

THE IMPACT OF STUDENT ENGAGEMENT, INSTRUCTIONAL STRATEGIES, AND  
CLASSROOM MANAGEMENT ON SELF-EFFICACY OF  
CHRISTIAN PRIVATE SCHOOL TEACHERS

by

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Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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## ABSTRACT

The purpose of this quantitative correlational research study was to investigate variables that best predict Christian private school teachers' efficacy. Specifically, the study addresses the question of how the predictor variables of gender, age, ethnicity, professional qualification, and school status relate to efficacy in student engagement, instructional strategies, and classroom management. The present study contributes to the limited resources for research concerning efficacy of a teacher. Approximately 138 teachers from northeast Florida Christian private schools completed the Teacher Self-Efficacy Scale–Short Form. The instrument developed for assessing efficacy also targeted instructional strategies, classroom management, and student engagement. A target sample was identified and after data collection and participant efficacy perceptions was analyzed by a multiple linear regression to investigate the relationships between subscales. Through a correlational research design, data was analyzed using a multiple regression and frequencies were run to identify any missing data or errors.

*Keywords:* private schools, self-efficacy, classroom management, student engagement, instructional strategies

## **Dedication**

Motivator, encourager, mover and shaker, achiever, and promotor are only a few words that describe the two most influential people in my life. I dedicate this dissertation to my father and mother. As a young child, my parents recognized leadership characteristics in my life. Because of the quality time my dad spent with me, he instilled the importance of perseverance, honesty, confidence, and commitment. My father has taught me the importance of establishing goals to provide my life with direction and purpose. In addition, he guided me to never give up in spite of difficulties or discouragement. These skills have built a level of confidence and commitment in my life. Having the opportunity to learn and grow from my earthly parents is a once in a lifetime opportunity that I have never taken for granted. No matter my age, I take the time to listen and learn. My mother taught me at a young age the importance of details. She taught me to take the extra step to do what others neglect to do. Earlier in my life I questioned what that meant but now I realize that she was helping me to be successful personally and in my career. I am the lucky one to call them dad and mom and they will always be heroes to me. Thank you, dad, for always giving me pep talks and pushing me to accomplish measures that I felt at times were unreachable. Thank you, mom, for always helping me to recognize the importance of paying attention to detail. Throughout my lifelong journey, I have used these qualities to become a productive member of society. I know that you both are most proud of me that I pursued and completed this degree.

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**List of Abbreviations**

National Center for Education Statistics (NCES)

Norwegian Teacher-Self Efficacy Scale (NTSES)

Ohio State Teacher Efficacy Scale (OSTES)

Teacher Self-Efficacy Scale (TSES)

## **CHAPTER ONE: INTRODUCTION**

### **Overview**

Researchers have long studied the association between teachers' sense of efficacy and a myriad of factors that could affect it. Classroom management, student engagement, and instructional strategies are three areas of efficacy that teachers encounter on a daily basis. This study examined factors that effected the efficacy level of private, Christian teachers and how effectiveness links to the Social Cognitive Theory (Bandura, 1997).

### **Background**

In the United States, Christian private education makes up 10% of the educational system (National Center for Education Statistics [NCES], 2013a). An impending crisis is looming in the waning numbers of private school teachers. More research is needed to discern factors commonly associated with faculty attrition in private schools (Skaalvik & Skaalvik, 2014). With the continuing demand for qualified teachers in private Christian sectors, it is imperative for schools to encourage self-efficacy to reduce attrition rates (Jamil, Downer, & Pianta, 2012). According to Watzke (2005), "There currently exists no means for preparatory measures for private Christian teachers to the religious mission" (p. 465). As a result, teacher-education programs have begun to nurture and teach the fundamentals for teacher efficacy (Watzke, 2005).

Throughout the study, research focused on the self-efficacy theory. Teacher self-efficacy is the "teacher's belief in his or her own ability to organize and execute courses of action essential to successfully achieving the specific teaching tasks in specific situations" (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998, p. 207). Teachers with a greater sense of efficacy tend to incorporate high levels of instructional strategies, student engagement, and classroom-management strategies (Allinder, 1994).

Teachers with a greater sense of self-efficacy are more likely to attempt new ideas and test novel methods that bring about a change in student learning (Martin, Sass, & Schmitt, 2012). Because quality educational instruction mostly impacts student achievement, teachers self-evaluate and create inventive ways to improve instruction, thereby increasing efficacy. The integration of effective instructional strategies, a balance of engaging learning activities, and good classroom management increasingly improve self-efficacy (Skaalvik & Skaalvik, 2014). As a result of greater self-efficacy, “students’ learning outcomes become more positive and teachers have a more positive attitude toward teaching” (Guskey, 1984, p. 253). Additionally,

Teacher efficacy influences behavior through cognitive, motivational, affective, and selection processes (Bandura, 1993, 1997). Teachers who believe that they will be successful set higher goals for themselves and their students, try harder to achieve those goals, and persist through obstacles more than do teachers who are not sure of their success. (Bandura, 1994, p. 50)

The nature of an educator’s job depends on the daily requirements associated with classroom responsibilities such as monitoring attendance, identifying a learner’s needs for differentiation, developing lesson plans, and continual assessment of students’ work. Another responsibility is the deliberate planning of engaging student activities. Additionally, educators should take the initiative of working toward collaborative efforts with other grade-level teachers, driven by persistence to improve instructional practices (Lee, Cawthon, & Dawson, 2013; Tschannen-Moran & Woolfolk Hoy, 2001).

Students comprehend subject matter when taught using a variety of instructional techniques (Al-Alwan & Mahasneh, 2014). Thus, developing a setting to encourage student participation at the elementary and secondary levels leads to effective lessons, which increases

learning (Watzke, 2005). Classroom management requires teachers to employ various strategies to control disruptive behaviors in the classroom. As a result, “controlling behavior in the classroom as a way to enhance learning is viewed as a priority for teachers in the education community” (Dibapile, 2012, p. 80). An effective educator balances management techniques, teaching students accountability through interventions. These techniques minimize distractions and provide learning opportunities. Having an advantage of previous teaching experiences can benefit, and serves as a dominant source of efficacy (Fives & Buehl, 2010). Educators are unable to have a successful classroom without quality-management skills (Beaty-O’Ferrall, Green, & Hanna, 2010).

Self-efficacy links independently to goal attainment, which is a characteristic of social-cognitive theory (Bandura, 1997; Tschannen-Moran et al., 1998). Self-efficacy derives from Bandura’s social-cognitive theory, which stresses the idea that people self-organize, self-regulate, self-reflect, and are proactive in shaping their learning and behavior (Haverback & Parault, 2011). Bandura emphasized cognitive concepts of social experiences and how these cognitions influence behavior and development (as cited in Stone, 1998). Bandura proposed that “teacher’s efficacy is a cognitive process in which people construct beliefs about their capacity to perform at a given level of competence” (as cited in Goddard, Hoy, & Woolfolk Hoy, 2000, p. 480). However, social-cognitive theory acknowledges that “personal agency operates within a broad network of socio-structural influences” (Bandura, 1997, p. 6) and thus the theory “states that others share beliefs and work together to produce effects” (Bandura, 1997, p. 7).

Varied levels of efficacy can yield characteristics of effective or ineffective instructional strategies, student engagement, and classroom management (Tschannen-Moran & Woolfolk Hoy, 2001). Christian private schools continue to implement support systems, thereby increasing

levels of efficacy while reducing attrition. These efforts aim to establish higher levels of job satisfaction, more rigor with instructional practices, and increased student engagement (Woolfolk, Rosoff, & Hoy, 1990).

### **Problem Statement**

Teaching is a difficult and complicated profession (Meador, n.d.). Challenges to private and public school educators can be found in the professional environment, lack of administrative support, and in low salaries (Vilson, 2012). Researchers have concluded that if the efficacy perception of a teacher is elevated, educators are more motivated to perform their work with greater satisfaction compared to leaving the field due to dissatisfaction (Hsu, Chiang, & Cuange, 2015; Shoulders & Krei, 2015; Shahzadi, Khatoon, Aziz, & Hassan, 2011, Varghese, Garwood, Bratsch-Hines, & Vernon-Feagans, 2016). However, a paucity of literature examines how to both diminish teacher dissatisfaction and increase retention among instructors in Christian, private schools (Shaukat & Muhammad-Iqbal, 2012).

The findings from previous studies in this area identified the importance of improving teachers' self-efficacy in public school education (Hsu et al., 2015; Shaukat & Muhammad-Iqbal, 2012; Varghese et al., 2016; Shoulders & Krei, 2015). However, no locatable study to this date has identified whether a teacher's gender, age, ethnicity, professional qualification, and school status are predictive factors for Christian private teachers' self-efficacy (Shaukat & Muhammad-Iqbal, 2012). Therefore, the present study sought to contribute to the limited body of research about efficacy and its relationship to gender, age, ethnicity, professional qualification, and school status among Christian private teachers. Specifically, this study examined whether the concepts of teacher instructional strategies efficacy, teacher student engagement efficacy, and teacher classroom-management efficacy are predicted by a teacher's gender, age, ethnicity,

professional qualification, and school status. The problem is the lack of research regarding efficacy. By seeking to better understand Christian private teacher efficacy, this study encouraged preventative measures related to attrition.

### **Purpose Statement**

The purpose of this quantitative correlational study was to investigate the factors that best predict Christian private teachers' efficacy. Parochial schools are private, supported by a particular church or parish and have a curriculum that includes religious and secular subjects (Alt & Peter, 2002). A private school is owned and governed by entities that are independent of any government:—typically, religious bodies or independent boards of trustees (Alt & Peter, 2002). A Christian school is based on Christian principles or by a Christian organization (The Christian Philosophy of Education, n.d.). This quantitative study included Christian private-school teachers in northeast Florida. A G\* powered 3.1 a priori power analysis (Faul, Erdfelder, Buchner, & Lang, 2009) for a fixed-model R-square deviation from zero multiple linear regression equation with five independent variables, an alpha significance level .05, a power of 0.95, and a medium effect size of 0.15 suggested that 138 respondents were needed in the sample to detect statistically significant effects. The predictor variables were gender, age, ethnicity, professional qualification, and school status. The criterion variable was teacher efficacy. Student engagement, instructional strategies, and classroom management, measured by the Teacher Sense of Efficacy Scale (TSES) was used as the model for the variable of teacher efficacy.

### **Significance of the Study**

The present study contributes to the limited body of research concerning teacher efficacy. The study identified how the predictive variables of gender, age, ethnicity, professional qualification, and school status impacts Christian private teachers' efficacy. Also, this study

examined the concepts of student engagement, instructional strategies, and classroom management as subscales used to define teacher efficacy. Recognizing factors that give rise to teacher attrition, and then, developing and implementing preventive measures is paramount in fostering teacher efficacy (Protheroe, 2008). This research served to cultivate school reform and provided reformers with imperative information useful for equipping and supporting teachers.

Teachers' self-efficacy affects accomplishments or disappointments of teachers (Jaafari, Karami, & Soleimani, 2012). Al-Alwan and Mahasneh (2014) stated, "Teachers' beliefs in their abilities to instruct students and influence students' performances are very strong indicators of instructional effectiveness" (p. 171). This belief is an attribute of self-efficacy. Teachers learn how to implement proven classroom management strategies and techniques (Miller & Hall, 2009). As a result, distractions and behavior problems that hinder learning are minimized and controlled. In theory, creating a classroom environment that models instructional strategies, engages students, and manages the environment will improve student behavior and increase learning (O'Neill & Stephenson, 2012).

Despite such claims, a gap persists in current research regarding the relationship of teacher efficacy to gender, age, ethnicity, educational levels, and school status among Christian private teachers. Attrition in Christian private schools may be due to lower pay and organizational explanations such as "the level of administrative support, the degree of conflict and strife within the organization; and the degree of employee input into organization policies" (Ingersoll, 2001, p. 506). This study examined whether a teacher's gender, age, ethnicity, professional qualification, and school status predicted the concepts of teacher instructional strategies efficacy, teacher student engagement efficacy, and teacher classroom management efficacy.



## Research Questions

The research questions drove the focus of the study. In addition, the present study contributed to the limited body of research by identifying the relationship between the dependent variables of efficacy in student engagement, instructional strategies, and classroom management and the five key independent variables of gender, age, ethnicity, educational level, and school status among Christian private educators in northeast Florida.

**RQ1:** What is the relationship between the three measured factors of teacher efficacy and gender?

**RQ2:** What is the relationship between the three measured factors of teacher efficacy and age?

**RQ3:** What is the relationship between the three measured factors of teacher efficacy and ethnicity?

**RQ4:** What is the relationship between the three measured factors of teacher efficacy and educational level?

**RQ5:** What is the relationship between the three measured factors of teacher efficacy and school status?

## Null Hypotheses

The following null hypotheses were generated based on the research questions.

**H<sub>0</sub>1:** Gender will have no statistically significant relationship to teacher efficacy.

**H<sub>0</sub>2:** Age will have no statistically significant relationship to teacher efficacy.

**H<sub>0</sub>3:** Ethnicity will have no statistically significant relationship to teacher efficacy.

**H<sub>0</sub>4:** Educational level will have no statistically significant relationship to teacher efficacy.

**H<sub>05</sub>:** School status will have no statistically significant relationship to teacher efficacy.

### **Definitions**

Throughout this paper, key terms provide a common understanding and clarity for communication.

*Christian school.* A school based on Christian principles or administrated by a Christian organization (The Christian Philosophy of Education, n.d.).

*Classroom management.* Developed strategies that emphasize encouragement for desirable behaviors in students through positive reinforcement, inspiration, and devotion, despite disruptive behavior (Emmer & Hickman, 1991).

*Educational level.* The degree status of an individual (Convey, 2014), school status is referenced as teaching in elementary, secondary, or postsecondary education (Martin et al., 2012).

*Instructional strategies.* Educator's techniques that support independent thinking, creativity in teaching, and strategic methods for assessment (Tschannen-Moran & Woolfolk Hoy, 2001).

*Ohio State Teacher Efficacy Scale (OSTES).* The survey now known as the TSES was formerly titled, the Ohio State Teacher Efficacy Scale (Tschannen-Moran et al., 1998).

*Parochial School-* a private school supported by a particular church or parish whose curriculum includes religion and secular subjects (Alt & Peter, 2002).

*Private school.* Schools owned and governed by entities that are independent of any government:—typically, religious bodies or independent boards of trustees (Alt & Peter, 2002).

*School status:* A respondent who is teaching in either an elementary or secondary educational setting (Martin et al., 2012).

*Self-efficacy.* The belief that one has the capacity to perform certain actions built on previous mastery experiences, vicarious experiences, verbal persuasion, and physiological arousal (Bandura, 1997).

*Student engagement.* The ability of an educator to encourage a student to value learning and motivate an atmosphere of learning (Tschannen-Moran & Woolfolk Hoy, 2001).

*Teacher efficacy.* “The extent to which the teacher believes he or she has the capacity to affect student performance” (Bandura, 1986, as cited in Berman, McLaughlin, Bass-Golod, Pauly, & Zellman, 1977, p. 137; Goddard et al., 2000, p. 480).

*Teacher retention.* Continuing employment in the same school location for successive years (Ingersoll, 2001).

*Teachers’ Sense of Efficacy Scale (TSES).* The current name of the scale formerly known as the OSTES (Tschannen-Moran, & Woolfolk Hoy, 2001).

## **CHAPTER TWO: LITERATURE REVIEW**

### **Overview**

The purpose of this quantitative correlational study was to investigate the factors that best predict Christian private teachers' efficacy. The chapter includes definitions of self-efficacy, social-cognitive theory, and sources of self-efficacy. The chapter also includes brief accounts of efficacy studies and existing research on teacher efficacy. The information from the present study provides a deeper understanding of teacher efficacy through the variables of gender, age, and ethnicity, educational level, and school status in Christian private schools. There is insufficient amounts of literature recognizes how to reduce poor levels of self-efficacy to support teacher retention (Shaukat & Muhammad-Iqbal, 2012). As a result, this chapter documents the need for research in private, Christian schools. Chapter 2 is organized as a review of literature regarding efficacy theory, previous studies measuring and defining teacher efficacy, predictive factors and subscales that measure teacher efficacy, and a summary of Christian teachers' sense of efficacy. This study sought to address recommendations for future research as the field of efficacy continues to mature.

### **Theoretical Framework**

#### **Self-Efficacy Theory**

The amount of energy, determination, and perseverance an individual is willing to work toward is considered self-efficacy (Pajares, 1997). There is two identified strands of research that teachers helped to develop a framework for efficacy (Tschannen-Moran & Woolfolk Hoy, 2001). These include Rotter's (1966) social-learning theory of internal versus external control and Bandura's social-cognitive theory (1977).

In 1954, Rotter introduced the idea of identifying expectations and reinforcing self-initiated change rather than that influenced by others (Rotter, 1966). Rotter conducted six different types of research to compare skill and the chance to learn. The research incorporated tasks to provide reinforcement that were controlled in each experiment without the participant knowing. Rotter's scheme of internal-external locus of control focused entirely on actions rather than outcomes (Goddard et al., 2000), based on one's ability or behavior, which is an independent action. According to the theory, "behavior varies as a function of expectancies so outcomes can be determined by one's actions or external factors which can be out of one's control" (Bandura, 1977, p. 204). The results of the study displayed that actions are dependent on an individual's behavior. Locus of control specifically functions as action, describing outcome likelihoods rather than individual determinations (Bandura, 1977).

Bandura (1997) summarized that self-efficacy is the belief that one has the capacity to perform certain actions built on previous mastery experiences, vicarious experiences, verbal persuasion, and physiological arousal. Bandura (1997) led the way to understanding vicarious learning and the importance of modeling. Bandura (1997) labeled self-efficacy as an individual's thoughts, feelings, behaviors, and motivations that developed into personal efficacy. In addition, Bandura (1997) emphasized cognitive concepts in social experiences and how these cognitions influenced behavior and development.

The development of social-cognitive theory built on behavioral and social theorists' explanations of the behaviors of an individual. As a result of personal factors, "individuals possess self-beliefs that enable them to exercise a measure of control over their thoughts, feelings, and actions which affects their behavior" (Bandura, 1986, p. 25). Bandura (1977) hypothesized that self-efficacy affects an individual's choice of actions, exertion, and

determination. These behaviors also reflect a connection between teaching and learning.

Cognitive processes are emergent brain activities that exert determinative influences (Bandura, 2001).

According to Fives and Buehl (2010), social-cognitive theory posits the importance that the world and environmental influences impact one's beliefs. The researchers sampled 102 practicing teachers and 270 preservice teachers. Participants completed the TSES questionnaire comprising of 24 questions: the long form. In addition, Fives and Buehl analyzed data separately between the two groups and results showed that practicing teachers with more than 10 years of experience had stronger efficacy beliefs compared to preservice teachers.

Pajares (1997) noted that controlling one's thoughts and feelings would also develop a system self-evaluating behavior based on environmental influences. Individual human agency is formed by behavior, environment, and personal factors that contribute to the control of one's life. As a result, social-cognitive theory rests on this human agency. Bandura stated, "The power to originate actions for given purposes is the key feature of personal agency" (1997, p. 3). Based on Bandura's (1995) social-cognitive theory, teacher self-efficacy is the belief that an educator has the ability to change student performance.

Throughout the career of an educator, self-efficacy can be a source of inspiration and obligation (Tschannen-Moran & Woolfolk Hoy, 2001), as well as a strong predictor of effectiveness (Reilly, Dhingra, & Boduszek, 2014). Continuing to find ways to improve upon self-efficacy will benefit both the educator and the school.

Klassen and Chiu (2010), studied the commitment of preservice teachers using a cross-sectional survey. Participants included 434 practicing teachers and 379 preservice teachers. The researchers concluded that preservice teachers produced a higher level of commitment that

resulted in increasing their work ethic. However, results from teachers who experienced difficulty with job-related tasks correlated with lower job satisfaction.

Skaalvik and Skaalvik (2010) studied Norwegian educators in elementary and middle schools. In this study, participants were 2,249 female educators ranging in age from 24 to 69 years. The researchers evaluated teachers using the Norwegian Teacher Self-Efficacy Scale (NTSES), focused on instruction, individual student needs, motivation, and discipline. Results indicated that job satisfaction “positively related to teacher self-efficacy and negatively related to both dimensions of teacher burnout with emotional exhaustion as the far strongest predictor” (p. 1066). Results also indicated that Norwegian teachers are more confident when setting goals if they are competent in their work-related tasks (Skaalvik & Skaalvik, 2010). Furthermore, “enhancing a teacher’s self-efficacy and self-esteem has a positive influence over increasing job satisfaction” (Reilly et al., 2014, p. 366).

Bandura (1986, 1995, 1997) enlightened researchers on self-efficacy through the sources of (a) mastery experience, (b) vicarious experience, (c) verbal persuasion, and (d) physiological arousal. Tschannen-Moran et al. (1998) further contended that these sources of self-efficacy can influence not only teachers’ own sense of teaching competence but also teachers’ perceptions of the teaching behavior observed.

Mastery and vicarious experiences are two sources of efficacy resulting from the actions of others. These foundations are conduits to understanding efficacy and individual’s behavior. Bandura’s (1986) explanation of mastery experience uses implications of self-enhancement to lead toward achievement. Raising an individual’s competence and confidence leads to authentic mastery experiences. The extent to which one attributes past enactment to internal causes enhances self-efficacy. “Mastery experiences are a powerful source of knowledge about one’s

own capabilities as a teacher, but also supply information about the complexity of the teaching task” (Tschannen-Moran et al., 1998, p. 229).

Woolfolk (as cited in Shaughnessy, 2004) stated,

Some of the most powerful influences on the development of teachers’ efficacy beliefs are mastery experiences. Bandura’s theory of self-efficacy suggests that the beginning years of teaching could be critical to the long-term development of teacher efficacy leading to mastery experience. (p. 155)

Students are more productive and thrive on expectations and structured environments. In this type of environment, more experienced teachers understand the impact of routines and provide cues for expectations. Woolfolk (as cited in Shaughnessy, 2004) described instructional support as necessary to guarantee student success. For example, “To help students maintain incremental views of intelligence can be completed by adopting learning goals rather than performance goals” (Shaughnessy, 2004, p. 159). In addition, mastery experiences also mean that cognitive and metacognitive skills such as planning, monitoring, and goal setting will develop teacher efficacy with long-term retention (Shaughnessy, 2004, p. 159). The researcher suggested further research be conducted to explore the factors that mediate efficacy development and cultural influences on the construction of efficacy beliefs.

Hagen, Gutkin, Wilson, and Oats (1998) completed an environmental study of 89 graduate students whose potential included teaching elementary education. Their purpose was to implement vicarious experience and verbal persuasion to increase teacher self-efficacy. The researchers concluded that providing graduate students the opportunity to engage in more vicarious experiences decreased their reluctance to complete behavioral referrals, which increased efficacy (Hagen et al., 1998). As a result of their study, Hagen et al. strove to increase



vicarious experiences in teaching that would increase the power to affect one's self-efficacy belief.

Pajares (1997) distinguished that one's vicarious experience involves the social interactions made with other individuals to influence choices. As a result of the experience, the courses of action that individuals pursue result from whether they choose to avoid situations or choices that affect their lives. "Strong self-efficacy beliefs enhance human accomplishment and personal well-being in many ways" (Pajares, 1997, p. 4).

Positive and negative praise influence verbal persuasion regarding performance or the ability to perform (Redmond, 2010). When individuals receive praise, they are motivated to persevere and have a greater chance of being successful. Negative connotations can lead to doubts and lower self-esteem, which lowers efficacy. Although verbal persuasion is also likely to be a weaker source of self-efficacy beliefs than performance outcomes, it is widely used because of its ease and ready availability (Redmond, 2010). Researching a credible source of persuasion will contribute to encouraging others to be persistent (Tschannen-Moran et al., 1998, p. 7). A study of 255 graduate-level students who ranged in age from 21 to 57 had teaching experiences ranging between 1 and 29 years. The goal of the study was to find a difference between novice and experienced teachers who had available resources for a successful classroom. As a result, these individuals received verbal persuasion from administrators and colleagues (Tschannen-Moran et al., 1998).

Last, the fourth source of efficacy, according to Bandura (1977), can be determined by one's emotional well-being. Positive and negative factors contribute to an emotional state such as exhaustion, pressure, joy, pleasure, and mood. As shown in Figure 1, teachers who experience uncomfortable tasks will be emotionally aroused, influencing their beliefs of efficacy (Bandura,

1977). However, the more confident a teacher is in their classroom, the more comfortable the level of self-efficacy becomes. Just as students require consideration based on their basic needs, an educator with positive well-being will create an active learning community among their peers.

Furthermore, Bandura (1997) argued that “the level of generality of the efficacy items within a given domain of functioning varies depending on the degree of situational similarity and task demands” (p. 13). Tschannen-Moran and Woolfolk Hoy (2007) agreed: “Self-efficacy beliefs can become self-fulfilling prophecies, validating beliefs either of capability or of incapacity” (p. 3). An individual’s ability to perform successfully in a task is the key to efficacy.

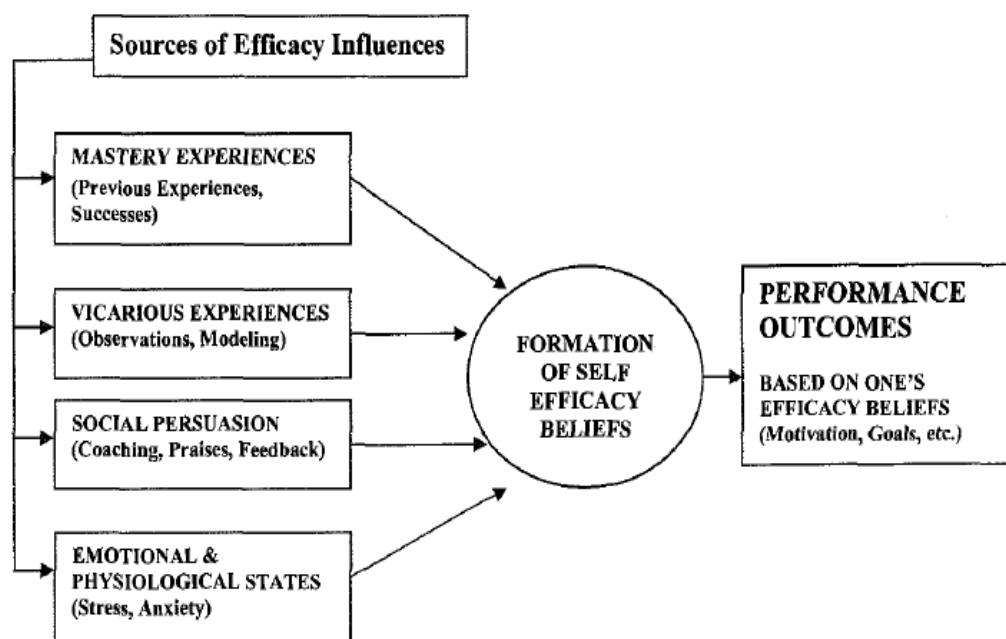


Figure 1. Sources of efficacy influence

Adapted from *Self-Efficacy: The Exercise of Control*, by A. Bandura, 1997, New York, NY, Freeman.

### Measuring Teaching Efficacy

Researchers have developed multiple instruments to assess teachers’ sense of efficacy.

Teacher self-efficacy is a “teacher’s belief in his or her capability to organize and execute

courses of action required to successfully accomplish a specific teaching task in a particular context” (Tschannen-Moran et al., 1998, p. 222). Further,

Teacher efficacy was first conceived by the Research and Development researchers as the extent to which teachers believed that they could control the reinforcement of their actions. Student motivation and performance were assumed to be significant reinforcers for teaching behaviors with the work of Rotter (1966) as a theoretical base. Thus, teachers with a high level of efficacy believed that they could control, or at least strongly influence, student achievement and motivation (Tschannen-Moran et al., 1998, p. 202).

In Rand studies, two statements asked teachers questions that assessed efficacy. The assessment was based on Rotter’s (1966) studies of social learning. The statements included (a) “When it comes right down to it, a teacher can’t really do much because most of a student’s motivation and performance depends on his or her home environment”, and (b) “If I try really hard, I can get through to even the most difficult or unmotivated students” (Goddard et al., 2000, p. 205). Responses accrued based on a 5-point Likert-type scale and the sum of the scores on the two items was called Teacher Efficacy. The construct revealed the higher the teacher efficacy, the more students learned and earned academic gains in reading.

Tschannen-Moran & Woolfolk Hoy (2001) contributed to the development of the TSES, also known as the OSTES. This instrument assesses a teacher’s understanding of the educator’s tasks involved with efficacy. The instrument also displays “positive correlations with other measures of personal teaching efficacy which provide evidence for construct validity” (Tschannen-Moran & Woolfolk Hoy, 2001, p. 801). The instrument assesses three factors: efficacy in student engagement, efficacy in instructional practices, and efficacy in classroom management.

The questionnaire consists of 12 questions with Likert-style responses, differentiating between beliefs and results. The range example is A great deal = 9, Quite a bit = 7, Some Influence = 5, Very little = 3, Nothing = 1 (Tschannen-Moran & Woolfolk Hoy, 2001). Tschannen-Moran and Hoy (2001) critiqued and reevaluated the TSES, considering it to be of high quality compared to earlier efficacy methods. Researchers can use this scale across all subject areas and grade levels because the three-factor organization of the measure allows for recognition of educators' concerns. The TSES assesses aspects of teaching tasks, performance outcomes, and student achievement. A teacher's sense of efficacy can lead to gains in the classroom and encourage stability, motivation, and success in the classroom environment. Furthermore, efficacious teachers "persist longer, provide a greater academic focus in the classroom, and exhibit different types of feedback" (Tschannen-Moran et al., 1998, p. 210). This measurement has been considered a "a unified and stable factor structure and assesses a broad range of capabilities that teachers consider important to good teaching, without being so specific as to render it useless for comparisons of teachers across contexts, levels, and subjects" (Tschannen-Moran et al., 1998, p. 210).

Multiple instruments have been developed to assess teachers' sense of efficacy (Allinder, 1994; Gibson & Dembo, 1984; Tschannen-Moran et al., 1998). Even though researchers are consistent in referencing Social-Cognitive Theory, the major influences on efficacy beliefs are context specific and require consideration of the teaching task. As described by Tschannen-Moran et al. (1998),

In analyzing the teaching task and its context, the relative importance of factors that make teaching difficult or act as constraints is weighed against an assessment of the resources available that facilitate learning. While measuring self-perceptions of teaching

competence, the teacher judges personal capabilities such as skills, knowledge, strategies, or personality traits balanced against personal weaknesses or liabilities in this particular teaching context. (p. 228)

Teacher efficacy provides a way to view teachers' beliefs about their ability to teach, which includes a determinant for teaching behavior. A connection exists between teacher beliefs, student behavior, and a teacher's understanding of the learning process (Henson, 2001). Self-efficacy of teaching impacts judgments, actions, energy, and perseverance to face difficulties in the classroom. The rising concern is not simply how proficient teachers are, but how capable teachers believe themselves to be (Tschannen-Moran et al., 1998).

### **Related Literature**

Multiple factors influence self-efficacy among Christian private school teachers and public-education teachers. According to Bullock, Coplan, and Bosacki (2015), "The most challenging part of a teacher's career is teacher efficacy. As teachers gain years of experience, then self-efficacy increases over time" (p. 176). Teachers who have increased levels of personal teaching efficacy are able to develop strategies to overcome difficulties in a school setting and classroom. In contrast, teachers who have decreased levels of personal teaching efficacy believe they are unable to influence changes in the school or classroom environment (Klassen & Chiu, 2010).

### **Predictor Variables**

The predictor variables in this study were gender, age, ethnicity, professional qualification, and school status. Klassen and Chiu (2010) completed a study designed to measure self-efficacy beliefs based on gender, school status, and educational level of 1,430 teachers with

varying years of experience. Results indicated that 5% of male teachers had stronger classroom and instructional-management skills than female teachers (Klassen & Chiu, 2010).

On average, teacher's self-efficacy about classroom management and instructional practices increased from 0 years of experience to about 23 years of experience and declined afterwards. At the peak, teachers with 23 years of experience averaged 76% greater classroom management self-efficacy than that of new teachers. (p. 750)

Also, elementary teachers showed an increase of 7% more classroom-management interventions compared to secondary teachers. "The self-efficacy of teachers with 23 years of experience averaged 68% greater engagement of students than that of new teachers" (Klassen & Chiu, 2010, p. 751). Overall, the researchers showed that self-efficacy increased from 0 to about 23 years of experience and then declined as years of experience increased (Klassen & Chiu, 2010).

According to the researchers,

Teachers' confidence in engaging students, managing student behavior, and using effective instructional strategies showed the same pattern of growth and gradual decline. Whereas previous researchers have noted that self-efficacy increases with teachers' experience (e.g., Wolters & Daugherty, 2007). (Klassen & Chiu, 2010, p. 755)

A collection of research data identified differences between male and female teachers on subscales of self-efficacy. Outcomes showed no difference in classroom management between male and female teachers. However, teachers differed by gender in student engagement with the types of instructional strategies they employed. Male teachers were better at student engagement, whereas female teachers increased their instructional strategies (Nejati, Hassani, & Sahrapour, 2014; Sak, 2015; Shazadi et al., 2011).

Sak (2015) conducted research with a random sample of 451 preservice Turkish teachers of whom 231 were women. Early childhood education is typically a female-dominant career in the Turkish population. Study participants responded to the TSES by Tschannen-Moran and Woolfolk Hoy (2001). Results showed “a significant difference between male and female teachers in regards to classroom management but not with instructional strategies and student engagement” (Sak, 2015, p. 1636).

A study by Nejati et al. (2014) investigated the relationship between gender and subscales of self-efficacy on Iranian English-as-a-foreign-language teachers. Study participants were 22 women and 12 men who taught in private English-language institutes in Karaj, Iran. Participants responded to the TSES. Results indicated that the “difference between male and female teachers in terms of student engagement, instruction strategies, and classroom management was explored and the outcomes showed that males and females do not differ as far as classroom management is considered” (Nejati et al., 2014, p. 1222).

Likewise, teacher efficacy links strongly to a teacher’s years of experience and resistance to change in instructional strategies (Bullock et al., 2015). A qualitative study on the “predictive relations among early childhood educators’ years of teaching experience, personality traits, and classroom management self-efficacy belief” (Bullock et al., p. 180) queried 395 early childhood educators who completed the Ten-Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003) and the TSES. Participants ranged in ethnicity from Caucasian, to African American, Asian, Hispanic, and those categorized as other. Another finding was that encouraging long-term employment in their current position improved overall working conditions. However, “Bandura (1977, 1986, 1993) defined self-efficacy as a participant’s judgment about his or her ability to complete a future action” (Ross, Cousins, & Gadalla, 1996, p. 386). Findings showed that

teacher efficacy is a form of self-efficacy but can be continuously defined as an individual teacher's expectation that he or she is able to bring about student learning. Researchers demonstrated that involving students in the learning process increases their focus and motivates them. Although this study provided insight to understudied populations, results showed that early childhood educators with more years of experience reported higher levels of efficacy in management strategies compared to those with less experience (Bullock et al., 2015).

Squillini (2013) conducted a study on the longevity of teachers in Catholic schools. The researcher noted that job satisfaction was critical to the length of time committed to the field of education. The researchers surveyed a random sample of 600 Christian teachers ranging in age from 28 to 69 and found that private-school educators continue to work in this field because they enjoy the positive reinforcement they receive from administration. In addition, this encouragement increases satisfaction, which in turn promotes retention in the field of education. According to the researcher, "Christian educators were under the age of 48 by 43% and 53% were between the ages of 49–69" (Squillini, 2013, p. 340). Factors that described individuals' commitments to their career included characteristics related to efficacy. The ability to teach Christian values, personal fulfillment, and positive relationships with colleagues contributed to private-school educators' long-term commitment (Squillini, 2013, p. 348). In addition, efficacy was "positively affected by the teachers' age" (Squillini, 2013, p. 352).

Mehta and Mehta (2015) conducted a study with 150 private school teachers in Haryana to better understand teacher self-efficacy and job burnout. Using two testing models, the TSES (Tschannen Moran & Hoy, 2001) and Maslach's Burnout Inventory-Educator (Maslach, Jackson, & Leiter, 1996), to help identify the relationship between the two. The researchers noted that teachers have been exposed to unnecessary stress, which results in depression, exhaustion, and



poor performance that in turn links to low levels of self-efficacy (Mehta & Mehta, 2015). Results from using a regression analysis and cluster sampling of participants concluded that “teachers’ self-efficacy is highly correlated with burnout” (Mehta & Mehta, 2015, p. 60). In addition, the results indicated that teachers with low self-efficacy tend to be high on burnout.

A study conducted by Hsu et al., (2015) compared teacher efficacy and teacher–student age gaps. One area of concern in the study was that, “The aging of the population and the low workforce participation of older adults have become key concerns in most countries” (p. 591). Using a stratified random sampling Hsu et al. collected survey responses from 498 teachers in 33 elementary schools in Taiwan. Following correlational analyses, results indicated a positive association among efficacy for classroom management, student engagement, and instructional strategies. After conducting a hierarchical regression analysis, researchers found that efficacy for classroom management can positively predict the affective and cognitive subdomains of retirement attitude. The Hsu et al. (2015) final discussion described,

The larger the age gap between the teachers and their students, the greater the influence of teacher on school affairs, the stronger the teachers’ belief in the efficacy of their classroom management, and the more positive their attitude toward retirement (p. 601)

Yu, Wang, Zhai, Dai, and Yang (2014) found that emotional situations and overload from additional tasks can cause burnout. As a result, educators tend to find excuses to not attend work. The Yu et al. researchers examined the impact of work stress on job burnout and self-efficacy, collecting data from 387 middle school teachers using multiple scales. The sample consisted of 183 men and 204 women; results displayed that “stress related job responsibilities and self-efficacy were significantly correlated with job burnout” (Yu et al., 2014, p. 702). One goal through research is to identify strategies to prevent job burnout and extend the health and

betterment of the workplace. Teachers can face additional pressures in the work field. Those who feel the pressure develop lower self-efficacy and feel tired. Several studies identified stress as among the direct causes of job burnout among teachers, caused by physical exhaustion, frustration, work overload, and mental exhaustion. Helping teachers relieve their level of stress would help them rebuild enthusiasm for teaching (Yu et al., 2014).

Shoulders and Krei (2015) conducted a study of teachers from 15 high schools in Tennessee and six high schools in Indiana. The researchers surveyed teachers' perceptions of self-efficacy beliefs in student engagement, instructional strategies, and classroom management. Shoulder and Krei found a "significant difference reported between the years of teaching experience and efficacy in instructional practices" (p. 57). Teacher self-efficacy beliefs were better predictors of instructional strategies because teachers could anticipate outcomes based on their perceived competence at certain instructional performances (Shoulders & Krei, 2015).

Research conducted by Haverback and Parault (2011) elaborated on increasing efficacy with female preservice teachers. The purpose of the study was to investigate field experience, tutoring, and observation of 86 university students. Participants included Caucasian, African American, and Hispanic teachers completing field experience to better support their efficacy. Haverback and Parault (2011) wrote, "Field experiences can offer preservice teachers an opportunity to work with students, and research has found that field experiences impact preservice teacher efficacy in a number of nations" (p. 703). Participants completed a demographic questionnaire and the TSES. As summarized, "Tutoring created an opportunity for preservice teachers to gain experience which may not lead to higher efficacy compared to observing. This can result in a vicarious experience" (Haverback & Parault, 2011, p. 710). The

researchers found no correlations between an individual's achievement and individuals who show persistence.

Williams (2009) stated, "Teacher self-efficacy research has centered upon classroom practice and teachers' perceptions of their ability to bring about desired outcomes in relation to student learning" (p. 601). Research has recognized that degree experience identifies the type of emotional state one may face in their educational career. Over an 8-year span, Williams conducted a study with 202 primary-school teachers. Respondents completed a closed-questionnaire survey to indicate if a relationship existed between an individual's level of education and emotions. The researchers documented, "Open ended responses identified the major consequences of the degree for teachers. Educators made it clear that a number of impacts were associated with their emotions" (Williams, 2009, p. 605).

Some results included greater confidence levels based on degree-level completion. "Over three-quarters of the teachers thought that degree experience contributed to either their professional or general confidence level" (Williams, 2009, p. 607). As summarized, building a level of confidence increased personal and professional self-efficacy. Research by Wheatley (2002), showed that confidence and self-efficacy are generally used interchangeably in literature. Teachers who have high self-confidence are usually described as having a greater sense of self-efficacy, and, in contrast, those with low confidence are described as having low self-efficacy (Tschannen-Moran et al., 1998).

Results from the Tschannen-Moran et al. (1998) are consistent with those of Goddard and Goddard (2001) in that teachers' personal accomplishments support personal self-efficacy beliefs. In addition, personal accomplishments may also influence student achievement. Williams (2009) also summarized that experienced teachers' self-efficacy beliefs can be

subjective due to events that happened in their lives: “in this case completing a degree, which while contributing to their practice, is not situated directly within their practice” (Williams, 2009, p. 610). Noticeably, a teacher’s mastery of the degree suggests affirmative emotions that strengthen personal self-efficacy and encourage modifications to their practice.

### **Criterion Variables**

**Student engagement.** Student engagement involves teaching students the importance of working together to accomplish an instructional goal (Fredricks, 2014). A content-centered approach has a common theme in a classroom environment, in comparison to student-centered instruction. However, communication and sharing experiences prompt the engagement of students and an increased level of confidence, and will build a student-centered classroom. “High-quality teacher–student relationships are a key factor in determining student engagement” (Fredricks, 2014, p. 44). As a result, learning environments support a variety of skill levels integrated with the curriculum to reach multiple instructional needs for each learner.

Student engagement is an important component of effective practices at school. Uden, Ritzen, and Pieters (2013) conducted a study of 195 teachers, examining the motivational factors of educators. One positive finding was teachers setting goals at the beginning of the school year. In addition, “Teacher support, positive teacher-student relationships, structure, support, and challenging tasks have been associated with student engagement” (Uden et al., 2013, p. 44). Teacher self-efficacy beliefs provided a perception of the motives for influencing student engagement as well as a conceptual framework for effective teaching. According to Uden et. al. (2013), “This framework consists of the level of knowledge regarding the learners, knowledge of the curriculum content and goals, and knowledge of teaching in light of the content and learners

to be taught” (p. 45). After the questionnaire was completed, results displayed that teacher self-efficacy contributed to students’ success rate in class.

Research completed by Perry and Steck (2015) on the use of academic materials loaded onto an iPad increased student engagement and self-efficacy. According to the researchers, “Students’ engagement with academic material is influenced by their levels of self-efficacy and self-regulated learning using cognitive strategies” (Perry & Steck, 2015, p. 127). To explore the efficiency of the study, through convenience sampling, the researchers chose 110 students at the secondary level who were engaged in a student-centered pedagogy of inquiry and discovery. This approach “facilitated student engagement, discovery, and understanding of mathematical concepts” (Perry & Steck, 2015, p. 130). Participants responded to two questionnaires—an eight-item self-efficacy Likert-type scale and a 12-item metacognitive self-regulation scale—to assess student engagement and beliefs related to staying engaged. The researchers found that mastery experiences and individual goals established for an academic task influenced student engagement with learning. Learning goals positively aligned with increased levels of engagement (Perry & Steck, 2015).

Christensen, Horn, and Johnson (2011) discovered that in small-group learning environments, teaching students how to be persistent while participating in the assigned instructional goal helped increase student engagement. Establishing a learning environment for teaching social and oral communication transitioned educators into facilitators of information and increased student engagement. Students engaged in deep discussion of content information permits students to construct their own familiarity about what they are learning and move toward applying it in their education (Christensen et al., 2011).

The Ministry of Education is a foundation responsible for hiring teachers in Turkey, as well as making curriculum decisions. In 2007, the Ministry of Education made the decision to move the curriculum from teacher-centered instruction to student-centered instruction (Cerit, 2013). This reform caused a change in instructional strategies that required extensive professional development for teachers. Cerit conducted a study of 299 Turkish elementary teachers using the TSES. Results showed that “teachers’ self-efficacy for student engagement had a significant effect on their willingness to implement the curriculum reform and was a strong predictor of it” (Cerit, 2013, p. 263). The “stepwise regression analysis revealed that teachers’ self-efficacy for student engagement is a significant predictor of teachers’ willingness to implement curriculum reform” (Cerit, 2013, p. 252). The student-centered approach provides active engagement for students during the teaching process. In addition, teachers have moved into a more innovative approach and willingly take on demanding tasks. Through this reform, teachers face challenges but continue to strive toward excellence in student engagement.

Al-Alwan and Mahasneh (2014) conducted a study using a simple random sample of 679 Jordanian teachers. The researchers stated, “When teachers create a learning environment in which students feel comfortable and confident, it will enhance positive attitudes toward school. The creation of a positive learning environment impacts both students’ learning and attitudes” (p. 171). In addition, participants responded to the NTSES. Study results showed a relationship between teachers’ self-efficacy and student engagement, due to exerting a positive influence on students’ attitudes and engagement toward classroom instructional strategies (Al-Alwan & Mahasneh, 2014, p. 176).

Christophersen, Estad, Turmo & Solhaug (2015) conducted a study on a variety of educational programs and their impact on student engagement at the university level. The

researchers collected data using a questionnaire from 491 teachers in training from Norway who were attending multiple teacher-education programs. Results from the research indicated, “Students’ perceptions of the integration of pedagogic knowledge and practice increased student efficacy and the support from administration increased teacher efficacy” (Christophersen et al., 2015, p. 240). Throughout the study report, the researchers discussed the importance of vicarious learning through modeling. Modeling for students enables the teacher to provide and follow through with expectations and build a level of confidence. Through modeling, teachers are “supporting student efficacy in learning and overcoming challenges” (Christophersen et al., 2015, p. 244). The study focused on helping students believe in their learning through motivation, which builds on the work of Skaalvik and Skaalvik (2008). Results indicated a positive correlation with teacher efficacy and those who received instruction with student teaching at the university level.

**Instructional strategies.** An educator’s techniques that support independent thinking, creativity in teaching, and strategic methods for assessment defines instructional strategies (Tschannen-Moran & Hoy, 2001). Establishing a fundamental framework, setting values, and incorporating instructional strategies in the Christian educator’s classroom leads students toward a holistic, balanced, and God-honoring life in society (Van Brummelen, 2009, p. 10). Over time, researchers have defined teacher efficacy as the belief that an individual in a classroom setting can affect instructional practices (Berman et al., 1977). Christensen et al. (2011) stated, “Educators have to find ways to present material that maximizes intelligence in a way that students with logical intelligence can be motivated. Then, find ways to assess the two comparatively” (Christophersen et al., 2015, p. 112). Today, administrators and educators have learned techniques that establish them as a mentors for other teachers. In addition, “Educators

motivate students through learning and provide individual assistance that is complementary to the learning model that each student is learning” (Christensen et al., 2011, pp. 106–107).

According to the research by Shaukat and Muhammad-Iqbal (2012), classroom management, instructional strategies, and student engagement are factors that may increase attrition. Researchers conducted a convenience sample of 198 male and female teachers. Results from the TSES indicated that teachers in their first 5 years of teaching were better equipped to prepare instructional strategies to engage students compared to teachers with more than 20 years of teaching. However, teachers with more years of experience above the mean rated higher on effective use of instructional strategies in their classrooms, compared to those with less experience (Shaukat & Muhammad-Iqbal, 2012).

Researchers have long studied the association between teachers’ sense of efficacy and their level of instructional practice. Having an advantage of previous teaching experiences can be a considerable benefit and serve, theoretically, as a dominant source of efficacy (Shoulders & Krei, 2015). The nature of an educator’s job depends on the daily requirements associated with classroom responsibilities. One obligation is the deliberate planning of instructional strategies.

Another group of researchers acknowledged that experienced educators take the initiative to work toward collaborative efforts, driven by persistence (Lee et al., 2013). The researchers conducted a study of 27 teachers from four schools ranging in teaching experience between 1 and 34 years. The study took approximately 1 year to assess teachers, using Bandura’s (1977) Self-Efficacy Scale, a lesson plan that included a pretest and posttest measure that identified instructional strategies used in the classroom, and an End-of-Year Feedback document. Results indicated that teachers engage their students best when providing authentic learning experiences.



In addition, the researchers identified that the development of instructional practices, including learning goals, increased instructional practices between teachers and students (Lee et al., 2013).

Thoroughly understanding and organizing instruction is a key component in influencing a teacher's beliefs in the classroom to enhance student learning. Yilmaz (2011) conducted a study with 54 male and female Turkish teachers, randomly sampled from 12 primary and eight secondary schools. Educators had between 1 and 16 years of experience teaching English. Teachers responded to a three-part questionnaire assessing teachers' self-efficacy: the first part was the TSES. The other sections of the questionnaire consisted of measuring English proficiency and pedagogical strategies. Results indicated that "teacher efficacy has a direct influence on teaching practices and student outcomes" (Yilmaz, 2011, p. 92).

Additional research on instructional strategies used a simple random sampling on more than 679 teachers and 1,820 students in primary and secondary schools in Jordan (Al-Alwan & Mahasneh, 2014). The instrument used in this study was the NTSES, developed by Skaalvik and Skaalvik (2008). Also, researchers used the Students' Attitudes Toward School Scale, which the researchers designed.

The researchers reflected on a "teachers' beliefs in their abilities to instruct students and influence students' performance are very strong indicators of instructional effectiveness" (Al-Alwan & Mahasneh, 2014, p. 176). Results indicated that teachers with a strong sense of efficacy "exhibit high levels of planning, management, and organization, are open to new ideas and are more willing to experiment with new methods to better meet the needs of their students" (Al-Alwan & Mahasneh, 2014, p. 176). The report indicated that students comprehend subject matter when taught using a variety of techniques and setting goals. Finally, results showed that no

significant differences emerged between male and female teachers in their level of self-efficacy (Al-Alwan & Mahasneh, 2014). See Figure 2 for an additional illustration.

**Classroom management.** Classroom management is the process by which teachers create and maintain an environment in the classroom that allows students an opportunity to engage in learning (Miller & Hall, 2009). Pace, Boykins, and Davis (2014) conducted a study based on Bandura's theory of self-efficacy. The researchers selected this theory "as the framework for the project ... based on the assumption that teachers' job performance is strongly influenced by confidence and skills necessary to manage the classroom" (Pace et al., 2014, p. 34). The researchers queried 26 middle school teachers who completed the TSES, a demographic-survey form, and one program-evaluation form. The program of focus in the study was a proactive classroom-management training-program intervention. Findings supported the need for classroom-management training and "teachers who possess the training identify and respond appropriately to individual student's needs, communicate more effectively with students, and develop de-escalation skills needed for intervention" (Pace et al., 2014, p. 37). Also, results indicated that teachers enhanced their levels of efficacy and regained classroom control.

Ponitz, Rimm-Kaufman, Grimm, and Curby (2009) researched the effectiveness of classroom management and found that developing a plan of action for the classroom that describes positive reinforcement and consequences for negative decisions emphasized teachers' expectations. Participants in the research included 171 teachers rated on classroom observations of behavioral management. The study implied that educators revert to positive reinforcement to encourage students to repeat desired behavior. According to Ponitz et al. (2009), "Classrooms with the highest achieving students were characterized by good management, support for student

self-regulation and a balance of activities for the leveled skills” (p. 108). As a comparison to the study,

Christian, private school teachers who professed more of a desire to involve students in classroom decision making and less of a desire to control them were the ones who reported the most concern about their inability to discipline classes in the way they would want. (Lewis, 1999, p. 162)

Varghese et al., (2016) conducted a quantitative study on participants from North Carolina, Texas, New Mexico, and Nebraska. Throughout the research, classroom management was cited to “discuss the teachers’ ability to establish order within the classroom and encourage on task behavior by students (Varghese et al., p. 229). Lower self-efficacy in classroom management can yield disruptive student behaviors that could result in lower self-efficacy and reflect poor classroom management. Conversely, teachers with a greater sense of self-efficacy have greater capacity to effectively manage their classrooms and teachers who employ successful classroom-management strategies experience a greater sense of efficacy (Bandura, 1997).

The Varghese et al. (2016) study is among the few that explored the association between teachers’ perceptions of efficacy and the significance of teachers’ classroom management on students’ early literacy development. The researchers chose schools based on Title 1 qualifications including students who receive free or reduced-priced lunch, participation in Reading First, and minority populations (Varghese et. al., 2016). The total sample of schools included 15, with 76 teachers and 618 primary aged students. Teachers received the TSES by Tschannen-Moran and Woolfolk Hoy (2001), which consisted of 12 items assessing self-efficacy in the classroom. Results indicated no significant differences between teachers in efficacy for classroom management (Varghese et al., 2016, p. 236).

Aloe, Amo, and Shanahan (2014) completed a multivariate review of more than 16 studies that focused on improving self-efficacy as a protective factor to reduce teacher burnout. The researchers found persistent evidence to support the concept that multiple factors influence burnout. Some examples included lack of school support and changes in the school that may lead to exhaustion, uncertainty, and burnout. In addition, other researchers have “examined teacher burnout in relation to different teacher and school or organizational characteristics” (Aloe et al., 2014, p. 103). The researchers examined “the evidence for classroom management self-efficacy in relation to the three dimensions of burnout: emotional exhaustion, depersonalization, and personal accomplishment” (Aloe et al., 2014, p. 101). Aloe et al. used several strategies to test the research, assessing the relationship among classroom management self-efficacy and the three dimensions of burnout using the Maslach Burnout Inventory (Maslach et al., 1996). Results from the quantitative study confirmed that teacher self-efficacy increases when a teacher feels competent to organize a classroom and maintain order, which results in a healthy classroom environment (Aloe et al., 2014).

Researchers continue to investigate teacher efficacy in educational settings (Dibapile, 2012; Woolfolk et al., 1990). Motivating teachers to build confidence and have effective classroom managers will reduce some problems in education (Dibapile, 2012). The purpose of the Dibapile (2012) study was to conduct quantitative research among junior secondary school teachers in Botswana. The study explored classroom management using the TSES and a Checklist of Teacher Practices to measure teachers’ self-efficacy. A random sample in seven and 13 schools in Botswana included 1,006 teachers. Results indicated that efficacy with gender and classroom management showed trends toward significance (Dibapile, 2012). Dibapile clearly found that “teachers with high efficacy have been perceived as displaying a great deal of

knowledge in planning and organizing activities” (p. 152) (as cited in Tschannen-Moran & Woolfolk Hoy, 2001).

Jong et al. (2013) conducted a study to identify the predictors of preservice secondary teachers’ relationship to classroom management with self-efficacy. The researchers gathered information from 120 preservice teachers in education programs to assess self-efficacy using the TSES. The study provided relevant information regarding positive reinforcement, coercive discipline strategies, sensitive discipline strategies, and student misbehaviors. Multivariate multilevel regression analyses yielded results that suggested “self-efficacy does not refer to actual competence, but to the teacher’s perception of it (Klassen et al., 2010; Woolfolk Hoy & Spero, 2005), and increasing experience may cause changes in the pre-service teacher’s perception of this competence” (Jong et al., 2013, p. 306). Finally, establishing structure in the classroom through rules and procedures and building a positive classroom environment will also decrease the level of stress and increase the level of self-efficacy (Jong et al., 2013, p. 306).

Miller and Hall (2009) conducted research on classroom management and maintaining an effective learning environment. Their study described how educators establish a classroom-management plan that includes establishing expectations along with consequences. In addition, visibly posting the information allowed educators to react with consistency to an infraction as well as providing students with reminders (Miller & Hall, 2009). Implementing proven classroom-management strategies and techniques minimized distractions. One criticism of this study was that the empirical study lacked the richness of detail in context and the techniques teachers used in their classroom. The study also described the effectiveness of using inquiry to develop the skills necessary for cognitive and behavioral development. Bandura’s social-cognitive theory determined that a learning environment incorporating social learning and

feedback for students will enhance positive behavior and help students develop positive efficacy (Boyce, 2011). The theory suggests that the learning environment; individual behaviors; and attitudes, beliefs, and perceptions are all key variables that influence student development (Boyce, 2011). Those who avoid tasks or feel they are less competent develop a lower sense of self-efficacy. All these characteristics combine to comprise a teacher's classroom management. Bandura identified that behavior can be a powerful analyst of apparent capabilities in an explicit task. Bandura also suggested that "our own abilities affect our behavior, motivation, and ultimately our success or failure" (as cited in Cerit, 2013, p. 254).

### **Christian Private School Research**

Over the last 25 years, NCES (2013b) has collected data every 2 years on private elementary and secondary schools, beginning in the 1989–1990 school year, to address increased concern for educational alternatives. More than 30,861 schools, or 24%, of all schools in the United States, are private schools, and 80% of those have a religious affiliation. More than 5.3 million students attend private schools (Council for American Private Education, 2015; NCES, 2013b). Two main sectors of nonpublic schools are Catholic and Christian. In these two sectors are seven categories that comprise nonpublic educational schools: Catholic, including parochial, private order, other religious schools, or diocesan; and Christian, including a religious body or no affiliation; and Nonsectarian (Council for American Private Education, 2015). Funding for private schools comes from tuition, private foundations, alumni, or donations (Alt & Peter, 2002). These schools are governed by religious bodies and boards of trustees that are independent from local, state, and federal governments.

In previous research, Bandura's (1977, 1986) theory of self-efficacy has been implicit in a two-dimensional construct (Ashton & Webb, 1986; Gibson & Dembo, 1984). As a result,

research conducted by Woolfolk et al. (1990) on 55 religious middle school language-arts teachers displayed that developing a sense of efficacy may require “adopting a less custodial and more autonomy encouraging orientation within the classroom” (p. 146). Researchers examined the relationships between efficacy and management, control, and student motivation. Findings revealed that student autonomy in the classroom setting supports general teaching efficacy. In addition, conclusions included that teachers encourage extrinsic motivation for student success (Woolfolk et al., 1990).

Anderson (2016) conducted a causal-comparative quantitative study to assess whether differences in teacher efficacy related to instructional practices and student engagement between a traditional and classical Christian setting. The researcher intended to study whether teacher efficacy linked to task analysis and teaching proficiency between the two types of school settings. Pedagogical styles compared to teacher efficacy was a factor in instructional strategies. The results from testing 88 Christian educators yielded no statistically significant differences between student engagement and instructional strategies between the two settings. However, “descriptive statistics reported that educators with 1-3 years of experience reported higher student-engagement and instructional strategies” (Anderson, 2016, p. 85). In addition, the researcher noted that for further study, researchers should focus on all Christian school settings compared to public schools as well as why newer teachers have overall higher self-efficacy ratings.

### **Summary**

This chapter provided a historical examination of self-efficacy as a component of social-cognitive theory, as well as the factors that influence efficacy. Teacher efficacy is a critical component in establishing effective educators and the development of productive students

(Shoulders & Krei, 2015). Focusing on student engagement, instructional strategies, and classroom management as variables to improve and increase efficacy with teachers provides a basis for teaching and reflection (Al-Alwan & Mahasneh, 2014).

As educational demands increase, a lack of teacher efficacy has led to an increase in attrition rates and dissatisfaction in education (Dietrich, 2010). Teachers experience emotional fatigue and depersonalization with a lower sense of personal accomplishment. According to Aloe et al. (2014), “Bandura’s theory highlights the interaction among the environment, behavior, and personal factors. Taken together, these factors are helpful in understanding the role self-efficacy plays in preventing burnout” (p. 106). This is one factor that explains why teacher burnout links to teacher shortages. Continuing difficulties have contributed to the awareness that gender, age, ethnicity, educational level, and school status can contribute to efficacy in Christian private school teachers (Williams, 2009).

As summarized in Skaalvik and Skaalvik (2014), teachers who consider themselves less competent in instructional strategies, classroom management, and student engagement reported a higher level of dissatisfaction compared to other educators. The researchers provided background on how predictor variables could align with lower levels of efficacy. To increase the efficacy of Christian educators, teachers who desire to become more efficient will “increase their responsibilities within the school. Also, students’ learning outcomes will become more positive and teachers will have a more positive attitude toward teaching” when schools begin to take steps toward lowering attrition (Guskey, 1984, p. 253). As a result, “Teachers with higher levels of self-efficacy are more confident in their teaching abilities, have more positive attitudes towards teaching, and are active and assured in their responses to students” (Tschannen-Moran et al., 1998, p. 210).



Another factor to consider is teacher expertise as a critical component toward building confidence and diminishing attrition. Nonetheless, the loss of experienced, qualified teachers is costly to private schools. Students require a variety of instructional strategies and respond to different environments. However, it is important to help teachers understand the diverse needs in classroom management, instructional strategies, and unique student-engagement opportunities to better understand influences that affect Christian private school teachers (Shaukat & Muhammad-Iqbal, 2012).

According to Bandura's (1977) social cognitive theory, self-efficacy represents one of the most important predictors of human motivation, defined as "people's beliefs about their capacities to produce designated levels of performance and exercise influence over events that affect their lives" (Bandura, 1994, p. 71). The present study focused on private-school Christian teachers in elementary and secondary education. The study assessed self-efficacy, an educator's confidence in performing a particular teaching task, and effectiveness in teaching students well.

## CHAPTER THREE: METHODS

### Design

The present study used a quantitative correlational research design to investigate the relationships between teacher self-efficacy and several predictor variables. A quantitative correlational research design was appropriate in the current analysis scenario, as it allowed a researcher to determine if one or more predictor variables correlated to a change in one or more criterion variables (Gall, Gall, & Borg, 2007). Using a correlational design was appropriate for this study because its purpose was “to measure the degree and direction of the relationship between two or more variables and to explore possible causal factors” (Gall et al., 2007, p. 336). A quantitative correlational research design was appropriate as it is used to establish “relationships between multiple variables and to predict scores on one variable from research participants’ scores on other variables” (Gall et al., 2007, p. 337).

**Correlational research** also allows for a determination of the nature of a relationship between two or more variables through statistical data analysis. In this type of research, researchers typically do not manipulate variables, (as would be the case in an experiment), but rather use variables that occur in a natural setting to recognize trends and patterns in data. According to Gall et al. (2007),

Correlational research designs are highly useful for studying problems in education. Their principal advantage over causal-comparative or experimental designs is that they enable researchers to analyze the relationships among a large number of variables in a single study and their degree of relationship to the variables being studied. (p. 336)

**Compared to quasi-experimental research, researchers do not use correlational designs to establish cause effect relationships among the variables under investigation. In a**

quasi-experimental design, researchers compare a treatment and control group in a natural or ‘real-world’ scenario to demonstrate cause effect relationships (Gall et. al., 2007). This is almost unachievable in educational research as rarely are an experimental group and control group available to compare a real-world scenario. The current investigation did not compare an experimental and control group, rendering a quasi-experimental technique inappropriate.

**Experimental research**, often called true experimentation, uses the scientific method to establish a cause effect relationship among variables in a laboratory setting (Gall et. al., 2007). The research conducted here was not investigated in a laboratory, nor did the research test cause and effect relationships. Thus, an experimental technique was inappropriate for the current investigation.

Other researchers in the area of self-efficacy have used correlational designs as part of their work. For example, Shahzadi et al. (2011) used a comparable correlational research design when analyzing differences in efficacy to understand the association among instruction, management, and engagement. Another example can be found in the work of Cerit (2013), who identified using a correlational design that educators are more likely to fulfill their goals when they include creativity and effort. Cerit deployed a linked correlational research design implementing the TSES, and concluded that relationships existed between classroom teachers’ efficacy beliefs and their willingness to implement reform.

A final example can be found in the work by Yilmaz (2011). The Yilmaz study investigated teachers’ efficacy beliefs and identified a positive relationship between a teachers’ sense of self-efficacy and perceived language proficiency through a correlational design.

The criterion variable for the current study was teacher efficacy scores reported by the TSES. Teacher self-efficacy can be defined as “the extent to which the teacher believes he or she

has the capacity to affect student performance” (Goddard et al., 2000, p. 480). The TSES survey includes three subscales measuring instructional strategies, student engagement, and classroom management. Instructional strategies are an educator’s technique that supports independent thinking, creativity in teaching, or strategic methods for assessment (Tschannen-Moran & Woolfolk Hoy, 2001). Student engagement is an educator’s ability to encourage a student to value learning and motivate an atmosphere of learning (Tschannen-Moran & Woolfolk Hoy, 2001). Classroom management is the developed strategies that emphasize encouragement for desirable behaviors in students through positive reinforcement, inspiration, and devotion, despite disruptive behaviors (Emmer & Hickman, 1991).

Predictor variables included gender, age, ethnicity, educational level, and school status. Gender is defined by the biological sex of male and female teachers measured by respondent identification of their gender. Age was defined as the length of time a person has lived and measured by how old a person is in years. Ethnicity describes a group of people who differ in race in the country in which they live; this concept was measured by a person’s self-identified ethnic classification. Educational level referred to the degree status of an individual, and measured by the identification of a respondent’s achieved educational level. Finally, school status was defined as whether a respondent taught in either an elementary or secondary educational setting.

### **Research Questions**

**RQ1:** What is the relationship between the three measured factors of teacher efficacy and gender?

**RQ2:** What is the relationship between the three measured factors of teacher efficacy and age?

**RQ3:** What is the relationship between the three measured factors of teacher efficacy and ethnicity?

**RQ4:** What is the relationship between the three measured factors of teacher efficacy and educational level?

**RQ5:** What is the relationship between the three measured factors of teacher efficacy and school status?

### **Null Hypotheses**

The following null hypotheses were generated based on the research questions.

**H<sub>01</sub>:** Gender will have no statistically significant relationship to teacher efficacy.

**H<sub>02</sub>:** Age will have no statistically significant relationship to teacher efficacy.

**H<sub>03</sub>:** Ethnicity will have no statistically significant relationship to teacher efficacy.

**H<sub>04</sub>:** Educational level will have no statistically significant relationship to teacher efficacy.

**H<sub>05</sub>:** School status will have no statistically significant relationship to teacher efficacy.

### **Participants and Setting**

In the present study, the target population included Christian private school educators located in the northeastern part of Florida who teach all subject areas in grades K-12. Data was accrued from most teachers employed in four different Christian private schools located in the northeastern part of Florida. To identify the target sample, a web search identified private Christian schools in Florida. I contacted administrators at each of the four schools to explain the purpose for my research. I began completing documentation to seek approval from the Liberty University Institutional Review Board. Once administrators provided permission to work with

possible participants, I followed up with an e-mail to potential participants offering them a voluntary choice to participate within the project.

A convenience sample of 166 participants was gathered. A G\*powered 3.1 a priori power analysis (Faul et al., 2009) for a fixed-model R-square deviation from zero multiple linear regression equations with five predictor variables, an alpha significance level 0.05, a power of 0.95, and a medium effect size of 0.15 suggested that 138 respondents were needed in the sample to detect statistically significant effects. I added 20% added to the suggested sample to allow for flexibility. The total number of participants was 166.

### **Instrumentation**

Tschannen-Moran and Woolfolk Hoy (2001) developed the OSTES using a factor analysis implementing Rand items along with Gibson and Dembo's Teacher Efficacy Scale. The researchers preferred this instrument to be relabeled, the TSES (see Appendix A for a copy of this instrument).

### **Criterion Variable**

The TSES instrument was developed to assess instructional strategies, classroom management, and student engagement using a short or long form. The construct validity of the instrument includes all three subscales.

Tschannen-Moran and Johnson (2011) defined the TSES in the following manner:

Classroom management includes techniques that present and use question strategies that will maintain the groups' attention and responsibility while managing the class.

Instructional strategies are an educator's techniques that support independent thinking, creativity with teaching, strategic methods for assessment. Student engagement is the

ability of the educator to encourage the student to value learning and motivate an atmosphere of learning. (p. 759)

Seeking the least number of factors that can account for common correlations, principal-axis factoring, and varimax rotation, researchers validated test items for the TSES. The construct validity of the short form reviewed the correlation for the new TSES and against other measures. The total scores on the short form proved to have positive correlations with similar measurement constructs, providing evidence for construct validity. Reliability using Cronbach's alpha for student engagement was .81, instructional strategies .86, and for classroom management .86, with an overall reliability of the scale equaling .98 (Shaukat & Muhammad-Iqbal, 2012). Tschannen-Moran and Woolfolk Hoy (2001) noted that, "the instrument is also shown to be reliable with Cronbach's alpha values above .70 and overall 12 questions being 0.90" (p. 801).

For this study, I used the 12-item short form of the TSES (see Appendix A). This form consisted of questions designed to help researchers gain a better understanding of the situations that create difficulties for teachers in school environments. Numerous researchers have used this instrument (e.g., Rogers-Haverbach & Mee, 2015; Shoulders & Krei, 2015; Skaalvik & Skaalvik, 2014; Tschannen-Moran & Johnson, 2011) and have found it to be an effective measure of personal teaching efficacy.

The questionnaire used for this research consisted of 12 questions with Likert-style responses differentiating beliefs from results. The responses to all 12 questions are as follows: A great deal = 9, Quite a bit = 7, Some Influence = 5, Very little = 3, Nothing = 1. The combined possible score on the overall TSES for all 12 questions ranges from 12 to 108 points. A score of 108 points was the highest possible score, meaning that teachers have a high level of efficacy; a

score of 12 points is the lowest possible score, meaning teachers have a low sense of efficacy. Questions 1-5 are aligned with the predictor variables within the study.

Woolfolk Hoy provided written permission to use the TSES for the current research (see Appendix C). From the TSES instrument, items 2, 4, 7, and 11 are aligned with efficacy in student engagement which falls under question 6 on the current study's survey. Item numbers 5, 9, 10, and 12 are aligned with efficacy in instructional strategies which falls under question 7 on the current study's survey. Last, item numbers 1, 3, 6, and 8 are aligned with efficacy in classroom management which falls under question 8 on the current study's survey.

### **Predictor Variables**

The predictor variables for this study included gender, age, ethnicity, educational level, and school status. Gender was measured as male or female, with values assigned as male = 1, female = 2. Age was measured as how many years a person has been alive; age is a continuous variable that is already inherently numerical. Educational level measured the degree level that a teacher has earned. The variable was coded as Ed.D. = 1, Ed.S. = 2, M.Ed. = 3, B.Ed. = 4, and other = 5. Other can be defined as any educational experience less than a B.Ed. Ethnicity (i.e. the cultural background or ethnic origin of a person) was measured as White/Caucasian = 1, Black/African American = 2, Hispanic/Latino(a) = 3, Asian American/Pacific Islander = 4, American Indian/Alaskan Native = 5, Multi-ethnic/Multiracial = 6, or Other ethnicity = 7. After data was collected, ethnicity was recoded as white = 1 and other = 0. The plan for the recoding built on the assumption that a majority (i.e., more than 70%) of respondents indicated that their race/ethnicity was white. In this situation, it is easier to simply dichotomize the variable into 'white' versus 'other'. School status was measured as either teaching at an elementary = (coded as 1) or secondary level = (coded as 2).



## Procedures

The researcher initiated the study by obtaining approval from the Institutional Review Board from Liberty University (see Appendix D). After obtaining Institutional Review Board approval, I targeted gaining permission from private school head masters in the school districts in northeast Florida. Initially, I conducted a web search (i.e., Private School Review, 2017) to identify phone numbers for three private Christian schools in northeast Florida (see Appendix F). Next, I scheduled phone call appointments with the headmasters to discuss the research and gain permission to contact school principals. The headmasters were asked to grant written permission to contact school principals who supervising both elementary and secondary teachers in their schools (see Appendix G).

I asked principals for permission to contact their elementary (kindergarten through fifth grade) or secondary (sixth through 12th grade) teachers' through email. I considered principals be considered the point of contact for each school, and gave them the invitation e-mail to forward to their teachers.

Each school principal forwarded the invitation e-mail to their teachers. The body of the invitation email included the purpose of the research and explained the procedures (see Appendix B). The body of the e-mail also explained that teachers participating in the study would have the option of entering their e-mail address for a drawing with the chance to win a \$200 Visa gift card. I chose a winner at random from those participants who completed and returned the survey (using RandonPicker.com, 2017).

For those who chose to participate in the survey, an email link took them to the survey. Embedded in the first page of the online survey was the informed consent form (see Appendix

E). Immediately following completion of the online survey, a thank you notice was displayed (see Appendix H). The survey took participants approximately 15 minutes to complete online.

Once all schools completed the survey, I downloaded the data to an Excel file and loaded the information into SPSS. Following this procedure, I analyzed and interpreted the data. After data was collected, I drew the winner of the \$200 Visa gift card at my workplace, and contacted the winner with the contact information they had provided.

### **Data Analysis**

I used SPSS to run the statistical analysis. I conducted a multiple linear regression analysis to “determine correlation between the criterion variable and a combination of two or more predictor variables” (Gall et al., 2007, p. 353). Regression analysis is effective and useful for modeling relationships between variables and testing hypotheses. It is an appropriate method when the desired outcome is to explain or predict variability in the criterion variable using information from two more predictor variables (Gall et al., 2007, p. 357). In the current study, I fit three models to the data, one for each of the three types of efficacy, (i.e., one regression model for instructional strategies efficacy, one for student engagement efficacy, and one for classroom management efficacy). I included the predictor variables of gender, age, educational level, and school status was included in all three regression models.

I uploaded information from the survey into SPSS and then ran frequencies to identify any missing or unsound data, outliers, or human-made errors in the data. I calculated Cronbach’s alpha reliability for all scales in the investigation. Before running the regression analyses, I checked the assumptions of regression (linearity, independence, normality, and homogeneity) for errors (as proposed by Gall et al., 2007). I also assessed the presence of multicollinearity by checking the variance inflation factors in all three regression equations.

### **Summary**

The purpose of this chapter was to define the procedures used to conduct this research study. In addition, the chapter provided clarity to enable the reader to better understand the criterion and predictor variables. Analyzing the data helped me transform and revise certain information to reach a conclusion and answer the research questions.

## CHAPTER FOUR: FINDINGS

### Overview

Chapter Four will include the research questions, describe the descriptive statistics, and analyze the results. The chapter also examines the statistical analysis which indicated that a statistically significant relationship emerged between school status and student engagement self-efficacy.

### Research Questions

**RQ1:** What is the relationship between the three measured factors of teacher efficacy and gender?

**RQ2:** What is the relationship between the three measured factors of teacher efficacy and age?

**RQ3:** What is the relationship between the three measured factors of teacher efficacy and ethnicity?

**RQ4:** What is the relationship between the three measured factors of teacher efficacy and educational level?

**RQ5:** What is the relationship between the three measured factors of teacher efficacy and school status?

### Null Hypotheses

The following null hypotheses were generated based on the research questions.

**H<sub>0</sub>1:** Gender will have no statistically significant relationship to teacher efficacy.

**H<sub>0</sub>2:** Age will have no statistically significant relationship to teacher efficacy.

**H<sub>0</sub>3:** Ethnicity will have no statistically significant relationship to teacher efficacy.

**H<sub>04</sub>:** Educational level will have no statistically significant relationship to teacher efficacy.

**H<sub>05</sub>:** School status will have no statistically significant relationship to teacher efficacy.

### **Descriptive Statistics**

I calculated percentages and frequencies for all categorical variables in Table 1. The categorical variables included gender, ethnicity, educational level, and school status. Age is considered a continuous variable and percentages and frequencies were also run. Percentages and frequencies for categorical variables are the appropriate descriptive statistics to use for a report (Ritchey, 2008). As Table 1 shows, approximately three of every four respondents (72.2%) were female, and the majority of the respondents (86.4%) were White (nine of ten). Seven of every ten respondents (69.1%) had at least a bachelor's degree. Of the respondents who participated in the research, 44.4% were educators at the elementary level and 55.6 % were educators at the secondary level.

I calculated means and standard deviations for continuous predictor variables shown in Table 2. Means and standard deviations are the appropriate descriptive statistics to report for continuous variables (Ritchey, 2008). The standard deviation is the average amount any score will deviate from a mean, whereas the mean is the average scores. Among the three self-efficacy scales, classroom management ( $M = 30.40$ ) has the highest mean, followed by instructional strategies ( $M = 29.49$ ) and student engagement ( $M = 28.02$ ). The average age of participants for the study was 42.5 years. These results suggest that respondents had the highest levels of efficacy with respect to classroom management.

Table 1

*Percentages and Frequencies of Study Variables*

	Frequency	Percent
Gender of Respondent		
Male	45	27.8%
Female	117	72.2%
Race/Ethnicity of Respondent		
White/Caucasian	140	86.4%
Black/African American	8	4.9%
Hispanic/Latino(a)	5	3.1%
Asian American or Pacific Islander	4	2.5%
Native American	0	0.0%
Multi-ethnic or Multiracial	5	3.1%
Highest Level of Education of Respondent		
Less than bachelor's degree	7	4.3%
Bachelor's degree	112	69.1%
Master's degree	40	24.7%
Ed.S.	1	0.6%
Ed.D.	0	0.0%
Ph.D.	2	1.2%
School Status		
Elementary	72	44.4%
Secondary	90	55.6%
<i>N</i>	162	100.0%

Table 2

*Means and Standard Deviations, Continuous Variables*

Variable	<i>M</i>	<i>SD</i>
Age of Respondent	42.69	11.47
Student Engagement Scale	28.02	4.63
Classroom Management Scale	30.40	3.96
Instructional Strategies Scale	29.49	3.67

*Note.*  $n = 162$ .

Researchers typically measure internal consistency as a function of the correlations between scale items using a measurement instrument. A survey instrument used in research is often in the form of a Likert scales. The *alpha coefficient*, developed by Cronbach in 1951 measures the reliability and internal consistency of a scale (Tavakol & Dennick, 2011). Alpha ranges between a value of 0 and 1, with higher scores indicating higher reliability. Cronbach (1970) suggested scores of .70 or greater indicate an adequate level of reliability. As can be seen in Table 3, all three self-efficacy scales had very good to excellent reliability.

Table 3

*Internal Consistency Values (Cronbach's  $\alpha$ )*

Scale	$\alpha$
Student Engagement Scale	0.823
Instructional Strategies Scale	0.759
Classroom Management Scale	0.889

## Results

### Data Screening

I conducted screening to check for absent outliers, missing data, the assumptions of regression, and discrepancies among predictor and criterion variables. At the completion of the survey, 171 respondents had participated. Nine respondents did not complete one or more of the items that formed the scales for the criterion variables. Therefore, I removed these nine cases from the dataset because prior to statistical calculations, the data must have case-wise removal of missing data for items that form the dependent variables (Allison, 2002). This procedure led to a final dataset of 162 valid cases which is a 5.3% attrition of cases from the dataset. I substituted means for the missing data to answer Research Question 2 (respondent's age). Given the continuous nature of this variable, mean substitution is appropriate (Allison, 2002). I dichotomized the variable that measured a respondent's race/ethnicity into a two category nominal-level variable. The new variable was collapsed into White (coded as 1) and Other (coded as 0). This procedure was warranted, given the skewed nature of this variable (i.e., 86.4 % of the sample being White).



## Assumption Tests

Several assumptions must be met in multiple linear regression (Allison, 2002): *linearity*, *homoscedasticity*, *independence of errors*, *normality of errors*, and *multicollinearity*. For the assumption of linearity, the linear relationship between the predictor variables and each of the criterion variables were examined using the *Normal probability plot* (Normal P-Plot: Mertler & Vannatta, 2010). I used Normal P-Plots to check for linearity which identifies the nature of the independent variable (see Figures 2, 3, and 4). The Normal P-Plot shows that this assumption was tenable.

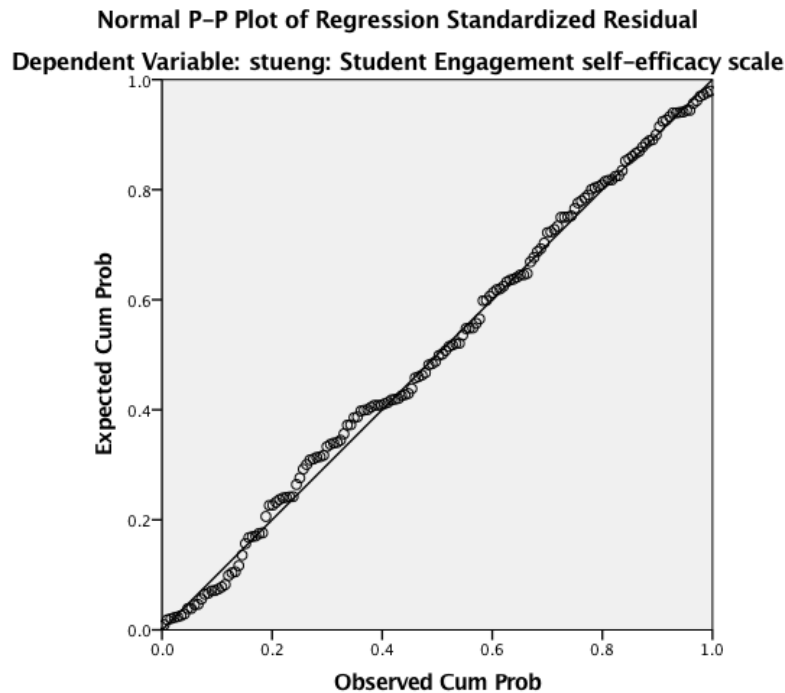


Figure 2. Normal P-Plot, Student Engagement Self-Efficacy Scale.

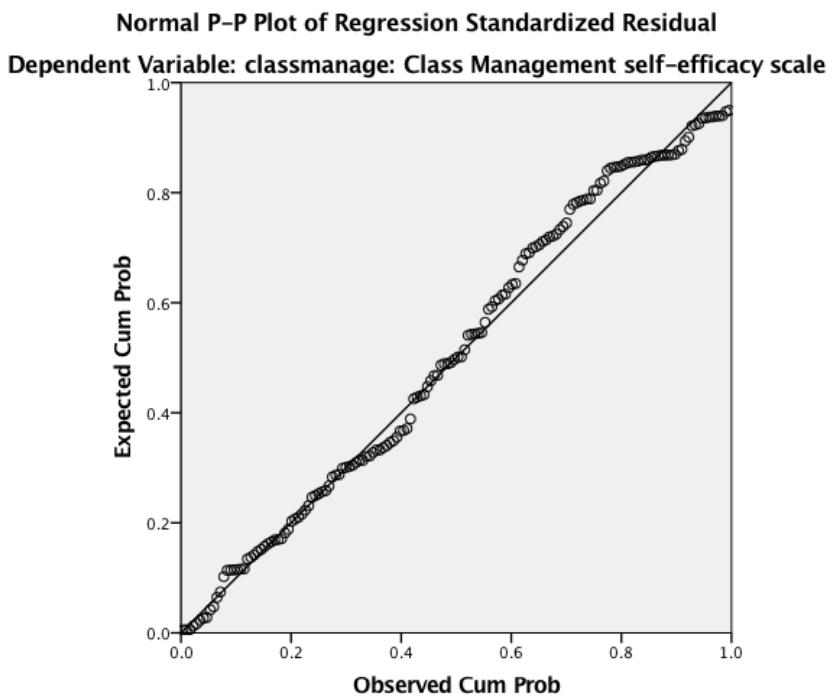


Figure 3. Normal P-Plot, Classroom Management Self-Efficacy Scale.

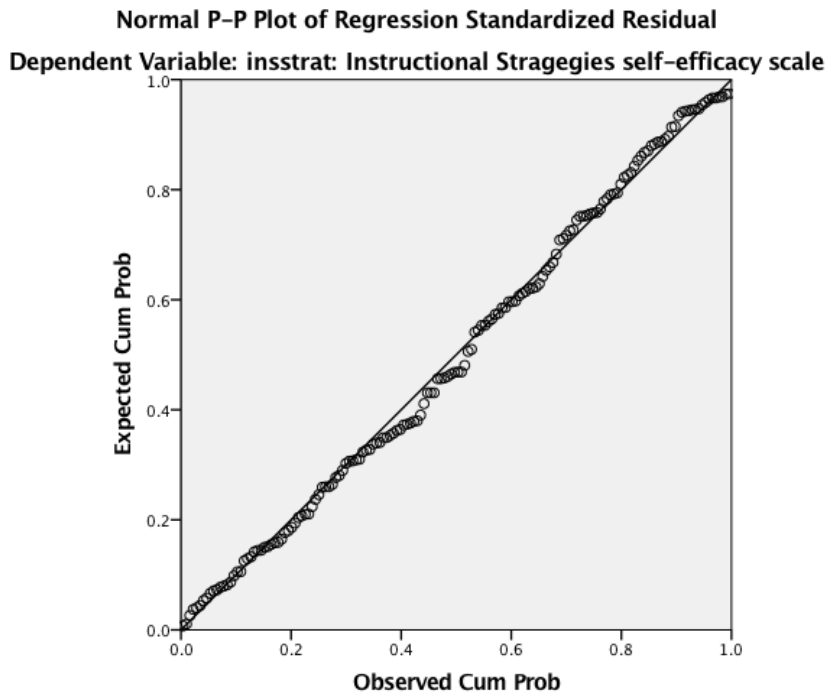


Figure 4. Normal P-Plot, Instructional Strategies Self-Efficacy Scale.

For the assumption of *homoscedasticity*, I used a chi-square test to estimate that the degree of error in each of the regression equations remained constant (Allison, 1999). This was assessed by using the Breusch-Pagan Test (Breusch & Pagan, 1979), which is a chi-square test. If the value of the chi-square was statically significant, the data is considered heteroscedastic and corrective measures are required. The results were statistically nonsignificant for the Student Engagement Self-Efficacy Scale ( $\chi^2 = 3.292$ ,  $df = 5$ ,  $p = 0.655$ ), the Classroom Management Self-Efficacy Scale ( $\chi^2 = 1.476$ ,  $df = 5$ ,  $p = 0.916$ ), and the Instructional Strategies Self-Efficacy Scale ( $\chi^2 = 1.117$ ,  $df = 5$ ,  $p = 0.953$ ). This assumption was met.

I checked *Independence of errors* through the Durbin-Watson statistic. The Durbin-Watson statistic ranges from 0 to 4, and as a general rule, values around 2 represent independence of errors whereas anything less than 1 or greater than 3 suggest correlation of errors (Gujarati, 2003). The Durbin-Watson statistic was 1.881 for the Student Engagement Self-Efficacy Scale, 1.957 for the Classroom Management Self-Efficacy Scale, and 1.836 for the Instructional Strategies Self-Efficacy Scale. The assumption was met.

I examined *Normality of errors* for each variable using the Shapiro-Wilk Test (Shapiro & Wilk, 1965). Normality of errors rests on the understanding that all errors are normally dispersed in a regression equation. The value of the test was statistically significant for the Student Engagement Self-Efficacy Scale ( $W = 0.970$ ,  $df = 162$ ,  $p = 0.002$ ), the Classroom Management Scale ( $W = 0.950$ ,  $df = 162$ ,  $p < 0.001$ ), and the Instructional Strategies Self-Efficacy Scale ( $W = 0.974$ ,  $df = 162$ ,  $p = 0.004$ ). This assumption was not tenable. However, this assumption is critical only when there are fewer than 100 cases in a sample (Allison, 1999). Due to the sample size being 162, the violation of this assumption can be disregarded.

Although *multicollinearity* is not a violation of the assumptions of regression per se, Allison (1999) recommended it be checked. For this study, I used Variance Inflation Factors to check the assumption. A Variance Inflation Factor of 10 or greater typically indicates potential multicollinearity (Anderson, Sweeney & Williams, 2002). All Variance Inflation Factors for all regression equations were under 2.0. This assumption was tenable.

### **Statistical Analysis**

**Student Engagement Efficacy.** Table 4 presents the impact of the multiple linear regression of student engagement self-efficacy onto the several predictor variables. The first parameter of interest is the Omnibus *F*-Test, which is a global test of model coefficients. This test was statistically significant ( $F = 2.770$ ,  $df = 5, 156$ ;  $p = 0.020$ ) allowing decomposition of effects in the regression model to proceed. The coefficient of determination, also known as the  $R^2$  value, was 0.082. This value shows that 8.2% of the variation in student engagement self-efficacy can be explained by the five independent variables in the equation. Among the five predictor variables, only school status ( $B = -2.384$ ,  $p = 0.004$ ) emerged as a statistically significant predictor of the criterion variable. The negative coefficient suggests that being in a secondary school setting will decrease a respondent's student engagement self-efficacy.

Table 4

*Multiple Linear Regression of Student Engagement onto the Predictor Variables*

Variable	<i>B</i>	<i>SE(B)</i>	<i>p</i>
Constant	29.861	1.930	0.000
Age of Respondent	0.031	0.032	0.340
Gender of Respondent (1= Female)	-1.037	0.871	0.235
Race/ Ethnicity of Respondent (1=White)	-1.740	1.037	0.095
Highest Level of Education of Respondent	0.339	0.569	0.553
School Status	-2.384	0.824	0.004
<i>N</i>	162		
<i>F</i>	2.770		0.020
<i>R</i> <sup>2</sup>	0.082		

**Classroom Management Efficacy.** Table 5 presents the results of the multiple linear regression of classroom management self-efficacy onto the several predictor variables. As before, the first parameter of interest is the Omnibus *F*-Test, which is a global test of model coefficients. The Omnibus *F*-Test is statistically nonsignificant ( $F = 1.592$ ,  $df = 5, 156$ ;  $p = 0.165$ ). Thus, decomposition of effects in the regression model was rendered moot.

Table 5

*Multiple Linear Regression of Classroom Management onto the Predictor Variables*

Variable	<i>B</i>	<i>SE(B)</i>	<i>p</i>
Constant	31.335	1.679	0.000
Age of Respondent	0.020	0.028	0.475
Gender of Respondent	-1.895	0.758	0.013
Race/ Ethnicity of Respondent (1=White)	-0.118	0.902	0.896
Highest Level of Education of Respondent	-0.250	0.496	0.615
School Status	-0.005	0.717	0.994
<i>N</i>	162		
<i>F</i>	1.592		0.165
<i>R</i> <sup>2</sup>	0.049		

**Instructional Strategies Efficacy.** Table 6 presents the results of the multiple linear regression of instructional strategies self-efficacy onto the several independent predictors. As before, the first parameter of interest was the Omnibus *F*-Test, which is a global test of model coefficients. The Omnibus *F*-Test was statistically nonsignificant ( $F = 2.114$ ,  $df = 5, 156$ ;  $p = 0.067$ ). Thus, decomposition of effects within the regression model is rendered moot.

Table 6

*Multiple Linear Regression of Instructional Strategies onto the Predictor Variables*

Variable	<i>B</i>	<i>SE(B)</i>	<i>p</i>
Constant	27.132	1.544	0.000
Age of Respondent	0.039	0.026	0.131
Gender of Respondent	-1.112	0.697	0.112
Race/ Ethnicity of Respondent (1=White)	0.847	0.830	0.309
Highest Level of Education of Respondent	0.740	0.456	0.106
School Status	-0.293	0.659	0.657
<i>N</i>	162		
<i>F</i>	2.114		0.067
<i>R</i> <sup>2</sup>	0.063		

A statistically significant relationship emerged between school status and student engagement self-efficacy. Research Question 5 received partial support, but only as it relates to student engagement self-efficacy. Thus, the researcher rejected Null Hypothesis 5. No other statistically significant relationships emerged in the data. Thus, there is no support for Research Questions 1, 2, 3, or 4.

### Summary

The findings indicated that student engagement is higher for elementary teachers compared to secondary education teachers. Research Question 5 is the only research question to receive support from the data. The negative coefficient associated with school status suggests being in a secondary school setting will decrease the respondent's student engagement self-efficacy.

## **CHAPTER FIVE: CONCLUSIONS**

### **Overview**

A gap is apparent in current research regarding the relationship of teacher efficacy to gender, age, ethnicity, educational levels, and school status among Christian private school teachers. As a result of greater self-efficacy, “students’ learning outcomes become more positive and teachers have a more positive attitude toward teaching” (Guskey, 1984, p. 253). The results of the current study indicated that being in an elementary school setting increases teacher efficacy but that being in a secondary school setting decreases student engagement teacher efficacy.

### **Discussion**

The purpose of this correlational study was to investigate if the variables of gender, age, ethnicity, educational level, and school status predict Christian private school teachers’ efficacy. An insufficient amount of literature exists with respect to how to reduce poor levels of self-efficacy to support teacher retention (Shaukat & Muhammad-Iqbal, 2012). As a result, very little literature examines how to diminish teacher dissatisfaction and commensurately increase retention among instructors in private Christian schools (Shaukat & Muhammad-Iqbal, 2012). Thus, this chapter documents the need for research in private, Christian schools.

This study used the TSES to quantitatively examine if classroom management, student engagement, or instructional strategies help researchers gain a better understanding of the situations that create difficulties for teachers in school environments. Tschannen-Moran and Woolfolk Hoy (2001) developed the OSTES using a factor analysis with implementation of Rand items along with Gibson and Dembo’s Teacher Efficacy Scale. The researchers preferred this instrument to be relabeled, as the TSES. I used the TSES to gather data to answer the



following research question: What is the relationship between the three measured factors of teacher efficacy and gender, age, ethnicity, educational level, and school status?

A quantitative correlational research design was appropriate in the current analysis scenario, as it allowed me to determine if one or more predictor variables correlated to a change in one or more criterion variables (Gall et al., 2007). The criterion variable for the current study was teacher efficacy scores reported by the TSES, and the predictor variables were gender, age, ethnicity, educational level, and school status.

### **Null Hypothesis 1**

For null hypothesis 1, no significant relationship emerged between gender and the three measured factors of teacher efficacy. This finding contrasts with the work of Nejati et. al. (2014) who investigated the relationship between gender and the subscales of self-efficacy of Iranian teachers. The outcomes of the research showed that “males and females do not differ as far as classroom management is considered. However, they differed in terms of student engagement and instructional strategies” (Nejati et al., 2014, p. 1222). The researchers’ results indicated that a teacher with a strong sense of efficacy did all things needed for a learner to be successful. Women in the Iranian education system follow the traditional principles of education and do not sense the desire to engage students. The study displayed that men engage learners in learning and allow them to express themselves because men are more confident than women. The statistical analysis concluded that the values of tests for the independent variable, of gender, was 29.642; therefore, “there is statistically significant difference between male and female teachers in terms of student engagement, instructional strategies, and classroom management” (Nejati et al., 2014, p. 1221). In the present study, I found no significant relationship between gender and the three measured factors of teacher efficacy.

**Null Hypothesis 2**

For null hypothesis 2, no significant relationship emerged between age and the three measured factors of teacher efficacy. Bullock et al. (2015) noted that educators older in age reported higher levels of self-efficacy with classroom management, an outcome that is consistent with the findings from a study conducted by Klassen and Chiu (2010). In contrast, teachers early in their careers enhance their self-efficacy through vicarious experiences and verbal persuasion tactics. The researchers' results indicated evidence of classroom management self-efficacy for those with greater years of teaching experience. The statistical analysis concluded that classroom management efficacy was significantly and positively related to age and years of teaching experience. Teachers of higher age throughout this profession tend to actively use their skills to manage students and successively improve their teacher efficacy through mastery experiences that influences teacher self-efficacy (Wolters & Daugherty, 2007). In the present study, a significant relationship did not rise for age and the three measured factors of teacher efficacy.

**Null Hypothesis 3**

For null hypothesis 3, no significant relationship emerged between ethnicity and the three measured factors of teacher efficacy. Haverback and Parault (2011) noted that teachers of Caucasian, African American, and Hispanic ethnicity worked in the field of education to better support their efficacy. The researchers concluded that "Field experiences can offer teachers an opportunity to work with students, and research found that the experiences impact teacher efficacy in a number of nations" (Haverback & Parault, 2011, p. 703). Bandura's theory regarding mastery experience is quite influential as a way to create high self-efficacy. In order to do so, vicarious learning must be present for efficacy to increase. The results of this study

encouraged teachers of various ethnicities to create vicarious experiences to help gain teacher efficacy.

#### **Null Hypothesis 4**

For null hypothesis 4, no significant relationship emerged between educational level and the three measured factors of teacher efficacy. This result lies at odds with the work of Shoulders and Krei (2015), as they found a significant difference between the different levels of education and efficacy in instructional practices and classroom management. The researchers' results showed a significance level, concluding that those with higher degrees are more efficacious in instructional practices and classroom management compared to those with a Bachelor's degree. In many cases this efficacy is a result of professional development or coursework offered during a field of study. The present statistical analysis revealed that the teachers assessed did not differ in what they employed in the classroom. In the present study, a significant relationship did not arise between educational level and the three measured factors of efficacy.

#### **Null Hypothesis 5**

A statistically significant relationship emerged between school status and student engagement self-efficacy. Thus, there was partial support for Research Question 5, but only as it relates to student engagement self-efficacy. This finding is similar to that of Varghese et al. (2016), who summarized that a teachers' heightened sense of self-efficacy in engaging students often drives the quality of their instruction across content areas. As Varghese et al. (2016) noted, "Teachers' increased confidence in their abilities to engage students may reflect greater attunement to students' levels of engagement with classroom activities" (p. 230). Based on the work of Klassen and Chiu (2010) teachers working in the elementary school setting averaged 21% more student engagement which increased self-efficacy. Statistical analysis from the

Klassen and Chiu (2010) study had averaged means of .96 which indicated an occupational commitment. This type of commitment influences a teacher's decision to stay in the profession due to self-efficacy and the motivational and contextual factors that vary throughout one's career (Klassen & Chiu, 2010).

The results of the study confirmed that school status is an important motivator for Christian private school teachers when choosing to teach at the elementary level or secondary level in education. This decision is an important predictor of a teacher's job satisfaction, particularly with regard to their interactions with students in engagement, instructional practices, or classroom management matters. The results also show that teachers display a level of comfort in their choice of school level and the environment contributes to a higher level of job satisfaction. The findings replicate those from previous research that showed the importance of intrinsic factors more than extrinsic factors as conditions for the job satisfaction of Christian private school teachers.

### **Implications**

Additional professional development is needed to identify the relationship between instructional strategies and teacher efficacy (Perry & Steck, 2015). Using instructional strategies in the classroom requires instructors to provide students with critical-thinking skills to navigate engagement in meaningful ways. This implication is in agreement with De Neve, Devos, and Tuytens (2015) who stated in order to improve the professional learning of teachers, teachers need to engage in instructional conversations with colleagues to share knowledge and best practices on educational approaches. It has been found that teachers who have an educator with whom they can share learning opportunities to fit various student needs find it much easier to differentiate the lesson content and activities in the classroom (Pettig, 2000).

To be considered an effective manager in the classroom, teachers must establish effective systems and routines. Classroom management involves developing positive reinforcement despite disruptive behavior (Emmer & Hickman, 1991). This need may indicate other factors that influence teachers' confidence in their abilities to manage the classroom and their actions. Additional training and support systems to build effective classroom management structures (Dicke et al., 2014).

Because the present study did find a statistically significant relationship between school status and student engagement, it may be the case that Christian private school teachers need professional development. Since some of the research focused on predictor variables, professional development could focus on ways to improve abilities for instructional strategies and classroom management. Regardless of the experience one has in student engagement, I recommend professional development to enhance classroom management skills and instructional strategies.

### **Limitations**

The study had several known limitations. First, the study's sample and size ( $n = 171$ ) was a limitation. I invited elementary and secondary teachers from four Christian private school districts in a small region of northeast Florida to participate. The relatively small sample size drawn from a large population introduces the possibility that the sample is not a true representation of the total population of teachers in private, Christian schools. The sample was created by selecting schools in northeast Florida and the participants were volunteers. Many private schools did not have interest in participating in the study. Identifying target locations and securing the schools took months to complete. Participants answered the pertinent questions but did not thoroughly complete each question in the survey. The sample was not very diverse; most

were female (73.21%) and white (85.7%). A final limitation was the response rate to the electronic survey which will provide direction for future research. Also, this study only targeted schools in northeast Florida that were labeled as Christian private schools. Parochial schools were not included in the research.

### **Recommendations for Future Research**

Replicate the study with Christian private school teachers from a different sample including a larger region. This would enable researchers to determine the stability of the results across different areas. Particularly helpful would be a national study using a random sample of teachers stratified by different regions of the country.

Future researchers should develop a study that includes types of professional development to enhance the self-efficacy of various stages in the career of a Christian private school educator.

Implementing a form of field observation to help determine if the approach identifies the strengths or weaknesses of instructional practices that have been implemented. This type of instructional practice may enhance the level of confidence for all teachers.

### **Summary**

This chapter provided an overall examination of the hypothesis generated and the factors that influence efficacy. The chapter provided clarity to enable the reader to better understand that a statistically significant relationship emerged between school status and student engagement self-efficacy. This chapter documented the need for additional research in private, Christian schools.

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**APPENDIX A: PREDICTIVE VARIABLES INSTRUMENT  
AND TEACHERS' SENSE OF EFFICACY SCALE (SHORT FORM)**

THE SCALE HAS BEEN REMOVED DUE TO COPYRIGHT.

**APPENDIX B: E-MAIL LETTER**

[Insert Date]

[Recipient]

[Title]

[Company]

[Address 1]

[Address 2]

[Address 3]

Dear [Recipient]:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is “The Impact of Student Engagement, Instructional Strategies, and Classroom Management on Self-Efficacy of Private Christian School Teachers” and the purpose of my research is to determine the relationship between efficacy in student engagement, classroom management, and instructional strategies and a linear combination of gender, age, ethnicity, professional qualifications, and school status for private Christian teachers. I am writing to invite you to participate in my study.

If you are between the ages of 18 and 65 years of age, a certified teacher of either elementary or secondary schools, and employed at a private Christian school, you will be asked to answer a total of 9 questions using a Likert scale. It should take approximately 5-10 minutes for you to complete the procedure[s] listed.

Names will not be requested on the survey, but participants willing to participate in a raffle for a **\$200 Visa gift card** will need to send a separate “please enter me in the raffle” email to the researcher.

To participate, click on the link provided. Please review the consent document and complete the linked survey.

<https://www.surveymonkey.com/r/VBDBGX6>

A consent document is provided once you click on the survey link. 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.

Sincerely,

Monica F. Cason

## APPENDIX C: PERMISSION TO USE INSTRUMENT

 **Monica Cason** <monicafcason@gmail.com> 9/23/15 ☆    
to Hoy.17 ▾

Good evening Dr. Hoy. My name is Monica Cason and I am a graduate student at Liberty University. I am beginning my dissertation and research and would like to ask if the following attachment provides me with complete permission to use your Teacher Self-Efficacy Scale (TSES) testing instrument. I was able to locate your scale, scoring directions as well as permission letter from the following site:

<http://anitawoolfolkoy.com/instruments/>

On your site, I did not see any limitations or restrictions for using the instrument. If there is additional information that I should research, please let me know. Also, I did not see where there was a charge or an area to purchase the instrument.

Thank you again and I am looking forward to hearing from you.

Warm Regards,

...

**APPENDIX D: INSTITUTIONAL REVIEW BOARD APPROVAL**

July 5, 2017

Monica F. Cason

IRB Exemption 2843.070517: The Impact of Student Engagement, Instructional Strategies, and Classroom Management on Self-Efficacy of Private Christian School Teachers

Dear Monica F. Cason,

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

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

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:

(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

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

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

Sincerely,

*Administrative Chair of Institutional Research*  
**The Graduate School**

**LIBERTY**  
UNIVERSITY.

*Liberty University | Training Champions for Christ since 1971*

## APPENDIX E: CONSENT FORM

*The Impact of Student Engagement, Instructional Strategies, and Classroom Management  
on Self-Efficacy of Private Christian School Teachers*

*Monica F. Cason*

*Liberty University*

*School of Education*

You are invited to be in a research study of factors that affect private Christian teacher instruction. You were selected as a possible participant because you teach either elementary or secondary students in a private Christian school. I ask that you read this form and ask any questions you may have before agreeing to be in the study. Monica F. Cason, 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 the relationship between efficacy in student engagement, classroom management, and instructional strategies and a linear combination of gender, age, ethnicity, professional qualifications, and school status for private Christian teachers.

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

1.) Complete an anonymous, 10-15 minute survey

**Risks and Benefits of being in the Study:** The risks involved in this study will be minimal. The risks are no more than the participant would encounter in everyday life. Participants should not expect to receive a direct benefit by participating in this study.

**Compensation:** A raffle will take place, and one participant will have the opportunity to win a \$200 Visa gift card for taking part in this study.



**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.

The data will be downloaded into an Excel file, and the researcher will enter the information from the questionnaire into SPSS so that the data can be analyzed and interpreted. Throughout the research process, all participants will remain anonymous. In addition, the data collected will not disclose identities, and the researcher will not be able to tell to whom the data belongs.

**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, Trinity Christian Academy, Providence School of Jacksonville, or Lighthouse Christian School. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

**Contacts and Questions:** The researcher conducting this study is Monica F. Cason. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at mcason4@liberty.edu. You may also contact the researcher's faculty advisor, Dr. Andrea Beam, at abeam@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Green Hall Suite 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

*Please notify the researcher if you would like a copy of this information to keep for your records.*

**Statement of Consent:** I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

---

Signature

Date

---

Signature of Investigator

Date

## APPENDIX F: COMMUNICATION LOG

Name of contact	School Location	Email	Phone	Discussion
Jim McKenzie	The Rock School		6/28/2017	Purpose of Research; requested more info by
			6/29/2017	Follow up email by request
			7/10/2017	Received written approval
Tim Anderson	Providence Upper School		5/11/2017	Follow up email with survey link for
			5/31/2017	Purpose of Research; requested more info by email
			7/10/2017	Follow up email by request
Deshawn Mills	Providence Lower		6/3/2017	Received written approval
				Follow up email with survey link for
Heath Nivens	University Christian		5/10/2017	Purpose of Research; requested more info by
			5/19/2017	Follow up email by request
			7/10/2017	Received written approval
Rick Spain	First Coast Christian		5/8/2017	Follow up email with survey link for
			5/9/2017	Purpose of Research; requested more info by
			7/10/2017	Follow up email by request
				Received written approval
				Follow up email with survey link for

**APPENDIX G: PARTICIPANT LETTER FOR ADMINISTRATION**

[Insert Date]

[Recipient]

[Title]

[Company]

[Address 1]

[Address 2]

[Address 3]

Dear [Recipient]:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is “The Impact of Student Engagement, Instructional Strategies, and Classroom Management on Self-Efficacy of Private Christian School Teachers” and the purpose of my research is to determine the relationship between efficacy in student engagement, instructional strategies, and classroom management and a linear combination of gender, age, ethnicity, professional qualifications, and school status for private Christian teachers.

I am writing to request your permission to contact members of your staff to invite them to participate in my research study. Participants will be asked to click on the link provided and complete the attached survey. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, respond by email to [mcason4@liberty.edu](mailto:mcason4@liberty.edu).

Sincerely,

Monica F. Cason

**APPENDIX H: THANK YOU EMAIL**

Thank you for participating on the online questionnaire. The information you provided will remain anonymous. If you would like to be entered into a raffle to win a \$200 Visa gift card, please send an email with the subject line “please enter me in the raffle” to [mcason4@liberty.edu](mailto:mcason4@liberty.edu).

Thank you again,

Monica F. Cason