A COMPARATIVE STUDY OF TEACHER EFFICACY IN CHARTER AND TRADITIONAL PUBLIC SCHOOLS

by

Sara Capwell

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2019

A COMPARATIVE STUDY OF TEACHER EFFICACY IN CHARTER AND TRADITIONAL

PUBLIC SCHOOLS

by Sara Capwell

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University, Lynchburg, VA

2019

APPROVED BY:

Michelle Barthlow, Ed.D., Committee Chair

Sarah Horne, Ed.D., Committee Member

John Mann, Ed.D., Committee Member

ABSTRACT

The purpose of this study was to determine if a significant difference exists between classroom teacher efficacy in traditional public schools and public charter schools as an overall measure as well as in the specific areas of student engagement, instructional strategies, and classroom management. The methodology was that of a quantitative causal comparative ex post facto study with sample participants located in school districts in central Florida. The accredited districts included more than 300 schools, more than 50 of which were charter schools. The results of the independent *t*-tests for overall teacher efficacy, teacher efficacy for student engagement, teacher efficacy for instructional practices, and teacher efficacy for classroom management indicate that no significant difference exists between charter and traditional public school teachers. Based upon the results included in this study, however, it can be concluded that teachers in charter schools feel that they can positively impact student performance in the areas of student engagement and classroom management. It is recommended that further research examine the reasons why these differences exist and how these factors impact student achievement.

Keywords: traditional public school, public charter school, teacher efficacy, student engagement, instructional strategies, classroom management, student achievement

Copyright Page

© 2019 Sara Capwell

All rights reserved.

Dedication

This manuscript is dedicated to my teachers:

- Jesus Christ—who taught me to love as he loved.
- Martha Joy Capwell—who taught me to never give up on my dreams, to never complain, to root for the underdog, and to always do my best.
- Mr. John Luke, Dr. Andrew Badger, Mrs. Pamela Knowles, and Mrs.
 Margaret Williams—who challenged my mind, inspired my heart, and saw something in me that only true teachers can see: potential.
- Dr. Edward Weiss & Dr. Josie Weiss—who not only opened their hearts and home to a struggling teenager, but gave me hope that I could change the course of my life by educating myself and broadening my perspective.
- Mr. Doug Nicholson & Mrs. Beverly Nicholson—who taught me that we all need a place of refuge and someone to call home to when we struggle. I could not have made it these last few years without your encouragement.
- Dr. John Mann—who taught me the value of trust, transparency, high expectations, and the cultivation of hope.
- Dr. Michelle Barthlow—who has guided this process, challenged my thinking, and most of all been my intellectual cheerleader!
- My K–12 colleagues over the years, many of whom I call friends, who taught me the value of a sense of humor, held me accountable to my word as a leader, and who are the inspiration for this work.
- Most of all to my friends & family, especially Sean Geary, Luke, &
 Mark—who lived this journey with me and helped me to believe in myself.

Table	of	Contents
-------	----	----------

ABSTRACT
Copyright Page4
Dedication
List of Tables9
List of Figures
List of Abbreviations
CHAPTER ONE: INTRODUCTION
Overview12
Background12
Problem Statement
Purpose Statement14
Significance of the Study15
Research Questions16
Definitions16
CHAPTER TWO: LITERATURE REVIEW
Overview18
Introduction18
Theoretical Framework
Bandura's Social Cognitive Theory20
Rotter's Social Learning Theory21
Teacher Efficacy Defined
Gidden's Structuration Theory

Related Literature	8
Charter Schools	8
Teacher Self-Efficacy	3
Current Knowledge Regarding Teacher Efficacy in Charter Schools	8
Needed Knowledge Regarding Teacher Efficacy in Charter Schools43	3
Summary47	7
CHAPTER THREE: METHODS	9
Overview49	9
Design	9
Research Questions	0
Hypotheses	0
Participants and Setting	1
Instrumentation	2
Procedures	5
Data Analysis	5
Data Screening55	5
Assumptions	б
CHAPTER FOUR: FINDINGS	8
Overview	8
Research Questions	8
Null Hypotheses	8
Descriptive Statistics	9
Demographics	9

Study Variables	60
Results	62
Research Question One	62
Research Question Two	64
Research Question Three	66
Research Question Four	69
CHAPTER FIVE: CONCLUSIONS	71
Overview	71
Discussion	71
Implications	77
Limitations	78
Recommendations for Future Research	79
REFERENCES	81
APPENDIX A: Permission to use Teachers' Sense of Efficacy Scale	
APPENDIX B: Liberty University IRB Approval Letter	90
APPENDIX C: Hillsborough School Distrcit Permission to Conduct Research	91
APPENDIX D: Hillsborough County Research Participant Recruitment Letter	92
APPENDIX E: Research Participant Consent Form	

List of Tables

Table 1. List of Descriptive Statistics 61
Table 2. Kolmogorov-Smirnov Results 63
Table 3. Overall Teacher Efficacy Levene's Test of Equality of Variance Results 63
Table 4. Overall Teacher Efficacy <i>t</i> -test for Equality of Means Results 64
Table 5. Teacher Efficacy for Student Engagement Levene's Test of Equality of Variance
Results
Table 6. Teacher Efficacy for Student Engagement Efficacy <i>t</i> -test for Equality of Means
Results
Table 7. Teacher Efficacy for Instructional Strategies Levene's Test of Equality of Variance
Results
Table 8. Teacher Efficacy for Instructional Strategies <i>t</i> -test for Equality of Means Results 68
Table 9. Teacher Efficacy for Classroom Management Levene's Test of Equality of Variance
Results
Table 10. Teacher Efficacy for Classroom Management Independent Sample Mann Whitney U
Test Results

List of Figures

Figure 1. Box and Whisker Plot for Overall Total Teacher Efficacy	62
Figure 2. Box and Whisker Plot for Teacher Efficacy for Student Engagement	65
Figure 3. Box and Whisker Plot for Teacher Efficacy for Instructional Strategies	67
Figure 4. Box and Whisker Plot for Teacher Efficacy for Classroom Management	69

List of Abbreviations

Overall Teacher Efficacy (OE) Teacher Efficacy for Classroom Management (CM) Teacher Efficacy for Instructional Strategies (IS) Teacher Efficacy for Student Engagement (SE) Teachers' Sense of Efficacy Scale (TSES)

CHAPTER ONE: INTRODUCTION

Overview

Teacher efficacy, both individual and collective, drives student success in and out of the classroom. Charter schools report higher achievement scores and growth gains than traditional public schools. Utilizing the Teachers' Sense of Efficacy Scale (TSES) inventory (Tschannen-Moran & Woolfolk Hoy, 2001) a comparative study was conducted to ascertain whether a difference exists between teacher efficacy in charter and traditional public school settings to address the research gap that currently exists.

Background

Despite the establishment of the Elementary and Secondary Education Act in 1965 that reallocated federal funds to address increasing needs within the U.S. school system, student achievement gaps continue to grow each year for students living in poverty, learners in U.S. public schools fall further behind their counterparts in other countries, and teacher morale continues to diminish despite focused efforts of government agencies to address perceived discrepancies in teacher effectiveness (Farber & Azar, 2015; Ingersoll, 2003).

Enough time and money has been wasted piloting ineffective programs, implementing new assessment processes, and questioning instructional practices under the guise of student improvement initiatives. "As the discussion on educational accountability and achievement escalates, the question of impact becomes key in measuring student success. There are many points to consider when discussing student impact, such as ways educational systems can have greater positive impacts on learners" (Rodríguez, Villarreal, Montemayor, & Cortez, 2002, p. 1).

Charter schools first emerged as alternatives to public education in 1991 and currently serve approximately 10% of the students being educated in the U.S. (Bulkley, 2012). Forty-two

of the 50 states plus the District of Columbia have written legislation for the implementation and monitoring of charter schools (Center for Education Reform, 2015). These state level memorandums of understanding are then implemented and monitored by local school districts where the charter schools are located.

Teacher efficacy has been studied relative to student achievement (Shaughnessy, 2004) and to student engagement (Denzine, Cooney, & McKenzie, 2005; Tschannen-Moran & Woolfolk Hoy, 2001) in multiple studies and within multiple settings. Findings from these studies indicate that teacher efficacy is an important concept that significantly impacts public schools on a variety of levels. Teacher efficacy has been cited as a primary source of job satisfaction for teachers. In fact, it is reported as being a more significant factor in teacher retention studies than pay or even public recognition of their work (Pedota, 2015). Teacher efficacy has also been cited as a primary predictor of student achievement (Pajares, 1996; Khan, 2012). Finally, teacher efficacy has been cited as a primary predictor of student engagement (Mojavezi & Tamiz, 2012). Of note is that school size has been cited as a primary predictor of teacher efficacy (Khan, Fleva, & Qazi, 2015). The majority of charter schools are smaller in size than traditional public schools (Bulkley, 2012).

Julian Rotter's (1966) theory regarding locus of control indicated that teachers who view their roles as essential for student achievement and motivation, and that they could personally impact them, reinforce their work efforts. Albert Bandura's (1977, 1993) social cognitive theory further developed this idea that teachers' belief of personal competence impacts job performance. Self-efficacy (Goddard, Wayne, & Woolfolk Hoy, 2000) applies the concept that teachers who believe that they control their work have increased effort, dedication, and resilience. The TSES inventory (Tschannen-Moran & Woolfolk Hoy, 2001) measures differences in teacher efficacy using three subscales: efficacy for student engagement, efficacy for instructional strategies, and efficacy for classroom management. The TSES has been used in several studies as a valid and reliable measurement tool for teacher perception of efficacy (e.g., Ashton & Webb, 1986; Muijs & Reynolds, 2002; Pajares, 1996; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Reliability of the long form instrument is considered moderate to highly reliable and gauged by the following Cronbach Alpha scores: overall .94, engagement .87, instruction .91, and management .90 (Tschannen-Moran & Woolfolk Hoy, 2001).

Problem Statement

Teacher efficacy is a primary predictor of student engagement, teacher job satisfaction, and student achievement (Khan, 2012; Mojavezi & Tamiz, 2012; Pedota, 2015; Shaughnessy, 2004). Charter schools are increasingly heralded as viable alternatives for improving the current educational system (Bulkley, 2012; Khan et al., 2015). The problem is that there is a gap in the literature comparing teacher efficacy in charter schools with that of traditional schools.

Purpose Statement

The purpose of this quantitative causal comparative study was to determine if there is a difference in teacher efficacy between public charter schools and traditional public schools. This study compared four dependent variables across the independent variable of setting: overall teacher efficacy, teacher efficacy for student engagement, teacher efficacy for instruction, and teacher efficacy for classroom management. Teacher efficacy is a "judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (Tschannen-Moran & Woolfolk Hoy, 2001, p. 783).

Overall teacher sense of efficacy on the TSES inventory (Tschannen-Moran & Woolfolk Hoy, 2001) was determined by an average of efficacy scores from sub-scales of teacher efficacy for student engagement, teacher efficacy for instruction, and teacher efficacy for classroom management. Teacher efficacy for student engagement refers to the amount of influence a teacher feels she has over active student participation (Tschannen-Moran & Woolfolk Hoy, 2001). Teacher efficacy for instruction refers to how effective the teacher feels she is at providing high quality instruction that positively impacts student performance (Tschannen-Moran & Woolfolk Hoy, 2001). Teacher efficacy for classroom management references how well a teacher feels she organizes students within the classroom to reach their highest potential and limits distractions (Tschannen-Moran & Woolfolk Hoy, 2001).

Significance of the Study

This study is important because teacher efficacy has a direct impact on student engagement, productivity, and achievement in the classroom (Khan, 2012; Mojavezi & Tamiz, 2012; Pedota, 2015; Shaughnessy, 2004; Short & Greer, 2002; Skinner & Belmont, 1993). This study is significant in that it adds to the literature on teacher efficacy by examining the differences between teachers in charter schools and traditional schools. Assuming that teachers responded honestly to the survey, that they are representative of a larger population, and that teacher efficacy is a primary influencer of improved student engagement and performance, the information gleaned from the study should serve as a catalyst for further research. Findings from this study indicate that no significant difference exists in regard to teacher efficacy between charter and traditional settings. However findings included in this study do call for further research into differences in means for classroom management and student engagement as it could lend insight into effective school improvement strategies that could be replicated across multiple settings. As there is little difference in teacher efficacy for instructional strategies, further research into classroom management models in charter schools as well as other causes for charter school performance indicators could assist traditional school leaders with developing effective improvement models. The study was limited to teachers located in central Florida from schools in urban and suburban neighborhoods. However, the results of this study could inform the decision-making process of school and community leaders seeking ways of improving systems across districts, states, and the nation.

Research Questions

RQ1: Is there a difference in overall teacher efficacy between public charter school teachers and traditional public school teachers?

RQ2: Is there a difference in teacher efficacy for student engagement between public charter school teachers and traditional public school teachers?

RQ3: Is there a difference in teacher efficacy for instructional strategies between public charter school teachers and traditional public school teachers?

RQ4: Is there a difference in teacher efficacy for classroom management between public charter school teachers and traditional public school teachers?

Definitions

1. *Teacher self-efficacy* is a "judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (Tschannen-Moran & Woolfolk Hoy, 2001, p. 783).

2. *Teacher collective efficacy* is generated through teacher collaborative efforts as they "engage in a metacognitive process in which group members assess the relationship between

their competence and the nature of the task they face" (Goddard, Goddard, Kim, & Miller, 2015, p. 507).

3. *Teacher efficacy* is a term frequently used interchangeably with teacher self-efficacy within the research but is also utilized to "represent the generalization of research conducted in regard to both teacher self-efficacy and teacher collective efficacy" (Tschannen-Moran & Woolfolk Hoy, 2001, p. 783).

4. "A *public charter school* is a publicly funded school that is typically governed by a group or organization under a legislative contract (or charter) with the state or jurisdiction" (National Center for Education Statistics, 2017).

CHAPTER TWO: LITERATURE REVIEW

Overview

Exploration into the literature that is foundational to the purposes and practices of charter schools, factors impacting teacher efficacy, and the correlation between teacher efficacy and student success is necessary to build the background knowledge and common understanding needed to comparatively analyze teacher efficacy between traditional and charter public schools. The purpose of this literature review is to outline the essential elements of the charter school movement, to describe teacher efficacy and the factors that impact its development, and to show the correlation between teacher efficacy and student achievement. The common understanding developed in this literature review will be utilized by the researcher to make connections between the analysis of the data, interpretation of the results, and the recommendations for future research.

Introduction

Charter schools are increasing in popularity as a viable alternative to traditional public education, yet little research has been conducted on the actual practices of such schools. The question as to whether or not charter schools are successful has not been fully answered. To do so, an established definition for success needs to be articulated (Center for Education Reform, 2015). Student performance on standardized tests has been the accepted mode for evaluating success in most school systems nationwide; however, this norm has been challenged by educators and parent organizations alike.

Advocates for charter schools indicate that the measure of success is the specialized niche that they provide within the educational system that allows for instructional innovation and alternative management arrangements. However, the public-at-large utilizes a different

measurement. Currently the mode by which schools, students, and teachers are rated consists of a complex algorithm applied to student performance scores on standardized tests that differ from state to state. A more comprehensive analysis of how charter schools impact student achievement is necessary to ascertain the level of success experienced by these schools of choice (Bulkley, 2012). Quantifiable data gathering regarding successful strategies for improvement needs to take place. Analysis of the patterns and outcomes should be followed with a transparent discussion between stakeholders of necessary changes in educational policy that address the promotion of charter school implementation and accountability protocols.

Research from McEachin, Welsh, and Brewer (2016) indicates that the school evaluation model that depends upon "estimating the average achievement differences among school types and sectors potentially misses the nontrivial and multilayered variation in school effects" (p. 687). This research supports the argument that school evaluation models should include alternative data points measuring indicators of student success such as attendance rates, parent involvement hours, student discipline rates, staff satisfaction rates, student satisfaction rates, and parent satisfaction rates.

One such mechanism is the examination of teacher efficacy levels across multiple settings. Dibapile and Tefo (2012) contended that "teacher self-efficacy is essential in education and can play a major role in overcoming these problems in education" (p. 81). Teacher efficacy has been noted as a key indicator of student success on standardized tests, classroom assessments, and with the acquisition of knowledge as indicated across several studies (Ashton & Webb, 1986). The correlation between teachers' belief that they can influence and change both student behavior and academic performance directly impacts student engagement, motivation, and personal growth. As a consistent predictor of student success, teacher efficacy in charter schools needs to be explored to ascertain student impacts within this specific environment (Khan et al., 2015).

Theoretical Framework

Bandura's Social Cognitive Theory

This study is grounded in Bandura's (1989) social cognitive theory that favors a model of causation involving triadic reciprocal determinism. "In this model of reciprocal causation, behavior, cognition and other personal factors, and environmental influences all operate as interacting determinants that influence each other bi-directionally" (p. 2). This model illustrates the integrated experience that thought, action, and environment provide as they impact human behavior. Bandura (1997) defines self-efficacy as the "belief in one's capabilities to organize and execute the courses of action required producing given attainment" (p. 3).

Bandura focuses on the importance of behaviors that are influenced by emotional connection which in turn builds sense of confidence. Research by Warren and Dowden (2012) found that "the strength of teachers' efficacy beliefs was negatively associated with feelings of depression, anxiety, and stress" and that "negative relationships were also found between teacher efficacy beliefs and irrational beliefs" (Warren & Hale, 2016, p. 189). Bandura (1993) further explained the application of this theory to the role that teacher self-efficacy plays within students' academic development: "Teachers' beliefs in their personal efficacy to motivate and promote learning affect the types of learning environments they create and the level of academic progress their students achieve" (p. 117). Subsequent research by Bandura also indicated a high correlation between teacher efficacy and student performance (Bandura, 1997). Bandura's theory on efficacy has been measured and evaluated by expert educational researchers such as

Rand, Gusky, Ashton, Gibson, and Dembo who found the self-efficacy theory to be both valid and reliable across multiple domains and fields of study.

Rotter's Social Learning Theory

Julian Rotter's social learning theory is also foundational to this research study. Rotter connects the impact that reward and reinforcement have on individual behavior. According to Rotter (1966), "the effects of reward or reinforcement on preceding behavior depend in part on whether the person perceives the reward as contingent on his own behavior or independent of it" (p. 1). This theory is based upon the assumption that competency and autonomy build individuals' confidence in their ability to impact situations (Rotter, 1966).

Rotter's work parallels Bandura in that efficacy is the application of Rotter's theory regarding the perception of personal impact on outcomes. Rotter (1966) describes the between study validity correlation of locus of control and efficacy as follows:

A series of studies provides strong support for the hypotheses that the individual who has a strong belief that he can control his own destiny is likely to (a) be alert to those aspects of the environment which provide useful information for his future behavior; (b) take steps to improve his environmental condition; (c) place greater value on skill or achievement of reinforcements and be generally more concerned with his ability, particularly his failures; and (d) be resistive to subtle attempts to influence him. (p. 25)

Teacher Efficacy Defined

Teacher efficacy. Bergman, McLaughlin, Bass, and Zellman (1977) defined teacher self-efficacy as "the extent to which the teacher believes he or she has the capacity to affect student performance" (p. 137). Teacher efficacy is based upon the premise that the daily expenditure of time, energy, and talent will bring about change in student achievement and

attitude, which is the desired outcome for the teacher. The impact of the teacher's locus of control, preparedness for the challenge, and support offered by peers and supervisors provides significant motivation for individual teachers. Hakanen, Bakker, and Schaufeli (2006) found that

Teachers who are able to draw upon job resources like job control, supervisory support, and innovativeness may become more vigorous and dedicated, i.e., engaged in their work, and may feel stronger commitment. On the other hand, our findings show that a lack of job resources to meet demands may be associated with burnout, which may further undermine work engagement and lead to lower organizational commitment.

(p. 508)

This renewed commitment to task by engaged teachers facilitates the energy required to continue the processes necessary for daily interactions. The understanding that their ability to facilitate change within the classroom, to apply their understanding of motivational strategies, and to impact student achievement grows exponentially as teachers are empowered and encouraged.

The term teacher efficacy as referenced throughout this study encompasses both teacher self-efficacy and teacher collective efficacy. When a delineation between self-efficacy and collective efficacy has been made in a previous study or is required for descriptive purposes, the terms self-efficacy and collective efficacy are utilized to lend specificity. In such cases, self-efficacy is an individual construct of teacher efficacy whereas collective efficacy is a group construct. Teacher collective efficacy is generated through teacher collaborative efforts as they "engage in a metacognitive process in which group members assess the relationship between their competence and the nature of the task they face" (Goddard et al., 2015, p. 507).

Dimensions of teacher efficacy. Teacher self-efficacy is comprised of self-efficacy related to classroom management, self-efficacy related to instruction, and self-efficacy impacting

student engagement (Tschannen-Moran & Woolfolk Hoy, 2001). Classroom management indicators reflect the foundation of the teacher's beliefs and perception of locus of control as it relates to the daily procedures and systems utilized by the teacher. This includes all of the "non-instructional personal interactions" (Tournaki, Lyublinskaya, & Carolan, 2009, p. 98) that occur between teachers and students that impact the student's ability to function within the classroom.

The strength of this personal belief that the teacher facilitates the learning environment as well as the trust structures built between the individuals in the room determines the level of responsiveness found within the classroom. "Teachers employ different strategies to control disruptive behaviors in the classroom" (Dibapile & Tefo, 2012, p. 80). Teacher self-efficacy related to classroom management speaks to the teacher's perceived ability to organize group structures, student behaviors, and physical space. "Effective teachers are viewed as experts in classroom management" (Dibapile & Tefo, 2012, p. 80).

Teacher self-efficacy related to instruction refers to the teacher's belief that the instructional practices and content presented within the classroom environment directly impact student acquisition of knowledge and transfer of content across multiple disciplines. As students achieve mastery, teacher confidence increases and therefore self-efficacy beliefs are positively impacted. This cycle of efficacy building based upon effectiveness of instruction continues as teachers increase the rigor of goal setting, collaborate with peers, proactively work with parents, and take personal responsibility for student outcomes (Ross, Romer, & Horner, 2012).

Research included in widely accepted teacher evaluation systems and coaching models by Dufour and Marzano (2011) as well as Danielson and McGreal (2000) highlight the importance of instructional practice as a key predictor of student success. The logic then applies that teacher self-efficacy beliefs related to that of instruction have a direct impact upon the depth and quality of the instructional practices utilized within the classroom environment.

Teacher self-efficacy as it relates to student engagement refers to the teacher's perception of influence over student motivation and inspiration as defined through the research of Goddard et al. (2000) and cited within research by Dibapile and Tefo (2012). Research conducted by van Uden, Ritzen and Pieters (2014) stated that

Teacher support, positive teacher–student relationships, classroom structure, autonomy support and authentic and challenging tasks have been associated with student engagement at the classroom level. Clearly, the teacher has a role in creating those supportive conditions. However, whether teachers try to create them and how they go about trying to do so is likely to depend on their beliefs about teaching and about being a teacher. (p. 22)

These findings highlight the importance of teacher belief of impact, i.e., teacher self-efficacy, in creating a quality environment where students are engaged with learning.

Teacher collective efficacy. It is important to note the impact that peer interaction regarding instructional effectiveness and practice has upon teacher efficacy. As teachers collaborate to improve their skills, their sense of empowerment builds and collective teacher efficacy cultivates an environment where student success is expected as an outcome (Goddard et al., 2000). As teachers begin to understand their collective capacity, they also begin to understand that they can control their work environment, even in this age of accountability (Ingersoll, 2003). "Teachers' classroom practice will be affected by what they know and by their view of the importance of that knowledge. Their students then experience that knowledge in classroom practice" (van Uden et al., 2014, p. 23). The supportive structure of professional

learning communities has been cited as a successful intervention for building teacher collective capacity and for promoting high impact instructional strategy usage in the classroom (Dufour & Marzano, 2011).

The opposite is also true when teachers witness poor student engagement or achievement due to peer experiences (Warren & Hale, 2016). Teacher collective efficacy increases the use of data-driven decision making and the consistent implementation and monitoring of instructional strategies. Zee and Koomen (2016) noted in their longitudinal research study that "teacher self-efficacy for data-driven decision making is positively related to collaborative concerns, suggesting that efficacious teachers more often work with colleagues to improve and increase the use of data-driven decision making in class" (p. 991).

Teacher emotional efficacy. Teaching is a profession where emotional attachment to students, curriculum, feelings of personal success, and collective success drive instructors to give extra time and attention to struggling students and to imbed within content instruction opportunities to witness collaborative success (Warren & Hale, 2016). This attention to detail and personalized instructional methods build student confidence, fill in content gaps, and strengthen understanding, all of which impact student achievement. Teacher emotional efficacy is grounded in well-being theory that consists of "positive emotion, engagement, meaning, positive relationships, and accomplishment" (Seligman, 2011, p. 16) as being resources for building both teacher and student capacity.

The impact that teachers have on student achievement based upon positive relationship building is cited as a primary facet of student success. Citing research by Jennings and Greenberg (2008), van Uden et al. (2014) state, "Interested and caring teachers who try to establish positive relationships with their students could make a difference for students at risk" (p. 22). The increasing number of students at risk indicate that the concept of teacher emotional efficacy as an important factor to consider when addressing the issues plaguing our schools.

Emotional efficacy within teachers is impacted by the collective capacity building and emotional intelligence of the leadership within a school community. Positive culture, structures that build self-awareness, professional learning opportunities formatted within collaborative learning communities, as well as transparent dialogue among staff members are related to the effectiveness of building leadership. Pierce (2014) indicates that leaders develop emotional efficacy and school culture through this open dialogue by

sharing information and resources while developing a more democratic and cooperative process. Leaders competent in social skills displayed qualities of respect and helpfulness and nurtured strong cultural commitment toward achievement of organizational goals. An organizational culture rich in collaboration, cooperation, and collective commitment may influence and enhance the development of collective teacher efficacy within schools. (p. 311)

Gidden's Structuration Theory

Giddens' structuration theory (1984) further outlines the role that the environment or surrounding rule structure impacts the behavior of the individual seeking a particular outcome. Structuration theory explains the role that the accountability systems play when interacting with teachers' sense of efficacy and student achievement. "New research since Rotter's initial work have made it clear that control beliefs are not stable. . . . It is just as important to focus on how changes in perceived control are linked to meaningful outcomes" (Infurna & Reich, 2016, p. 12). The accountability system utilized to gauge school and teacher effectiveness can either positively impact a teacher's sense of effectiveness or negatively impact a teacher's control beliefs

depending on the perspective that is perpetuated by the principal, other teachers, parents, and the community.

Giddens' research sends a direct message to educational leaders seeking a solution to the challenges facing educational policymakers and educational practitioners alike. Oppong (2014) summarized Giddens' position as follows:

Structures and agency cannot be separated; that they are connected to one another in what Giddens termed the "duality of structure." Human actors are the elements that enable creation of our society's structure by means of invented values, norms or are reinforced through social acceptance. (p. 112)

It is possible to change the current climate of teacher shortages, minimal achievement gains, and the perception that public education is ineffective through the building of teacher efficacy. Through the application of understanding regarding teacher efficacy and the positive impacts on student achievement, policymakers and practitioners could revitalize the eroding educational accountability system by reinventing the cultural and academic outcomes. A paradigm shift in the implementation practices of accountability systems is a necessity.

Research by Angrist, Pathak, and Walters (2013) indicated that charter schools that employ a No Excuses model with high percentages of poverty in urban settings such as Houston, Boston, and New York City have experienced dramatic student performance growth attributed to practices such as consistent teacher feedback, data-driven instruction, and high expectations. Usage of these strategies designed to increase teacher efficacy within charter schools join a "growing body of evidence documenting the effectiveness of the No Excuses practices in various contexts" (p. 3) that suggest effective usage outside of the charter content. Understanding this correlation and facilitating the implementation of practices that promote the evolution of school culture and the empowerment of teachers to increase teacher efficacy is necessary. If practices positively impacting student success such as the emphasis on building teacher efficacy have been identified in the most challenging of environments, it stands to reason that these same practices could be utilized across school systems to improve the educational landscape. Without this dramatic shift in perspectives, the education system in the United States will only continue to deteriorate. The students and teachers within this system deserve better than the mediocrity caused by negativity and learned hopelessness of both teachers and students that permeates the schools of today.

Related Literature

Charter Schools

Support for charter schools. Growth within the charter school movement continues to expand exponentially each year. What was once a selective small business endeavor found in pockets across the United States has now emerged as a significant educational source for students. "While charter schools remain a relatively small percentage of the more than 96,000 public schools in the nation, they seem to receive a disproportionate amount of attention" (Bulkley, 2012, p. 58). Data obtained from the U.S. Department of Education, National Center for Education Statistics (2017) indicates that 7% of all public schools in the United States are public charter schools.

Each year since its inception in Minnesota, the charter school movement has continued to gain momentum. In fact, a key component of the revised Elementary and Secondary Education Act of 1965, renamed the No Child Left Behind Act in 2002, now called the Every Student Succeeds Act enacted in 2015, is the inclusion of language specifically addressing and promoting

the replication of high quality charter schools. The bipartisan initiative was developed to speed up district approval processes for successful charter schools as its advocates believe that the charter school movement "helps to support and grow local innovations, including evidence-based and place-based interventions developed by local leaders and educators" (U.S. Department of Education, 2015). Charter school support is grounded in the concept that increased innovation, critical thinking, and problem solving by school leadership come with the increased autonomy.

Strengths of charter school models. Supporters within urban school districts cite urban charter schools as having substantial learning gains with non-White students and those living in high poverty areas. Research conducted within the Massachusetts urban charter school system supports this premise: "Urban schools are most effective for minority students and students with low baseline scores" (Angrist et al., 2013, p. 2). According to Angrist et al. (2013), "five practices explain charter school effectiveness. . . high expectations, frequent teacher feedback, high-dosage tutoring, increased instructional time, and data-driven instruction" (pp. 20–21). Teacher efficacy is an outcropping of high expectations combined with the confidence to provide necessary instructional practice.

Charter school implementation models are continually changing in response to the need expressed by constituents to expand new opportunities for students. Research from McEachin et al. (2016) indicated that school districts across the nation are increasing their interest in reforming schools through various educational models: "These reforms ranged from enhancing local control and autonomy in traditional public schools to increased use of charter schools for competition and individual choice to centralized control for low performing schools through mayoral control or state-run school districts" (p. 669). This is a paradigm shift for many school districts but has become a necessity as an increasing number of urban schools struggle to achieve performance goals, particularly in large cities like Chicago, New York, and Los Angeles. Recently, the use of a portfolio management model has gained popularity as it combines many of these choices into a menu of options offered directly to stakeholders. This shift has greatly increased the accessibility of opportunities for students (McEachin et al., 2016).

Similarities amongst charter models build standards-based accountability systems across settings. McEachin et al. (2016) specifically investigated the effectiveness of portfolio management model school systems which offer alternative choice school settings to parents. Portfolio management model school districts contract with charter schools, including them within the network of governmentally-controlled school options. Portfolio management model school districts "posit that the diversification of schooling options and the increased opportunity for students to attend a school of choice, as well as the threat of closure for the lowest performing schools, improve student achievement" (McEachin et al., 2016, p. 670).

The McEachin et al. (2016) study delved first into the foundational research conducted regarding charter school effectiveness and then narrowed the scope of analysis to that of portfolio management model effectiveness. The authors concluded that a gap in the literature existed when determining comparative effectiveness of traditional public schools and the charter school options offered with these portfolio management model school districts. The team of researchers narrowed the scope of their study further to specifically understanding the effects of the portfolio management model district instituted in New Orleans post-Katrina as an effort to improve failing schools. To accomplish this, a standardization of the student level data from grade level averages on state tests administered, beginning with the 2006–2007 school year and ending with the 2010–2011, was inputted into an Education Production Function for students current output proposed in the research of Todd and Wolpin (2003) to compare student

achievement and growth between traditional public schools and public charter schools within the portfolio management model framework in New Orleans.

Results of this research from the McEachin et al. (2016) study indicated that, within urban settings such as New Orleans charter schools, more research is needed to ascertain why increases in student achievement within these networked charter schools did not "exist in the non-charter schools and or non-networked charter schools" (p. 687). It is evident from this research that all models of student choice schools are not universally successful and all models are not that dissimilar to that of traditional public school in regard to student achievement and student accountability frameworks.

Shared challenges. Charter schools have similar hiring and retention challenges as their traditional counterparts. Charter schools seek to hire and retain teachers that are not only qualified, but are closely aligned with the organization's vision and mission and can sustain the energy required to meet the high expectations of the organization (Weiner & Torres, 2016). Teacher efficacy levels are positively impacted when teacher and school goals are closely aligned. Therefore, identification of aligned values is an important hiring practice for human resources to consider when hiring teachers within both traditional and charter public schools.

Currently, a teaching shortage exists across the United States that directly impacts this component effecting teacher efficacy. Data from the annual publication of the nationwide Teacher Shortage Area List 1991–2017 compiled by the U.S. Department of Education indicates that there are teacher shortages in every state. Forty-eight of the 50 states have teacher shortages in math and 46 of the 50 states currently have teacher shortages in science (U.S. Department of Education, 2017). States with large enrollments such as Florida, Texas, California, and New York experienced shortages across all core subjects as well as in performing arts subjects in 2017

(U.S. Department of Education, 2017). States with large increases in enrollment or large special populations like Arizona also experienced shortages in all academic areas (U.S. Department of Education, 2017).

Teacher shortages also currently exist because there has been an increase in overall enrollment that is expected to continue over the next decade. Combined with the data indicating that fewer individuals are entering the profession, this trend is likely to continue. With "enrollments in teacher preparation programs dropping 35% nationwide over the last five years" (Berry & Shields, 2017, p. 8), the teacher shortage is reaching crisis level. Additionally, teachers are leaving the profession in large numbers because they feel devalued, are constantly under stress, and have little instructional autonomy in the classroom (Berry & Shields, 2017).

Opposition. Those who oppose the charter school movement challenge assessment data, accountability practices, and the definition of innovation as applied to charter schools. There is a firmly held opinion of those opposing charter schools that they are not making a statistical impact and are only draining funds from traditional public schools. Support for this claim has been reaffirmed in studies such as Chabrier, Cohodes, and Oreopoulos (2016), which indicated that "studies that use survey data for national samples of charter schools tend to find positive but not statistically significant overall impacts" (p. 63). Other educators, leaders, and researchers disagree with charter school supporters on the basis that they are not truly innovating. They argue that "what innovation means is not clear. . . . Innovation means practices that are new or distinct" (Bulkley, 2012, p. 60). Others further challenge charter school innovation of practice (Bulkley, 2012).

With this inconclusive data in mind, advocates and opposition alike call for further research ascertaining the effectiveness of the charter school movement. Chabrier et al. (2016) indicated that charter school success is due to "an intensive 'No Excuses' approach with strict and clear disciplinary policies, mandated intensive tutoring, longer instruction times, frequent teacher feedback, and a relentless effort to help all students" (p. 63). The authors also pointed out that these factors "need not be exclusive to charter schools" (Chabrier et al., 2016, p. 63).

Teacher Self-Efficacy

Teacher self-efficacy measures. Teacher self-efficacy is gauged by measuring teacher confidence, quantifying teacher understanding of personal responsibility for student achievement, and relating teacher locus of control with impact on students (Tschannen-Moran & Woolfolk Hoy, 2001, pp. 785–786). Skinner and Belmont (1993) identified the reciprocal relationship between teacher and student efficacy as being a primary predictor of student achievement (p. 577). Skinner and Belmont (1993) gathered data from 144 participants, which were children in Grades 4, 5, and 6 from a suburban school district in upstate New York, all of whom had female teachers. Data were gathered using a questionnaire administered directly to students by trained staff while teachers completed individual surveys in a separate location. Data from this study found that teacher behavior impacted engagement levels of students, which then impacted teacher behavior toward students in that "teachers respond to children who have initially high involvement, more autonomy support, and consistency" (Skinner & Belmont, 1993, p. 578). The cycle continues to repeat itself, therefore significantly impacting overall teacher and student self-efficacy.

Chang (2015) examined the relationship between teacher efficacy in the field of mathematics and students' mathematics self-efficacy and found that the greater the teacher

efficacy, the greater the student efficacy and, therefore, the student achievement (p. 1308). Chang (2015) administered two mathematics efficacy instruments to 58 teachers and 1244 fifth graders. Both regression analysis of collected data and the results of ANOVA of collected data indicated that mathematics teachers' efficacy significantly predicted fifth graders' student mathematics achievement as well as fifth grade students' mathematics self-efficacy.

Reciprocal impacts of community support and school culture on teacher selfefficacy. Teacher self-efficacy impacts collective efficacy and overall school culture. School culture also impacts teacher efficacy. "Positive impact through engagement stems from partnerships between schools, parents and communities that are based on mutual benefit, respect and accountability" (Rodríguez et al., 2002). Teacher self-efficacy is positively impacted by the expressed trust and support of stakeholders involved within the school community, and this sense of ownership empowers teachers to set high expectations, explore new educational strategies, and to trust that student growth will follow. As teacher self-efficacy grows, teachers begin to "enlist administrative control, make decisions, and control aspects of their classroom operations" (Zee & Koomen, 2016, p. 1006). This understanding of teacher-perceived effectiveness results in increased commitment to teaching as a profession. Zee and Koomen (2016) found evidence in multiple studies (Barouch Gilbert et al., 2013; Klassen & Chiu, 2011; Klassen et al., 2013) that this increased commitment due to increased self-efficacy crosses cultures and includes personal as well as organizational commitment increases. According to Zee and Koomen (2016) collaborative environments led to "increased self-efficacy for data driven decision making" (p. 991) and instructional practices in multiple studies (Dunn, Airola, Lo, & Garrison, 2013; Gorozidis & Papaioannou, 2011; Lee, Cawthon, & Dawson, 2013).

Impacts of leader expectations. School-based leader expectation has a direct influence upon teacher efficacy. School-based leaders impact teacher self-efficacy by creating an efficient environment with clear expectations. Research from Hubbard, Mehan, and Stein (2006) indicated that a primary responsibility of leaders is to be "moral purpose communicators, change makers, relationship builders, coherence providers, decision makers, reflective practitioners, team builders, capacity builders, and belief makers" (p. 155). Zee and Koomen (2016) cited several studies (Briones et al., 2010; Duffy & Lent, 2009; Lent et al., 2011; Sass et al., 2011) that indicated that "factors such as work conditions, student stressors, personal achievement and social support have been shown to mediate the relationship between teacher self-efficacy and job satisfaction" (p. 1006).

Leaders make positive impacts when streamlining of processes and expectations but diminish self-efficacy when communication is not clear. Because the leader creates improvement goals, teacher evaluative practices, and school-wide behavioral systems, the role of the leader greatly impacts a teacher's ability to see himself as effective. "Complexity, unpredictability, and deception generate rampant ambiguity, a dense fog that shrouds what happens from day to day" (Bolman & Deal, 2008, p. 33). According to Schmoker (2011), successful schools need "three simple things: reasonably coherent curriculum, sound lessons, and authentic literacy" (p. 2). Schmoker's recommendations directly relate to teacher self-efficacy for instruction.

Impacts of perceived assessment success on teacher efficacy. Assessment structures for both students and teachers implemented by school leadership impact self-efficacy of both students and teachers. Assessment practices that continually change learning targets and standards undermine the teacher's ability to systematically respond to student strengths and

deficiencies. The data measurement then becomes punitive for both student and teacher, breaking down the essential element of teacher-efficacy: hope. Research by Aronson (2010) indicated that "a perspective that appreciates relevant, positive experiences and is a departure from the traditional deficit model that highlights a problem and seeks to find solutions" (p. 4) is needed to improve our education system. Appropriate application of assessment results and instructional practice is a necessary component for building teacher efficacy in that "appreciative inquiry highlights influences under teacher control, such as effort and planning. Taking control in this way increases teacher confidence, persistence, and resiliency" (Aronson, 2010, p. 4).

Rather than depending solely upon data trends reflecting deficiencies, consideration of other analysis methods that concentrate foci on strength areas can be used to build teacher efficacy. Appreciative inquiry is a construct that utilizes strengths to make connections with areas of challenge and builds both individual and collective capacity for success. "Appreciative inquiry is not just about changing structures, but constructing new patterns of thinking that promote adaptability in our response to complex challenges" (Priest, Kaufman, Brunton, & Seibel, 2013, p. 24). Application of constructs of this nature align with the use of teacher self-assessments, goal setting, and reflection resulting in increased self-efficacy.

Impacts of teacher self-efficacy on student success. Student success hinges greatly upon teacher efficacy. Kaiser, Retelsdorf, Sudkamp, and Moller (2013) found that teachers make "pre-conceived judgements regarding student engagement and achievement abilities because of this focus on areas of weakness and impact their level of engagement with the students" (p. 75). Studies across the world have explored the relationship between teacher efficacy and student achievement and have found patterns of influence factoring into student achievement. A synthesized research study by Zee and Koomen (2016) indicated that teachers'
self-efficacy beliefs are "relevant for a range of adjustment outcomes at different levels of classroom ecology" (p. 981).

Other researchers such as Pedota (2015) have utilized this research to make recommendations on how to use the TSES to establish a climate where students receive ongoing support and encouragement:

- Set short- and long-term goals (things you would like to accomplish) and objectives (what students will do to show that they accomplished the goal) that have high expectations for all students.
- Use verbal and nonverbal communication that all students understand.
- Quickly response to student concerns, questions, and work.
- Know how to differentiate instructional planning to engage students and promote success.
- Access and use data as a tool to help all students become successful, active participants.
- Deemphasize grades and emphasize learning that has meaning to students.
- Establish and maintain a fair and consistent classroom management policy.
- Build a culture that enables parents to become a partner in their child's education.
- Reward and celebrate success with students, parents, and the community. (pp. 54-60)

An understanding of teacher efficacy highlights how each of the items identified above relates to increased teacher capacity in the classroom and positive student achievement gains. It is through the empowerment of teachers with quality strategies, a supportive environment, a common language, and a sense that everyone is a contributing member of the community. Parents, students, educators, and business partners all share in the learning process and are all valued as a result.

Capacity building of the public school infrastructure, whether traditional or charter, begins with the teacher and flows outwardly to the various stakeholder groups. "Using various measures and definitions, studies imply that teachers with an assured sense of self-efficacy set the tone for a high-quality classroom environment by planning lessons that advance students' abilities, making efforts to involve them in a meaningful way, and effectively managing student misbehavior" (Zee & Koomen, 2016, p. 982).

Charter schools in relation to student success and teacher efficacy. The emphasis of the charter school movement as an agent of change to bring both innovation and increased student achievement continues to grow. An examination of how teacher efficacy works, ways to utilize teacher efficacy to impact student success, and the role that charter schools play in this new age of education is necessary to inform stakeholders and to grow quality educational reform practices.

Warren and Hale (2016) stated, "It is critical school leaders acknowledge the impact beliefs have on teacher performance and student success while seeking ways to promote developmentally appropriate and optimal learning environments" (p. 189). The study of charter schools as alternative learning environments that foster developmentally appropriate measures of student success and teacher performance relative to Warren and Hale's (2016) claim is both timely and necessary.

Current Knowledge Regarding Teacher Efficacy in Charter Schools

The good news. A recent study conducted by Mojavezi and Tamiz (2012) compared charter and non-charter school effectiveness and identified "a reasonably positive correlation

between teacher self-efficacy and student motivation" (pp. 488–489). Eighty high school teachers across Iran were surveyed using the Tschannen-Moran and Woolfolk Hoy (2001) questionnaire, and reliability estimates were calculated using Cronbach alpha that indicated an acceptable index of reliability coefficient of .76. Researchers found this reliability coefficient to be significant enough to continue with the second phase of research regarding student motivation.

Students assigned to these teachers were administered a students' motivational questionnaire compiled by Mojavezi and Tamiz (2012) and adapted from several previous studies (Gardner, 1986; Schmidt, 1996). Factor analysis of this student motivational questionnaire indicated that four components exceeded recommended Kaiser-Meyer-Olkin value of .6 with an .815 Kaiser-Meyer-Olkin value and were used to gather data regarding student motivation in this study. Teacher efficacy data and student motivational data were then analyzed using a Pearson product-moment correlation and determined to show a significant correlation between teacher self-efficacy and student motivation. According to Mojavezi & Tamiz (2012), "It can be inferred that the higher the teacher self-efficacy, the higher the students' motivation" (p. 487).

Teacher engagement has a direct impact on student engagement, productivity, and therefore impacts student achievement in classrooms. With students exhibiting an increased apathy toward public education, it is imperative that school leaders address teacher engagement. Teacher efficacy and feedback assigning value to their contributions add significantly to levels of engagement (Strike, 2007). As teacher efficacy increases, teacher engagement increases, and student achievement is then positively impacted. Teachers continue to make a difference. **Teacher efficacy and closing the achievement gap.** The continued power struggle in the age of accountability has damaged teacher morale at the core of their being (Ingersoll, 2003). This deficit thinking model has been utilized to grade students, teachers, and schools for several decades under the guiding mandates of the Elementary and Secondary Education Act. The outcome has not been positive. Student achievement gaps have continued to grow for students living in poverty, learners in American public schools have fallen further behind their counterparts in other countries, and teacher morale has continued to diminish despite focused efforts of government agencies to address perceived discrepancies in teacher effectiveness (Farber & Azar, 2015; Ingersoll, 2003). This is not surprising as "an oppressant environment restrains an individual from fulfilling his/her basic needs" (Messerschmidt, 2018, p. 84). This attitude must change.

Positive public perception, teacher self-esteem, and student confidence must be increased so that efficacy of both teachers and students can push participants to engage with content, to master skills, and to collaborate with peers for the betterment of each other. Research by Ashton and Webb (1986) indicated that a teacher's personal sense of efficacy directly interacts with that same teacher's understanding of the overall impact that the teaching profession as a whole has on student achievement. If a teacher believes that a student's life circumstance is too great an obstacle, or that the learning environment provided by the community is not conducive to learning, or that the assessment tool that policymakers have created is not developmentally aligned with appropriate expectations, it creates a disconnect with how the teacher views his or her own personal sphere of influence and it deteriorates the teacher's efficacy capacity.

Application of this knowledge for change. Student success hinges greatly upon teacher efficacy. Using a research-driven structural equation model, Kaiser et al. (2013) found that

teachers make pre-conceived judgements regarding student engagement and achievement abilities because of this focus on areas of weakness, and these beliefs impact their level of engagement with the students. Evidence of impact of these instructional decisions is found in studies such as Ready and Wright (2011) which focused on how teachers group students and how teachers determine level of difficulty for questions utilized in their classrooms (Kaiser et al., 2016).

Mojave and Tamiz (2012) identified "a significant correlation between teacher selfefficacy and student achievement by influencing teachers' instructional practices, enthusiasm, commitment, and teaching behavior" (p. 488). Therefore, it stands to reason that if leaders build teacher efficacy, American schools will improve (Short & Greer, 2002).

Barrett and Fry (2005) further suggested that school leader application of appreciative inquiry leads to improved teachers' perception of supervisory support as well. The appreciative inquiry model builds upon individual strengths and focuses growth on the utilization of these strengths. Teacher efficacy, growth, and commitment to task increase in this environment as teachers follow leaders that understand and utilize their own strengths to facilitate change (Rath & Conchie, 2008). Collaborative leaders facilitate change through the building of teacher efficacy by empowering teachers "to redefine their roles and responsibilities and to do differently" (Dufour & Marzano, 2011, p. 22).

Another recent study conducted in Pakistan by Khan (2012) found that "there is a significant relationship between teachers' self-efficacy and students' academic achievement in the subjects of Math and English" (p. 446). Khan also utilized the Tschannen-Moran and Woolfolk Hoy (2001) to ascertain self-efficacy beliefs of 32 teachers in the Urdu language and then compared the academic achievement of their students within the Attock District of Pakistan.

Their findings reaffirm research conducted in the United States regarding the positive impact that teacher efficacy has upon student achievement. However, there is little data comparing teacher efficacy between charter and non-charter schools.

Kahn (2012) also noted four sources of information that are key to the development of teacher self-efficacy: mastery experiences, personal emotional and physiological conditions, vicarious experiences of other model teachers, and social persuasion in the form of feedback from key stakeholders (Bandura, 1997). This further supports the need for school leaders, stakeholders, and researchers to formulate teacher development programs and assessment systems that include opportunities for teachers to grow in each of these areas.

Kahn (2012) conducted Pearson product-moment analysis for five hypotheses with the following purposes:

- To determine if a relationship exists between teachers' self-efficacy and students' academic achievement in Math and English.
- To determine if a relationship exists between teachers' self -efficacy levels according to gender upon students' academic achievement in relation to their gender in Math.
- To determine if a relationship exists between teachers' self -efficacy levels according to gender upon students' academic achievement in relation to their gender in Reading.
- To determine if a relationship exists between teachers' self -efficacy levels according to gender upon students' academic achievement in relation to their location (whether urban or rural setting) in Math.

• To determine if a relationship exists between teachers' self -efficacy levels according to gender upon students' academic achievement in relation to their location (whether urban or rural setting) in English. (p. 440)

Results from Kahn (2012) regarding gender differences in levels of teacher self-efficacy indicated that "male teachers' sense of self-efficacy impact on student achievement was more significant in mathematics and female teachers' sense of self-efficacy impact on student achievement was more significant in English" (p. 447). This finding indicates a need to research further ways to build female teacher self-efficacy in the area of mathematics and male teacher self-efficacy in the area of English.

Teacher sense of self-efficacy impact on students did not differ significantly between male and female teachers according to the location of students. This validates that teachers' sense of self-efficacy can impact student achievement, regardless of location. Further research comparing the results found in urban charter schools in the United States comparatively to the performance figures found in Kahn (2012) could identify particular indicators for success across multiple locations.

Needed Knowledge Regarding Teacher Efficacy in Charter Schools

School setting defined. The traditional public school is a setting in which established government-sponsored school districts provide educational opportunities for students within the confines of a neighborhood or city. A public charter school is a setting in which government funds are utilized by private organizations to create alternative spaces for students to acquire knowledge. Several variations exist for charter schools from locally sponsored schools whose faculty develop the expectations and norms to large company-run schools with corporately designed programs of study. Khan (2012) found that location held minimal significance when

analyzing student achievement, factoring for levels of teacher self-efficacy, but further study into the type of setting within various geographical locations could lend further insight into factors influencing teacher self-efficacy and therefore student achievement. Identification and comparative analysis of the key elements that differ between charter and traditional public schools pertaining to teacher self-efficacy and student achievement could assist with ascertaining the most impactful and, therefore, essential variations within these models of learning.

Factors that impact teacher efficacy. Teacher efficacy is impacted by years of experience, school setting, and emotional exhaustion. School setting encompasses the physical space, instructional framework, and organizational structure in which a student engages with formal schooling. Several studies have been conducted supporting the relationship between experience and teacher efficacy as well as the impact of emotional exhaustion upon teacher efficacy. Zee and Koomen (2016) found that quality teaching experience positively impacts teacher sense of self-efficacy, and indirect negative associations between teacher self-efficacy and job discontent "hold across time, domains, and levels of teaching experience" (p. 1006).

Emotional exhaustion has been defined as "overwhelming feelings of being emotionally overextended and drained by others" (Kokkinos, 2006, p. 26). Emotional exhaustion has been connected to increased teacher burnout and decreased job satisfaction, both of which impact teacher self-efficacy levels as noted in multiple studies (Blackburn & Robinson, 2008; Canrinus et al., 2010; Salanova et al., 2011; Tsigilis et al., 2010).

One primary impact factor for emotional exhaustion is that of the expenditure of emotional labor. Emotional labor is defined by Yao et al. (2015) as "managing one's emotions to comply with organizational or occupational display rules" (p. 12). Yao et al. (2015), further explained that although emotional labor has positive impacts on student engagement and therefore achievement, if a teacher has extensive emotional dissonance due to the regulation of authentic emotions, a gap occurs that creates stress and often leads to emotional exhaustion. Zee and Koomen (2016) concluded that teacher commitment to the profession is impacted by the level of emotional labor needed to maintain healthy relationships with stakeholders and to avoid burnout as reported in several studies centered on teacher self-efficacy: Briones, Taberno, and Arenas (2010); Brissie, Hoover-Dempsey, and Bassler (1988); Egyed and Short (2006); Friedman (2003); Høigaard, Giske, and Sundsli (2012); Hultell, Melin, and Gustavsson (2013).

While an indirect correlation between teacher efficacy and school setting has been established, researchers indicate that further exploration into differences between settings is needed to ascertain the level of impact of this element upon teacher efficacy (Change & Engelhard, 2015, p. 11). Positive culture also impacts teacher efficacy as evident by increased teacher commitment to the profession when teacher self-efficacy is high due to their ability to "enlist administrative control, to make decisions, and to control classroom operations" (Zee & Koomen, 2016, p. 1006). Leaders can utilize structures like that of the appreciative inquiry model to build teacher capacity in these areas by creating a narrative of trust, success, and learning in American classrooms by building on positive elements within school culture (Cooperrider & Whitney, 2005).

Charter schools as effective agents of change. Further research is needed to confirm concerns of educational leaders seeking to understand and evaluate the usage of charter schools as agents for change and to meet the varied needs of students across the nation. If no difference exists in teacher efficacy rating scales between charter and traditional public schools, if "they are not, overall, better than traditional public schools" (Bankston & Caldas, 2015, p. 17), and if "there is not evidence of innovative practices not found in traditional public schools" (Bankston

& Caldas, 2015, p. 17) then the pursuit of charter school expansion is a wasteful and unproductive use of funding.

Other alternative setting options within the public school operations may offer viable solutions to student performance issues that earn higher educational dividends. Conversely, other valid reasons to investigate within charter school privatization practices may exist that warrant continued utilization of this construct such as management practices to address the influence of parent choice and other socialization issues.

Self-efficacy influences within particular domains. "Self-efficacy beliefs influence task choice, effort, persistence, resilience, and achievement. . . [and are] closely related to persistence, achievement, and learning. . . . Teaching is a good example of all these motivation concepts" (Khan et al., 2015, p. 119). If differences in teacher efficacy exist between charter and traditional public schools, further questions for research arise from the data.

First, determination of whether differences exist within the Tschannen-Moran and Woolfolk Hoy (2001) subscales for instruction, engagement, and classroom management between these two subgroups could assist leaders with the assessment of effectiveness within these two particular educational settings. It also follows that determination of which of the established Tschannen-Moran and Woolfolk Hoy (2001) sub scales assessing teacher efficacy (teacher efficacy for instruction, teacher efficacy for engagement, and teacher efficacy for classroom management) hold greater impact on student achievement within traditional public schools and public charter schools would also inform decision makers regarding allocation of resources, staff development needs, and best practices for assessment. The quantitative analysis of the data gathered within this comparative study could then be applied to other settings and states to validate the findings through the replication of procedures and analysis in further research.

Validation and replication. The outcomes of the proposed study, if replicated across multiple states with multiple variations of state laws governing the implementation of charter school procedures and assessment practices (U.S. Department of Education, 2015), could also be utilized by stakeholders to monitor and adjust their unique implementation processes (Center for Education Reform, 2015). With the continued analysis of the widely accepted Tschannen-Moran and Woolfolk Hoy (2001) TSES across multiple states and settings can be utilized by researchers to offer student centered proof that the difference discovered in teacher efficacy between charter and traditional public schools positively impacts student performance on standardized assessments.

Data from this comparative study could also cause stakeholders to question standardized assessment practices and offers impetus for stakeholders to seek new measures of student learning that are not related to standardized tests. In particular, assessment indicators based upon the elements that build both teacher and student efficacy identified in this study could be utilized for assessing school effectiveness.

Summary

Teachers' sense of self-efficacy has been identified as a positive contributor to many dimensions of student success, including that of student achievement across multiple studies in many countries and within a variety of settings. Public schools across the United States have experienced limited success related to student achievement, whether measured by performance or improvement measures within the scope of current assessment systems. Public charter schools have emerged as a viable alternative to traditional public schools for parents seeking successful academic experiences for their children. Legislation has increased funding for these alternative settings and research continues to support successful student achievement in public charter schools. Research is needed to gather further comparative data regarding teacher's sense of self-efficacy in both traditional and charter public schools to validate and predict future student success across these settings.

CHAPTER THREE: METHODS

Overview

The methodology of this study included a quantitative causal comparative design focused on determining whether a variance exists between teacher efficacy in charter school settings and teacher efficacy in traditional school settings. Four hypotheses were tested to assess differences based upon efficacy sub-scales of the TSES. A convenience sample was administered the survey, and data were gathered accordingly.

Design

This quantitative causal comparative study was conducted using multiple *t*-tests to determine if there is a difference in teacher efficacy between public charter school and traditional public school teachers. The independent variable was the setting; the dependent variable was teacher efficacy. Within the variable of teacher efficacy, the TSES assessed overall teacher efficacy, teacher efficacy for student engagement, teacher efficacy of instructional practices, and teacher efficacy of classroom management. Teacher efficacy is applied as a psychological construct within the TSES and is defined as a "judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (Tschannen-Moran & Woolfolk Hoy, 2001, p. 783).

Within this study the manipulation of data was not a necessity as the relationship between the variables was "naturally occurring and therefore considered, ex post facto research" (Gall, Gall, & Borg, 2007, p. 306).

Research Questions

RQ1: Is there a difference in overall teacher efficacy between public charter school teachers and traditional public school teachers?

RQ2: Is there a difference in teacher efficacy for student engagement between public charter school teachers and traditional public school teachers?

RQ3: Is there a difference in teacher efficacy for instructional strategies between public charter school teachers and traditional public school teachers?

RQ4: Is there a difference in teacher efficacy for classroom management between public charter school teachers and traditional public school teachers?

Hypotheses

The null hypotheses for this study were as follows:

Ho1: There is no significant difference in overall teacher efficacy on the TSES inventory (Tschannen-Moran & Woolfolk Hoy, 2001) between public charter school teachers and traditional public school teachers.

H₀2: There is no significant difference in teacher efficacy for student engagement on the TSES inventory (Tschannen-Moran & Woolfolk Hoy, 2001) between public charter school teachers and traditional public school teachers.

 H_03 : There is no significant difference in teacher efficacy for instructional strategies on the TSES inventory (Tschannen-Moran & Woolfolk Hoy, 2001) between public charter school teachers and traditional public school teachers.

 H_04 : There is no significant difference in teacher efficacy for classroom management on the TSES inventory (Tschannen-Moran & Woolfolk Hoy, 2001) between public charter school teachers and traditional public school teachers.

Participants and Setting

A convenience sample, which is defined by Gall et al. (2007) as "a sample that suits the purposes of the study and is convenient" (p. 175), was chosen from school districts within the Tampa-St. Petersburg-Clearwater Metropolitan Statistical Area, including Hillsborough, Pinellas, Hernando, and Pasco Counties located near the researcher. The participants included in this study were teachers at either charter or traditional public schools that were accredited and represented suburban and urban environments. These districts represented more than 300 schools and more than 50 of which were charter schools. According to Data USA (2017) the median household income for the area is less than \$49,000 per year. Combined, these school districts educate approximately 850,000 students; approximately 5% of students have disabilities, more than 60% are economically disadvantaged, more than 10% are English language learners, and approximately 3% are homeless or migrant.

Participants included in the independent sample *t*-test were selected from both elementary and secondary schools, of which a minimum of 10 were traditional public schools and a minimum of 10 were charter schools of similar size, poverty, and mobility rates. Per the recommendation of Gall et al. (2007) for a medium effect size with the statistical power of .7 (p. 145), the participant sample consisted of 102 teachers from the traditional schools and 100 teachers from the charter schools. Additionally, Gall et al. (2007) recommends 20–50 participants in each minor subgroup (p. 176). Following this recommendation each sub group representation consisted of a minimum of 50 teachers from schools with less than 750 students and a minimum of 50 teachers from schools with more than 750 students; a minimum of 50 teachers from schools with 30% or below free and reduced lunch rates, a minimum of 50 teachers from schools with 31–79% free and reduced lunch rates, and a minimum of 50 teachers from schools with 80% free and reduced lunch rates.

Instrumentation

Permission to use the TSES was acquired. See Appendix A for permission to use the instrument. See Appendix B for instrument. Permission to include the survey in this manuscript was granted. Instrument was administered in session according to the instructions included on the instrument. Survey completion time was approximately 15 minutes. See Appendix C for the directions included on survey instrument. The TSES inventory (Tschannen-Moran & Woolfolk Hoy, 2001) is a self-assessment survey that measures differences in teacher efficacy using three subscales: efficacy for student engagement, efficacy for instructional strategies, and efficacy for classroom management. The TSES was selected for use in this study as it is grounded in Rotter's social learning theory, which defines teacher efficacy as the teacher's belief that the teacher has the power to influence student learning (Armor et al., 1976) and Bandura's social cognitive theory that indicates a high correlation between teacher efficacy beliefs and student performance (Bandura, 1993).

Several previous instruments influenced the development of the TSES; Tschannen-Moran et al. (1998) researched the Rand measure and applied Guskey's responsibility for student achievement, Rose and Medway's locus of control measure, and the Webb scale. The Rand index, developed by William Rand, is an external evaluation measure created to solve "the problem of comparing two partitions of set objects that occur naturally in various domains, notably in data analysis and clustering" (Hullermeier, Rifqi, Henzgen, & Senge, 2012, p. 546). The Rand researchers involved in the development of the TSES "conceived teacher efficacy as the extent to which teacher's believed that they could control the reinforcement of their actions" (Tschannen-Moran & Woolfolk Hoy, 2001, p. 783).

Guskey's 30-item instrument designed to measure responsibility for student achievement explored the causal relationship between items within the teacher's control and those that are out of the teacher's control (Tschannen-Moran & Woolfolk Hoy, 2001). Scores obtained from this instrument measured how much responsibility a teacher assumed in regard to student achievement. Tschannen-Moran and Woolfolk Hoy (2001) indicated that the strong positive correlation between teacher confidence and student achievement found in Guskey's study support the usage of such a self-concept measure as directly related to efficacy.

Rose and Medway's locus of control measure was considered in the development of the TSES as the correlations identified in the 28-item measure indicated a significant relationship to those found within the Rand measure. The Webb scale was then applied to the Rand measure in an effort to minimize social desirability bias and to expand the reliability of the index and to expand the utilization purposes of the TSES.

The TSES was developed from these proven measures by graduate students, and vetted for validity and reliability in three separate studies (e.g., Roberts & Henson, 2001; Henson & Bennett, 2000; & Tschannen-Moran & Woolfolk Hoy, 2001). The Tschannen-Moran and Woolfolk Hoy (2001) TSES measures teacher efficacy using three sub scales: teacher efficacy for instruction, teacher efficacy for engagement, and teacher efficacy for classroom management, with equal weight being placed upon each sub-scale. Other investigative measures such as the "REBT (Ellis, 1962) conceptualize and analyze the cognitive, emotive, and behavioral processes in which teachers develop, maintain, and act on efficacy beliefs" (Warren & Hale, 2016, p. 190). The analyses of these measures of teacher efficacy include greater emphasis on self-esteem, cognitive dissonance, irrational beliefs, and overgeneralization (Warren & Hale, 2016, p. 191). Although these other measures have provided valid information that can be appropriately measured, the Tschannen-Moran and Woolfolk Hoy (2001) TSES continues to be the most frequently used measurement of teacher efficacy and is therefore the most accepted measure (Zee & Koomen, 2016, p. 984). The TSES is considered "superior to previous measures of teacher efficacy in that it has a unified and stable factor structure" (Woolfolk Hoy & Burke-Spero, 2005, p. 354).

The TSES has been used in several studies as a valid and reliable measurement tool for teacher perception of efficacy (e.g., Ashton & Webb, 1986; Muijs & Reynolds, 2002; Pajares, 1996; Tschannen-Moran et al., 1998). Reliability of the long form instrument is considered moderate to highly reliable and gauged by the following Cronbach Alpha scores: overall .94, engagement .87, instruction .91, and management .90 (Tschannen-Moran & Woolfolk Hoy, 2001). Permission to utilize the TSES was acquired through Rightslink in 2017.

The TSES consists of 24 questions asking for a response in relation to the question, "How much can you do?" Responses range from nothing to a great deal on a nine point Likert-type scale. The instrument does not include any reverse questions. Question response choices on the Likert scale are as follows: Nothing = 1, Very Little = 2/3, Some Influence = 4/5, Quite A Lot = 6/7, and A Great Deal = 8/9. Efficacy in student engagement was measured by responses to test items 1, 2, 4, 6, 9, 12, 14, 22. Efficacy in instructional strategies was measured by responses to test items 7, 10, 11, 17, 18, 20, 23, 24. Efficacy in classroom management was measured by responses to test items 3, 5, 8, 13, 15, 16, 19, 21. The lowest possible score was 24 and would indicate a low level of teacher efficacy while the highest possible score was 216, which would indicate a high level of teacher efficacy.

Procedures

See Appendix B for instrument. IRB Permission was granted from Liberty University; see Appendix D. IRB Permission was granted from school district to survey teachers; see Appendix E. TSES items were inputted into a digital Survey Monkey in their totality. Principals from a minimum of 10 traditional public schools and a minimum of 10 charter schools were contacted by the researcher asking that they offer the survey opportunity via an e-mail link to their staff. Using Survey Monkey, participants completed the online TSES individually and submitted anonymously. The researcher then gathered the electronic survey data and offered a separate response link for the gift card drawing. Participants signed an electronic informed consent form prior to responding to the survey. See sample in Appendix G.

The researcher exported the survey scores using an Excel spreadsheet. Scores were then imported into SPSS for analysis. Analyses were conducted. See Data Analysis. Results were reported. See Results. Letters of appreciation were sent to participating schools.

Data Analysis

Data Screening

An independent *t*-test analysis was conducted using data collected with the TSES for the independent variable impact of setting on teacher efficacy for student engagement, efficacy of instructional strategies, and efficacy of classroom management. Results are found in Table 1. Preliminary data screening was conducted on each group's dependent variables of overall efficacy (OE), student engagement (SE), instructional strategies (IS), classroom management (CM) regarding data inconsistencies and outliers. The researcher sorted the data on each variable and scanned for inconsistencies as recommended by Green and Salkind (2014, p. 169–174). See Table 1. Scatterplots for each group were reported. Box and whiskers plots were used

to detect outliers_on each dependent variable. The researcher screened the data for significant outlier z-scores for participants spanning more than three standard deviations of the mean (Green & Salkind, 2014, pp. 169–174).

Assumptions: Normality, Homogeneity of Variance, and Independence of Scores

Four independent *t*-tests were used to test differences between two groups (Traditional Public Schools and Public Charter Schools) on three dependent variables of teacher efficacy (efficacy for student engagement, efficacy for instructional strategies, and efficacy for classroom management). These tests required that the assumptions of normality, homogeneity of variance, and independence of scores be met. Assumption of normality was then examined using the Kolmogorov-Smirnov as n > 50 (Warner, 2013, p. 474). See Table 2 for the Kolmogorov-Smirnov test results.

A Levene's test was used to examine homogeneity of variance at the (p < .05). The Levene's test for equality of error for overall efficacy scores, efficacy for student engagement, efficacy for instructional strategies, and efficacy for classroom management was conducted to ensure that the variance in the two groups was similar. See Table 4 for the Levene's test for equality of error. Independent *t*-tests were conducted and analyzed for significance. Since four *t*-tests were conducted, a Bonferroni correction was needed to guard against type I error. The alpha level was calculated to be: 0.05/4 = .0125 (Warner, 2013). The assumption test of independence of scores was met as no participants were a member of both groups. Reported data within the study include the following:

- Descriptive statistics (*M*, *SD*)
- Number (N)
- Number per cell (*n*)

- T value (*t*)
- Significance level (*p*)
- Effect size

CHAPTER FOUR: FINDINGS

Overview

The purpose of this quantitative causal comparative research was to ascertain whether a difference exists in teacher efficacy beliefs between charter and tradition public school teachers. Reported in this chapter are the research findings of the survey conducted utilizing the Tschannen-Moran and Woolfolk Hoy (2001) TSES and the resulting analysis.

Research Questions

RQ1: Is there a difference in overall teacher efficacy between public charter school teachers and traditional public school teachers?

RQ2: Is there a difference in teacher efficacy for student engagement between public charter school teachers and traditional public school teachers?

RQ3: Is there a difference in teacher efficacy for instructional strategies between public charter school teachers and traditional public school teachers?

RQ4: Is there a difference in teacher efficacy for classroom management between public charter school teachers and traditional public school teachers?

Null Hypotheses

The null hypotheses for this study are as follows:

 H_01 : There is no significant difference in overall teacher efficacy on the TSES inventory (Tschannen-Moran & Woolfolk Hoy, 2001) between public charter school teachers and traditional public school teachers.

 H_02 : There is no significant difference in teacher efficacy for student engagement on the TSES inventory (Tschannen-Moran & Woolfolk Hoy, 2001) between public charter school teachers and traditional public school teachers.

H₀3: There is no significant difference in teacher efficacy for instructional strategies on the TSES inventory (Tschannen-Moran & Woolfolk Hoy, 2001) between public charter school teachers and traditional public school teachers.

H₀4: There is no significant difference in teacher efficacy for classroom management on the TSES inventory (Tschannen-Moran & Woolfolk Hoy, 2001) between public charter school teachers and traditional public school teachers.

Descriptive Statistics

Demographics

Respondents in this study included 202 teachers, of which 100 were charter school employees (49.5%) and 102 (50.5%) were traditional public school employees. Respondents serve schools within the central Florida region, located near the researcher. To guarantee anonymity, the researcher asked respondents interested in the gift card drawing to send a separate email to the researcher at the conclusion of the survey. The researcher used these responses to gather additional demographic information. Based upon gift card entry responses, a minimum of 22 schools were represented in the survey data, with staff from 11 charter schools and 11 traditional public schools self-identifying. Within these groups, participants selfidentified their school size, socioeconomic status, and mobility rate.

Participants in the study that responded for the gift card entry included 53 (26.24%) participants from schools with less than 30% free and reduced lunch, with three (60%) of these schools representing charter schools and two (40%) traditional public schools. Participants in the study that responded for the gift card entry included 57 (28.22%) participants from schools with 30%–80% free and reduced lunch, with five (50%) of these schools representing charter schools and five (50%) traditional public schools. Participants in the study that responded for the gift

card entry included 92 (45.54%) participants from schools with greater than 80% free and reduced lunch, with three (43%) of these schools representing charter schools and four (57%) traditional public schools. Additionally, participants in the study that responded for the gift card entry included 129 (64.18%) participants from schools with low mobility rates (below 30%), 61 (30.35%) from schools with medium mobility rates (30%–80%), and 11 (5.47%) participants from schools with high mobility rates (greater than 80%).

Study Variables

The dependent variables for overall teacher efficacy, teacher efficacy for student engagement, teacher efficacy for instructional strategies, and teacher efficacy for classroom management were examined via independent *t*-tests in relation to the independent variable of setting using the TSES. Responses to the 24 questions included on the long form of the TSES rating "How much can you do?" ranged from "nothing" to "a great deal" on a nine-point Likerttype scale. Question response choices on the Likert scale were as follows: Nothing = 1, Very Little = 2/3, Some Influence = 4/5, Quite A Lot = 6/7, and A Great Deal = 8/9. Efficacy in student engagement was measured by responses to test items 1, 2, 4, 6, 9, 12, 14, 22. Efficacy in instructional strategies was measured by responses to test items 7, 10, 11, 17, 18, 20, 23, 24. Efficacy in classroom management was measured by responses to test items 3, 5, 8, 13, 15, 16, 19, 21. Table 1 shows a summary of each of the TSES scores.

Student Engagement question scores for charter teachers ranged from 1.0 to 9.0 with a mean of 6.9 (SD = 1.1). Student Engagement question scores for traditional teachers ranged from 1.0 to 9.0 with a mean of 6.6 (SD = 1.1). Instructional Practice question scores for charter teachers ranged from 1.0 to 9.0 with a mean of 7.1 (SD = 1.0). Instructional Practice question scores for traditional teachers ranged from 1.0 to 9.0 with a mean of 7.1 (SD = 1.0). Instructional Practice question

Management question scores for charter teachers ranged from 1.0 to 9.0 with a mean of 7.3 (*SD* = 1.1). Classroom Management question scores for traditional teachers ranged from 1.0 to 9.0 with a mean of 7.1 (SD = 1.2). Overall Efficacy scores for charter teachers ranged from 1.0 to 9.0 with a mean of 7.1 (SD = 1.0). Overall Efficacy scores for traditional teachers ranged from 1.0 to 9.0 with a mean of 6.9 (SD = 1.0).

Table 1

	Group	Mean	Std. Deviation	Ν
Overall Efficacy	Charter Teachers	7.11333	0.9929	100
	Traditional	6.89011	0.9890	102
Student Engagement	Charter Teachers	6.94625	1.120467	100
	Traditional	6.56740	1.131331	102
Instructional Strategies	Charter Teachers	7.13500	1.029808	100
	Traditional	7.03676	1.009943	102
Classroom Management	Charter Teachers	7.25875	1.123281	100
-	Traditional	7.06618	1.157694	102

List of Descriptive Statistics

Results

Research Question One

Research Question 1 asked if there was a difference in overall teacher efficacy between public charter school teachers and traditional public school teachers. Preliminary data screening was conducted regarding this first dependent variable of overall teacher efficacy in relationship to charter and traditional teacher feelings of efficacy. No extreme outliers were identified. See Figure 1. As a result, all data were retained.







An independent *t*-test was conducted regarding overall efficacy (OE) and three assumptions were then examined: normality, homogeneity of variance, and independence of scores. The assumption of normality was assessed using the Kolmogorov-Smirnov as n > 50 per Warner (2013, p. 474). See Table 2.

Table 2

	Statistic	df	Sig.
Overall Teacher Efficacy	.062	202	.059
Student Engagement	.062	202	.054
Instructional Strategies	.061	202	.068
Classroom Management	.080	202	.003

The results indicate that the assumption of normality is tenable with a significance value of p = 0.059, which is greater than the alpha level of p < 0.05. A Levene's test was then used to examine homogeneity of variance at the (p < 0.05) and to assess the equality or error between the charter and traditional teacher efficacy scores. The results indicated that this assumption was met with F = .17, p = .68. See Table 3. The independence of scores was met as no participants were in both the charter and traditional teacher groups.

Table 3

Overall Teacher Efficacy Levene's Test of Equality of Variance Results

	F	Sig.
Equal variances assumed	0.172	0.679

A *t*-test for Equality of Means was conducted with t (202) = 1.60, p = .111, Cohen's d = .22. It should be noted that Cohen's d = .22 is a small effect size. Charter teacher (MD = .22, SD = .14, n = 100) overall total efficacy is not statistically different from that of traditional teacher (MD = .22, SD = .14, n = 102) overall total efficacy. See Table 4 for results. Therefore, the researcher failed to reject the null hypothesis.

Table 4

	t	df	Sig (2-tailed)	Mean Differ	Std. Error Diff.	Lower	Upper
Equal variance assumed	1.601	200	.111	.223219	.139462	051786	.498224
Equal variance not assumed	1.601	199.886	.111	.223219	.139468	051798	.498236

Overall Teacher Efficacy t-test for Equality of Means Results

Research Question Two

Research Question 2 asked if there was a difference in teacher efficacy for student engagement between public charter school teachers and traditional public school teachers. Preliminary data screening was conducted regarding this second dependent variable of teacher efficacy for student engagement. No extreme outliers were identified. See Figure 2. As a result, all data was retained.



StudentEngmnt

Figure 2. Box and whisker plot for teacher efficacy for student engagement.

An independent *t*-test was also conducted regarding teacher efficacy for student engagement and three assumptions were then examined: normality, homogeneity of variance, and independence of scores. The assumption of normality was assessed using the Kolmogorov-Smirnov as n > 50 per Warner (2013, p. 474). See Table 2. The results indicated that the assumption of normality was tenable with a significance value of p = 0.054, which is greater than the alpha level of p < 0.05. A Levene's test was then used to examine homogeneity of variance at the (p < 0.05) and to assess the equality or error between the charter and traditional public school teacher efficacy scores. The results indicated that this assumptions was met with F = .17, p = .97. See Table 5. The independence of scores was met as no participants were in both the charter and traditional teacher groups.

Table 5

Teacher Efficacy for Student Engagement Levene's Test of Equality of Variance Results

	F	Sig	
Equal variances assumed	0.172	0.97	

Additionally, a *t*-test for Equality of Means was conducted with t (202) = 2.40, p = .0.02, Cohen's d = .34. It should be noted that Cohen's d = .34 is also a small effect size. Charter teacher (MD = .38, SD = .16, n = 100) efficacy for student engagement is not statistically different from that of traditional teacher (MD = .38, SD = .16, n = 102) efficacy for student engagement. See Table 6 for results. Therefore, the researcher failed to reject the null hypothesis.

Table 6

			Sig	Mean			
	t	df	(2-tailed)	Differ	Std. Error Diff.	Lower	Upper
Equal variance assumed	2.391	200	.018	.378848	.158453	.066395	.691301
Equal variance not assumed	2.391	199.979	.018	.378848	.158438	.066424	.691272

Teacher Efficacy for Student Engagement t-test for Equality of Means Results

Research Question Three

Research Question 3 asked if there was a difference in teacher efficacy for instructional strategies between public charter school teachers and traditional public school teachers. Preliminary data screening was conducted regarding this third dependent variable of teacher efficacy for student engagement. No extreme outliers were identified. See Figure 3. As a result, all data were retained.



Instrct Strat

Figure 3. Box and whisker plot for teacher efficacy for instructional strategies.

A third independent *t*-test was conducted regarding teacher efficacy for instructional strategies and three assumptions were then examined: normality, homogeneity of variance, and independence of scores. The assumption of normality was assessed using the Kolmogorov-Smirnov as n > 50 per Warner (2013, p. 474). See Table 2. The results indicated that the assumption of normality was tenable with a significance value of p = 0.068, which is greater than the alpha level of p < 0.05. A Levene's test was then used to examine homogeneity of variance at the (p < 0.05) and to assess the equality or error between the charter and traditional public school teacher efficacy scores. The results indicated that this assumptions was met with F = .14,

p = .71. See Table 7. The independence of scores was met as no participants were in both the charter and traditional teacher groups.

Table 7

Teacher Efficacy for Instructional Strategies Levene's Test of Equality of Variance Results

	F	Sig.
Equal variances assumed	0.135	0.714

Additionally, a *t*-test for Equality of Means was conducted with t (202) = 0.684, p = .49, Cohen's d = .096. Charter teacher (MD = .10, SD = .14, n = 100) efficacy for student engagement is not statistically different from that of traditional teacher (M = .10, SD = .14, n =102) efficacy for student engagement. See Table 8 for results. Therefore, the researcher failed to reject the null hypothesis.

Table 8

Teacher	Efficacy	for	Instructional	<i>Strategies</i>	t-test for l	Equality	of Means	Results
				0	./	1 2		

	t	df	Sig (2-tailed)	Mean Differ	Std. Error Diff.	Lower	Upper
Equal variance assumed	0.684	200	.494	.098235	.143516	184764	.381234
Equal variance not assumed	0.684	199.690	.494	.098235	.143544	184821	.381292

Research Question Four

Research Question 4 asked if there was a difference in teacher efficacy for classroom management between public charter school teachers and traditional public school teachers. Preliminary data screening was conducted regarding this fourth dependent variable of teacher efficacy for classroom management. No extreme outliers were identified. See Figure 4. As a result, all data were retained.



ClassManngnt

Figure 4. Box and whisker plot for teacher efficacy for classroom management.

A fourth independent *t*-test was conducted regarding teacher efficacy for classroom management and three assumptions were then examined: normality, homogeneity of variance, and independence of scores. The assumption of normality was assessed using the Kolmogorov-Smirnov as n > 50 per Warner (2013, p. 474). See Table 2. The results indicated that the assumption of normality was not tenable with p = 0.003. See Table 2 for results.

A *t*-test for Equality of Means was conducted with t (202) = 1.200, p = .232, d = .017.

Charter teacher (MD =.19, SD = .16, n = 100) efficacy for classroom management is not statistically different from that of traditional teacher (MD = .19, SD = .16, n = 102) efficacy for classroom management. A Levene's test was then used to examine homogeneity of variance at the (p < 0.05) and to assess the equality of error between the charter and traditional public school teacher efficacy scores. The results indicated that this assumption was met with F = .18, p = .68. See Table 9 for results. The independence of scores was met as no participants were in both the charter and traditional teacher groups.

Table 9

Teacher Efficacy for Classroom Management Levene's Test of Equality of Variance Results

	F	Sig.
Equal variances assumed	0.176	0.675

Further nonparametric testing was conducted as the data for null four, teacher efficacy for classroom management, were not normally distributed, as is seen in Table 2. The Mann Whitney U nonparametric test confirmed the findings of the *t*-test. For results see Table 10.

Table 10

Teacher Efficacy for Classroom Management Independent Sample Mann Whitney U Test Results

	Sig.	Decision
Distribution of Classroom Management the same across categories of school	0.285	Retain the null hypothesis.

*Asymptotic significances are displayed. The significance level is .05.

CHAPTER FIVE: CONCLUSIONS

Overview

This chapter will outline the results of this causal comparative study of teacher efficacy between charter and traditional school teachers. The researcher will also outline the implications of the findings of this study and clarify the limitations of the study. Finally, the researcher will make recommendations for further research based upon these findings.

Discussion

The purpose of this causal comparative study of teacher efficacy between charter and traditional public school teachers was to determine if a difference exists between these two groups utilizing the Tschannen-Moran and Woolfolk Hoy (2001) TSES. If such a difference exists therein, then the purpose of this study extends further to ascertain where such differences occur within the tool and how this information can be used by educational decision makers to improve the educational models being implemented today.

The first research question of this causal comparative study addressed whether a difference exists between overall teacher efficacy for charter and traditional school teachers. The results of this causal comparative study indicate that, overall, there is not enough statistical difference between the survey respondents to imply significance. However, previous research indicates that teacher efficacy remains a predominantly large indicator of student success and should be utilized by leaders to collaboratively improve school performance (Dufour & Marzano, 2011).

A finding of notable importance is that across each subscale of the survey and then for the overall rating on the survey, the score of "7" was common to each group. Teachers across both groups report this ranking as their average score. A score of seven is described as "Quite A Lot" referring to the teacher's belief in her ability to impact students. This indicates that, overall, teachers in both settings believe that they have the ability to impact student performance on a regular basis. Specifically the mean of charter teacher responses for overall teacher efficacy was 7.1. The mean of traditional teacher responses for overall teacher efficacy was 6.9. Both of the scores hover around the rating of 7, which again indicates that teachers feel they have quite a lot of influence over student achievement. This is vitally important for students to be successful. According to Hattie (2003), teacher impact accounts for 30% of the variance in student performance, which is five times as much of an influence as the school, home, or peers and second only to the student. This finding contradicts the message given in other research that teachers are disempowered and disenfranchised.

Teachers involved in this study still believe that they make a difference. One finding from the study that may have a direct impact on this strong efficacy belief is that the participants in both the charter and traditional schools indicated that mobility rates reported that 64.18% of participants were from schools with low mobility rates (below 30%), 30.35% of participants were from schools with medium mobility rates (30%–80%), and 5.47% of participants were from schools with medium mobility rates (30%–80%), and 5.47% of participants were from schools with high mobility rates (greater than 80%). Pedota (2015) observed that teachers with high efficacy use goal setting with students, quickly respond to student concerns, give direct feedback on student work, use data to drive instruction, emphasize mastery of content, celebrate successes, and involve parents in the classroom culture building process. Many charter schools operate in structures that promote parent involvement, data analysis, and student-centered learning (Denice, Gross, & Rausch, 2015). Another factor impacting this strong sense of efficacy may be that the more experienced teachers responded to the survey. This would be
another recommended area of research as years of experience was not considered within this study.

The second research question of this study addressed whether a difference exists in teacher efficacy for student engagement between charter and traditional school teachers. The results of this study again indicate that there was not a significant difference of teacher efficacy for student engagement because all assumptions were met. This indicates that although very similar some difference between the two groups did exist.

The data indicated that charter teachers averaged slightly higher in their self-reporting of efficacy for student engagement than their traditional peers, but with the application of the Bonferoni correction there was not enough of a difference noted to reject the null. Khan et al. (2015) found that teachers with higher efficacy were more engaged with students and therefore students were more engaged with classroom content. Research by Hattie (2003) indicated that teacher experience has a great deal of influence over teacher efficacy for student engagement as these expert teachers "possess knowledge that is more integrated, in that they combine new subject matter content knowledge with prior knowledge; can relate current lesson content to other subjects in the curriculum; and make lessons uniquely their own by changing, combining, and adding to them according to their students' needs and their own goals" (p. 5).

The mean of charter teacher responses for efficacy related to student engagement was 6.95. The mean of traditional teacher responses for efficacy related to student engagement was 6.57. Although both of the scores are around the rating of 7, the means for this component of teacher efficacy are lower than the other ratings for teacher efficacy. In particular, teacher efficacy ratings for traditional teachers in relation to student engagement are the furthest from the mean indicating that they are not as confident that they can influence student achievement in the

area of student engagement. Research by van Uden et al. (2014) may lend insight in that they found the following:

Teacher support, positive teacher–student relationships, classroom structure, autonomy support and authentic and challenging tasks have been associated with student engagement at the classroom level. Clearly, the teacher has a role in creating those supportive conditions. However, whether teachers try to create them and how they go about trying to do so is likely to depend on their beliefs about teaching and about being a teacher. (p. 22)

Additionally, research by Khan et al. (2015) indicates that engagement impacts achievement across multiple settings and circumstances. Therefore, previous research as well as the trend noted in this data set indicate to the researcher that this is an area calling for further study and will be referenced in recommendations for further study.

The third research question of this causal comparative study addressed whether a difference exists in teacher efficacy for instructional strategies between charter and traditional school teachers. The mean of charter teacher responses for efficacy- related to instructional strategies was 7.14. The mean of traditional teacher responses for efficacy related instructional strategies was 7.04. These numbers indicate that this particular subscale comparison between the charter and traditional teacher efficacy on the Tschannen-Moran and Woolfolk Hoy (2001) TSES was the most consistent. This indicates to the researcher that both groups feel adequately prepared in the use of instructional strategies that positively impact student performance. Danielson and McGreal (2000) highlight the importance of instructional practice as a key predictor of student success.

Teachers in both charter and traditional schools are required to meet minimum preparation and certification standards outlined within each state board of education rules. Additionally, each state has board rules outlining required professional development for instructional strategies for new teachers as a component of professional certification. In the state of Florida, both charter and traditional school teachers share the same preparation standards and certification requirements. All participants work within the state of Florida and have similar preparation to build efficacy in the area of instructional strategies. The similarity of this preparation supports the findings in that teacher efficacy can be improved through collaboration and training related to instructional strategies (Dufour & Marzano, 2011). Additionally, Ross et al. (2012) found that the effectiveness of instruction continues to improve as teachers increase the rigor of goal setting, collaborate with peers, proactively work with parents, and take personal responsibility for student outcomes, which van Uden et al. (2014) reference as being integral descriptors of teachers with high efficacy.

The final research question of this study addressed whether a difference in teacher efficacy for classroom management exists between charter and traditional school teachers. This study found that there was not a significant difference in teacher efficacy for classroom management on the Tschannen-Moran and Woolfolk Hoy (2001) TSES. However, much like with efficacy for student engagement, teachers in charter schools reported a higher sense of teacher efficacy mean score for classroom management than their counterparts in traditional public schools.

The mean of charter teacher responses for efficacy related to classroom management was 7.23. The mean of traditional teacher responses for efficacy-related classroom management was 6.92. Research by Denice et al. (2015) indicated that the discipline practices of charter schools

impact teacher influence over classroom management. Although this null was not rejected, this study further supports that teachers in charter schools believe they have influence over classroom management at a higher level than traditional teachers.

Classroom management greatly impacts student academic performance (Saifi, Hussain, Salamat & Iftikhar, 2018). This direct relationship between a positive classroom climate that includes consistently applied rules, established norms for order, and behavior management systems to increased student performance makes this particular finding important for educational leaders. Research indicates that a correlation between teachers' beliefs that they can influence and change both student behavior and academic performance directly impact student engagement, motivation, and personal growth. "Teachers employ different strategies to control disruptive behaviors in the classroom" (Dibapile & Tefo, 2012, p. 80). Teacher self-efficacy related to classroom management speaks to the teacher's perceived ability to organize group structures, student behaviors, and physical space. "Effective teachers are viewed as experts in classroom management" (Dibapile & Tefo, 2012, p. 80).

As a consistent predictor of student success, teacher efficacy in charter schools needs to be explored to ascertain student impacts within this specific environment (Khan et al., 2015). Based upon the evidence found in this study as well as in the research previously referenced, the researcher recommends further study into how classroom management strategies can be used to improve teacher efficacy for student engagement. One aspect identified by Denice et al. (2015) within charter organizations that may contribute to increased teacher efficacy for classroom management is the charter school commitment to a clear mission and vision that includes behavioral norms in which students and parents are required to adhere.

Implications

The results of this study have important implications for educational leaders and key stakeholders to consider. Teachers in charter schools report a higher mean score of efficacy for classroom management in particular. Most charter schools focus on establishing a clear mission and vision that includes behavioral norms to which they hold students accountable (Denice et al., 2015). Many charter schools have research-based programs for classroom management that are implemented systematically across classrooms. Teachers are empowered by this collaborative disciplinary expectation as it holds students and parents accountable. Many charter schools also require a minimum number of volunteer hours each year for parents as a component of the parent agreement during registration. This supports the shared relationship between the school and the parents in that parents have a clear expectation of involvement from the onset of the child's acceptance. This bond enables the parents and teachers to work cooperatively when disciplinary situations do occur in the classroom.

Teachers across the nation report that student and parent accountability for behavioral concerns and disciplinary actions is frequently lacking in public schools. Students report a loss of academic achievement when order is lacking and their peers are not held to a common set of expectations (Saifi, Hussain, Salamat, & Iftikhar, 2018). If both teachers and students indicate that there is a direct relationship between classroom management and student achievement, then educational decision makers and policymakers need to hold students and families more accountable through school disciplinary policies that increase student performance.

This study supports the need for a significant cultural shift within our educational system. We cannot afford to continue providing the right to a free and public education outlined by the U.S. Constitution without enforcing the responsibility of each citizen to respectfully engage with this educational experience. Our laws do not allow for unruly behavior that is unsafe within our communities or on our roads. Those who violate laws promoting the safety of others are often fined, denied access to protected spaces, and can even be confined to a detention center. Schools are communities and the rules of governance should protect the educational environment with the same level of consistency. If we make such a shift, teacher efficacy for classroom management in traditional public schools will increase and, therefore, it can be inferred that student performance will increase.

Teachers continue to leave the professional at increased rates every year and we have difficulty attracting teachers for high level math and science areas in particular. Teachers continually cite a lack of support from parents and leaders regarding disciplinary issues as a reason for exiting the field. The findings in this study support the necessity of increased teacher efficacy in the area of classroom management within our traditional public schools. As the teacher training courses and certification requirements are the same for both groups, the difference lies within the implementation of classroom management strategies and disciplinary practices.

Limitations

Although great efforts were made by the researcher to include participants from both comparison groups from similar grade level buildings, socioeconomic status, and building size, the comparative groups are not exact. The researcher did not screen participants as the invitation to participate protected participant identity. Data gathered from participant responses did indicate representation from a variety of building levels, school sizes, and socioeconomic circumstances, however. This study was conducted in a geographical location that included school districts within the Tampa Bay area. Although the participant sample met all recommendations from Gall et al. (2017), the participants are all from this one geographical region. Because charter school laws vary from state to state, there may be limitations to the researcher's implications for application as the participants all reside in Florida.

The data gathered from this research was gleaned from anonymous teacher survey response and is limited to rating scales and quantitative analysis of these scales. The depth of the knowledge gained is limited by the constraints of the methodology used. The researcher recommends further qualitative study to gain a multilayered perspective on the analysis comparing teacher efficacy within charter and traditional public schools.

Recommendations for Future Research

As this comparative research regarding teacher efficacy between charter and traditional public school teachers addresses a gap currently found within the research field, there are many recommendations for further study. This researcher has opened the conversation regarding the comparative analysis of teacher efficacy between charter and traditional public school teachers, but there is much to be learned about the differences that could be used to improve leadership decision making and teacher practice. Although this list is not exhaustive, recommendations for further research include the following:

- 1. Expansion of the sample size to include a larger geographical population.
- 2. Limit the participants to targeted populations (school size, demographics of students, demographics of teachers, types of charter schools) to ascertain trends.
- 3. Expand the comparative analysis to include a desegregation of teacher school level: elementary, middle, or high school.

- 4. Expand the comparative analysis study to private school teachers as well as charter and traditional public school teachers.
- 5. Qualitative analysis of teacher experiences within both settings to gain insight into the reasons for this difference of teacher efficacy for classroom management found in this study.
- 6. Further study comparing teacher preparation programs, school-wide behavior expectations, and collaborative relationships with parents regarding discipline across these settings.
- 7. Comparative analysis of the implementation of school choice initiatives across states to ascertain opportunities for growth in low-performing schools.
- Expand the sample size for a comparative analysis regarding teacher efficacy for student engagement to ascertain whether a significant difference exists with a larger sample.

REFERENCES

- Angrist, J. D., Pathak, P. A., & Walters, C. R. (2013). Explaining charter school effectiveness. *American Economic Journal: Applied Economics*, 5(4), 1–27.
- Aronson, N. A. (2010). A study of the effects of appreciative inquiry on teacher classroom practice (Doctoral dissertation). ProQuest Dissertations and Theses database. (UMI 3419249)
- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers sense of efficacy and student achievement*. New York, NY: Longman.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. doi:10.1037/0033-295X.84.2.191
- Bandura, A. (1989). Social cognitive theory. *Annals of Child Development: Six Theories of Child Development, 1*(6), 1–66.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117–148.
- Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York, NY: W.H. Freeman and Company.
- Bankston, C. L., III, & Caldas, S. J. (2015). *Controls and choices: The educational marketplace and the failure of school desegregation*. New York, NY: Rowman & Littlefield.
- Barrett, F. J., & Fry, R. E. (2005). Appreciative inquiry. A positive approach to building cooperative capacity. Chagrin Falls, OH: Taos Institute Publications.
- Bergman, P., McLaughlin, M., Bass, E., & Zellman, G. (1977). Federal programs supporting educational change: Volume VII. Factors affecting implementation and continuation.
 Santa Monica, CA: RAND.

- Berry, B., & Shields, P. M. (2017). Solving the teacher shortage: revisiting the lessons we've learned. *Phi Delta Kappan*, 98(8), 8.
- Bolman, L. G., & Deal, T. E. (2008). *Reframing organizations: Artistry, choice, and leadership*. San Francisco, CA: Jossey-Bass.
- Bulkley, K. E. (2012). Charter schools... taking a closer look. *The Education Digest*, 77(5), 58–62.
- Center for Education Reform. (2012). Just the FAQs –charter schools. Retrieved from https://edreform.com/2012/03/just-the-faqs-charter-schools/
- Chabrier, J., Cohodes, S., & Oreopoulos, P. (2016). What can we learn from charter school lotteries? *The Journal of Economic Perspectives*, *30*(3), 57–84.
- Chang, Y. L. (2015). Examining relationships among elementary mathematics teachers' efficacy and their students' mathematics self-efficacy and achievement. *Eurasia Journal of Math, Science and Technology Education, 11*(6), 1307–1320.
- Change, M., & Engelhard, G. (2015). Examining the teachers' sense of efficacy scale at the item level with Rasch measurement model. *Journal of Psychoeducational Assessment*, 1, 1–15.
- Cooperrider, D. L., & Whitney, D. (2005). *Appreciative inquiry: A positive revolution in change*. San Francisco, CA: Berrett-Koehler Publishers, Inc.
- Danielson, C., & McGreal, T. (2000). *Teacher evaluation to enhance professional practice*. Princeton, NJ: Educational Testing Service.
- Data USA (2017). Tampa-St. Petersburg-Clearwater, FL Metro Area. Retrieved from https://datausa.io/profile/geo/tampa-st.-petersburg-clearwater-fl-metro-area/#intro

- Denice, P., Gross, B., & Rausch, R. (2015). *Understanding student discipline practices in charter schools: A research agenda*. Center on Reinventing Public Education.
- Denzine, G. M., Cooney, J. B., & McKenzie, R. (2005). Confirmatory factor analysis of the Teacher Efficacy Scale for prospective teachers. *British Journal of Educational Psychology*, 75, 689-708. doi:10.1348/000709905X37253
- Dibapile, W., & Tefo, W. (2012). A review of literature on teacher efficacy and classroom management. *Journal of College Teaching & Learning*, 9(2), 79–91.
- Dufour, R., & Marzano, R. J. (2011). *Leaders learning: How district, school, and classroom leaders improve student achievement.* Bloomington, IN: Solution Tree.
- Farber, B. A., & Azar, S. T. (2015). Blaming the helpers: The marginalization of teachers and parents of the urban poor. *American Journal of Orthopsychiatry*, 69(4), 515–528.
- Gall, M., Gall, J., & Borg, W. (2007). *Educational research: An introduction* (8th ed.). Boston,MA: Pearson/Allyn & Bacon.

Giddens, A. (1984). The constitution of society. Malden, MA: Polite Press.

- Goddard, R., Goddard, Y., Kim, E. S., & Miller, R. (2015). A theoretical and empirical analysis of the roles of instructional leadership, teacher collaboration, and collective efficacy beliefs in support of student learning. *American Journal of Education*, *121*(4), 501–530.
- Goddard, R. D., Wayne, H. K., & Woolfolk Hoy, A. (2000). Collective teacher efficacy: Its meaning, measure and impact on student achievement. *American Educational Research Journal*, 37(2), 47–507.
- Green, S., & Salkind, N. (2014). Using SPSS for Windows and Macintosh analyzing and understanding data. (7th ed.). Boston, MA: Pearson.

- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, *43*, 495–513.
- Hattie, J. (2003, October). *Teachers make a difference. What is the research evidence?* Paper presented at the Building Teacher Quality: What does the research tell us ACER Research Conference, Melbourne, Australia. Retrieved from http://research.acer.edu.au/research_conference_2003/4/.
- Hubbard, L., Mehan, H., & Stein, M. K. (2006). *Reform as learning: School reform, organizational culture, and community politics in San Diego.* New York, NY: Routledge.
- Hullermeier, E., Rifqi, M., Henzgen, S., & Senge, R. (2012). Comparing fuzzy partitions: A generalization of the Rand index and related measures. *IEEE Transactions on Fuzzy Systems*, 20(3), 546–556.
- Infurna, F. J., & Reich, J. W. (2016). 50 years of innovation and another 50 to g o. In J. W. Reich & Infurna (Eds.), *Perceived control: Theory, research, and practice in the first 50 years* (pp. 1–22). Oxford Scholarship Online. doi:10.1093/acprof:oso/9780190257040.003.0001
- Ingersoll, R. M. (2003). *Who controls teachers' work? Power and accountability in America's schools*. Cambridge, MA: Harvard University Press.
- Kaiser, J., Retelsdorf, J., Sudkamp, A., & Moller, J. (2013). Achievement and engagement: How student characteristics influence teacher judgements. *Learning and Instruction*, *28*, 73–84.
- Khan, A., Fleva, E., & Qazi, T. (2015). Role of self-esteem and general self-efficacy in teachers' efficacy in primary schools. *Psychology*, *6*, 117–125.
- Khan, S. A. (2012). The relationship between teachers' self-efficacy and student's academic achievement at secondary level. *Language in India: Strength for Today and Bright Hope for Tomorrow*, *12*, 436–449.

- Kokkinos, M. (2006). Factor structure and psychometric properties of the Maslach Burnout
 Inventory Educators Survey among elementary and secondary school teachers in Cyprus.
 Stress and Health, 22, 25–33.
- McEachin, A. J., Welsh, R. O., & Brewer, D. J. (2016). The variation in student achievement and behavior within a portfolio management model: Early results from New Orleans.
 Educational Evaluation & Policy Analysis, 38(4), 669–691.
- Messerschmidt, J. W. (2018). *Hegemonic masculinity: Formulation, reformation, and amplification*. London: Rowman & Littlefield.
- Mojavezi, A., & Tamiz, M. P. (2012). The impact of teacher self-efficacy on the students' motivation and achievement. *Theory and Practice in Language Studies*, 2(3), 483–491.
- Muijs, D., & Reynolds, D. (2002). Teachers ' beliefs and behaviours: What really matters? Journal of Classroom Interaction, 37, 3-15.
- National Center for Education Statistics. (2017). Fast facts: Charter schools. Retrieved from https://nces.ed.gov/fastfacts/display.asp?id=30
- Oppong, S. (2014). Between Bandura and Giddens: Structuration theory in social psychological research? *Psychological Thought*, 7(2), 111–123.
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66, 533–578.
- Pedota, P. J. (2015). How can student success support teacher self-efficacy and retention? *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 88(2), 54–61.
- Pierce, S. (2014). Examining the relationship between collective teacher efficacy and emotional intelligence of elementary school principals. *Journal of School Leadership*, 24(2), 311.

- Priest, K. L., Kaufman, E. K., Brunton, K., & Seibel, M. (2013). Appreciative inquiry: A tool for organizational, programmatic, and project-focused change. *Journal of Leadership Education*, 12(1), 18–33.
- Rath, T. & Conchie, B. (2008). *Strengths based leadership. Great leaders, teams, and why people follow.* New York, NY: Gallup Press.

 Rodríguez, R. G., Villarreal, A., Montemayor, A. M., & Cortez, J. D. (2002). *Improving* educational impact through community and family engagement. San Antonio, TX: Intercultural Development Research Association. Retrieved from http://www.idra.org/images/stories/impact.pdf

- Ross, S. W., Romer, N., & Horner, R. H. (2012). Teacher well-being and the implementation of school-wide positive behavior interventions and supports. *Journal of Positive Behavior Interventions*, 14(2), 118–128.
- Rotter, J. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1–28.
- Saifi, I. L., Hussain, M., Salamat, L., & Iftikhar, M. (2018). Impact of classroom management on students' achievement at university level. Asian Innovative Journal of Social Sciences & Humanities, 2(2), 13–27.
- Schmoker, M. (2011). *Focus: Elevating the essentials to radically improve student learning*. Alexandria, VA: ASCD.
- Seligman, M. E. (2011). Flourish: A visionary new understanding of happiness and wellbeing. New York, NY: Simon & Schuster.
- Shaughnessy, M. (2004). An interview with Anita Woolfolk: The educational psychology of teacher efficacy. *Educational Psychology Review*, *16*(2), 153–176.

- Short, P. M., & Greer, J. T. (2002). *Leadership in empowered schools: Themes from innovative efforts*. Upper Saddle River, NJ: Pearson.
- Skinner, E. A., & Belmont M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, 85(4), 571–581.
- Strike, K. A. (2007). Ethical leadership in schools: Creating community in an environment of accountability. Thousand Oaks, CA: Corwin Press.
- Todd, P. E., & Wolpin, K. I. (2003). On the specification and estimation of the production function for cognitive achievement. *The Economic Journal*, *113*, 3–33.
- Tournaki, N., Lyublinkaya, I., & Carolan, B. V. (2009). Pathways to teacher certification: Does it really matter when it comes to efficacy and effectiveness? *Action in Teacher Education*, 30(4), 96–109.
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, *17*, 783–805.
- Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202–248.
- U.S. Department of Education. (2015). Every Student Succeeds Act (ESSA). Retrieved from https://www.ed.gov/essa?src=rn
- U.S. Department of Education. (2017, June). *Teacher shortage areas nationwide listing 1990–1991 through 2017–2018* [Report]. Retrieved from www.ed.gov.
- van Uden, J. M., Ritzen, H., & Pieters, J. M. (2014). Engaging students: The role of teacher beliefs and interpersonal teacher behavior in fostering student engagement in vocational education. *Teaching and Teacher Education*, 37, 21–32.

- Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Warren, J. M., & Dowden, A. R. (2012). Elementary school teachers' beliefs and emotions:
 Implications for school counselors and counselor educators. *Journal of School Counseling*, *10*(19).
- Warren, J. M., & Hale, R. W. (2016). The influence of efficacy beliefs on teacher performance and student success: Implications for student support services. *Journal of Rational-Emotive* & Cognitive-Behavior Therapy, 34(3), 187–208.
- Weiner, J. M., & Torres, A. C. (2016). Different location or different map? Investigating charter teachers' professional identities. *Teaching and Teacher Education*, 53, 75–86.
- Woolfolk Hoy, A., & Burke-Spero, R. (2005). Changes in teacher efficacy during early years of teaching: A comparison of four measures. *Teaching and Teacher Education*, 21, 343–356.
- Yao, X., Yao, M., Zong, X., Li, Y., Li, X., Guo, F., & Cui, G. (2015). How school climate influences teachers' emotional exhaustion: The mediating role of emotional labor.
 International Journal of Environmental Research and Public Health, 12, 12505–12517.
- Zee, M., & Koomen, H. M. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research*, 86(4), 981–1015.

APPENDIX A

PERMISSION TO USE TEACHERS' SENSE OF EFFICACY SCALE

COLLEGE OF EDUCATION HUMAN ECO	and LOGY	
ANITA WOOLFOLK HOY, PH.D.	Pi Pi	ROFESSOR Sychological Studies in Educatio
Dear		
You have my permission to use scoring instructions can be four	e the <i>Teachers' Sense of Efficacy Scale</i> nd at:	e in your research. A copy the
Best wishes in your work.	<u>n/mstruments/</u>	
Anita Woolfolk Hoy, Ph.D. Professor Emeritus		
Anita Woolfolk Hoy, Ph.D. Professor Emeritus		
Anita Woolfolk Hoy, Ph.D. Professor Emeritus		
Anita Woolfolk Hoy, Ph.D. Professor Emeritus		
Anita Woolfolk Hoy, Ph.D. Professor Emeritus		

APPENDIX B

LIBERTY UNIVERSITY IRB APPROVAL LETTER

Dear Sara Capwell,

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 retain this letter for your records. Also, if you are conducting research as part of the requirements for a master's thesis or doctoral dissertation, this approval letter should be included as an appendix to your completed thesis or dissertation.

Your IRB-approved, stamped consent form is also attached. This form should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document should be made available without alteration.

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**

Liberty University | Training Champions for Christ since 1971

APPENDIX C

HILLSBOROUGH SCHOOL DISTRICT PERMISSION TO CONDUCT RESEARCH

1

School Board Sally A. Narra, Chair Tamara P. Shamburger, Vice Chair Lynn L. Gray April Griffin Melissa Snively Cindy Stuart Sosien L. Vikice



Superintendent of Schools Jeff Eakins

> Deputy Superintendent Van Ayres

> > Chief of Schools Harrison Peters

General Manager Office of Strategy Management Joe Cochran

April 9, 2018



Dear Ms. Capwell:

The Hillsborough County Public School district has agreed to participate in your research proposal, A Comparative Study of Teacher Efficacy in Charter and Traditional Public Schools. A copy of this letter <u>MIST</u> be available to all teachers to assure them your research has been approved by the district. Your <u>approval number is RR 1718-60</u>. You must refer to this number in all correspondence. Approval is given for your research under the following conditions:

- Participation by the teachers is to be on a voluntary basis. That is, participation is <u>NOT</u> MANDATORY and you must advise <u>ALL_PARTICIPANTS</u> that they are not obligated to participate in your study.
- 2) If the principal agrees the school will participate, it is up to you to find out what rules the school has for allowing people on campus and you must abide by the school's check-in policy. You will <u>NOT BE ALLOWED</u> on any school campus without first following the school's rules for entering campus grounds.
- Confidentiality must be assured for all. That is, <u>ALL DATA MUST BE AGGREGATED</u> <u>SUCH THAT THE PARTICIPANTS CANNOT BE IDENTIFIED</u>. Participants include the district, principals, administrators, teachers, support personnel, students and parents.
- 4) Any student data MUST be DESTROYED when the project has been completed.
- 5) Research approval does not constitute the use of the district's equipment, software, email, or district mail service. In addition, requests that result in extra work by the district such as data analysis, programming or assisting with electronic surveys, may have a cost borne by the researcher.
- This approval <u>WILL EXPIRE ON 6/30/2019</u>. You will have to contact us at that time if you feel your research approval should be extended.
- A copy of your research findings must be submitted to this department and for our files.

VOLUNTEER FORMS/FINGERPRINTING: Your proposal indicates that you <u>will not</u> come into contact with any students. IF THIS CHANGES, YOU MUST contact us for further instructions.

Raymond O. Shellan School Administrative Center + 901 East Kennedy Boulevard + Tampa, Florida 33602 School Disblet Main Office: 813-272-4000 + P.O. Box 3408 + Tampa, Florida 33601 + website: <u>xxx.sdbc.k52.fl.us</u> Office of Strategy Hanagement

APPENDIX D

HILLSBOROUGH COUNTY RESEARCH PARTICIPANT RECRUITMENT LETTER

2/20/2018

Potential Research Participant Teacher Hillsborough County Public Schools 901 East Kennedy Boulevard P.O. Box 3408 Tampa, Florida 33601

Dear Potential Research Participant,

As a graduate student in the in the School of Education at Liberty University, I am conducting research as part of the requirements for an Ed.D. in Educational Leadership. The title of my research project is, "A Comparative Study of Teacher Efficacy in Charter and Traditional Public Schools". The purpose of this quantitative causal comparative study is to determine if there is a difference in teacher efficacy between charter and traditional public school settings and I am writing to invite you to participate in my study.

If you are 18 years of age or older, are a public school teacher in Pasco or Hillsborough County, and are willing to participate, you will be asked to take on online survey. It should take approximately 20 minutes for you to complete the survey. Your participation will be completely anonymous, and no personal, identifying information will be collected.

To participate to go to surveymonkey.com and click on the link provided.

A consent document is provided as the first page you will see after you click on the survey link. The consent document contains additional information about my research. Please click on the survey link at the end of the consent information to indicate that you have read the consent information and would like to take part in the survey.

If you choose to participate, you will be entered in a raffle/contest to receive a \$50 gift card.

Stifa Capwell Doctoral Candidate Liberty University

APPENDIX E

RESEARCH PARTICIPANT CONSENT FORM

CONSENT FORM

A Comparative Study of Teacher Efficacy in Charter and Traditional Public Schools Sara Capwell Liberty University School of Education

You are invited to be in a research study of teacher efficacy. You were selected as a possible participant because you are either a charter or traditional public school teacher in Pasco County or Hillsborough County, Florida School Districts. Please read this form and ask any questions you may have before agreeing to be in the study.

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

Background Information: The purpose of this study is to determine, via a quantitative causal comparative design, if there is a difference in teacher efficacy between public charter schools and traditional public schools. This study will compare four variables across the two settings: overall teacher efficacy, teacher efficacy for student engagement, teacher efficacy for instruction, and teacher efficacy for classroom management.

Procedures: If you agree to be in this study, I would ask you to do the following things:

- 1. Complete the school demographic portion of the pre-survey.
- 2. Complete the Teachers' Sense of Efficacy Scale Inventory via the provided surveymonkey link.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study.

Compensation: Participants will be entered into a drawing for a \$50 gift card for participating in this

study.

at

Confidentiality: The records of this study will be kept private. 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.

To protect participants:

· Participants will be assigned a number.

• Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic record 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. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

How to Withdraw from the Study:

If you choose to withdraw from the study, please [exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Contacts and Questions: The researcher conducting this study is Sara Capwell. You may ask any questions you have now. If you have questions later, you are encouraged to contact her

You may also contact the researcher's faculty chair, Michelle J. Barthlow, Ed.D. at-

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.