effort, extended perseverance, and quicker recovery when confronted with disappointments. The literature review summarized relevant research of facets and factors that pertain to job satisfaction. Furthermore, the summary section follows to concisely summarize the framework and literature review. Although the theory of self-efficacy impacts pre-service through veterans, adding to the research regarding the relationship between it and job satisfaction yields pathways to teacher persistence in the field.

Theoretical Framework

Epistemology is the study of knowledge and its development. In the beginnings of the pursuit for truth, Plato, in 400 B.C.E., proposed that only a student can discover truth, although a teacher is the conduit through which the student is led. That dialogue and a democratic process of discovery will preclude individual critical inspection of values and internal truths (Guttek,

2011). A postmodern application of the epistemology defines truth as an open-ended endeavor that is relative to an individual's worldview.

As late as 2008, researchers sought correlations between self-efficacy, epistemological beliefs, and epistemological world views. Yilmaz-Tuzun and Topcu (2008) conducted a multiple regression study to predict the factors that significantly influence the Schommer Epistemological Questionnaire given to pre-service science teachers. Results showed that self-efficacy, epistemological worldview, and outcome expectancy are predictor variables that significantly contributed to the Innate Ability scores of the survey. Innate ability in teachers correlated to their instruction in teachers who (a) believe student achievement is flexible, (b) believe that they are good teachers, (c) believe their students will do well, and (d) assert a relativist view that student-centered methods work best. In the multi-variant study, Yilmaz-Tuzun and Topcu (2008) noted that in-service teachers' beliefs of their teaching practices were significantly influenced by their self-efficacy scores.

Metacognition, as an information processing theory, analyzes a learner's awareness of self-thought. According to Richard Breeding (2008), metacognitive awareness precedes understanding of an individual's environment, and an individual's relative place within environmental context, and facilitates the potential to improve what Breeding refers to as self-efficacy perceptions. Self-efficacy perceptions are strengthened by: mastery experiences, understanding an individual's proximity to opportunities, positive efficacy expectations, and positive internal locus of control. In a task-associated study, self-efficacy is a stronger predictor in novice divers than past performance (Feltz, Chow, & Hepler, 2008). The application of metacognition in the career sphere was studied by Feltz, Chow, and Hepler (2008), as well as Breeding (2008). In a cognitive study performed by career rehabilitation counselors, instructional

activities enhanced self-understanding of current job opportunities, thereby promoting heightened feelings of self-efficacy in self-directed and counselor-assisted career activities (Feltz, Chow, & Hepler, 2008). Breeding (2008) noted that by utilizing intake assessments, career counseling, placement matrix, planning, and following strategies, job-seekers are self-aware of their skills in relation to job opportunities, therefore boosting their positive self-efficacy and subsequently increasing self-deterministic behavior. From these studies, it can be inferred that metacognition can be facilitated by such activities, whether self-done or counselor-assisted.

Albert Bandura, social learning psychologist, qualified concepts such as vicarious reinforcement, mimicry learning by observing others and observational learning, realizations through external agencies. The melding of ongoing social cognitive theory ideas created the concept of self-efficacy. As defined by Miller (2011), self-efficacy is “people’s perception of their competence in dealing with their environment and exercising influence over events that affect their lives” (p. 243). In Bandura’s text, (as cited by Miller, 2011), a formal definition of self-efficacy is a “belief in one’s capabilities to organize and execute the courses of action required to produce given attainments (p. 243).

The concept of self-efficacy is based on self-regulation strategies that are exhibited. Bandura (1997) included a subsection that noted the impact of self-efficacy. Cognitively, an individual is capable of focusing on reaching the successful goal in lieu of concentrating on social or skill-based deficiencies. High intrinsic motivation allows for a slower depletion of effort, extended perseverance, and quicker recovery when confronted with disappointments. Self-regulation yields emotional benefits through the perception of lessened threat levels, more confident responses, and the regulation of self-debilitating thoughts. It then follows that people experience more success through self-regulation. These efficacious individuals socially

encounter more people who model success, learn to position events for success, and are adaptive in interpreting and mitigating the onset of frustration and/or fatigue.

On the other hand, those who have not adequately acquired self-efficacious habits, in a psycho-social realm, have little defense against the iterative cycle of depressive thoughts, weakened hopes, and social withdrawal that leads to chronic stress (Bandura, 1997). Dwelling on perceived shortcomings, and attributing those to intrinsic failures, hinders recovery and has consequences in an individual's psychological self-treatment in three areas, as documented by Bandura. Bandura (1997) found that when facing phobias, "a perceived lack of coping efficacy breeds anxiety, not the other way around" (p. 3). When assessing addicts in alcohol and drug recovery, professionals can predict recovery and relapse rates based on perceived self-regulation, thus self-efficacy. The subjects who have little confidence in their functioning tend to relapse sooner, and have a more difficult time retooling and recommitting (Majer et al., 2015).

How a person responds to an inconsistency between internal precepts and perceived negative feedback leads to negative discrepancy. The results of negative discrepancies can either motivate and uplift, or de-motivate and depress. In 1996, Bandura exposed the dichotomy of these positive and negative responses. Bandura noted that people who elicit positive responses have proactive control and reactive control strategies regarding perceived and real stressors. These strategies offer self-directed regulation of positive responses: standards-based value system, realistic assessment of personal efficacy towards the standards, expected achievement and failure outcomes, and tailor affective responses to situations. Bandura (1996) showed that these efforts "create satisfaction and intrinsic interest through sub-goal attainments, and promote performance accomplishments" (p. 23). Ultimately, the person who relies on self-regulation strategies achieves repeated growth and successes in the sub-goals that scaffold positive self-

efficacy; in the long-term, self-regulation strategies increase towards a vision and its attainment.

The concepts of self-efficacy are shown in individuals with posttraumatic life events and those with a propensity to face adverse work conditions. Benight and Bandura (2004) determined that Posttraumatic Stress Disorder (PTSD) can be a debilitating diagnosis for those who have undergone “intense fear, helplessness, or horror” as a result of natural or environmental situations that are uncontrollable, unpredictable, and perceived to precede peril (p. 1130). In situations of rape, combat, terroristic episodes, criminal assaults, and the like, recovery hinges on an individual’s ability to gain incremental control while engrossed in the aftermath of the catastrophe. Benight and Bandura (2004) noted that people who had a strong sense of self-efficacy prior to the incident were able to rebound more quickly due to their responses to potential threats, particularly not dwelling on them and reacting to them less, as well as better managing their behavior toward these threats.

In a study of mathematics students’ sense of efficacy, similar findings were reported. The ability to complete mathematics goals was less impactful as a predictor of student attitudes; instead, the perception of positive self-efficacy most accurately predicted student attitude toward the expected skills. Those who believed in their efficacy to gain control of the environment proved to respond with novel ideas and persist at them (Bandura, 1993). Contrarily, a decline in efficacy, facilitated by comparison with others in a group, exhibited increases in erratic thinking and hindered result attainment. Acknowledging incremental gains increased “perceived self-efficacy, aspirations, efficient analytic thinking, self-satisfaction, and performance accomplishments” (Bandura, 1993, p. 125). In traumatic and stressful learning conditions, people are reduced to relying on basic perceptions of self-efficacy as a springboard. By building positive experiences through those strategies that matter most, they are engendered with stronger feelings

of efficacy and empowered to sustain increases until mastery and control is gained. Overall, the cited studies have demonstrated self-efficacy as applied to different individuals in different situations. Altogether, they confirm the power of self-efficacy in the achievement of their goals, whether they are mental or behavioral, and in the reduction of negative responses to setbacks and failures.

Those who have positive self-efficacy respond logically, optimistically, engaging appropriate resources, set goals and persist to realization. In systems of government, business, academia, team dynamics, and community, research has been done with regards to the form of social-cognitive theory related to collectivism. The transference of individual efficacy upon collective efficacy is also a phenomenon researched by psychologist Albert Bandura. Collective efficacy, as defined by Patricia Miller (2011), is the belief that through shared response the group will empower individuals to affect positive change within their sphere of influence and emanate outwards to impact cognitive efforts in society.

Collective-efficacy, as with self-efficacy, inhabits the mind of the individual group members. However, collective-efficacy corresponds with the creation of, and interaction with social systems that result in positive attainment of goals or negative surrendering of efforts. Individuals, operating as a collective, act upon the social system and react to the social system in much the same way as they would initiate action and reflect upon actions as an individual. Bandura's findings, when eleven studies were considered regarding collective-efficacy, showed that there was a positive correlation in positive collective efficacy and participant motivation, persistency, and goal-oriented accomplishments (Bandura, 2000).

Similar to its contributions to research literature on various populations, Bandura's concept of self-efficacy has driven research on educational professions in new directions over the

years. About four decades worth of research has continually confirmed self-efficacy as a key factor that helps teachers progress in their careers by positively influencing a number of job aspects including psychological wellbeing, job satisfaction, job commitment (Chesnut & Burley, 2015), classroom effectiveness (Sandholtz & Ringstaff, 2014), and student achievement (Goddard et al., 2015; Zee & Koomen, 2016), and by reducing a number of negative job aspects such as job burnout (Aloe, Amo, & Shanahan, 2014). Self-efficacy allows teachers to better adjust to new environments and new instructional practices, as found in Celik and Yesilyurt's (2013) study on the relationship between teacher self-efficacy and computer anxiety in relation to adjusting to computer supported education. Moreover, it provides teachers with a greater sense of autonomy to explore new potentially effective instructional practices and with the confidence to teach according to their personal values and ideas (Skaalvik & Skaalvik, 2014).

Self-efficacy provides teachers with the ability to try to compensate for their needs when they are not adequately satisfied by the school (Holzberger, Philipp, & Kunter, 2014). Nevertheless, while self-efficacy is typically thought of as an intrinsic characteristic, there is evidence that it is also significantly affected by extrinsic factors. For teachers, especially, researchers have found that school climate plays a major role in teachers' self-efficacy (Zee & Koomen, 2016); specifically instructional support from mentors and school leaders such as the principal (Aldridge & Fraser, 2016). Tschannen-Moran and Hoy (2007) found this to be accurate regardless of whether the teacher had little or plenty of experience, while Moulding et al. (2014) found this consistent result from schools in urban, sub-urban, and rural areas.

Related Literature

Effects of Self-Efficacy

Researcher has presented a discussion on how self-efficacy is built and the ensuing

results of such growth:

Self-efficacy beliefs are viewed as the conscious reflection of an implicit process of self-motivation that occurs as a response to the perception of increased demands. A positive rate of change in self-efficacy beliefs, rather than a steady state of self-efficacy, indicates self-motivation and is associated with positive motivational consequences. (Bledow, 2012, para. 1)

Bledow (2012) discussed the components of the effect of self-efficacy on individuals. He explained that the effect can be both positive and negative depending on how the individual ends up dealing with the connections between self-motivation. The researcher also acknowledged that the roles played by self-efficacy are dynamic and require complex study in order to determine how best to increase the effect on careers such as education. According to Bledow (2012), there are external factors on the effect of self-efficacy as well as subconscious influences; “A dynamic response to demanding situations rather than a static belief is the source of the motivational benefits associated with self-efficacy” (p. 16). This indicates that the self-motivation and expertise to respond in this way has an encouraging effect for heightened self-efficacy.

Through a variety of studies, self-efficacy has been proven to increase as confidence grows. In some studies, the discussion on connections to self-efficacy differentiates the factors related to self-motivation. Bledow (2012) noted a difference between self-motivation and Bandura’s definition of self-efficacy, in that self-motivation pertains to a self-initiated mobilization of cognitive and behavioral resources while self-efficacy pertains to an individual’s beliefs in one’s capabilities. As responsibilities and demands increase for individuals, the effect on their level of self-efficacy may increase or decrease depending on their degree of functionality and self-motivation. Beck and Schmidt’s (2013) findings supported those of Bledow (2012),

stating that there are positive and negative relationships between self-efficacy and resource allocation, and thus “natural fluctuations” in degrees of self-efficacy depending on the situation (para. 1). Overall, these components influence how workers succeed in the workplace.

Dalal, Bhawe, and Fiset (2013) agreed that job performance is not static; rather, it is dynamic, as there are important relationships between what is known as “within-person and between-person” dynamics related to self-efficacy. Within-person relates to one’s internal dialogue, while between-person relates to external relationships. These researchers addressed varying environments in which individuals may flourish or falter depending on the conditions present and demands that influence negative or positive reactions to individual responses. Dalal et al. (2013) presented alternative understandings of how job performance and job performers are distinctively different. Implications of their research include the notion that there are physical and emotional influences that create fluctuations in performances, as well as in performer attitudes and accomplishments. Dalal et al. (2013) hinted that the positive performance evident in relationships between personnel positively impacts the performance of the original individual, as opposed to growth of an individual through a between-person experience that increases performance.

Dalal et al. (2013) noted that both Albert Bandura’s and Jeffrey Vancouver’s theories conclude that self-efficacy has a positive impact directly related to goals. Overall, the interpretation holds that Vancouver’s theory enriches Bandura’s social cognitive theory even though Bandura’s theory delineates the positive and Vancouver’s theory emphasizes the “null” and “negative” (para. 10). Vancouver (2012) posits that incorrectly measuring self-efficacy can result in ineffective resource allocation or, indirectly, the positive attainment of challenging goals in any area of life. “Individuals would estimate greater need when those (self-efficacy) beliefs

were relatively low, creating a negative relationship between self-efficacy and effort . . . Indeed, I suspect that this anticipatory estimate of need is why self-efficacy positively relates to the adoption of goals” (Vancouver, 2012, p. 469).

In a meta-analysis of longitudinal, within-person change, researchers Dalal et al. (2013) delineated the benefits of the approach on job performance. First, directly observable signs persist when self-efficacy and performance are factors of change. Theories presented in meta-analysis research support changing signs of within-person results. Also, “The within-person happiness–productivity relationships obtained by Fisher (2003) were indeed stronger than not only the between-person relationships obtained in the same study, but also the meta-analytic between-person satisfaction–performance relationship” (Dalal et al., 2013). Lastly, the rate of improvement decreases as the length of employment increases. Although within-person change is not self-efficacy, research by Beattie, Fakehy and Woodman (2014) assert that within-person performance results decrease significantly over time, and “self-efficacy magnitude, not strength, had a significant and positive relationship with subsequent performance improvement” (p. 608). As researchers have revealed, self-efficacy has many dynamics that are influenced by a variety of daily components including (a) environmental influences; (b) goal setting and fulfillment; (c) daily, weekly, and even yearly influences and changes; (d) mood in and out of the workplace; as well as (e) management needs and contributions (Dalal et al., 2013).

Teacher Self-Efficacy

Research has been conducted surrounding self-efficacy in the context of education. More research has occurred with regards to the impact of professional development and its effect on teacher efficacy and student achievement. In a study by John Ross and Catherine Bruce (2007) including the development of mathematics, researchers associated the instruction provided

through professional development with its action as a catalyst for effective teaching. The researchers provided the framework for diligent application of strategies and masterful experiences. The novel standards-based strategies that were the focus of the study required that teachers divert from traditional delivery methods and adapt ones whereby students explored content from a conceptual vantage point, teachers relinquished total control of the classroom agenda and in-time variations of the lesson, and encouraged students to accept greater responsibility for learning, thereby diminishing the teacher as the primary subject matter expert.

Results from the study conducted by Ross and Bruce reported that there were increases in all treatment group variables; however, the classroom management subgroup reflected statistically significant results. The researchers suspected that increases in teacher self-efficacy sparked student engagement with content, encouraged student efficacy, and resulted in better classroom management practices (Ross & Bruce, 2007).

The flow chart, Figure 1, indicates the effect of self-efficacy on student learning depicts the relationships.

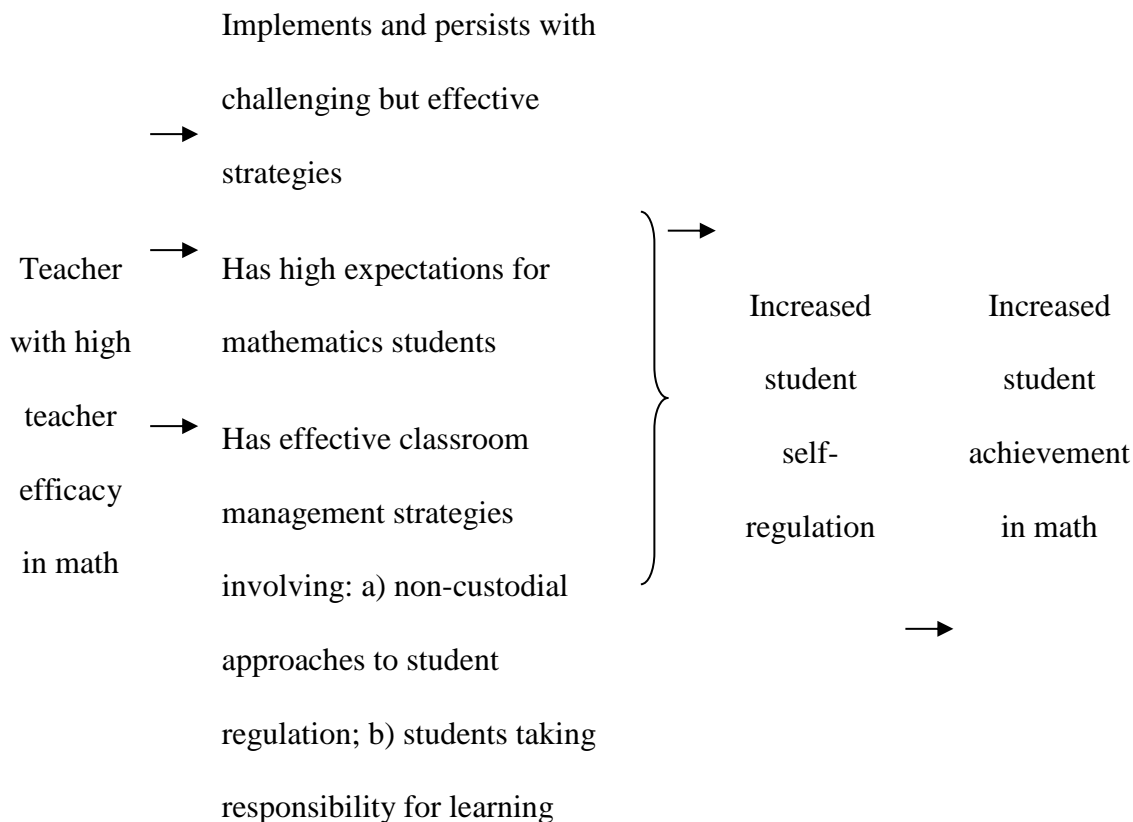


Figure 1. The relationship between teacher efficacy and student achievement. (Bruce, Esmonde, Ross, Dookie, & Beatty, 2010, p. 3).

Enhancing teacher self-efficacy. Despite the focus of self-efficacy on self-perceptions, research findings also emphasize that self-efficacy can be improved in a teacher through the help of external intervention and interactions with others. Researchers have continually suggested that support and constructive interventions for self-efficacy can be beneficial for teachers. Tindall and Culhane (2014) recommended that pre-service programs provide information on the importance of self-efficacy in order to improve how educators succeed in increasing student achievement. Walan and Rundgren (2014) also addressed the need for teacher training through professional development on self-efficacy components. The outcome of this study, which involved 71 preschool through elementary grade teachers, showed self-efficacy with science curriculum based on a PROFILES instrument that was condensed from 50 items to 13 for

primary grade teachers, and 16 for pre-school teachers. Addressing self-efficacy in content and pedagogical knowledge areas contributed to preventing low self-esteem in teachers and also increased individual confidence.

This healthy sustenance of self-confidence is beneficial to career development and professional growth. According to Walan and Rundgren (2014), increasing content knowledge and confidence increases assessment development and implementation; among the types of professional development that impact content knowledge are lectures, discussion groups, and content workshops. These researchers also noted that more effective professional development impacts the ways teachers guide students in curricular investigations and question forming; knowing how to guide students in thinking creatively supports improved scientific problem solving. The results show that teachers with sufficient self-efficacy in pedagogy are able to mitigate the disparity in Content Knowledge, and this adaptation was made through reliance on skills learned through workshops and ongoing continuing education. Walan and Rundgren (2014) also noted that even when teachers have high self-efficacy, they remain significantly interested in further professional development and learning. Generalizability of the study is hampered by the adaptation of the instrument, and the involvement of participants in a multi-year program.

Ross and Bruce (2007) conducted a study throughout the Province of Ontario to document the effects of sustained classroom-embedded professional learning on teacher efficacy and student achievement. The research gave evidence that inflated self-perceptions of efficacy can be debilitating as one refuses learning opportunities. Also, teacher self-efficacy is merely a facilitator for teachers to decide to commit to rigorous goals and diligence; those lofty objectives relate to greater student achievement, not the efficaciousness of the teacher.

The teachers in the treatment group learned to conduct lessons distributed in three parts: activation, development and consolidation. They also gained experience in observing students' explicit cognitive processes, recognized the self-direction of students, and conveyed the insights of attending students to teacher peers. Data were disaggregated as a collaborative exercise to add context to increases in student behaviors, encourage teachers' assertion of risky teaching strategies, and foster efficacy of reluctant participants until frequency lead to mastery. In the research, teachers with less self-efficacy at the onset of the study surpassed the teacher efficacy of the control group. Consequently, the lack of instructional change in the control group did not encourage a change in achievement levels (Bruce et al., 2010).

Al-Awidi and Alghazo (2012) determined that teacher education programs that assist with preparing teachers in subject content material and a variety of teaching strategies contribute most to success in teaching. These same skills also contribute to effectively using technology in the classroom. Al-Awidi and Alghazo (2012) also noted that when preservice teachers increase their technology skills then there is a direct influence on increasing their self-efficacy. Al-Awidi and Alghazo (2012) also reported that preservice experiences impact self-efficacy: Student teaching experiences itself can be a factor that affects preservice teachers' beliefs toward their self-efficacy. Many studies have suggested that when preparing preservice teachers to integrate technology in their teaching, they need to be contextually and socially situated in school-based learning environment rather than be taught in isolated coursework in universities (Al-Awidi & Alghazo, 2012, p. 925).

Among their findings, Awidi and Alghazo (2012) showed that hands-on teaching experiences assist preservice teachers in the transferring of "knowledge and skills and bridge the gap between theory and practice" (p. 925).

In an attempt to bring together what happens in teacher training with the realities of actual classroom teaching, Butler and Cuenca (2012) used descriptors of “idiosyncratic and nuanced” to describe the realm of mentoring preservice teachers (p. 296). Butler and Cuenca (2012) interpreted the arena of mentoring, noting it is “Centered in the notion that mentoring is often a socially constructed practice, these roles include a consideration of the mentor teacher as (1) instructional coach, (2) emotional support system, and (3) socializing agent” (p. 296). As Childre and Van Rie (2015) conducted clinical research into creating a model for pairing preservice teachers with a viable mentor; they concluded that an expert in teaching will help improve teachers’ skills due to their understanding of, and proficiency in, the expectations, responsibilities, and practices of a teacher. Teacher mentors are also described as developers of talent and as openers of doors (Schien, 1978), trusted guides and counselors (Galvez-Hijomevik, 1986), colleagues (Borko, 1986), and hands-off facilitators (Saunders, Pettinger, & Tomlinson, 1995; Butler & Cuenca, 2012).

As noted by Erozkan (2014), an individual’s perceptions of self-efficacy plays a large role in the regulation of human functioning and well-being. Their perception on their abilities greatly affect how they think, feel, and act in a certain situation, thereby determining how they deal with their problems. In connection with professional development and the growth of self-efficacy in teachers, research shows the correlation between constructive, rational problem solving and social self-efficacy of 706 teachers from seven prospective teaching departments. Through the correlative study, the researcher concluded that social problem solving predetermines social self-efficacy for prospective teachers.

Researchers from Singapore conducted research to determine the correlation between teacher self-efficacy and the use of constructivist pedagogy. Using the Tschannen-Moran and

Woolfolk Hoy teacher efficacy scale (2001) and constructivist scale for teachers with 2139 participants, conclusions revealed a strong positive correlation in teachers with high efficacy and those who employed a constructivist instruction approach (Nie, Tan, Liao, Lau, & Chua, 2012). Faucette and Nugent (2012) also connected mentoring preservice teachers with constructivism and application of real life experience, noting a caring, facilitative foundation between mentors and preservice teachers contributed to building stronger efficacy.

Newton, Leonard, Evans, and Eastburn (2012) showed that preservice teacher self-efficacy is a developmental skill that increases especially when applied through teacher preparation classes and that content knowledge is an important component for stronger efficacy. Coursework assisted in increasing self-efficacy during the classes, but the level of self-efficacy dropped somewhat during actual preservice teaching, according to Newton et al. (2012). Also noted by Newton et al. (2012) is the increase in self-efficacy among preservice teachers who began the experiences in education with lower levels of efficacy in teaching mathematics. The results indicated a consistent and positive relationship between teacher efficacy and content knowledge where no such relationship was found between outcome expectancy and content knowledge (Newton et al., 2012).

Webster, Erwin, and Parks (2013) emphasized the roles efficacy play in the preservice and mentor relationships noting that social persuasion, in the form of performance feedback and engagement, from someone perceived by others to have credibility and expertise in the targeted practice is instrumental in the development of efficacy beliefs. The researchers also encouraged applying theory and document research studies in order to better understand how efficacy influences preservice teachers. In the correlational study, researchers concluded teacher training significantly alters collective efficacy in preservice teachers, but individual efficacy has no effect

on willingness to implement movement in elementary learning environments.

Researchers in Departments of Psychology conducted an extensive survey of 390 Teach For America (TFA) that mitigated the occurrence of high-performing teachers' disproportionate distribution to higher-paying/performing placements, and that performance evaluations have the propensity to introduce bias towards teacher personality, not performance. These researchers distributed information to recent graduates of the TFA program; the information gauged grit, passionate perseverance for long-term goals, life satisfaction (contentment), and optimistic explanatory style, reactions likely to be subjective. TFA post hoc data was collected and attributed a coding for teacher ranking based on grade-level gains, student attainment of 80%, or both. The first results proved that all three qualifiers predicted performance; in the second iteration, life satisfaction and grit forecast teacher performance. Life satisfaction, hypothetically closely related to higher levels of self-efficacy, was the most reliable predictor of performance (Duckworth, Quinn & Seligman, 2009).

Socio-Economic Status (SES) of students and self-efficacy of teachers has also been the topic of research. Tschannen-Moran and Woolfolk Hoy (2001) and Devos, Dupriez and Paquay (2012) research showed that teacher self-efficacy beliefs could not be predicted by SES, while a more current study of 344 primary and secondary teachers bore different results. Research by Tsouloupas, Carson, and Matthews showed that teacher efficacy in handling misbehavior had a significant and direct correlation to student SES. Elevated student SES was found to be associated with elevated self-perceptions of efficacy. Furthermore, when collective teacher efficacy is considered, "SES is indirectly related to CTE (collective teacher efficacy) through the intervening effect of school-based social capital" (Belfi, Gielen, DeFraine, Verschueren & Meredith, 2015, p. 41). The dimension of social capital being intangible resources encompassing:

values, norms, and support. When teachers do not identify with the social capital of their lower SES students, the relationships result in lower teacher efficacy self-perceptions. In an effort to assist teachers in recognizing effects of collective efficacy, research has been conducted through peer rating of collective teacher efficacy by 1,077 teachers in 44 schools. The data suggested that a focus on gaining specific teacher competencies through differentiated staff development may change teacher self-perceptions of efficacy in teaching students with lower student SES (McCoach & Colbert, 2010).

Self-efficacy among special education teachers. While special education teachers are relatively few compared to general education teachers, researchers have noted that there is still high demand for special education teachers, as over six million children in the United States are being enrolled in special education programs in public schools (Roach, 2009). A recurring problem in the past decades is the severe shortage of special education teachers in both quantity and quality, not only because only few individuals venture to teach in the special education field, consequently forcing schools to employ teachers who do not meet the qualifications outlined in state and federal mandates for effective special education services (McLeskey & Billingsley, 2008; VanCise, 2013), but moreso because the special education field suffers from a rather significant retention rate, with nine percent of special education teachers leaving the profession after their first year (Horrison-Collier, 2013). In fact, researchers have indicated that job satisfaction rates are lower, and that burnout turnover rates are higher among special education teachers compared to general education teachers (Brunsting, Sreckovic, & Lane, 2014), and it is most likely due to the additional responsibilities that they carry due to their students' disabilities. These responsibilities include co-teaching, developing individualized education plans, and modifying assignments and curriculums in order to accommodate their students' disabilities

(Emery & Vandenberg, 2010). It is commonly the case, then, that special education teachers are especially in need of ways to maintain their levels of job satisfaction.

Other research has been conducted to associate teacher efficacy of special education teachers and the impact of supervision to resource-room teachers. Teachers of special education students self-reported a mean of 4.25 on a 6-point scale on a Gibson and Dembo (1984) survey instrument that was adapted to collect special education data. Since there was no generalized study with which to compare the results, the researchers reported the findings as baseline data. Analytically, the self-efficacy data showed that resource teachers are typically more self-efficacious than not (Coladarci & Breton, 1997). This finding was further confirmed, in that the input from supervision had an insignificant impact when it was perceived as utilizable insight within the Coladarci and Breton study. Utility of managing consultations, more than frequency, and higher satisfaction impacted the sense of self-efficacy in teachers.

In connection with measuring effectiveness and self-efficacy of teachers, studies on special education teachers revealed greater gains for student achievement due to self-efficacy. Guo, Dynia, Pelatti, and Justice (2014) noted that there was a positive relationship between early childhood special education teachers' self-efficacy and improvements in the language and literacy skills of their students with language impairment. Moreover, Crowson and Brandes (2014) determined from a sample of 229 pre-service teachers from the Southwestern United States that the self-efficacy to include students with disabilities were more proximal predictors of opposition to inclusion.

Ashburner, Rodger, Ziviani, & Hinder (2014) performed an academic critique of a study that endeavored to determine the efficacy of the therapy on autistic children. The researchers, in addressing measurements of effectiveness and efficacy, promoted the usefulness of manualized

treatment guidelines and comparison interventions by which to compare results. These two accountability measures for the treatment group were not initiated in the initial study. Ashburner et al., (2014) also disclosed dosage, intervention intensity differences, and goal-setting bias that was introduced into the 2013 study conducted by Schaaf, Benevides, Mailloux, Faller, Hunt, and van Hooydonk. Based on the cited studies, it is clearly evident that using accurate measurement tools is a key determinant in understanding the effectiveness of efficacy.

The efficacy among teachers of Autism was researched by Ruble, Usher, & McGrew (2011) to determine the relationship between persistence, administrative support and affective measures of burnout and the levels of self-efficacy as reported by 35 teachers. Through quantitative data, a correlation of self-efficacy, leadership support, and burnout was accumulated. The data reflected that there was no significant relationship between self-efficacy and persistence, nor administrative support; however, there was a negative correlation between self-efficacy and burnout. There was a significant negative correlation in the classroom management self-efficacy subscale with relation to burnout. This meant that teachers who reported that they were more confident in their abilities had lower levels of burnout (Ruble et al., 2011). These findings indicated that in order to identify successful strategies for development activities and support initiatives for teachers of students with disabilities, potential sources of their self-efficacy must be identified and understood as well.

As with regular teachers, special education teachers also benefit from external support and development programs. Billingsley, Carlson, and Klein (as cited in Ruble et al., 2011) observed the connections between teacher support and teacher success with special education students:

Beginning teachers who have higher levels of induction support compared to those with lower levels of support are more likely to view their jobs as manageable, report that they can teach the most difficult students, and indicate that they are successful in providing education to students needing special education services. (p. 68)

One component in the amplified focus on special education teacher needs is the “500% increase” in identified autism cases as noted by the Government Accountability Office (2005). With the increases in special needs students’ identification, there is the subsequent increase in the need for teachers to build and maintain self-efficacy practices that can be obtained through social and emotional strategies initiated with professional development.

In summary, it is evident that a considerable amount of research has been done on the sub-group of special education teachers in much the same way as it has for regular teachers. The results from this study also show that self-efficacy results in similar effects for special education teachers as for regular teachers. Likewise, initiatives for the development of self-efficacy are beneficial among special education teachers as well.

Measuring self-efficacy among teachers. How to accurately reflect teacher self-efficacy has been addressed in many studies. In a review conducted by Henson, Kogan, and Vacha-Haase (2001), the researchers discovered that designing an instrument that would yield reliable test scores had been broached by many times in educational research. Although an instrument can be found valid, having different sampling dynamics from the initial instrument sample may impact score reliability. Reliability comes when the current sample participants are correlative to the dynamics of the originally reported sample. For that reason, new research should either conduct sample analysis and comparison before applying an instrument to a study, or ensure that the characteristics of the original study are comparatively equal to the current sample.

A measurement theory that focused on a teacher's locus of control was suggested through a Rand measure, based on J. B. Rotter's research of 1966, whereby teachers responded to two qualitative questions that intended to determine in whose control teaching gains were embedded – internally with the teacher, or externally with the student. The fluidity of internal and external forces in teaching and learning as the tasks rigor changes causes a weak correlation between the calculations of teacher efficacy: general teacher efficacy (GTE), personal teaching efficacy (PTE) and responsibility for student achievement (RSA). Research instruments based on Albert Bandura's social cognitive theory were also established by Gibson and Dembo (1984) and Bandura (1997) himself, loosely constructed an instrument with seven subscales. Delineating summative teaching task lists with appropriate load values, and determining the broadness or specificity of tasks proved to be difficult; factoring in the teacher's expectations also had to be included into the measure (Tshannen-Moran & Hoy, 2001).

Researchers Megan Tshannen-Moran and Anita Woolfolk Hoy created a Likert-style measure through conducting three iterations of testing that endeavored to reflect an accurate range of teaching responsibilities, include items with comparable load-analysis and acceptable validity markers, and correspond to the factors of student engagement, instructional strategies, and classroom management as they relate to teacher self-efficacy. The resulting instrument (Ohio State teacher efficacy scale, OSTES, or Teachers' sense of efficacy scale) was field tested, and sampled by 851 teacher participants enrolled in university education courses at: Ohio State, William and Mary, Southern Mississippi, and the University of Cincinnati; its reliability subscales were 0.91 in instructional efficacy, 0.90 for classroom management efficacy, and 0.87 in student engagement for the 24-item long form.

Horvitz, Beach, Anderson, and Xia (2015) distributed the Michigan Nurse Educators

Sense of Efficacy for Online Teaching, a modified Teachers' Sense of Efficacy Scale, to elicit responses from online higher education instructors of nursing. The 91 participants' results established that the instructional strategies and classroom management sub-scales were higher in an online format than student engagement. The researchers also concluded that the use of computers, does not significantly predict impact teachers' sense of self-efficacy. According to Horvitz et al. (2015), "the significant variable of number of semesters taught online for the sub-score for classroom management indicated that the window of opportunity for training and support is not wide open" (p. 314).

Other teacher self-efficacy measurements include other dynamics that include a professional development component. A Standards Performance Continuum rubric requires a professional development component, is strategy specific and must have treatment and control groups (Doherty, Hilbert, Epaloose, & Tharp, 2002). In a mixed-method study conducted by Lyle Rethlefsen and Hyesung Park, the Mathematics Teaching Efficacy Beliefs Instrument was used to determine the correlation between teacher efficacy (TE) and outcome expectancy (OE) when preservice teachers who attended six local universities participated in the survey. Two open-ended, qualitative questions were asked in conjunction with the quantitative survey instrument; students were taught using the BAR model which includes the strategies to build knowledge, act on knowledge, and reflect on the action of knowledge. The methodology required training of professors, well-designed lessons that used the BAR approach, and attending university systems to participate in the study (Rethlefsen & Park, 2011).

All in all, research studies on the assessment scales that were formulated to measure self-efficacy suggest that quantitative methods are most preferred. So far, the same instruments have been used for regular teachers and special educational teachers alike. Advances have also been

made in distinguishing self-efficacy from other attributes such as outcome expectancy. However, a growing number of attempts have been and are still being made to identify the job factors and aspects that most strongly predict and associate with self-efficacy among teachers. Nevertheless, progress is promising, as a number of existing assessment scales have garnered acceptable validity and reliability scores after being field-tested with teachers from different locations in the United States.

Job Satisfaction

The Association for Psychological Science awarded Edwin Locke the 2005 James McKeen Cattell Fellow Award; he is described as “the most published organizational psychologist in the history of the field” by (2014, para. 1). His exploration of the dichotomy of emotion and job satisfaction yielded the following definition: “Job satisfaction is the pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating the achievement of one’s job values” (Locke, 1969, p. 316). For Locke, three aspects qualify one’s job satisfaction: one’s perceptions of job aspects, one’s implicit and explicit values surrounding the job, and the discrepancies between the aforementioned perceptions and values. The amount of discrepancy is important, along with the value attributed to the perceived discrepancy (Locke, 1969). Akpınar, Bayansalduz, and Toros’ (2012) approach analyzed a job as an individual’s obligation to complete a goal through labor; satisfaction being and affective emotion that emerges in one’s mind. Paul Spector (1997) defines job satisfaction as the level of emotional satisfaction, or dissatisfaction, that one attains through a global, all-encompassing assessment of various facets.

Dawis and Lofquist (1984) characterized the theory of work adjustment as an exchange between an individual’s work environment and an individual. According to the theory, an

individual negotiates the value of external cues of satisfactoriness represented with wages, style of work and social relations, and their correspondence with internal cues of a worker's satisfaction to fulfill value-based requirements. Dawis and Lofquist (1984) noted the Theory of Work Adjustment as a base in which "job satisfaction might be defined as a pleasurable affective condition resulting from one's appraisal of the way in which the experienced job situation meets one's needs, values, and expectations" (p. 72). Collectively, researchers in the organizational field agree that job satisfaction is a positive state of contentment with one's job due to their positive perceptions of various aspects of their job.

Researchers have also sought to identify the factors that influence an individual's job satisfaction. The physical environment and pay, human relationships, and personal growth and efficacy were identified in Locke's (1976) meta-analysis of facets important to job satisfaction. Spector's meta-analysis of the literature identified more specific facets which fall under Locke's categories: "appreciation, communication, coworkers, fringe benefits, job conditions, nature of the work itself, organization itself, organization's policies and procedures, pay, personal growth, promotion opportunities, recognition, security and supervision" (Spector, 1997, p. 3).

Many approaches have been attempted to isolate factors that affect job satisfaction. According to Heritage, Pollock and Robert (2015), analysis of the industrial and organizational Job Satisfaction Survey of 1979 created by War, Cook, and Wall did not maintain reliability while using factors of intrinsic, extrinsic and employee relations; the addition of the third scale, employee relations, decreased consistency from averages of $\alpha = .82$ intrinsic and $\alpha = .76$ extrinsic to $\alpha = .58 - .60$ with a three-pronged factorization. Other studies suggest that job satisfaction is heavily influenced by one's personal disposition and independent variables. Judge, Bono, and Locke (2000) concluded that the interconnectivity between one's personality and perceptions of

job characteristics determines the level of job satisfaction.

Besen, Matz-Costa, Brown, Smyer and Pitt-Catsouphes (2013) initiated research to determine if job satisfaction was affected by age. In a study of nine corporate entities, with 2,195 participants, evidence supported that age is a factor of job satisfaction. Job characteristics are less impactful to older employees when there is more emotional stability; younger workers' job satisfaction relies heavily on job characteristics as they seek paths to knowledge and achievement through reaching work-related goals. Two job characteristics, task significance and core self-evaluations, were related to job satisfaction in all age ranges. Geographical determinants of job satisfaction were compared in a 2012 study involving 3,918 Anglo, Asian, and Latin participants with regard to work-to-family conflict. Asian and Latin countries responded negatively to work flex-time because it was perceived that the company was either not willing to strengthen ties with employees or time fulfilling work tasks, away or at home. In contrast, Anglo cultures reported higher job satisfaction when offered flex-time as it eased work-to-family conflict. Employees' independent factors of age, personality and cultural geography have been researched in regards to job satisfaction.

Based on the previously mentioned studies, it is evident that a strong effort is being made by researchers to identify individual and job characteristics that are significant determinants of job satisfaction. A growing body of research has suggested that job satisfaction is influenced by the interaction between personal characteristics (e.g., age and cultural values) and job characteristics (e.g., benefits, work conditions, and whether or not the job satisfies their individual needs). In application to the current study, it may be beneficial to take a close look at the different factors in analyzing how similar or different levels of job satisfaction are between different samples.

One thing that must be noted is that job satisfaction is not analogous with other indicators of job performance. Morale is an anticipatory aspect of satisfaction, whereas satisfaction is based on past and present precepts. Another point of contention is that morale is a group construct, and satisfaction an individual one. Job involvement, another idea associated with job satisfaction, includes the level of mental engagement with an individual's work, however this is not similar to the level of emotional affect, positive or negative. Job involvement is independent of one's emotional reaction (Locke, 1976).

Social Cognitive Career Theory, as stated in a recent meta-analysis, purports that one's management of a career is affected by educational and occupational interest development, choice-making, performance and persistence. Satisfaction/well-being as a developing research theory model extends itself to process-based variables such as career decision making/exploration, job searching, career advancement, negotiation of work transitions, and multiple roles (Lent & Brown, 2013). In studying 314 Taiwanese nurses, Chang and Edwards (2015) sought to find the correlation of coping style, job-efficacy and job satisfaction. Data suggested that coping style and job satisfaction had a positive correlation to self-efficacy. The implication is to use goal oriented coping skills to influence job satisfaction.

Job satisfaction is of particular interest within human services occupations. Health care professionals have been seen to value the six external job satisfaction factors of autonomy, interactions with peers, organizational policies, pay, professional status, and task demands. Job satisfaction of nurses was positively impacted by organizational policies and interactions and peers, while task demands were less likely to yield positive job satisfaction (Itzhaki, Ea, Ehrenfeld, & Fitzpatrick, 2012). When market factors of physicians are associated with job satisfaction, there are clear factors that impact the data. Increases in job satisfaction are evident

when work environments are generous with necessary supplies, when appropriate numbers of physicians per capita are in the area, and pay is commiserate with expectations. Lower levels of job satisfaction are present in areas of widespread poverty, there is competition within the occupation, and higher hours with work tasks are logged (Mazurenko & Menachemi, 2012).

Job satisfaction within academia has also received attention from researchers in recent years. A review of literature conducted by Gkolia, Belias, and Koustelios (2014) revealed that there continues to be relevant research adding to the body of existing knowledge. Instruments to measure job satisfaction represented in the review included two English-based surveys with high reliability, JDI and the MSQ with 72-items and 100-items, respectively. Regarding self-efficacy, Bandura's social-cognitive theory functions as a base in the review. The Teachers' Sense of Efficacy Scale most exactly renders results that follow the theoretical framework of Bandura (1997).

Australian tutors in a problem-based learning environment were surveyed in a qualitative study by Papinczak (2012). The researcher concluded that job satisfaction was decreased by reduced job roles, and exclusion from information; positive mentoring relationships and job affirmations increase tutors' job satisfaction within the study (Papinczak, 2012). Psychologists, who have more work tasks and responsibilities than tutors, have also been studied as it relates to job satisfaction. In a Lithuanian study of 115 psychologists, the Minnesota Satisfaction Questionnaire (MSQ) that surveys internal and external facets of job satisfaction, and a General Self-Efficacy Scale (GSES) were used as survey instruments. Although the instruments are not the most relevant, the MSQ is designed for industrial use and the GSES is not specific to psychologists or human services professionals, correlations are evident. Mackonienè and Norvilè (2012) found that the factors of self-efficacy and job satisfaction are negatively related to job

burnout. Faculty of higher education in Turkey purported management organization most impacts positive job satisfaction, while demographical data least impacts positive job satisfaction. In the study conducted with the researchers' back-propagation algorithm, infrastructure, organizational culture, personal information, and education and academic activities had output that was not statistically significant in determining job satisfaction (Akkaya & Haydar, 2013).

The Minnesota Satisfaction Questionnaire (MSQ) was created in 1967 by D.J. Weiss, R. V. Dawis, G. W. England and L. H. Lofquist; a second version was released in 1977, to collect data regarding the extrinsic and intrinsic satisfaction of workers. The original long-form questionnaire consists of the five items for each of the 20 facets of satisfaction; the long-form yields a score for each facet and a general satisfaction score. A short-form questionnaire was created with one item for each of the 20 facets of satisfaction; the short-form yields internal, external and general satisfaction scores. The intrinsic facets assessed with the MSQ short-form are: social service, creativity, moral values, independence, ability utilization, social status, company policies, supervision – human relations, supervision – technical, security, co-workers, activity, and responsibility. While the MSQ short-form measures extrinsic facts with items regarding: achievement, variety, authority, compensation, working conditions, advancement, and recognition. All twenty items factor into the General Satisfaction scale. For usable results, the General Satisfaction raw score was converted to a percentile score that should be compared to the normed industry groups provided in the study. Average percentile scores ranging from 26 to 74 reflect average satisfaction (Weiss, Dawis, England, & Lofquist, 1967).

Statistics have been collected from the MSQ short-form. Median Hoyt reliability coefficient for intrinsic satisfaction was .86, while the extrinsic satisfaction median scale was

.80, with a .90 median scale score for general satisfaction. Stability of the long-form instrument was calculated with a 1-week latency and a 1-year latency. The general satisfaction scale correlation coefficient for the test-retest was .89 after 1 week. The general satisfaction scale correlation coefficient for the test-retest was .70 after 1 year. The validity of the MSQ short-form across occupational groups has no statistically significant variability differences; however, mean scores between the three scales were statistically significant (Weiss et al., 1967).

The objectives of study and subsequent adaptation of the Minnesota Satisfaction Questionnaire were the development of diagnostic tools for assessing the work adjustment 'potential' of applicants for vocational rehabilitation, and the evaluation of work adjustment outcomes (Weiss et al., 1967). The instrument measures satisfactoriness, which is a construct that indicates one's compatibility of the work environment to the individual; distinguishable from worker satisfaction, the positive affect of the individual with the work environment. Satisfactoriness, or competence, is based on the perspective of the employer's goals, and the level to which the employee satisfies them. Dawis and Lofquist (1984) then maintained that the ways in which the individual behaves within this working condition are indications of their level of satisfaction.

Spector (1985) cited researcher skepticism with the use of the MSQ short-form as a data collection tool for the intrinsic and extrinsic subscales. With one item per subscale there are high correlations within the subscale items, making an unclear delineation between items (Spector, 1997). It has also been noted that human services occupations surveyed with the MSQ have lower satisfaction norms than other industries surveyed with the instrument (Spector, 1985). Researchers continue to disaggregate data with the two subscales in research related to job satisfaction by medical care providers, and teaching professionals (Akpınar et al., 2012; Kiliç,

Tanrikulu, & Uğur, 2013; Narainsamy & Van Der Westhuizen, 2013). Other researchers use the MSQ short form for the general job satisfaction scale, a more reliable measure, as they correlate data with burnout and efficacy (Kumcagiz, Ersanli, & Alakus, 2014; Makola, 2013).

After the use of the Minnesota Satisfaction Questionnaire (MSQ) for 18 years from 1967-1985, and the Job Descriptive Index (JDI) for 16 years from 1969 -1985, Spector developed the Job Satisfaction Survey (JSS) based on the premise that “job satisfaction represents an affective or attitudinal reaction to a job” (Spector, 1985, p. 694). The JSS reduced the number of job facets to nine, from 20 surveyed in the MSQ (Weiss et al., 1967); it also reduced the number of items to 36 questions, from the 72 items represented in the JDI (Smith, Kendall, & Hulin, 1969).

An integration of the findings from past tests of these job satisfaction measures in the contexts of human service, nonprofit organizations, and public corporations revealed nine distinct dimensions of job satisfaction: Benefits, Communication, Contingent rewards, Co-workers, Nature of work, Operating procedures, Pay, Promotion, and Supervision. Among the 3,067 participants, spread through 20 separate samples, in the study conducted by Spector (1985) resulted in subscale coefficient alpha reliability ranges between .60 and .82; the total satisfaction scale being .91 coefficient alpha. The data for the 18-month test-retest received an overall score of .71, with ranges of reliability between .37 and .74 in all subscales. The validation of each distinct subscale is seen in that there are modest correlations between subscale items, with .35 being the median correlation. When compared to the existing Job Descriptive Index (JDI) job satisfaction survey, five of the JSS subscales correlate respectively .61 and .80 with coworkers and supervisors. The anomaly to the data is that the Contingent rewards subscale is made up of the divergent factors of Pay and Supervision (Spector, 1985).

The 36-item survey, given with a 6-point Likert Scale, produces results between 36 and

216, with some items needing to be reversed scored. Based on 8,113 participants, within over 52 organizations, a mean of 136.5, with a standard deviation of 12.1 has been established (Spector, 1997). Individual subscale scores have a maximum score of 24; ranges of normed subscale means exist between 11.8 and 19.2. The standard deviation total is 12.1, while the subscales vary from 1.1 to 2.6 in range (Spector, 1997).

The use of the JSS has been well documented in the health fields of nursing, physical training and speech pathology. Researchers primarily investigate the correlation of job satisfaction and intention to stay; however, leadership styles, and independent demographical features are tertiary goals of study (Abualrub & Alghamdi, 2011; Kalkhoff & Collins, 2012; Terranova & Henning, 2011). In the recent research, the JSS usage has not been consistent across studies. In a study correlating athletic trainers' job satisfaction with their expressed intent to leave, researchers combined Pay and Contingent Rewards into one subscale. The manipulation of the instrument skewed results towards subscales with seven items, Supervision, and Pay and Rewards. Underrepresented items, with two or three survey items were: Operating Conditions, Communication, and Coworkers; these changes were not represented in newly configured validity and reliability testing (Terranova & Henning, 2011). Nurses employed within six public hospitals of Saudi Arabia were also surveyed regarding their jobs satisfaction and intentions to stay based on leadership styles of supervisors. Mean scores for each of the nine subscales was calculated; however, the mean general job satisfaction was correlated to demographical variables, then transformational and transactional leadership styles with hierarchical regression analysis (Abualrub & Alghamdi, 2011).

In a study excluding research into intent to stay in the current employment, Kalkhoff and Collins (2012) surveyed speech-language pathologists to determine job satisfaction in those

functioning in school settings versus those in medical facilities. This study used the 136.5 mean and 12.1 standard deviation reported by Spector (1997) to determine levels of job satisfaction. JSS subscale totals ≤ 124.4 indicated low levels; $124.4 < \text{total JSS} < 148.6$ indicated a standard level of satisfaction; a total JSS ≥ 148.6 indicated a high job satisfaction level. Researchers exacted linear regression testing to determine if independent demographical data could be used to predict a satisfaction score. Normative data from the original survey was also compared with data collected from the speech-language pathologists to find that the current participants were significantly more satisfied, with exceptions in subscales of Operating conditions and Promotion and Supervision (Kalkhoff & Collins, 2012).

Research regarding job satisfaction related to SES has yielded relevant correlational data. In a study of 295 teachers in their first three years of the profession, teachers in communities of lower economies have lower feelings of job satisfaction than other beginning teachers (Devoux, Dupriez & Paquay, 2012). In a meta-analysis by Hughes (2012), research showed that high teacher attrition positively correlates to student with high poverty in the realm of being three times greater. However, the actual study conducted with 789 participants reached a conflicting conclusion; SES, pay and workload significantly impacted teachers' efficacy and intent to continue in the profession. Data supported that "schools with higher SES students were less likely to remain in teaching until retirement than teachers in the most impoverished schools" (Hughes, 2012, p. 252). According to the analysis, teaching to retirement was twice as likely to happen with teachers who were satisfied with their compensation and had a general satisfaction with the schools' resources.

Self-Efficacy and Job Satisfaction

A long history of philosophical and theoretical frameworks provides a foundation for

research into job satisfaction and self-efficacy. Through the development of measurement systems, the correlation of self-efficacy to needed facets of education will commence.

Investigating the facets of teacher self-efficacy and job satisfaction will lead to more applicable professional development, higher rates of student achievement, and higher levels of teacher satisfaction, thus persistence in the field.

Studies examining factors related to self-efficacy and job satisfaction in education have been conducted in recent years. In a study that endeavored to determine the correlation between job satisfaction, emotional intelligence, occupational stress, and self-efficacy of 400 middle grades teachers, four validated instruments were used with independent and dependent variables. Akomolafe and Ogunmakin (2014) combined measures to create a 116-item survey analyzed by Pearson's product moment correlation and multiple regression to establish the independent variables with the dependent variable of job satisfaction. Based on a review of literature, these variables were chosen.

Akomolafe and Ogunmakin (2014) found significant correlations with job satisfaction. Job satisfaction and emotional intelligence were significant in the areas which include: altruistic behaviors, commitment, emotional stability, empathy, integrity, managing relations, self-awareness, self-development, self-motivation, and value orientation. Job satisfaction and self-efficacy was determined to be significant as well. Conversely, a negative correlation was documented between job satisfaction and occupational stressors. The study endeavors to load regression data surrounding job satisfaction with an instrument with a coefficient alpha of 0.80.

Teacher beliefs of self-efficacy continually resurface as influential to teacher effectiveness, job satisfaction, and student achievement. A survey of recent literature provides evidence of correlations for study. Retaining teachers in the field of special education is an area

where the context of efficacy has been applied. Another important aspect of work that is directly connected to self-efficacy is job retention. A study by Luckey-Smith (2013) was conducted using 135 nursing students to determine levels of “high-fidelity simulation-based education” with a discussion of the results showing an actual increase in self-efficacy (para. 1). It was noted that the implication of the theory of self-efficacy reinforces increasing retention rates. Farkas (2013) also posited that how individuals live their lives is connected to their self-perceptions, and that self-efficacy is highly influential in retention. Farkas suggested that retention is closely connected to persistence, that it is a direct result of self-efficacy; and that home life, as it establishes generational traditions of education, also impacts levels of self-efficacy. These studies on self-efficacy and retention among teachers show that as individuals are presented with difficult tasks in life, those with stronger self-efficacy are able to achieve success more frequently, and this success applies to all areas of their lives including retention issues.

McNutt and Judge (2013) studied financial jobs and retention through treatment groups and control groups. Those experiencing five months of intervention that included management communication showed increases in self-efficacy directly correlated to a decrease in job turnover and an increase in job attitude (McNutt & Judge, 2013). McNutt and Judge (2013) also determined that utilizing workplace employees as resources increases job satisfaction for other workers; an increase in job satisfaction with a direct correlation to increasing self-efficacy and results in higher retention.

In a 2010 study, Viel-Ruma, Houchins, Jolivette, and Benson endeavored to correlate three factors of teacher retention: job satisfaction, teacher self-efficacy, and collective efficacy. Three separate instruments were used to quantify the measurements. The Brayfield-Rothe Index of Job Satisfaction with an alpha index of 0.90 was issued, the Collective Efficacy Scale

produced results with an alpha of 0.96, and segment of a Teacher Efficacy Scale with a 0.79 alpha was used. Instruments by Brayfield and Rothe, Goddard et al., and Gibson and Dembo collectively provided a 66-item measurement for the Pearson Correlation Analysis, multiple regression and MANOVA analysis showed a “significant relationship between job satisfaction and teacher self-efficacy . . . a significant relationship between teacher self-efficacy and collective efficacy” however no significance between job satisfaction and collective efficacy. In the study described above, a significant predictor of job satisfaction was only attributed to teacher efficacy (Viel-Ruma et al., 2010, p. 230). Another study found that a positive and significant correlation between self-efficacy and job performance existed for the 574 teachers surveyed in the public secondary school system of Osun State, Nigeria (Olayiwola, 2011).

It is evident in the recent literature that there is general agreement in the relationship between self-efficacy and job satisfaction, and it is a positive one at that. Moreover, this finding appears to be consistent across industries, as confirmed by reliable and valid tests. In the context of the educational sector, research has found relationships between self-efficacy and other job aspects such as student achievement and job retention, as mediated by self-efficacy’s relationship with job satisfaction. A notable observation within the existing knowledge, however, is that no distinction seems to have been made so far between general education teachers and special education teachers. This is because research on whether or not there are differences in the relationship between self-efficacy and job satisfaction between general teachers and special education teachers has not been conducted. Observing which facets of general and special education teachers’ self-efficacy strongly correlates to areas of job satisfaction will delineate and provide insights into focal points for further study. Understanding where weak or negative correlations exists between variables will allow rigorous additions to professional development

by teachers and staff that supports teachers.

Summary

Based on the literature, it is clear that the concepts of self-efficacy and job satisfaction are well-known and validated in organizational research across contexts and industries. Research has outlined the various factors that influence an individual's level of self-efficacy (Al-Awidi & Alghazo, 2012; Dalal et al., 2013), and even the effects of self-efficacy on different aspects of an individual's work. These include improved job performance (Beattie, Fakehy, & Woodman, 2013; Fisher, 2003) and situation management (Bledow, 2012).

Research that has been done on self-efficacy among teachers generally echo the theoretical and empirical findings of other research done on a general sample of individuals. Notable findings suggest that the effects of teacher self-efficacy go beyond the teacher and actually result in the improvement of student achievement and engagement (Ross & Bruce, 2007). Many researchers who studied self-efficacy among teachers have also found that while self-efficacy is internal and intrinsically influenced (Dalal et al., 2013), external sources may also have an effect on self-efficacy. Pre-service teacher training, mentorship, and ongoing teacher development programs while already on the job have been found to enhance teachers' confidence in their abilities, increasing their self-efficacy in the classroom (Childre & Van Rie, 2015; Tindall & Culhane, 2014; Walan & Rundgren, 2014).

Self-efficacy has also been studied among the subgroup of special education teachers. This body of research highlighted the positive impacts of self-efficacy, suggesting that self-efficacy in special education teachers are associated with improvements of student achievement, alleviation of students' disabilities and deficits, and improvement in teacher effectiveness among their students (Ashburner et al., 2014; Guo et al., 2014). Moreover, it was found to also lessen

burnout among special education teachers (Ruble et al., 2011).

Self-efficacy has also been related to job satisfaction. Job satisfaction, as collectively defined by researchers, is a sense of contentment and gratification with one's job resulting from a positive evaluation of the different aspects of the said job (Dawis & Lofquist, 1984; Locke, 1969; Spector, 1997). As shown in the literature, there is a variety of factors that interact with each other in influencing whether a person is satisfied with their job, and to what extent they are satisfied (Besen et al., 2013; Heritage, Pollock, & Robert, 2015; Judge, Bono, & Locke, 2000). In the context of educational professions, there is a general agreement in the literature that self-efficacy is positively associated with job satisfaction; that is, an individual with a high level of self-efficacy is likely to have a high level of job satisfaction as well (Akomolafe & Ogunmakin, 2014). According to researchers, this occurs because a positive perception toward oneself enables a more positive work attitude and improved management of occupational stressors and problems (McNutt & Judge, 2013). Due to this relationship, studies have also found a negative relationship between self-efficacy and retention and burnout; that is, an individual with a high level of self-efficacy is likely to have a low tendency for burnout and retention (Luckey-Smith, 2013; Mackonienè & Norvilè, 2012; Ruble, Usher, & McGrew, 2011).

Some studies have inadvertently touched up on teacher self-efficacy particularly in terms of student engagement, classroom management, and instructional strategy, just as associated with the research objectives in the current study (Ross & Bruce, 2007; Walan & Rundren, 2014). However, research is still scarce, as studies typically examine self-efficacy as a general concept. Moreover, there is also a shortage in research on whether or not there is a difference in these relationships between regular teachers and special education teachers. This realization further indicates the necessity and significance of the undertaking of the current study.

What the current study hopes to achieve, then, is to expand the empirical literature on the association between self-efficacy and job satisfaction among general education and special education teachers. In transition, Chapter 3, the methodology section, will provide a broad overview of various aspects regarding this research study. This section will discuss the research design, the study's sample, the data gathering instrument, and the data gathering procedure. Additionally, Chapter 3 will provide an understanding on the validity and reliability of the data collection procedures.

CHAPTER 3: METHODS

Overview

This chapter will provide a detailed discussion and the rationale for choosing the design for this study. This chapter will also present the characteristics of study participants and the setting of the study. This chapter also presents the instrumentation and procedures considered in the study as well as the data analyses procedures. This chapter ends with a summary of the key points of the methods chapter.

Design

A quantitative, correlative research plan will be conducted to examine the difference in the relationship of job satisfaction and self-efficacy between general and special education teachers in a southeastern school district in the United States. Comparisons between subgroups will be analyzed within the areas of self-efficacy and job satisfaction. A quantitative, correlational research design was selected for the study because the focus of the study is to examine the relationships between job satisfaction and self-efficacy scores (Gall et al., 2010). There will be no experimental control or treatment groupings among teachers. Natural data provided by faculty will be analyzed for the strongest relationships based on the scaled output provided by two reliable surveys. Furthermore, this study seeks to compare the relationship of job satisfaction and self-efficacy between general and special education teachers.

Subgroups statistics will be analyzed by means, and standard deviations for each data set; Pearson-Moment Correlation Coefficient (r) will allow score relationships, produced in regular intervals, to be revealed (Gall et al., 2010). The data will be grouped based on the type of teacher being general education or special education. The independent variable will be self-efficacy and the dependent variable will be the job satisfaction scores. A research analysis will be conducted

using quantitative data from the Likert-scaled items. The Teacher Sense of Efficacy Scale (TSES) short form will use a 9-point Likert-Scale dependent upon the following markers: *Nothing* (1), *Very Little* (3), *Some Influence* (5), *Quite a Bit* (7), and *A Great Deal*(9). The instrument, developed by Megan Tschannen-Moran and Anita Hoy (2001), will provide data in three domains: instructional strategies, classroom management and student engagement to measure self-efficacy.

Research Questions

RQ1: Is there a difference in the relationship of teacher’s job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in student engagement, as measured through Teachers’ Sense of Efficacy Scale, between general and special education teachers?

RQ2: Is there a difference in the relationship of teacher’s job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in instructional strategy, as measured through Teachers’ Sense of Efficacy Scale, between general and special education teachers?

RQ3: Is there a difference in the relationship of teacher’s job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in classroom management, as measured through Teachers’ Sense of Efficacy Scale, between general education and special education teachers?

Null Hypotheses

The following are the null hypotheses associated to each of the aforementioned research question:

H₀₁: There is no significant difference in the relationship of teacher’s job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in student engagement, as measured through Teachers’ Sense of Efficacy Scale, between general and special education

teachers.

H₀2: There is no significant difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in instructional strategy, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers.

H₀3: There is no significant difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in classroom management, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers.

Participants and Setting

Teachers in one local school of an urban school district in southeastern United States were invited and participate in this study. According to the Coordinator of Data Reporting for the district, there are 11,630 teachers in the county, with 1,934 special education teachers (16%), 2,151 male (18.5%), and 9,479 female (81.5%). The special education teachers have a current or provisional Special Education endorsement (Morales, 2012/11/29). Within the local school, there are 20 special education teachers and 72 general education teachers. All of the 92 teachers were solicited to participate; 30 male (32%) and 62 female (68%) faculty. The distribution across the content areas of Language Arts, Math, Science and Social Studies is 22 per course and 4 who support students in all areas. There are 30 teachers represented in each sixth, seventh, and eighth grade level with 2 that support learning in all grades. Special Education teachers who responded were teachers of: autism, emotional behavior disorders, specific learning disabilities, intellectual disabilities; visual, speech, other health, and orthopedically impaired; and significantly developmentally delayed (Gwinnett County Public Schools, 2012).

A priori power analysis was conducted to determine the minimum sample size necessary for the study. Based on the analyses, at least 128 participants are necessary to achieve 80% power considering a medium effect size and a significance level of .05 (Gall et al., 2010). Mid-May 2016, the survey and consent were distributed to all of the teachers who were indicated by the local school's human resources support personnel via hard-copy as the convenient sampling. Teachers were asked to read the consent and proceed with completing the surveys, then to submit them to the grade-level proctor onsite. From those who did not respond to the initial notification, a second, and final, iteration of consents and surveys were sent via interoffice mail late-May 2016. Faculty members self-selected participation in the survey.

The researched school is a part of conglomerate of 133 schools that offer services in the following Special Education disability areas: Autism, Emotional Behavioral Disorders, Specific Learning Disabilities, Intellectual Disabilities, Orthopedically Impaired, Visually Impaired, Deaf/Hard of Hearing, Speech Language Impairments, and Significantly Developmentally Delayed. In the county with over 160,000 students, there are 11,630 teachers who provide instruction, and an estimated per capita expenditure of \$8,851 per student. The county is located approximately 33 miles outside of a highly populated urban center, and is categorized as an urban school system because of the high level of student diversity. As such, this school district was recognized as a 2010 Broad Prize winner of the "annual award that honors the five large urban school districts that demonstrate the strongest student achievement and improvement while narrowing achievement gaps between income and ethnic groups" and received one million dollars for high school scholarships (Gwinnett County Public Schools Communication and Media Relations, 2010). The school district also was selected as a third tier winner of Race to the Top, which awarded the schools within this district two hundred million dollars based on reform

and innovation, implementation plans, and significant student gains recognized by the federal government according to the Governor's Office of Student Achievement (2011).

The local school, the actual research site, has a total of 2066 students who, based on parent-supplied data and federal regulations, meet requirements to be an identified Title I school. Eighty-seven percent of the students receive free or reduced-price lunch; while 100% of students are offered free breakfast. There are 295 (7%) students who have case managers assigned to them to support their educational needs through an Individual Education Plan (IEP) or a 504 Plan. The school's student demographics are: 907 (44%) Hispanic, 726 (35%) African American, 183 (9%) Asian, 164 (8%) Caucasian, and 69 (4%) other.

Instrumentation

The TSES created by Tschannen-Moran and Woolfok Hoy (2001) has become the standard measure of teacher self-efficacy. The instrument, TSES, was created in response to work of Bandura, *Self-efficacy: The Exercise of Control*(1997), and categorizes teacher efficacy based on subscales: influence in decision-making, influence over school resources, instructional, discipline, enlistment of parent support, community participation, and creation of a positive school environment (Tschannen-Moran & Hoy, 2001).The purpose of the TSES was to provide a measure of teacher self-efficacy in the areas of: student engagement, instructional strategies, and classroom management in light of the work of Bandura. The survey is composed of 24-items (long form) or 12-items (short form) which asked participants to respond from 1 (nothing) to 9 (a great deal) to measure their self-efficacy. The questionnaire was designed to measure what creates the most difficulty for teachers in their daily activities. The questionnaire involves three subscales: engagement, instruction, and classroom management. Each subscale is measures using 8 items in the 24-item questionnaire or 4 items in the 12-item questionnaire. The scores for each

subscale ranged from 8 to 72 for the long form and 4 to 36 for the short form.

In the Bandura (1996) research, it is acknowledged that the lack of self-regulation to perceived negative instances can affect behavior by inspiring motivation or demotivation, and depression or uplift. Bandura (1996) noted the internalization of one of the four factors is determined by an individual's "perceived self-efficacy to fulfill given standards, affective self-reaction to substandard performance, and readjustment of personal standards" (p. 20). The research further reports, the effects of positive self-efficacy are a reliable indicator of an individual's ability to self-regulate; the correlation of positive self-efficacy and self-regulation assists in an individual's ability to mitigate relapses, affect behavioral switches, and use the strategies to remain flexible, and recommit resources following disappointments.

During Ohio State University's instrument development of the TSES, the document withstood three data analysis iterations using a principal-axis factoring with varimax rotation by a scree test which ultimately pared the 52-items to a 24-item long form and a 12-item short form that identified self-efficacy of instruction (α reliability = .91), management (α reliability = .90), and engagement (α reliability = .87); the reliability of the 24-item scale was 0.94. Admittedly, the scale does not assess all areas of teaching; teacher support of alternative assessment, creativity, and student higher-order-thinking are not the intent of the measure (Tschannen-Moran & Hoy, 2001).

The validity of the TSES was also reported in the Tschannen-Moran and Hoy study (2001). The researchers of that study correlated the results of their instrument to that of previously accepted measures. When their sample group completed the Gibson and Dembo test and the Rand survey, data were positively correlated to the previous instruments with output of .18 and .53 for both Rand data sets, $p < 0.01$. The personal teaching efficacy was related to the

Gibson and Dembo at .64 reliability ($p < 0.01$), while to the general teacher efficacy (GTE) related to the 24-item TSES at a .16 mark ($p < 0.01$). The lower GTE score is consistent with other research as an inconclusive marker for teacher efficacy (Tschannen-Moran, & Hoy, 2001, p. 801).

Paul E. Spector created the Job Satisfaction Survey (JSS) the University of South Florida (1985) with the purpose of providing an instrument to analyze job satisfaction regarding nine facets and a Total. The JSS is composed of 36-items of 6-point Likert-type scales ranging from *strongly disagree* to *strongly agree* that is used to measure nine subscales of job satisfaction. However, for the purpose of this study, the focus will be on the overall score for job satisfaction which was determined to have an internal consistency of .91. The total score for job satisfaction ranged from 36 to 216. A test-retest was conducted 18 months apart with 43 participants to conclude that correlation coefficients within subscales was between .37 and .74, while .71 for the total instrument. A Total satisfaction mean reported was 133.1, with .27.9 as the standard deviation for the 3,067 surveyed members.

The validity of the JSS was performed by assessing the convergent and discriminant validities between the JSS and the Job Descriptive Index (JDI). Validity correlations were above .61, correlations among subscales were all higher than correlations among ones not corresponding, and there were consistent parallels between subscales (Spector, 1985). Studies on job satisfaction such as Klassen, Yerdelen, and Durkson (2013), Schmidt (2004), Wetherell (2002) considered the use of JSS to measure job satisfaction.

See Appendix E for Tschannen-Moran and Appendix F for Spector permission to use instruments. The TSES and the JSS instruments were combined to require a completion time of 20 minutes or less.

Procedures

To begin the study, contact to the instruments' authors was initiated to communicate intent to use the instruments in a research study, and attain the expressed consent of Tschannen-Moran(Appendix E) and Spector(Appendix F).See Appendix A for Liberty University IRB approval. See Appendix B for the county's Research and Evaluation department, local representative approval. The researcher implemented the research plan in the spring of 2016.

See Appendix D for a hardcopy version of the participant Consent Information notice will be delivered in mid-May to all local teachers of special and general education students. Teachers who have not yet completed the questionnaires will receive a second Consent Information letter, demographic information and surveys. Teachers will record responses on the hard copy survey instruments and grade-level proctors will receive completed documents placed in a receptacle.

The researcher will begin input of the TSES and JSS scores retrieved from the Likert-scaled items into a survey input tool. Tschannen-Moran and Hoy (2001) noted all quantifiable demographics data and "unweighted means of the items that load each factor" will be compiled as suggested by the instrument's authors (p. 808).The JSS will be scored as directed by the author's procedures and appendix noted in, no comma *Measurement of Human Service Staff Satisfaction: Development of the Job Satisfaction Survey* (Spector, 1985).

Data Analysis

Data will be prepared and analyzed using SPSS v22.0. After cleaning the data collected from participants, a post hoc power analysis will be conducted using G*Power v3.1.0 to determine the strength of the samples gathered to provide statistical valid results. Descriptive statistics will be summarized using frequencies and percentages while study variables will be

presented using measures of central tendencies such as the mean, standard deviation, and range values.

Data analysis will be performed and overseen by an expert consultant in the field using bivariate correlational statistics. According to Gall et al. (2007) a product-moment correlation (r) is needed when there are two continuous variables because this technique has the lowest standard of error (p. 348). The questions of the study will determine the methods of data analysis for the study. Each TSES question seeks to understand the magnitude of relationship between one of three efficacy factors and one general job satisfaction marker. Statistical data will be determined regarding mean scores, standard deviations, and correlation coefficients. A histogram will be used to determine whether the data collected in the study is normally distributed. A parametric test will be used for normally distributed data while a non-parametric test will be used for non-normally distributed data. To test the hypotheses posed in the study, an independent samples t -test (parametric) or a Mann-Whitney U test (non-parametric) will be conducted to determine the difference in the relationship of self-efficacy and job satisfaction between general and special education groups. A probability of $p < .05$ will be used for the alpha level to ensure responsible acceptance or rejection of the null hypothesis. As suggested by the research committee, analysis of demographics subsets can be analyzed for its comparative value.

Summary

The purpose of this quantitative correlational study is to examine the difference in the relationship of job satisfaction and self-efficacy between general and special education teachers in a southeastern school district of the United States. The variables under study are job satisfaction and self-efficacy. Job satisfaction will be measured through Spector's (1985) Job Satisfaction Survey while self-efficacy will be measured using Tschannen-Moran and Hoy's

(2001) Teachers' Sense of Self-Efficacy survey. Specifically, self-efficacy will be measured according to the three constructs of: student engagement, instructional strategy, and classroom management. The target population for this study will be general and special education teachers within a southeastern school district of the United States. Participants will be asked to respond to a survey questionnaire to gather data for the variables considered in the study. The data will be analyzed using descriptive and inferential statistics such as correlation analysis and independent samples t-test. A significance level of .05 will be used for all analyses.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this quantitative correlational study is to examine the difference in the relationship of job satisfaction and self-efficacy (SE) between general and special education teachers in a southeastern school district in the United States. As a correlative study the measures of SE act as the predictor variables, while job-satisfaction is the criterion variable. The purpose of this study is to contribute understanding of how special and general education teacher perceptions of SE and job satisfaction are related, and to provide implications for teacher resiliency, local school environments, and the school district retention practices. The clustered sampling of participants used in this study consisted 110 teachers from a metropolitan Atlanta, Georgia school district. Chapter 3 introduced the methodology of the study, and the research questions will be answered in this chapter.

Research Questions

The research questions for this study are as follows:

RQ1: Is there a difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in student engagement, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers?

RQ2: Is there a difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in instructional strategy, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers?

RQ3: Is there a difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in classroom management, as measured through Teachers' Sense of Efficacy Scale, between general education and special education

teachers?

Null Hypotheses

The null hypotheses are:

H₀₁: There is no significant difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in student engagement, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers.

H₀₂: There is no significant difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in instructional strategy, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers.

H₀₃: There is no significant difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in classroom management, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers.

Descriptive Statistics

Demographics

This study contained information for 83 teachers, where 84.3% were *female*, and 15.7% were *males*. When observing the highest degree held by each teacher, 25.3% have a *Bachelor's in Education*, 6.0% have some *other Bachelor's degree*, 36.1% have a *Master's in Education*, 6.0% have some *other Master's degree*, 2.4% have a *Doctorate in Education*, and 24.1% are *Education Specialists*. When asked how many years they had been teaching at their current placement, 44.4% stated *under 2 years*, 17.3% stated *3 to 5 years*, 13.6% stated *6 to 9 years*, and

24.7% stated *10 or more years*. And finally, participants were asked what their current placement was, where 51.9% teaching core content area courses (*Language Arts, Math, Science, Social Studies*), 20.4% teaching elective-based *Connections*, 4.8% teaching *ESOL*, 8.4% teaching *Gifted* students, 7.2% teaching *Self-Contained: EBD/SLD* classes, 4.8% teaching *Special Education – Collab* classes, and 2.4% teaching some other *unidentified* courses. In total, there are 60 general education teachers and 21 special education teachers. The results of all demographic variables with the addition of: age, race/ethnicity, years teaching, grades taught, school environments, professional development and certification pathway are summarized in Appendix I (Table 1).

Study Variables

Independent variables used to explore the research questions came from the Teacher Sense of Efficacy Scale (TSES) – Short Form. The TSES – Short Form contains 12 questions with Likert-Type responses, designed to help gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Participant responses to the TSES were used to create 3 subscale scores, measuring *Efficacy in Student Engagement* (mean of items 2, 3, 4, and 11), *Efficacy in Instructional Practices* (mean of items 5, 9, 10, and 12), and *Efficacy in Classroom Management* (mean of items 1, 6, 7, and 8). Table 2 shows a summary of each of the TSES Efficacy scores. Student Engagement scores ranged from 2.5 to 9 with an average of 6.8 ($SD = 1.1$). Instructional Practices scores ranged from 4.8 to 9 with an average of 7.6 ($SD = 0.96$). And Classroom Management scores ranged from 4.5 to 9 with an average of 7.6 ($SD = 1.1$).

Table 2

Summary of TSES Efficacy Scores

	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Student Engagement	6.77	1.08	2.50	9.00
Instructional Practices	7.56	0.96	4.75	9.00
Classroom Management	7.56	1.05	4.50	9.00

Dependent variables used to explore the research questions came from the Job Satisfaction Survey (JSS). The JSS contains 36 questions with Likert-Type responses, assessing job satisfaction on a continuum from 1 = low (dissatisfied) to 6 = high (satisfied), where high scores on the scale represent job satisfaction. Participant responses to the JSS were used to create 10 subscale scores, measuring participant satisfaction with *Pay* (mean of items 1, 10, 19, and 28), *Promotion* (mean of items 2, 11, 20, and 33), *Supervision* (mean of items 3, 12, 21, and 30), *Fringe Benefits* (mean of items 4, 13, 22, and 29), *Contingent rewards* (mean of items 5, 14, 23, and 32), *Operating conditions* (mean of items 6, 15, 24, and 31), *Coworkers* (mean of items 7, 16, 25, and 34), *Nature of work* (mean of items 8, 17, 27, and 35), *Communication* (mean of items 9, 18, 26, and 36), and *Total satisfaction* (mean of all 36 items). It should also be noted that items 2, 4, 6, 8, 10, 12, 14, 16, 18, 19, 21, 23, 24, 26, 29, 31, 32, 34, and 36, were all negatively worded questions, therefore, they were reverse scored when creating the subscales. Table 3 shows a summary of each of the Job Satisfaction scores. When observing each subscale, we can assume that agreement with positively-worded items and disagreement with negatively-worded items would represent satisfaction, whereas disagreement with positive-worded items, and agreement with negative-worded items represents dissatisfaction. This indicates that scores with a mean item response (after reverse scoring the negatively-worded items) of 4 or more represents

satisfaction, whereas mean responses of 3 or less represent dissatisfaction. The 10 interpreted subscales were: *Pay, Promotion, Supervision, Fringe Benefits, Contingent Rewards, Operating Conditions, Coworkers, Nature of Work, Communication, and Total Satisfaction*. Overall, data supports the notion that teachers are most satisfied with their supervision, coworkers, nature of work, communication, and total satisfaction. Table 3 summarizes the descriptive statistics.

Table 3

Summary of Job Satisfaction Scores

	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Pay	3.33	1.22	1.00	6.00
Promotion	3.48	0.91	1.50	5.75
Supervision	5.10	1.00	1.23	6.00
Fringe Benefits	3.68	1.08	1.00	6.00
Contingent Rewards	3.89	1.14	1.25	6.00
Operating Conditions	3.15	0.95	1.25	5.75
Coworkers	4.94	0.83	2.75	6.00
Nature of Work	5.28	0.61	3.75	6.00
Communication	4.39	1.06	1.00	6.00
Total Satisfaction	4.14	0.98	2.58	5.75

Reliability

Cronbach's Alpha was used to assess the reliability of each TSES subscale and Job Satisfaction scores. Table 4 shows each TSES and JSS score, along with the items used to create the score, with measure of reliability. Alpha values ranged from 0.55 to 0.92. Most of these results are on the high end, indicating high reliability. Items with high or acceptable reliability include all three efficacy scores of student engagement (0.78), instructional strategies (0.64), and

classroom management (0.86); six out of the nine subscales of job satisfaction of pay (0.79), promotion (0.72), supervision (0.87), fringe benefits (0.78), contingent rewards (0.82), and communication (0.80); and also the total score of satisfaction (0.92). The three subscales of job satisfaction of operating conditions (0.55), coworkers (0.65), and nature of work (0.62) do not have acceptable reliability since the Cronbach's alpha values are below the minimum of 0.70. An unacceptable reliability means that the different survey items measuring a particular efficacy score is not internally consistent or the items are not intercorrelated.

Table 4

Reliability for All Scores

	<i>Items</i>	<i>Alpha</i>
Efficacy Scores		
Student Engagement	2, 3, 4, 11	0.78
Instructional Strategies	5, 9, 10, 12	0.74
Classroom Management	1, 6, 7, 8	0.86
Job Satisfaction Scores		
Pay	1, 10, 19, 28	0.79
Promotion	2, 11, 20, 33	0.72
Supervision	3, 12, 21, 30	0.87
Fringe Benefits	4, 13, 22, 29	0.78
Contingent Rewards	5, 14, 23, 32	0.82
Operating Conditions	6, 15, 24, 31	0.55
Coworkers	7, 16, 25, 34	0.65
Nature of Work	8, 17, 27, 35	0.62
Communication	9, 18, 26, 36	0.80
Total Satisfaction	1 – 36	0.92

Results

Assumption Tests

To explore each null hypothesis, Correlation analyses were considered. One important assumption of Pearson's Correlation is that the independent and dependent variables must be normally distributed. To determine if this normality assumption was met, a Shapiro-Wilk test was used, where a p-value > 0.05 indicated normality. Table 5 shows the results of the Shapiro-Wilk tests, where all of the three efficacy scores were not normally distributed ($p < 0.05$). Because all of the hypotheses are comparing the 3 Efficacy scores to the Job Satisfaction scores, a nonparametric Spearman's Rank Correlation must be used for analysis.

Table 5

Shapiro-Wilk Tests for Normality

	<i>W</i>	<i>p-value</i>
Efficacy Scores		
Student Engagement	0.96	0.010
Instructional Practices	0.96	0.016
Classroom Management	0.94	0.001
Job Satisfaction Scores		
Pay	0.98	0.201
Promotion	0.98	0.112
Supervision	0.84	<0.0001
Fringe Benefits	0.99	0.538
Contingent Rewards	0.97	0.072
Operating Conditions	0.98	0.204
Coworkers	0.94	0.001
Nature of Work	0.91	<0.0001
Communication	0.96	0.011
Total Satisfaction	0.98	0.358

Research Question One

Research question one stated, is there a difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in student engagement, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers? To test this research question, a Spearman's Rank Correlation was used. Correlation values can range from -1 to 1, where values of -1 and 1 correspond to exact correlation (perfect association). A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association; that is, as the value of one variable increases, so does the value of the other variable. And the opposite is true for values less than 0. Separate correlation analyses were conducted for the samples of general and special education teachers to determine differences in the relationship of teacher's job satisfaction and self-efficacy in student engagement. Results of the Spearman's Rank Correlations for the samples of general education teachers in Table 6 showed that Efficacy in Student Engagement was significantly correlated with one of the nine subscales of Job Satisfaction relating to Nature of Work ($r(58) = 0.34, p = 0.01$); also, SE correlated to overall Total Job Satisfaction ($r(58) = 0.26, p = 0.05$). Specifically, both significant correlations were positive, in the weak to medium range. This means higher Efficacy in Student Engagement would result to higher Job Satisfaction relating to Nature of Work and also the Total Job Satisfaction among general education teachers.

In contrast, results of the Spearman's Rank Correlations for the samples of special education teachers in Table 7 showed that Efficacy in Student Engagement was not significantly correlated to any of the nine subscales of Job Satisfaction, nor to the Total Job Satisfaction ($r(19) = 0.002, p = 0.99$). These were because all the p-values were greater than the level of significance value of 0.05. There were differences in the results between the general and special

education teachers. As a summary, results of the Spearman's Rank Correlations test suggest that Efficacy in Student Engagement was significantly positively correlated with Job Satisfaction relating to Nature of Work and Total Job Satisfaction in the general education teachers while there were no significant correlations observed between Efficacy in Student Engagement and with any subscales and total Job Satisfaction in the special education teachers. With these results, it showed that there were differences in the relationship of teacher's job satisfaction and self-efficacy in student engagement between general and special education teachers. This implies the null hypothesis one, that "There is no significant difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in student engagement, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers", can be rejected for the relationship between job satisfaction in nature of work and total satisfaction to student engagement. Rejecting of the null hypothesis means that there is a significant relationship observed from the correlation analysis.

Table 6

*Spearman's Correlations of Job Satisfaction with Efficacy in**Student Engagement for General Education Teachers (n = 60)*

	<i>r</i>	<i>p-value</i>
Pay	0.15	0.27
Promotion	0.18	0.17
Supervision	0.18	0.18
Fringe Benefits	0.09	0.48
Contingent Rewards	0.09	0.50
Operating Conditions	0.20	0.13
Coworkers	0.15	0.25
Nature of Work	0.34*	0.01

Table 6

Spearman's Correlations of Job Satisfaction with Efficacy in Student Engagement for General Education Teachers (n = 60)

	<i>r</i>	<i>p-value</i>
Communication	0.28	0.28
Total Satisfaction	0.26*	0.05

*. Correlation is significant at the 0.05 level (2-tailed).

Table 7

Spearman's Correlations of Job Satisfaction with Efficacy in Student Engagement for Special Education Teachers (n = 21)

	<i>r</i>	<i>p-value</i>
Pay	0.09	0.69
Promotion	0.17	0.47
Supervision	0.22	0.34
Fringe Benefits	-0.05	0.82
Contingent Rewards	-0.05	0.82
Operating Conditions	0.08	0.72
Coworkers	0.04	0.87
Nature of Work	0.05	0.84
Communication	0.03	0.90
Total Satisfaction	0.002	0.99

Research Question Two

Research question two stated: is there a difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in instructional strategy, as measured through Teachers' Sense of Efficacy Scale, between general and special

education teachers? To test this research question, a Spearman's Rank Correlation was used. Separate correlation analyses were conducted for the samples of general and special education teachers to determine differences in the relationship of teacher's job satisfaction and self-efficacy in instructional strategy. Results of the Spearman's Rank Correlations for the samples of general education teachers in Table 8 showed that Efficacy in instructional strategy was significantly correlated with two out of the nine subscales of Job Satisfaction relating to Coworkers ($r = 0.32$, $p(58) = 0.01$) and Nature of Work ($r(58) = 0.33$, $p = 0.01$). Specifically, all two significant correlations were positive, in the weak to medium range. This means higher Efficacy in Instructional Strategy would result to higher Job Satisfaction relating to Coworkers and Nature of Work among general education teachers.

In contrast, results of the Spearman's Rank Correlations for the samples of special education teachers in Table 9 showed that Efficacy in Instructional Strategy was not significantly correlated to any of the nine subscales of Job Satisfaction nor the Total Job Satisfaction ($r(19) = -0.06$, $p = 0.81$). These were because all the p-values were greater than the level of significance value of 0.05. With these results, it showed that there were differences in the relationship of teacher's job satisfaction and self-efficacy in instructional strategies between general and special education teachers. There were differences in the results between the general and special education teachers. As a summary, results of the Spearman's Rank Correlations test suggest that Efficacy in instructional strategy was significantly positively correlated with Job Satisfaction relating to Coworkers and Nature of Work in the general education teachers while there were no significant correlations observed between Efficacy in instructional strategy and with any subscales and total Job Satisfaction in the special education teachers. This implies the null hypothesis two, that "There is no significant difference in the relationship of teacher's job

satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in instructional strategy, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers", can be rejected for the relationship between job satisfaction in coworkers and nature of work, to instructional strategy. Rejecting of the null hypothesis means that there is a significant relationship observed from the correlation analysis.

Table 8

Spearman's Correlations of Job Satisfaction with Efficacy in

Instructional Strategy for General Education Teachers (n = 60)

	<i>r</i>	<i>p-value</i>
Pay	-0.02	0.91
Promotion	0.001	0.99
Supervision	0.23	0.08
Fringe Benefits	-0.12	0.36
Contingent Rewards	0.06	0.63
Operating Conditions	-0.02	0.87
Coworkers	0.32*	0.01
Nature of Work	0.33*	0.01
Communication	0.08	0.53
Total Satisfaction	0.12	0.35

*. Correlation is significant at the 0.05 level (2-tailed).

Table 9

Spearman's Correlations of Job Satisfaction with Efficacy in

Instructional Strategy for Special Education Teachers (n = 21)

	<i>r</i>	<i>p-value</i>
Pay	-0.18	0.43

Table 9

Spearman's Correlations of Job Satisfaction with Efficacy in Instructional Strategy for Special Education Teachers (n = 21)

	<i>r</i>	<i>p-value</i>
Promotion	-0.15	0.53
Supervision	0.20	0.39
Fringe Benefits	-0.08	0.75
Contingent Rewards	-0.03	0.89
Operating Conditions	0.04	0.88
Coworkers	0.12	0.12
Nature of Work	-0.10	0.66
Communication	0.21	0.37
Total Satisfaction	-0.06	0.81

*. Correlation is significant at the 0.05 level (2-tailed).

Research Question Three

Research question three stated: is there a difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in classroom management, as measured through Teachers' Sense of Efficacy Scale, between general education and special education teachers? To test this research question, a Spearman's Rank Correlation was used. Separate correlation analyses were conducted for the samples of general and special education teachers to determine differences in the relationship of teacher's job satisfaction and self-efficacy in classroom management. Results of the Spearman's Rank Correlations for the samples of general education teachers in Table 10 showed that Efficacy in Classroom Management was significantly correlated with Job Satisfaction relating to Nature of Work ($r(58) = 0.26, p = 0.04$). Similarly, results of the Spearman's Rank Correlations for the samples of

special education teachers in Table 11 showed that Efficacy in Classroom Management was significantly correlated with Job Satisfaction relating to Nature of Work ($r(19) = 0.48, p = 0.03$). Specifically, the significant correlation was positive and weak for both the general education and special education teachers. This means higher Efficacy in Classroom Management would result to higher Job Satisfaction relating to Nature of Work among general and special education teachers. There were similar results between the general and special education teachers. As a summary, results of the Spearman's Rank Correlations test suggest that Efficacy in Classroom Management was significantly positively correlated with Job Satisfaction relating to Nature of Work in both the general education teachers and special education teachers. This implies the null hypothesis three, that "There is no significant difference in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in classroom management, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers", was not rejected since the correlation results were the same between general and special education teachers.

Table 10

Spearman's Correlations of Job Satisfaction with Efficacy in Classroom Management for General Education Teachers

	<i>r</i>	<i>p-value</i>
Pay	0.05	0.73
Promotion	0.01	0.92
Supervision	0.08	0.08
Fringe Benefits	0.06	0.64
Contingent Rewards	0.21	0.10

Table 10

Spearman's Correlations of Job Satisfaction with Efficacy in Classroom Management for General Education Teachers

	<i>r</i>	<i>p-value</i>
Operating Conditions	0.02	0.91
Coworkers	0.18	0.16
Nature of Work	0.26*	0.04
Communication	0.08	0.54
Total Satisfaction	0.18	0.18

*. Correlation is significant at the 0.05 level (2-tailed).

Table 11

Spearman's Correlations of Job Satisfaction with Efficacy in Classroom Management for Special Education Teachers (n = 21)

	<i>r</i>	<i>p-value</i>
Pay	0.02	0.92
Promotion	0.08	0.74
Supervision	0.41	0.06
Fringe Benefits	0.30	0.18
Contingent Rewards	-0.11	0.63
Operating Conditions	-0.15	0.51
Coworkers	0.21	0.37
Nature of Work	0.48*	0.03
Communication	0.04	0.86
Total Satisfaction	0.10	0.66

*. Correlation is significant at the 0.05 level (2-tailed).

Summary

The purpose of this quantitative correlational study was to examine the difference in the

relationship of job satisfaction and self-efficacy between general and special education teachers in a southeastern school district in the United States. The data were analyzed using descriptive and inferential statistics such as correlation analysis. For research question one, results of the analyses showed that there are significant differences in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in student engagement, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers. Efficacy in Student Engagement was significantly positive correlated with Job Satisfaction relating to Nature of Work and also the Total Job Satisfaction for the samples of general education teachers. On the other hand, Efficacy in Student Engagement was not significantly correlated to all nine subscales of Job Satisfaction and Total Job Satisfaction for the samples of special education teachers. For research question two, results of the analyses showed that there are significant differences in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in instructional strategy, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers. Efficacy in Instructional Strategy was significantly positive correlated with Job Satisfaction relating to Coworkers and Nature of Work for the samples of general education teachers. On the other hand, Efficacy in Instructional Strategy was not significantly correlated to the nine subscales of Job Satisfaction and Total Job Satisfaction for the samples of special education teachers. For research question three, results of the analyses showed that there are no significant differences in the relationship of teacher's job satisfaction, as measured through the Job Satisfaction Survey, and self-efficacy in classroom management, as measured through Teachers' Sense of Efficacy Scale, between general and special education teachers. Efficacy in Classroom Management was significantly positive correlated with Job Satisfaction relating to

Nature of Work for both the samples of general and special education teachers.

CHAPTER FIVE: CONCLUSIONS

Overview

The purpose of this quantitative correlational study is to examine the difference in the relationship of job satisfaction and self-efficacy (SE) between general and special education teachers in a southeastern school district in the United States. The purpose of this study is to contribute understanding of how special and general education teacher perceptions of SE and job satisfaction are related, and to provide implications for teacher resiliency, local school environments, and the school district retention practices. Chapter 5 included the discussion of the conclusion of the results obtain from the analysis chapter. Specifically, this chapter include the discussion of the results for each research question, implications of results, limitation of the study, and recommendations for future research.

Discussion

The present quantitative correlational study is to examine the difference in the relationship of job satisfaction and self-efficacy between general and special education teachers in a southeastern school district in the United States. The purpose of this investigation of factors will contribute understanding regarding teacher resiliency, self-efficacy and turnover rates in the context of school practices. The high turnover rates of teachers are a precursor to industry shortages (Ingersoll & Smith, 2003; Kaufman & Ring, 2011; Muller et al., 2011). The retention of teachers has been correlated to job satisfaction factors such as: job conditions, workplace demands and depression/burnout (Emery & Vandenberg, 2010; Lopez, 2010; Plash & Piotrowski, 2006). The efficacy of teachers has found to directly affect student self-regulation, classroom management and student engagement, and substantial increases in professional development (Bruce et al., 2010; Erozkhan, 2014; Ross & Bruce, 2007). Although the review of

literature found that job satisfaction is important to teacher retention and that teacher SE does impact many areas of the learning experience, researchers are not certain which factors of SE are most impacted by job satisfaction indicators. More research was needed to determine to what extent self-efficacy and job satisfaction are related so that administrators and professional development planners can better target training that bolsters teacher efficacy in their efforts to retain satisfied teachers.

Two research instruments were used in order to understand the correlation of self-efficacy and job satisfaction: Teachers' Self-Efficacy Scale (TSES) and Job Satisfaction Scale (JSS). Efficacy had three subscales, namely: self-efficacy in (a) student engagement, (b) instructional strategy, and (c) classroom management. Job Satisfaction had ten subscales, namely: pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, co-workers, nature of work, communication, and total satisfaction. Results from this study revealed the explicit relationships between Efficacy subscales and Job Satisfaction. Using Spearman Correlation analyses, the correlation coefficients of Efficacy and Job Satisfaction subscales showed that: (a) self-efficacy in student engagement was significantly and positively related with Job Satisfaction relating to Nature of Work and Total Satisfaction for general education teachers only; (b) self-efficacy in instructional strategy was significantly and positively correlated with Job Satisfaction relating to Coworkers and Nature of Work for general education teachers only; and (c) self-efficacy in classroom management was significantly and positively correlated with Job Satisfaction relating to Nature of Work for both general and special education teachers. There is a disparity in the relationship between teacher's job satisfaction and self-efficacy between general and special education teachers wherein there was only one significantly relevant self-efficacy marker (classroom management) for job satisfaction

(nature of work) in special education teachers while there were five significant relationships between self-efficacy and job satisfaction (self-efficacy in student engagement with job satisfaction relating to nature of work and total satisfaction; self-efficacy in instructional strategy with job satisfaction relating to coworkers and nature of work; and self-efficacy in classroom management with job satisfaction relating nature of work) for general education teachers.

The results of this correlation study contribute to a body of literature that demonstrates the correlation of the theory of SE (Bandura, 1997) and job satisfaction (Spector, 1997); the context of a middle school setting adds richness to that body. The importance of this research may be seen in a myriad of contexts: health service, corporate, sports, and many more. Moreover, in the context of increasing teacher turnover, the results of this study are important in the intervention research. Therefore, identifying the specific and explicit dimensions of SE that affect job satisfaction must be undertaken, especially in the context of general and special education.

Through the quantitative analysis of the current study, the results of the data present a preliminary understanding of the relationships of self-efficacy and job satisfaction. To expound, the explanation was divided into three level headings, indicating the relationship of the three dimensions of SE with the respective dimensions of job satisfaction.

Self-Efficacy in Student Engagement and Job Satisfaction

The investigation of the first research question (RQ1) focused on determining if there is a difference in the relationship of teacher's job satisfaction and self-efficacy in student engagement between general and special education teachers. It was hypothesized that SE in student engagement would be positively associated with job satisfaction. From the meta-analysis of the

literature regarding Spector (1997), it was suggested that the different facets of job satisfaction should be significant to factors of teachers' sense of efficacy.

The findings indicated that the teacher's sense of self-efficacy in student engagement does relate to job satisfaction, but only for the samples of general education teachers. Specifically, the results showed that the higher the self-efficacy in student engagement is, the teacher experiences greater satisfaction with their job relating to the nature of work and total satisfaction. However, it showed no relation of self-efficacy in student engagement and the other dimensions of job satisfaction, namely pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, and communications.

Interestingly, these findings are consistent with Dalal, Bhave, and Fiset's (2013) notion on between-persons' dynamics in job performance and efficacy. The main job description of teachers requires them to develop the students' skills in a specialized field (e.g., mathematics, languages). Thus, it is fundamental that they engage their students during classroom sessions. Student engagement entails the performance of the students with respect to the teacher's SE; therefore, it is a between-persons dynamics. On this premise, the affect of the teacher's perceptions of SE on the students' performance, as shown by the results of this study, is an interpersonal relationship that is quite innate in the nature of work of the teacher.

This result also supported Bruce et al.'s (2010) conclusions in the relationship of teacher SE and increased student behaviors. Adapting unfamiliar teaching strategies adds more challenge to the teacher's perceptions of SE (Bruce et al., 2010), thus increasing job satisfaction in relation to the nature of the work. In addition, job retention is closely associated with teacher SE (Luckey-Smith, 2013). This result reflected that increasing the complexity of teaching strategies,

and mastering those strategies, as a part of the nature of work results in stronger SE among teachers.

These findings suggested that the cultivation of the relationship between the teacher and the students during classroom sessions is important in the job performance of the former, as reflected by the results of Dalal et al.'s (2013) research on between-person dynamics of SE. In addition, while positive performance of the teacher is seen in positive personnel relationships (Dalal et al., 2013), these findings showed that such positive impact extends even to the teacher-student dynamics.

The data concluded student engagement to be much lower than classroom management; mean scores of 6.77 and 7.56, respectively. This study supports the notion that classroom management can be negatively correlated to SES; this low SES setting resulted in higher mean scores of classroom management, yet lower ratings of student engagement. The Devos et al. (2012) research also purported that teacher SE beliefs cannot be conclusively correlated by SES.

Despite the positive correlation between self-efficacy in SE among general education teachers, the non-significant result for the special education teachers may further explain how they experience higher emotional exhaustion and depersonalization in their work, and that lower personal achievement is more prominent among special education teachers (Kucuksuleymanoglu, 2011). These factors could possibly affect burnout among teachers (Boujutet al., 2016). Indeed, a person's self-efficacy is influenced by the conditions of the environment (Aldridge & Fraser, 2016; Klassen & Chiu, 2010; Sahertian & Soetjipto, 2011), and constant exposure to stressful situations have a negative influence on teachers, especially for those who had to proceed with extra caution due to the delicate nature of the work.

Alternatively, the other dimensions of job satisfaction can be described as external motivations, at least relative to the student-teacher relationship, may explain why SE in student engagement has no significant relation to pay, promotion, fringe benefits, contingent rewards, operating conditions, coworkers, and communication. However, this particular result warrants more questions than answers, and must be further explained in future studies.

Self-Efficacy in Instructional Strategy and Job Satisfaction

The second research question (RQ2) determined if there is a difference in the relationship of teacher's job satisfaction and self-efficacy in instructional strategy between general and special education teachers. It was hypothesized that there should be a positive correlation between instructional strategy and dimensions of job satisfaction. The link found here between self-efficacy in instructional strategy and job satisfaction relating to co-workers and nature of work is consistent with Spector's (1997) and Locke's (1976) important facets of job satisfaction. However, whereas these findings reflect the importance of these facets, our data also suggest that there are specific facets of SE that consequently determine one's job satisfaction.

The findings indicated that the teacher's self-efficacy in instructional strategy is associated with teacher job satisfaction. In particular, as self-efficacy in instructional strategy increases, so does job satisfaction relating to coworkers and nature of work, but only for the samples of general education teachers. Conceptually, the positive relation between instructional strategy and satisfaction with coworkers might be related to the notion that coworker is an extrinsic factor (Weiss et al., 1967) that may be paralleled to instructional strategy in such a way that both involve between-person dynamics and adaptation of effective strategies in order to achieve goals. Job satisfaction is achieved when the level of emotional satisfaction is attained (Spector, 1997). These motivations suggested that emotional satisfaction with regards to one's

job is be related to one's relationship with co-workers. Positive relationship with co-workers positively affect the individual's job satisfaction.

It is also noted that self-efficacy in instructional strategy was not correlated to what was previously described as external motivations, relative to interpersonal relationships. It is interesting to mention that these dimensions of job satisfaction (i.e. pay, promotions, fringe benefits, contingent rewards, operating conditions) involve benefits for the individual only, as compared to co-workers, which entails human relations. This suggested that such external, materialistic, motivations do not effectively impact the individual's motivations to actively seek techniques in order to contribute to student learning. This result confirmed how professionals seek positive peer relations and organization policies in a job (Itzhaki et al., 2012). Interactions with peers in the 2012 study correlate to the subset of Coworkers and Supervisors; these two represent the second and third highest correlation coefficient means for job satisfaction, although Supervisors was not found to be significantly correlated with self-efficacy in instructional strategy in this current study. Indeed, professional adults seek more to a job than just the pay or benefits.

In addition, this reflected the notion that professional development and self-efficacy in teachers are related with supportive interventions by co-workers and supervisors (Erozkan, 2014). In this case, teacher job satisfaction is achieved through the cultivation and utilization of interpersonal relationships, which Tindall and Culhane (2014) posit are important in preservice programs in order to increase student achievement. Teachers can effectively increase levels of SE by relying on supportive mentoring interventions through feedback and encouragement that decrease the negative problem orientation faced by novice teachers (Erozkan, 2014; Webster et al., 2013). Consequently, this showed the interconnection of self-efficacy in instructional

strategy and job satisfaction relating to coworkers and nature of work, and how this dimension of SE facilitate job satisfaction among teachers. Interpersonal relationships that foster this constructivist concept from a job satisfaction purview is the co-worker and nature of work subsets; both of which were significantly correlated to the Instructional Strategies efficacy subscale in the present study.

The lack of significant relation between self-efficacy in instructional strategy and pay, benefits, or rewards reflects the notion that a higher-paying job is more closely associated with teacher personality, not performance (Duckworth et al., 2009). This is because SE is an intrapersonal process that is more focused on personal growth through self-motivation (Bledow, 2012). Self-motivation far outweighs external motivations, and is thus reflected in the results of this study. Additionally, the non-significant result among the teachers of special education teachers, as a group, could potentially be an avenue for further research. Although special education teachers receive additional training to specifically handle the different needs of their students (Sarıçam & Sakız, 2014), it has been observed that self-efficacy is declining among teachers especially in special education teachers (Guo, Dynia, Pelatti, & Justice, 2014; Sarıçam & Sakız, 2014). The nature of the job requires special education teachers to provide more attention, which may be demanding at most times (Carnahan, Williamson, & Christman, 2011; Ricketts, 2010; Whalon & Hart, 2010). Despite the fact that no significant relationship was found among SPED teachers, it is still important to understand the reason behind this and to further study the evidence that may affect the teachers' self-efficacy and its different aspects. Reasons for non-significant results could be that the local school does not explicitly focus on imparting instructional strategies in staff development sessions. Instead, department leaders mainly focus

on the logics of data collection, disseminating information, and adherence to state filing standards.

Self-Efficacy in Classroom Management and Job Satisfaction

The third research question (RQ3) explored if there is a difference in the relationship of teacher's job satisfaction and self-efficacy in classroom management between general and special education teachers. In this light, it was hypothesized that there is a positive correlation between self-efficacy in classroom management and job satisfaction. Specifically, classroom management should be related to the different facets of job satisfaction.

The results showed that teacher's self-efficacy in classroom management are positively correlated with job satisfaction relating to nature of work for both general and special education teachers. Specifically, as self-efficacy in classroom management increases, job satisfaction relating to nature of work also increases. The positive correlation between classroom management and nature of work may be theoretically related to the fact that high self-efficacy in classroom management is negatively correlated to teacher burnout (Ruble et al., 2011). This means that those who experience higher classroom management efficacy tend to stay longer in their jobs. Self-efficacy in classroom management supports one's confidence in identifying classroom needs, and addressing these needs in order to promote student learning. This is reflected in how the effective classroom management strategies significantly affect student engagement and achievement (Ross & Bruce, 2007), thereby increasing job satisfaction pertaining to nature of work.

Additionally, this result supported the notion that administrative and leadership support is correlated with burnout (Ruble et al., 2011). Self-efficacy in instructional strategy entails the teacher's capability to adapt different strategies in order to increase engagement and learning

among his or her students. This, however, contradicts the notion that there is no empirical data that supports a positive correlation of administrative support and teacher job satisfaction. The results of this current study did not show a positive link between job satisfaction in supervision and teacher burnout, consequently affecting job satisfaction.

Again, as with the previous results, self-efficacy in classroom management did not correlate with the external motivations of teachers at work. While this disagrees with Spector's (1997) position that these must be present in order to achieve high levels of satisfaction, the results suggested that specific factors must be taken into consideration in order to properly assess job satisfaction of teachers. In this light, it is important to delineate and identify the mediating factors that connect self-efficacy and job satisfaction in the context of teachers.

From the results of the current study, it can be noted that the dimensions of SE in classroom management have a positive correlation with job satisfaction relating to the nature of work for both the samples of general and special education teachers. This means that as SE increases, job satisfaction relation to nature of work also increases. The more the teacher perceives their job as enjoyable and meaningful, the more they are contented with the work that they do. This supported Spector's formulation of job satisfaction as relating to emotional satisfaction of a person, which is attained through the holistic assessment of various facets (Spector, 1997). Overall satisfaction entails feelings of enjoyment with what one does, and the positive scores in these aspects further proves that, nature of work is a vital facet in indicating one's job satisfaction for teachers.

Interestingly, the three dimensions of SE did not have significant relationship with pay, promotions, supervision, fringe benefits, contingent rewards, operating conditions, and communication. Somehow, this contradicted some formulations that these are important facets in

job satisfaction. However, this discrepancy may be brought about by the focus shift from external motivations to self-motivated goals in the workplace, as reflected by the literature review. Further exploration on this aspect must be undertaken in order to have a broader grasp of these discrepancies.

The results of the study offered a preliminary theoretical framework to integrate self-efficacy and job satisfaction. While the empirical data offered a generalized connection of the two variables, it is important to look into the underlying conceptual links of these two in order to deepen one's understanding of job satisfaction and self-efficacy. It is also important to note that, where explicit relationships were found between self-efficacy and job satisfaction, these links describe only the surface level of the relationship. Although incomplete, the findings provided exploratory data on the intrinsic relationship of the two variables presented.

The results of this study showed the complex psychological processes of explicit relationships between self-efficacy and job satisfaction. The explicit relationships emerging from the extensive data show the various strategies through which the teachers navigate through their experiences with regards to their job. The present study elaborated on these relationships in light of addressing the gap of the literature in this field. However, the researcher acknowledged that this conceptualization may simply serve as a preliminary framework for future studies, and that it can still be subjected to change and further theorizing depending on the context.

The present study provided an extensive quantitative analysis of job satisfaction and SE in the context of general and special education. Addressing the gap of previous studies, the study acknowledged that this relationship is complex, and can be initially understood by drawing distinctions between these relationships. This study recognized that there are complex dimensions of meaning-making in the teacher resiliency in the workplace.

In summary, the present study identified the explicit relationships of self-efficacy and job satisfaction dimensions in the context of teacher resiliency. These findings integrated Bandura's theory of SE in Locke's formulation of job satisfaction. Some of the results of this study confirmed the existing body of literature, while also providing explanation on the discrepancies between contradictions of previous research.

Implications

The findings of the present study have several implications for school administrators and teachers. The present study contributed to the growing body of literature on job satisfaction and self-efficacy in multiple contexts. Understanding the interconnection of these two social concepts proved beneficial not only in the educational setting, but also in many other social contexts as well. Methodologically, the formulation and constant revision of assessment tests to measure the correlation of these two social concepts provides a deeper understanding of the underlying connections and nuances, thus providing insight to development strategies and programs for service providers. For example, Ashburner et al. (2014) argued that publicizing standardized treatment guidelines is vital in addressing these gaps in therapy assessment research, especially of children with autism. Moreover, the present study also provided insight on the importance of integration of SE measurement in understanding job satisfaction, resiliency, and efficacy of professionals. Whereas it is important to look into the isolated factors of job satisfaction, as seen in the works of Judge et al. (2000), the integration of SE in understanding job satisfaction among teachers offers a broader insight into the problems and possible interventions that the school or administration may provide.

The findings confirm that there are significant differences in the relationship between self-efficacy and job satisfaction of different teachers of general education teachers and special

education teachers in multiple ways. Specifically, it was determined that there are significant differences in the relationship of teacher's job satisfaction and self-efficacy in student engagement and instructional strategy between general and special education teachers. On the other hand, there are no significant differences in the relationship of teacher's job satisfaction and self-efficacy in classroom management between general and special education teachers. It is incumbent upon them to seek out prospective teachers who fundamentally have an affinity towards the nature of work that teaching necessitates. Although it is noted that the pay and benefits (Itzhaki et al., 2012), management organization (Mackonienè & Norvilè, 2012), and Theory of Work Adjustment (Dawis & Lofquist, 1984) are job satisfaction factors, the findings of this study strongly supported the crucial role of social relationships in improving and maintaining job satisfaction. Individuals are more inclined to stay and further improve their skills in an environment where positive relationships are created and nurtured. This implied that positive and supportive social relationships in the workplace can function as a safe space for the teacher. Through facilitating positive experiences through interpersonal relationships with co-workers and nature of work. Teachers who value interpersonal connections will internalize encouragement, mentoring and constructive feedback in a transformative way. Tasks such as providing engaging student activities, imploring a variety of classroom management techniques, and continually adapting instructional strategies to ensure learning targets are the core elements that encompass a teacher's nature of work.

The effect of this study can also have theoretical implications and practical applications for personnel development in addressing burnout and teacher retention in low SES environments. Maintaining an environment whereby teachers can thrive is paramount to decreasing teacher turnover. Since teachers most preferred County Sponsored Training and Curriculum Sponsored

Training, encouragement, modeling and constructive feedback must be sought in those modes of professional development. There is already a shift from the traditional view that pay and benefits are the main reason for employee improvement. Generally, service providers, especially those in management, must take advantage of this trend and further improve job satisfaction by addressing the more important concerns with regards to burnout: that is, the utilization of social relationships as a means for skills improvement and job satisfaction.

On the personal level, individual understanding of one's motivations with regards to one's work is also vital to assess job satisfaction, as well as locate SE in this context. The present study may help in the conveying the importance of constant self-reflection and evaluation of the different factors that affect one's motivations and resiliency towards work. One's agency in maintaining job satisfaction must also be recognized, so that the individual can also further develop self-regulatory processes to achieve job satisfaction.

The results of this study provided a preliminary model for the social psychological processes of resiliency. The present study provided an idea on how agency (as reflected by self-efficacy) links with job satisfaction in a myriad of contexts, including, but not limited to education, sports, or even the health care industry. It is apparent that further studies must be explored in order to achieve extensive knowledge on this topic, but the present study may provide a baseline of understanding.

Limitations

There are obvious benefits of this study; however, it cannot be ignored that this test also contains some flaws that should be taken into consideration. One important factor was the conceptual fit of the theoretical framework to the topic being researched. It would have been helpful if an analysis of variance were performed between the general teachers and special

education teachers in order to analyze the difference between the two sample groups.

Considering them as being part of the same group erases the fundamental difference of the nature of their work, thus not accounting for the distinction in experiences of each group. Additionally, including both groups as one whole data pool works under the assumption that they have similar experiences with regards to work situations; however, the review of related literature showed the contextualized differences of each group presented. A comparative study, using ANOVA, could have helped distinguish the correlation coefficients of each variable, which results in a more extensive quantitative analysis of the results.

In relation to sampling, there were several random and uncontrolled factors could have possibly affected the answering of the participants. Demographic characteristics of the sample population, time constraints, and the willingness of teachers to participate were not controlled factors. Moreover, this test has only been administered once, that is, this would be the first ever data set that would be acquired of this test. Despite the statistical results supporting the test's reliability, it was not certain that this test is highly generalizable as its data pool is limited to a single set of participants. Also there are differences in the sample size or number of participants in the two sample groups of general education teachers ($n = 60$) and special education teachers ($n = 21$) wherein the general education teachers have almost thrice the number of samples than the special education teachers. Thus, the sample population lacks diverseness in the sense that it has only been tested in one institution. It has not yet been tested in other agencies and institutions that exist.

The methodological limitations also affected the results of the study. One methodological limitation is that the three subscales of job satisfaction of operating conditions, coworkers, and nature of work did not have acceptable reliability since the Cronbach's alpha values were below

the minimum of 0.70. The unreliability of coworkers and nature of work might affect the outcomes being that several of the self-efficacy measure showed a significant correlation with nature of work and coworker. The significance of the correlation can be questionable because of the poor reliability of the measurements of the job satisfaction of operating conditions, coworkers, and nature of work. Although reliability tests were done in order to assess the test instruments, it may have been interpreted differently by the different segments of participants. Obviously, groups of general and special education teachers were expected to have different experiences regarding their work situations, as they deal with different groups of children and task assignments. While generalized study is important for the reliability of the research, the context and background of the participants also affected the results of the study.

The strength of the coefficient correlation results were in the weak to medium ranges, which may be seen as a discrepancy of the study. It could be that the strength of this relationship was affected by the heterogeneous sample of general and special education teachers. Delineating the variables, as well as of the two sampling population of general and special education teachers, can be done to address this discrepancy. Many interesting results were seen from the study, but because of the weakness of significance in the relationships, the data could not be interpreted. For example, a weak positive relationship between self-efficacy in instruction strategy and job satisfaction relating to coworker and nature of work were seen for the samples of general education teachers. Albeit insignificant, this showed a small discrepancy between the results of previous studies indicating strong positive correlations with SE.

Another limitation was the scarcity of research instrumentation involving the integration of job satisfaction and self-efficacy scales. Whereas separately the two social concepts have a rich body of literature, issues in interpretation and discussion arose when the two were

integrated. For one, it had been difficult to explicitly explain the underlying theories between the two variables because of the lack of literature on the said subject. While preliminary results showed evidence of the link of self-efficacy and job satisfaction, it is apparent that further studies must be undertaken in order to extensively nuance how these two relate with each other.

Recommendations for Future Research

The findings of this study confirmed that there is a significant relationship, however from the limitations discussed in the previous subsection, it is apparent that further studies must be undertaken in order to have a deeper understanding of the topic. In light of the results and limitations of the present study, one recommendation for a future study would be that between-groups analysis can be undertaken to have a deeper understanding of the contextual differences with regards to job satisfaction and self-efficacy. Another recommendation is that further studies can adapt a qualitative research design in order to address the research gap in the link between job satisfaction and self-efficacy.

Furthermore, evaluation and development of the test instruments used by the present study can be explored so that a more extensive but industry-specific instrument can be developed for assessment use. The importance of demographics must be taken into consideration, especially for social psychological studies that focus on cultural and ethnic differences in perceptions towards job satisfaction and self-efficacy. Because the current study found that nature of work is vital to job satisfaction, it is also important to look into how professionals understand their work, by using qualitative research design.

Lastly, looking into the coping mechanisms of teachers and other professionals in order to navigate through the stresses of their work is also important in studying job satisfaction through self-efficacy. Further studies can explore the specific relationships of the different dimensions of

job satisfaction and self-efficacy in different contexts. The present study offers basic interactions between these variables; hence future research can develop on these findings. However, the results of this study showed there is no significant data linking extrinsic motivators of job satisfaction to self-efficacy among general and special education teachers in a southeastern school district in the United State. This has not been addressed in further studies or in implications.

REFERENCES

- Abualrub, R., & Alghamdi, M. (2011). The impact of leadership styles on nurses' satisfaction and intention to stay among Saudi nurses. *Journal of Nursing Management, 20*, 668-678.
- Akkaya, M., & Haydar, A. (2013). Analyzing the effect of factors of different groups on the job satisfaction of academicians. *International Journal of Academic Research, 5*(1), 130-135.
- Akomolafe, M. J., & Ojunmakin, A. O. (2014). Job Satisfaction among secondary school teachers: Emotional intelligence, occupational stress and self-efficacy as predictors. *Journal of Educational and Social Research, 4*(3), 487-498. Retrieved February 10, 2016.
- Akpinar, S., & Toros, T. (2012). The study on job satisfaction levels of secondary education teachers in respect of some variables. *International Journal of Academic Research, 4*(1), 134-138. (2012, January 1). Retrieved July 11, 2014, from Ebsco.
- Akpinar, S., Bayansalduz, M., & Toros, T. (2012). The study on job satisfaction levels of secondary education teachers in respect of some variables. *International Journal of Academic Research, 4*(1), 134-137.
- Al-Awidi, H. M., & Alghazo, I. M. (2012). The effect of student teaching experience on preservice elementary teachers' self-efficacy beliefs for technology integration in the UAE. *Education Tech Research Development, 60*(5), 923-941. doi:10.1007 /s11423-012-9239-4
- Aldridge, J. M., & Fraser, B. J. (2015). Teachers' views of their school climate and its relationship with teacher self-efficacy and job satisfaction. *Learning Environments Research, 19*(2), 291-307. doi:10.1007/s10984-015-9198-x

- Ashburner, J. J., Rodger, S., Ziviani, J., & Hinder, E. (2014). Comment on: An intervention for sensory difficulties in children with autism: A randomized trial. *Journal of Autism & Developmental Disorders, 44*(6), 1486-1488.
- Association for Psychological Science: 2005-2006 James McKeen Cattell Fellow Award- Edwin A. Locke . (2006). Retrieved June 18, 2014, from <http://www.psychologicalscience.org/members/awards-and-honors/cattell-award/past-award-winners/locke>
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*(2), 117.
- Bandura, A. (1996). Failures in self-regulation: Energy depletion or selective disengagement? *Psychological Inquiry, 7*(1), 20-25.
- Bandura, A. (1997). Self-efficacy. *Harvard Mental Health Letter, 13*(9), 4-8.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science* (Wiley-Blackwell), *9*(3), 75-78.
- Beattie, S., Fakehy, M., & Woodman, T. (2014). Examining the moderating effects of time on task and task complexity on the within person self-efficacy and performance relationship. *Psychology of Sport and Exercise, 15*(6), 605-610. doi:10.1016/j.psychsport.2014.06.007
- Beck, J., & Schmidt, A. (2013). Negative relationships between self-efficacy and performance can be adaptive: The mediating role of resource allocation. *Journal of Management, 20*(10), 1-34. doi: 10.1177/0149206314567778
- Belfi, B., Gielen, S., Fraine, B. D., Verschueren, K., & Meredith, C. (2015). School-based social capital: The missing link between schools' socioeconomic composition and collective teacher efficacy. *Teaching and Teacher Education, 45*, 33-44.

doi:10.1016/j.tate.2014.09.001

Benight, C. C., & Bandura, A. (2004). Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behaviour Research and Therapy*, *42*(10), 1129-1148.

Besen, E., Matz-Costa, C., Brown, M., Smyer, M., & Pitt-Catsouphes, M. (2013). Job characteristics, course self-evaluations, and job satisfaction: What's age got to do with it? *International Journal of Aging and Human Development*, *76*(4), 269-295.

Bledow, R. (2012). Demand-perception and self-motivation as opponent processes a response to Bandura and Vancouver. Retrieved from *Journal of Management*, *39*(1), 14-26.

doi:10.1177/0149206312466149

Boujut, E., Popa-Roch, M., Palomares, E., Dean, A., & Cappe, E. (2017). Self-efficacy and burnout in teachers of students with autism spectrum disorder. *Research in Autism Spectrum Disorders*, *36*, 8-20. doi:10.1016/j.rasd.2017.01.002

Breeding, R. R. (2008). Empowerment as a function of contextual self-understanding: The effect of work interest profiling on career decision self-efficacy and work locus of control. *Rehabilitation Counseling Bulletin*, *51*(2), 96-106.

Bruce, C. D., Esmonde, I., Ross, J., Dookie, L., & Beatty, R. (2010). The effects of sustained classroom-embedded teacher professional learning on teacher efficacy and related student achievement. *Teaching and Teacher Education*, *30*, 1-11.

Butler, M., & Cuenca, A. (2012). Conceptualizing the roles of mentor teachers during student teaching. *Action in Teacher Education*, *34*, 296-308. doi:10.1080

/01626620.2012.717012

Carnahan, C. R., Williamson, P. S., & Christman, J. (2011). Linking Cognition and Literacy in Students with Autism Spectrum Disorder. *TEACHING Exceptional Children*, *43*(6), 54-

62. doi:10.1177/004005991104300606

- Chang, Y., & Edwards, J. K. (2015). Examining the Relationships Among Self-Efficacy, Coping, and Job Satisfaction Using Social Career Cognitive Theory: An SEM Analysis. *Journal of Career Assessment, 23*(1), 35-47. Retrieved January 24, 2016.
- Childre, A. L., & Van Rie, G. L. (2015). Mentor teacher training: A hybrid model to promote partnering in candidate development. *Rural Special Education Quarterly, 34*(1), 10-16.
- Coladarci, T., & Breton, W. (1997) Teacher efficacy, supervision, and the special education resource-room teacher. *The Journal of Educational Research, 90*(4), 230-239.
- Crowson, H., & Brandes, J. (2014). Predicting pre-service teachers' opposition to inclusion of students with disabilities: A path analytic study. *Social Psychology of Education, 17*(1), 161-178.
- Dalal, R., Bhawe, D., & Fiset, J. (2013). *Within-person variability in job performance: a theoretical review and research agenda*. Retrieved from <http://jom.sagepub.com/content/40/5/1396.full>
- Dawis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment: An individual-differences model and its application*. Minneapolis, MN: University of Minnesota Press. Retrieved from http://www.psych.umn.edu/psylabs/vpr/pdf_files/Psychological%20Theory%20of%20Work%20Adjustment.pdf
- Devos, C., Dupriez, V., & Paquay, L. (2012). Does the social working environment predict beginning teachers' self-efficacy and feelings of depression? *Teaching and Teacher Education, 28*(2), 206-217. doi:10.1016/j.tate.2011.09.008
- Doherty, R. W., Hilberg, R. S., Epaloose, G., & Tharp, R. G. (2002). Standards performance continuum: Development and validation of a measure of effective pedagogy. *Journal of*

- Educational Research*, 96(2), 78.
- Duckworth, A. L., Quinn, P. D., & Seligman, M. E. P. (2009). Positive predictors of teacher effectiveness. *Journal of Positive Psychology*, 4(6), 540-547.
- Dunnette, M. (1976). The nature and causes of job satisfaction: Edwin A. Locke. In *Handbook of industrial and organizational psychology*. Chicago, IL: Rand McNally College Pub.
- Emery, D. W., & Vandenberg, B. (2010). Special education teacher burnout and ACT. *International Journal of Special Education*, 25(3), 119-131.
- Erozkan, A. (2014). Analysis of social problem solving and social self-efficacy in prospective teachers. *Kuram ve Uygulamada Egitim Bilimleri*, 14(2), 447-455.
- Farkas, M. (2012). Self-efficacy in retention and how we can help build it. Retrieved from <http://hum.sagepub.com/content/61/6/783.short>
- Faucette, N., & Nugent, P. (2012). Preservice teachers' responses to a peer mentoring innovation: The leavers and completers. *Education*, 132(3), 548-559.
- Feltz, D. L., Chow, G. M., & Hepler, S. (2008). Path analysis of self-efficacy and diving performance revisited. *Journal of Sport & Exercise Psychology*, 30(3), 401-411.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). New York, NY: Allyn & Bacon.
- GALLUP. (2012). Retrieved from <http://www.gallup.com/strategicconsulting/strengths.aspx>
- Gholia, A., Belias, D., & Koustelios, A. (2014). Teacher's job satisfaction and self-efficacy: A review. *European Scientific Journal*, 10(22), 321-343. Retrieved February 10, 2016.
- Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76(4), 569-582. doi:10.1037/0022-0663.76.4.569
- Gkolia, A., Belias, D., & Koustelios, A. (2014). Teacher's job satisfaction and self-efficacy: a

- review. *European Scientific Journal*, 10(22), 321.
- Goldin, G. A., Epstein, Y. M., Schorr, R. Y., & Warner, L. B. (2011). Beliefs and engagement structures: Behind the affective dimension of mathematical learning. *ZDM*, 43(4), 547-568. doi:10.1007/s11858-011-0348-z
- Government Accountability Office. (2005). Special education: Children with autism. Government Accountability Office. Retrieved December 31, 2015, from <http://www.gao.gov/products/GAO-05-220>
- Governor's Office of Student Achievement. (2011). *Race to the top: What is race to the top?* Retrieved from <http://www.gaosa.org/highlights.aspx>
- Guo Y., Dynia J., Pelatti C., Justice L. (2014). Self-efficacy of early childhood special education teachers: Links to classroom quality and children's learning for children with language impairment. *Teaching & Teacher Education*, 39, 12-21. doi:10.1016/j.tate.2013.11.005
- Gutek, G. L. (2011). *Historical and philosophical foundations of education: A biographical introduction* (5th ed.). Upper Saddle River, NJ: Pearson.
- Gwinnett County Public School: *GCPS research questions/topics of interest 2012-13 Academic Year* (11/08/2012). Retrieved from [http://www.gwinnett.k12.ga.us/gcps-mainweb01.nsf/56EB70C14E1258A685257A020070CF0B/\\$file/Suggested-Research-Studies.pdf](http://www.gwinnett.k12.ga.us/gcps-mainweb01.nsf/56EB70C14E1258A685257A020070CF0B/$file/Suggested-Research-Studies.pdf)
- Gwinnett County Public Schools Communication and Media Relations. (2010). *2010 broad prize awarded to Gwinnett County public schools; Georgia district wins \$1 million in scholarships, Four Finalists Each win \$250,000*. New York, NY: Retrieved from <http://www.broadprize.org/asset/0-tbp%202010%20press%20release.pdf>
- Gwinnett County Public School. *Career in special education*. (3/19/2010). Retrieved from

<http://www.gwinnett.k12.ga.us/careers%5Ccareershr.nsf>

[/8B2B6E3C29E8793485257727004A43AD/\\$file/Special_Education_Insert.pdf](/8B2B6E3C29E8793485257727004A43AD/$file/Special_Education_Insert.pdf)

Henson, R. K., Kogan, L. R., & Vacha-Haase, T. (2001). A reliability generalization study of the teacher efficacy scale and related instruments. *Educational and Psychological Measurement, 61*(3), 404-420.

Heritage, B., Pollock, C., & Roberts, L. D. (2015). Confirmatory factor analysis of Warr, Cook, and Wall's (1979) Job Satisfaction Scale. *Australian Psychologist, 50*(2), 122-129.
Retrieved January 24, 2016.

Horvitz, B. S., Beach, A. L., Anderson, M. L., & Xia, J. (2014). Examination of faculty self-efficacy related to online teaching. *Innovative Higher Education, 40*(4), 305-316.

Hughes, G. D. (2012, June 04). Teacher retention: Teacher characteristics, school characteristics, organizational characteristics, and teacher efficacy. *The Journal of Educational Research, 105*(4), 245-255. doi:10.1080/00220671.2011.584922

Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership, 60*(8), 30-33. Retrieved from <http://web.ebscohost.com.ezproxy.liberty.edu:2048/ehost/pdfviewer/pdfviewer?sid=357fa704-ef58-4eb8-aec5-5941c7c80e3a%40sessionmgr112&vid=4&hid=118>

Itzhaki, M., Ea, E., Ehrenfeld, M., & Fitzpatrick, J. (2012). Job satisfaction among immigrant nurses in Israel and the United States of America. *International Nursing Review, 60*, 122-128.

Judge, T., Bono, J., & Locke, E. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of Applied Psychology, 85*(2), 237-249.

Kain, E. (2011). High teacher turnover rates are a big problem for America's public schools.

- Forbes Magazine*. Retrieved from <http://www.forbes.com/sites/erikkain/2011/03/08/high-teacher-turnover-rates-are-a-big-problem-for-americas-public-schools/>
- Kalkhoff, N., & Collins, D. (2012). Speech-language pathologist job satisfaction in school versus medical settings. *Language, Speech, and Hearing Services in Schools, 43*, 164-175.
- Kaufman, R. C., & Ring, M. (2011). Pathways to leadership and professional development: Inspiring novice special educators. *Teaching Exceptional Children, 43*(5), 52-60.
- Kiliç, S., Tanrikulu, T., & Ugur, H. (2013). Job satisfaction and social comparison levels of teachers working for state schools. *International Journal of Human Sciences, 10*(1), 760-779. Retrieved from Ebsco.
- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology, 102*(3), 741-756. doi:10.1037/a0019237
- Kucuksuleymanoglu, R. (2011). Burnout syndrome levels of teachers in special education schools in Turkey. *International Journal of Special Education, 26*(1), 53-63. (ERIC Document Reproduction Service No. EJ921186)
- Kumcagiz, H., Ersanli, E., & Alakus, K. (2014). Hopelessness, procrastination and burnout in predicting job satisfaction: A reality among public school teachers. *International Journal of Academic Research, 6*(1), 333-339. Retrieved July 11, 2014, from Ebsco.
- Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology, 60*(4), 557-568. doi:10.1037/a0033446
- Locke, E. (1969). What is job satisfaction? *Organizational Behavior and Human Performance, 4*, 309-336. Retrieved September 11, 2014.

- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), Handbook of Industrial and Organizational Psychology, Chicago: Rand McNally, 1297-1349.
- Locke, E. (2005, January 1). 2005 James McKeen Cattell Fellow Award. Retrieved July 14, 2014. Retrieved from <http://www.psychologicalscience.org/index.php/members/awards-and-honors/cattell-award/past-award-winners/locke>
- Lopez, A. J. (2010). *Reducing teacher turnover by utilizing a national list of reasons for teacher dissatisfaction*. Retrieved from ERIC. ED518123
- Luckey-Smith, K. (2013). Exploring self-efficacy and stress of senior nursing students who participate in progressive simulation. *Undergraduate Honors Theses*. Paper 111. Retrieved from <http://dc.etsu.edu/honors/111>
- Mackoniene, R., & Norvile, N. (2012). Burnout, job satisfaction, self-efficacy, and proactive coping among Lithuanian school psychologists. *Tiltai*, 3, 199-210.
- Makol, S. (2013). Efficacy of a sense of meaning intervention amongst managers at South African Institution of Higher Education. *Journal of Psychology in Africa*, 23(1), 119-122. Retrieved July 11, 2014, from Ebsco.
- Martens, E. H. (1946). State legislation for the education of exceptional children; some basic principles. *Journal of Exceptional Children*, 12, 225.
- Masuda, A., Poelmans, S., Allen, T., Spector, P., Lapierre, L., Cooper, C., Moreno-Velazquez, I. (2012). Flexible work arrangements availability and their relationship with work-to-family conflict, job satisfaction, and turnover intentions: A comparison of three country clusters. *Applied Psychology*, 61(1), 1-29.
- Mazurenko, O., & Menachemi, N. (2012). Environmental market factors associated with

- physician career satisfaction. *Journal of Healthcare Management*, 57(5), 307-320.
- McCoach, D. B., & Colbert, R. D. (2010). Factors underlying the collective teacher efficacy scale and their mediating role in the effect of socioeconomic status on academic achievement at the school level. *Measurement and Evaluation in Counseling and Development*, 43(1), 31-47. doi:10.1177/0748175610362368
- McNutt, D., & Judge, T. (2013). *Self-efficacy intervention, job attitudes, and turnover: A field experiment with employees in role transition*. Retrieved from <http://jom.sagepub.com/content/early/2012/10/31/0149206312466149.abstract>
- Memiş, A., & Gençtürk, A. (2011) Investigation of the relationship between teacher efficacy and job satisfaction. *The Journal of SAU Education Faculty*, 22, 76-88.
- Miller, P. (2011). *Theories of developmental psychology* (5th edition). New York, NY: Worth Publishers.
- Minnesota Satisfaction Questionnaire (MSQ)*. (2010, August 26). Retrieved November 5, 2012 from <http://vpr.psych.umn.edu/msq.html>
- Morales, P. (2012, November 29). Re: Research Information: Teachers/Paraprofessionals and Demographics [electronic mail].
- Muller, S. M., Gorrow, T. R., & Fiala, K. A. (2011) Considering protective factors as a tool for teacher resiliency. *Education*, 131(3), 545-555. Retrieved from <http://www.highbeam.com/doc/1G1-253740214.html>
- Narainsamy, K., & Van Der Westhuizen, S. (2013). Work related well-being: burnout, work engagement, occupational stress and job satisfaction within a medical laboratory setting. *Journal of Psychology in Africa*, 23(3), 467-474. Retrieved July 11, 2014, from Ebsco.
- Newton, K. J., Leonard, J., Evans, B., & Eastburn, J. (2012). Preservice elementary teachers' mathematics content knowledge and teacher efficacy. *School Science and Mathematics*,

112(5), 289-299.

Nie, Y., Tan, G. H., Liao, A. K., Lau, S., & Chua, B. L. (2012). The roles of teacher efficacy in instructional innovation: Its predictive relations to constructivist and didactic instruction.

Educ Res Policy Prac Educational Research for Policy and Practice, 12(1), 67-77.

Olayiwola, I. O. (2011). Self-efficacy as a predictor of job performance of public secondary school teachers in Osun State. *Ife Psychologia*, 19(1), 441-455.

Oren, F. S., Ormanci, U., & Evrekli, E. (2014). The alternative assessment-evaluation approaches preferred by pre-service teachers and their self-efficacy towards these approaches. *Egitim ve Bilim*, 39(173), n/a.

Papinczak, T. (2012). Perceptions of job satisfaction relating to affective organisation commitment. *Medical Education*, 46(10), 953-962. doi:10.1111/j.1365-

2923.2012.04314.x

Plash, S., & Piotrowski, C. (2006). Retention issues: A study of Alabama special education teachers. *Education*, 127(1), 125-128. doi:oclc/61744005

Rethlefsen, A. L., & Park, H. (2011). A mixed-method study: Assessing the BAR model's impact on preservice teachers' efficacy beliefs. *School Science & Mathematics*, 111(3), 102-117.

Ricketts, B. (2010). The role of simulation for learning within pre-registration nursing education — A literature review. *Nurse Education Today*. doi:10.1016/j.nedt.2010.10.029

Ross, J., & Bruce, C. (2007) Professional development effects on teacher efficacy: results of randomized field trial. *The Journal of Educational Research*, 101(1), 50-60.

- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1-28.
doi:10.1037/h0092976
- Ruble, L. A., Usher, E. L., & McGrew, J. H. (2011). Preliminary investigation of the sources of self-efficacy among teachers of students with autism. *Focus on Autism & Other Developmental Disabilities*, 26(2), 67-74.
- Sahertian, P. & Soetjipto, B. (2011). Improving Employee's Organizational Commitment, Self-Efficacy, and Organizational Citizenship Behavior Through the Implementation of Task-Oriented and Relationship-Oriented Leadership Behavior. *Business Review Cambridge*. 17. 48-60.
- Sarıçam, H., & Sakız, H. (2014). Burnout and teacher self-efficacy among teachers working in special education institutions in Turkey. *Educational Studies*, 40(4), 423-437.
doi:10.1080/03055698.2014.930340
- Schaaf, R. C., Benevides, T., Mailloux, Z., Faller, P., Hunt, J., Hooydonk, E. V., . . . Kelly, D. (2013). An Intervention for Sensory Difficulties in Children with Autism: A Randomized Trial. *Journal of Autism and Developmental Disorders*, 44(7). doi:10.1007/s10803-013-1983-8
- Sitzmann, T., & Yeo, G. (2013). A Meta-Analytic Investigation of the Within-Person Self-Efficacy Domain: Is Self-Efficacy a Product of Past. *Personnel Psychology*, 66(3), 531-568. doi:10.1111/peps.12035
- Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). The measurement of satisfaction in work and retirement. Chicago: McNally.
- Spector, P. (1985). Measurement of human service staff satisfaction: development of the job

- Satisfaction Survey. *American Journal of Community Psychology*, 693-713. Retrieved July 1, 2014, from ProQuest.
- Spector, P. (1997). *Job satisfaction application, assessment, cause, and consequences*. Thousand Oaks: SAGE Publications.
- Terranova, A., & Henning, J. (2011). National collegiate athletic association division and primary job title of athletic trainers and their job satisfaction or intention to leave athletic training. *Journal of Athletic Training*, 46(3), 312-318.
- Tindall, D., & Culhane, M. (2014). Irish preservice teachers' self-efficacy toward teaching children with disabilities. *Research Quarterly for Exercise and Sport*, 85(1), 159.
- Tschannen-Moran, M., & Hoy, A. W. (2001) Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805.
- Tsouloupas, C. N., Carson, R. L., & Matthews, R. A. (2013). Personal And School Cultural Factors Associated With The Perceptions Of Teachers' Efficacy In Handling Student Misbehavior. *Psychology in the Schools*, 51(2), 164-180. doi:10.1002/pits.21739
- Vancouver, J. (2012) Rhetorical reckoning: A response to Bandura. *Journal of Management*, 38(2), 465-474. doi:10.1177/0149206311435951
- Viel-Ruma, K., Houchins, D., Jolivette, K., & Benson, G. (2010). Efficacy beliefs of special educators: The relationships among collective efficacy, teacher self-efficacy, and job satisfaction. *Teacher Education and Special Education*, 33(3), 225-233.
- Walan, S., & Rundgren, S. C. (2014). Investigating preschool and primary school teachers' self-efficacy and needs in teaching science: A pilot study. *Journal: Center for Educational Policy Studies Journal*, 4(1), 51-67.
- Wang, L., Ertmer, P. A., & Newby, T. J. (2004). Increasing preservice teachers' self-efficacy

- beliefs for technology integration. *Journal of Research on Technology in Education*, 36(3), 231-250.
- Webster, C. A., Erwin, H., & Parks, M. (2013). Relationships between and changes in preservice classroom teachers' efficacy beliefs: Willingness to integrate movement, and perceived barriers to movement integration. *Physical Educator*, 70(3), 314-335.
- Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota satisfaction questionnaire*. Minneapolis, MN: University of Minnesota.
- Weiss, D., Dawis, R., England, G., & Lofquist, L. (1967). *Manual for the Minnesota satisfaction questionnaire*. Minneapolis: Work adjustment project, industrial relations center. University of Minnesota.
- Whalon, K. J., & Hart, J. E. (2010). Children With Autism Spectrum Disorder and Literacy Instruction: An Exploratory Study of Elementary Inclusive Settings. *Remedial and Special Education*, 32(3), 243-255. doi:10.1177/0741932510362174
- Yilmaz-Tuzun, O., & Topcu, M. S. (2008). Relationships among preservice science teachers' epistemological beliefs, epistemological worldviews, and self-efficacy beliefs. *International Journal of Science Education*, 30(1), 65-85.

APPENDIX

Appendix A: IRB Approval Letter

LIBERTY UNIVERSITY

INSTITUTIONAL REVIEW BOARD

5/16/2016

Angela Jean Alford

IRB Exemption 2521.051616: Teacher Self-Efficacy and Job Satisfaction: A Correlation Study

Dear Angela Jean Alford,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.


Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

- (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
 - (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,


G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

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UNIVERSITY.

Liberty University | Training Champions for Christ since 1971

Appendix B: Local School Permission to Conduct Survey

J. ALVIN WILBANKS
CEO/SUPERINTENDENT

RICHARDS MIDDLE SCHOOL
3555 SUGARLOAF PARKWAY,
Lawrenceville, Georgia 30044
Phone: (770) 995-7133
Fax: (770) 338-4791

Mark McCain
Principal

Ben Bachman
Theresa Consorti
LaTasha Cook
Leann Goulding
Sharon Macoy
Sharena Morgan
Administrative Team

April 28, 2016

Dear Institutional Review Board:

The purpose of this letter is to inform you that I give *Angela Alford* permission to conduct the research **TEACHER SELF-EFFICACY AND JOB SATISFACTION: A CORRELATION STUDY** at *Richards Middle School*. This also serves as assurance that this school complies with privacy and confidentiality rights and will ensure that these requirements are followed in the conduct of this research.

Sincerely,

Mr. Mark McCain

Principal, Richards Middle School

Appendix C: Recruitment Letter

Date: May 18 2016
Richards Middle School Faculty

Dear Colleague:

As a graduate student in the Education at Liberty University, I am conducting research as part of the requirements for a Doctor of Education. The purpose of my research is to determine relationships between teachers' sense of self-efficacy and their job satisfaction, and I am writing to invite you to participate in my study.

To participate in this survey one must be a county employee of our local school who provides direct instruction to students. If you are 18 years of age or older, and you are willing to participate, you will be asked to collect the survey from the local school mailroom and voluntarily complete: demographical information; the second portion, perceptions of self-efficacy; and the third, job satisfaction perceptions; and return it to your grade level proctor during your planning time. It should take approximately 15 minutes for you to complete the procedures listed. Your participation will be completely anonymous, and no personal, identifying information will be required.

To participate, go to your local school mailbox, complete and return the distributed survey on May 20 to your grade-level office during your planning time.

A cover letter explaining consent is provided as the first page that will be given to you at the time of the survey's distribution. The consent document contains additional information about my research, but you do not need to sign and return it.

Sincerely,

Angela Alford
EdD Candidate, Teacher

Appendix D: Consent Information

CONSENT INFORMATION

TEACHER SELF-EFFICACY AND JOB SATISFACTION: A CORRELATION STUDY

Angela Jean Alford, Doctoral Candidate

Liberty University

School of Education

You are invited to be in a research study looking at the relationship between teacher self-efficacy and job satisfaction. You were selected as a possible participant because you are currently teaching at Richards Middle School. I ask that you read this form and ask any questions you may have before agreeing to participate in the study.

Angela Alford, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to examine the relationship between teacher perceptions of self-efficacy and their perceptions of job satisfaction. How well one handles growth, situations and responses indicates one's efficacy. Which three areas of teacher efficacy yield the highest levels of job satisfaction? This study will examine teachers' attitudes and understand if there is a significant correlation between the two. Conclusions from the study can then be used to focus the design of better training development and mentorship for educators. The researcher requests all teachers, regular and special education, to participate in this study.

Procedures: If you agree to take part in the study, I ask you to do the following things:

- 1) Respond to the demographics data regarding job: setting, experience, preparation, age and gender.
- 2) Complete the 12 question survey giving your honest attitudes towards self-efficacy.
- 3) Complete the 36 question survey giving your honest attitudes towards job satisfaction.
- 4) Return the signed consent and survey to your grade level proctor (Mrs. Peterkin/ Rivera Archie/ Atkins) on May 20, 2016.

The written survey responses will be collected from you anonymously. Therefore, I will not know which completed form was submitted by whom.

Risks and Benefits of being in the Study: The risks involved in this study are no more than your normal work day. It is safe for you to accept or decline participation in the study.

The benefits to participation are knowing that you did something to contribute to another's success, and reflecting on your own efficacy and satisfaction with teaching. Results and conclusions will be shared with faculty after the study to improve teacher understanding in the areas studied: job satisfaction, and self-efficacy. Liberty University will not provide medical treatment or financial compensation if you are injured or become ill as a result of participating in

this research project. This does not waive any of your legal rights nor release any claim you might have based on negligence.

Participants are expected to spend approximately 15 minutes to thoughtfully complete 48 Likert-Scaled data questions. The written materials and survey responses will be used to evaluate job satisfaction levels and teacher efficacy in the areas of: Student engagement, Instructional strategies, and Classroom management. In the event that you do withdraw from the study before completing the survey, your data will be destroyed.

Compensation: Because your participation in the study is completely anonymous, you may not receive any compensation for taking part in this study.

Confidentiality: The records of this study will be kept private. Personal information used to determine the demographics of participants will be: Age, Gender, Race, Years and types of Experience, Degree, Professional Development, Number of years in Setting and Current Placement. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records.

I will keep the data on my computer, which is password protected, for three years. At that time, the data will be deleted.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University, your local school nor relations with Gwinnett County Public Schools. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions: The researcher conducting this study is Angela Alford. You may ask any questions you have prior to completing the survey via email or by proctor. If you have questions later, **you are encouraged** to contact her at angela_alford@gwinnett.k12.ga.us. You may also contact the researcher's faculty advisor, Dr. Angela Smith, at amsmith11@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Carter 134, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please retain this information for your records.

Statement of Consent:

I have read and understood the above information. Since no identifying information is being provided, a signature is not required from you.

Signature of Investigator

Date

Appendix E: Permission to use Teacher Sense of Efficacy Scale

4/12/2016 email

**ANITA WOOLFOLK HOY, Ph.D.****PROFESSOR**
PSYCHOLOGICAL STUDIES IN EDUCATION

Dear

You have my permission to use the *Teachers' Sense of Efficacy Scale* in your research. A copy the scoring instructions can be found at:

<http://u.osu.edu/hoy.17/research/instruments/>

Best wishes in your work,



Anita Woolfolk Hoy, Ph.D.
Professor Emeritus

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Appendix F: Permission to use Job Satisfaction Survey

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

1/18/2017	jssShare
Sharing of Results for Researchers Who Use My Scales	
All of my scales are copyrighted. I allow free use under two conditions.	
1. The use is for noncommercial educational or research purposes. This means no one is charging anyone a fee. If you are using any of my scales for consulting purposes, there is a fee.	
2. You agree to share results with me. This is how I continue to update the norms and bibliography.	
What Results Do I Need?	
1. Means per subscale and total score	
2. Sample size	
3. Brief description of sample, e.g., 220 hospital nurses. I don't need to know the organization name if it is sensitive.	
4. Name of country where collected, and if outside of the U.S., the language used. I am especially interested in nonAmerican samples.	
5. Standard deviations per subscale and total score (optional)	
6. Coefficient alpha per subscale and total score (optional)	
I would love to see copies of research reports (thesis, dissertation, conference paper, journal article, etc.) in which you used the JSS. Summaries are fine for long documents (e.g., dissertation), and e-mailed documents are preferred (saves copy and mail costs). Be sure to indicate how you want the work cited in the bibliography.	
You can send the material to me via e-mail: pspector [at sign goes here] usf.edu or via regular mail: Paul Spector, Department of Psychology, PCD 4118, University of South Florida, Tampa, FL 33620 USA.	
Last modified January 7, 2011.	
http://shell.cas.usf.edu/~pspector/scales/share.html	1/1

Appendix G: Demographics of Participants

Table 1

Summary of Demographics (n = 83)

	<i>n</i>	<i>Percent</i>
Gender		
Female	70	84.3
Male	13	15.7
Age		
Under 29 Years	15	18.1
30 – 39 Years	21	25.3
40 – 49 Years	23	27.7
Over 50 Years	24	28.9
Race/Ethnicity		
Black	29	34.9
Hispanic	4	4.8
White	42	50.6
Other/Missing	8	9.6
Years Teaching Experience		
0 to 2 Years	10	12.0
3 to 5 Years	14	16.9
6 to 9 Years	10	12.0
10 to 14 Years	14	16.9
15 to 24 Years	27	32.5
25 or More Years	8	9.6
Grades Taught*		
Pre School and Kindergarten	5	6.0
1 – 5	18	21.7
6 – 8	83	100.0
9 – 12	16	19.3
College	6	7.2
Years at Local School		
0 to 2 Years	34	41.0
3 to 5 Years	11	13.3
6 to 9 Years	15	18.1
10 or More Years	22	26.5

Table 1

Summary of Demographics (n = 83)

	<i>n</i>	<i>Percent</i>
Missing	1	1.2
Types of Schools*		
Home School/Online	2	2.4
GCPS	19	22.9
GCPS: Title I	78	94.0
Other Georgia County	10	12.0
Other State	1	1.2
Private	0	0.0
Highest Degree		
BS – Education	21	25.3
BS – Other	5	6.0
MS – Education	30	36.1
MS – Other	5	6.0
PhD –Education	2	2.4
Education Specialist	20	24.1
Most Impactful Professional Development		
Colleague Observation	8	9.6
County Sponsored Training	21	25.3
Curriculum Sponsored Training	20	24.1
FIP Training	8	9.6
Mentor Teacher Coaching	16	19.3
Self-Study	9	10.8
Missing	1	1.2
Certification Pathway		
Alternative Program	8	9.6
Alternative School-Based Program - College	16	12.0
Alternative School-Based Program - District	6	7.2
Traditional College – Grad Program	20	24.1
Traditional College – Undergrad Program	39	47.0
Years in Current Placement		

Table 1

Summary of Demographics (n = 83)

	<i>n</i>	<i>Percent</i>
Under 2 Years	36	43.4
3 to 5 Years	14	16.9
6 to 9 Years	11	13.3
Over 10 Years	20	24.1
Missing	2	2.4
Current Placement		
Art/Chorus/Music	4	4.8
Career-based Connections	3	3.6
ESOL	4	4.8
Gifted	7	8.4
Health / Physical Education	6	7.2
Language Arts	12	14.5
Math	13	15.7
Remedial/Enrichment Connections	4	4.8
Science	10	12.0
Self-Contained: EBD/SLD	6	7.2
Social Studies	8	9.6
Special Education - Collab	4	4.8
Unidentified	2	2.4

*Note: Choices were "Check All That Apply," therefore percents will be > 100