EFFECT OF PERCEIVED SELF-EFFICACY AND CERTIFICATION ON

TEACHERS OF STUDENTS WITH EMOTIONAL DISABILITIES

EXHIBITING BEHAVIORS

by

Maisha Evonne Williams

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

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ABSTRACT

Teacher efficacy is a motivational construct that suggests teachers' beliefs in their perceived efficacy affects the learning environments they create and the academic achievement of their students. Perceived self-efficacy affects the effort and persistence teachers exude during obstacles, such as when students exhibit challenging behaviors, regardless if the teacher is alternatively or traditionally certified. The purpose of this causal-comparative study was to test the construct of self-efficacy grounded in the social cognitive theory and compare a teachers' route to licensure (traditional or alternative) to perceived self-efficacy for special education teachers (SETs) of students with emotional disabilities exhibiting challenging behaviors. A convenience sample of SETs at a regional program in southeastern United States was surveyed using the long form of the Teachers' Sense of Efficacy Scale (TSES). Data from 45 surveys were analyzed using a multivariate analysis of variance and independent samples t test. Results of the study indicated there is no significant difference in the perceived self-efficacy among traditionally and alternatively certified SETs of students with emotional disabilities exhibiting challenging behaviors. School administrators must continue to find ways to support special education teachers through mentoring, trainings, and professional development. Recommendations include research to determine if professional development leads to increased perceived self-efficacy.

Keywords: perceived self-efficacy, alternative settings, students with disabilities, alternative certification, challenging behaviors, teacher shortage, emotional disability

Dedication

My greatest joy in life was becoming a mother and I would like to dedicate my work to my two daughters, Signe and Sanaii. Signe you have been my motivation and inspiration from the beginning of this journey. Sanaii you were my blessing that came along and helped me realize how strong I really am. It is my hope that both of you live your lives to the fullest and achieve all of your dreams. It is my expectation that you strive for excellence in all things that you pursue. Thank you both for your patience and unconditional love.

To my mother, Margaret Esther Williams, thank you for instilling the importance of education in me. We laugh now about how you made us complete schoolwork daily before we could go outside and play during the summer. We knew you would check it for accuracy so it had to be right. I never imagined that I would become an educator, but God had a plan. You have been my biggest cheerleader throughout this process. Thank you for watching the girls when I needed to get work done. I am grateful for all the prayers and support you gave me through this process.

I would like to thank my family for their love and support. To my father, Dock Louis Williams, this is for you. Thank you for being a provider and always there for me. Della, I hope you have been inspired. If you decide to start this journey, you must complete it. Kiana, thank you for the encouragement. Stay the course. Your graduation should be next. Steven, thank you for your support and remember it is never too late to start.

To my at work family, thank you all for your motivation, support, and love. You all prayed for me and encouraged me throughout my journey. I am grateful to supervise one of the best team of teachers in education. Thank you all for being "Leaders."

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I would like to give praise and glory to my Lord and Savior Jesus Christ. He has led me through this process with grace and humility. Through him, all things are possible.

I would like to thank Dr. Kimberly Lester for her wisdom and support during this process. I could not have done this without her. Thank you Dr. Shawntrice Thomas for your support and expertise.

Lastly, I would like to acknowledge Dr. Joan Fitzpatrick who passed away shortly after agreeing to be on my committee. Although saddened by the loss, I am forever grateful for her willingness to share her knowledge and expertise with me.

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Emotional and Behavioral Disorder (EBD)

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Individuals with Disabilities Act (IDEA)

Personal Teacher Efficacy (PTE)

Special Education Teacher (SET)

Southeastern Alternative Program (SAP)

Students with Disabilities (SWDs)

Teacher Efficacy Scale (TES)

Teachers' Sense of Efficacy Scale (TSES)

CHAPTER ONE: INTRODUCTION

Overview

Self-efficacy has been widely researched in the field of education and influences student achievement and behavior. Research extending over the past 40 years demonstrates that teachers' self-efficacy is related to academic success. While teacher certification is an indicator of teacher quality, it is not necessarily an indicator of teacher effectiveness. A part of teacher effectiveness is influenced by perceived self-efficacy. Teachers with high perceived self-efficacy have confidence in their ability to promote student learning and believe their actions will have a positive effect on student performance.

Background

Teacher shortage is an educational problem and topic of discussion resonating throughout the United States. Media reports claim there is a shortage of teachers qualified to educate children in this country (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). Every year as students head back to school, thousands of teacher positions are left unfilled confirming that school districts are finding it difficult to fill teacher vacancies with qualified staff (Goldhaber, Krieg, Theobald, & Brown, 2015). Special education has experienced teacher shortages since the initiation of the Education for All Handicapped Children's Act passed in 1975 (Brownell, Sindelar, Bishop, Langley, & Seo, 2002). According to the National Center for Education Statistics (2017) there were 6.6 million students receiving special education services during the 2014-2015 school year. The shortage of SETs has left many school districts no alternative but to hire alternatively trained teachers who have not completed a traditional special education teacher preparation program to fill special education positions (Sutcher et al., 2016).

As the concern about filling vacant teacher positions continues to grow, more focus has been placed on helping principals identify and hire effective teachers (Cannata et al., 2017). Research suggests teacher self-efficacy may have an influence on teacher effectiveness (Page, Pendergraft, & Wilson, 2014; Yoo, 2016). Perceived self-efficacy is the degree to which people believe they are capable of performing behaviors in order to attain certain goals (Bandura, 1977). It is a person's ability to judge how they will react to a given situation or how they might influence the outcome of the situation (Page et al., 2014). Gavora (2010) reported that teacher self-efficacy is the teacher's belief in their abilities to effectively plan lessons and achieve instructional goals. Teachers with high perceived self-efficacy are able to demonstrate the use of their professional knowledge and skills to bring about desired student learning outcomes (Gavora, 2010).

Teachers' sense of efficacy is positively related to teaching behavior and positive student achievement outcomes, even for difficult and unmotivated students (Armor et al., 1976; Bandura, 1977; Gibson & Dembo, 1984). Students with emotional disabilities exhibiting challenging behaviors can be disruptive to the learning environment and difficult to manage. SETs who work with these students must be equipped with the skills and knowledge to remediate challenging behaviors. Challenging behavior is repeated behavior that is harmful to the child, other children, or adults and interferes with the child's optimal learning and success, placing them at higher risk for social problems (Powell, Fixsen, Dunlap, Smith, & Fox, 2007). Examples of challenging behaviors include persistent noncompliance, the inability to form relationships with adults or peers, difficulty engaging in learning, and difficulty regulating emotions.

Historical Context

The idea of defining perceived self-efficacy and creating a reliable tool to measure it dates back to the early 1970s (Page et al., 2014; Tschannen-Moran & Hoy, 2001). Bandura (1997) posited perceived self-efficacy as the ability of a person to judge how they will react to a certain situation and the influence they have on the outcome of a matter in his social learning theory. It is the belief about one's own capabilities to organize and execute a certain task with mastery and is dependent on previous experiences, environment, and training (Grusec, 1992; Page et al., 2014). Perceived self-efficacy exists in many areas of human functioning and includes professional behavior. In the educational context, perceived self-efficacy exists as teacher self-efficacy and has been researched for over 25 years (Gavora, 2010).

Researchers have spent considerable time defining teacher efficacy and trying to find ways to quantify the construct (Tschannen-Moran & Hoy, 2001). The Teacher Efficacy Scale (TES) developed by Gibson and Dembo (1984) was once considered the "standard" tool for measuring teacher-self efficacy and has been used in many studies and school environments (Gavora, 2010). According to Gavora (2010), the TES was used to measure personal teaching efficacy (PTE) and general teaching efficacy (GTE). A teacher's sense of their own overall teaching effectiveness is measured by PTE and a teacher's belief that teaching can positively affect their students regardless of their motivation or other external factors is GTE (Gavora, 2010). The TES has been used to help researchers investigate teacher self-efficacy in terms of its impact on achievement, behavior, and attitudes (Gibson & Dembo, 1984; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998).

A new measure of teacher efficacy, the TSES, has since been developed and used to identify teacher needs and areas of difficulty (Tschannen-Moran & Woolfolk Hoy, 2001). This

new measure encompasses a broader range of tasks that support good teaching in instructional strategies, student engagement, and classroom management (Tschannen-Moran & Woolfolk Hoy, 2001). Tschannen-Moran and Woolfolk Hoy (2001) reported this measure of teacher efficacy "has 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 across contexts, levels, and subjects" (p. 802). The TSES is a constructive tool that allows the efficacy beliefs of a teacher to be measured over the course of their career (Tschannen-Moran & Woolfolk Hoy, 2001).

Social Context

Critical shortages in special education still persist since SETs continue to have the highest rate of turnover in the teaching profession (Robertson & Singleton, 2010). Teachers in special education who work with children with disabilities often experience teacher stress and burnout (Boe et al., 2013; Gebbie, Ceglowski, Taylor, & Miels, 2012) and leave the teaching profession within three to five years (Boe et al., 2013). Teachers of students with emotional disabilities have the highest attrition rates (Prather-Jones, 2010; Pullis 1992) and shorter careers than other SETs (Prather-Jones, 2010; Singer, 1993). The quality of education received by students with disabilities (SWDs) is affected by the shortage of SETs and high attrition rates in the teaching profession (Billingsley, 2004a). For this reason, SETs with a commitment to the profession must be recruited as opposed to hiring people just seeking employment (Billingsley, 2004a).

Research shows a positive relation between teachers' sense of efficacy and their commitment to continuing in the teaching profession (Allinder, 1994; Guskey, 1984). The greater a person's perceived self-efficacy, the more likely that person will successfully achieve

the goals that they set (Schwarzer & Hallum, 2008). When challenging behaviors are presented in the classroom, teachers must address these problems, which can take precedence over the planned academic lesson resulting in less instruction for students. Having less time to teach can make teachers doubt their teaching abilities, making them less confident in their ability to plan and deliver academic instruction to students (Sutherland, Kenton, & Gunter, 2005).

Teachers who are not able to meet the academic demands of their students often develop a low sense of efficacy (Bandura, 1993). Contrastingly, teachers with high perceived self-efficacy believe in their capacity to control their own behavior and situations to produce desired outcomes and are not threatened by the demands of teaching (Schwarzer & Hallum, 2008). This is significantly important for SETs working with students exhibiting challenging behaviors because these students often demonstrate inappropriate, disruptive, off-task, antisocial behaviors three times more than their typically developing peers (Dunlap et al., 2006; Gebbie et al., 2012). For example, Dunlap et al. (2006) described tantrums as typical behavior in early childhood but viewed tantrums as a challenging behavior for elementary students. When compared with students in other disability categories, students exhibiting challenging behaviors have poorer academic outcomes and higher dropout rates (Gebbie et al., 2012). Bowman-Perrott et al. (2011) found that students with emotional or behavioral disorders (EBD) are excluded for disciplinary reasons far more often than their peers are in general education even though disciplinary exclusion has not been found to improve problem behavior. These students are often disenfranchised from the traditional educational system and placed in alternative settings.

Theoretical Context

The theory of teacher self-efficacy is grounded between Rotter's (1966) attribution-based theory of locus of control and Bandura's (1977) social cognitive theory. Both theories focus on

human agency, the idea that individuals have the ability to control or intentionally influence the actions affecting their lives (Bandura, 1997; Zee & Koomen, 2016). Rotter (1966) posited locus of control as an individual's belief system regarding the control over the outcome of events in their lives. Zee and Koomen (2016) stated that, "Locus of control is conceptualized as a generalized expectancy for control of reinforcement that individuals develop in relation to their environment" (p. 983). Individuals with internal control believe they influence their own actions and outcomes, as opposed to individuals with external control who believe outside forces such as fate and luck affect their outcomes (Zee & Koomen, 2016). Rotter's theory of locus of control has been used in many studies and was used by Rand researchers to first measure teacher perceived self-efficacy in the 1970s (Tschannen-Moran & Woolfolk Hoy, 2001).

Almost one year after the efforts of Rand researchers to measure teacher self-efficacy, Bandura (1977) began to argue that a person's behavior was influenced by generalized expectancies for control and perceived self-efficacy (Zee & Koomen, 2016). Bandura distinguished response-outcome expectancies, viewed as equivalent to Rotter's (1966) construct, and perceived self-efficacy expectations by going beyond environmental causes (Zee & Koomen, 2016). Bandura argued that knowing certain experiences and events lead to favorable outcomes becomes useless when the individual does not believe they can produce the desirable action (Zee & Koomen, 2016). In his studies, Bandura posited that perceived self-efficacy beliefs are the most important basis for human behavior, and influences emotions and persistence when faced with adversity.

Problem Statement

The National Association for Alternative Certification (2015) suggested that alternative routes to certification are meeting the nation's teaching needs and decreasing teacher shortages

by permitting college graduates to delay formal educational training to begin teaching immediately. Unlike traditional teacher licensure programs, critics argue that alternative routes to certification do not allow teachers to learn best practices or give them the opportunity to apply theory in the classroom setting before working with students (Billingsley, 2004a). Contrastingly, little to no differences in the performance and quality of alternatively certified and traditionally certified teachers have been reported by proponents (Shuls & Trivitt, 2015; Zeichner & Schulte, 2001).

Nationally there is a shortage of teachers of students with EBD (Gage, Adamson, MacSuga-Gage, & Lewis, 2017). As a result, teachers who instruct students with emotional disabilities are more likely alternatively certified and less experienced compared to teachers of students with other disabilities (Gage et al., 2017). Billingsley, Fall, and Williams (2006) found teachers of students with EBD had less teaching experience and were less likely to be fully certified than other SETs. Henderson, Klein, Gonzalez, and Bradley (2005) found that twice as many EBD teachers received their teaching credentials through alternative certification programs compared to other special educators. These SETs encounter significant obstacles in the classroom and are often met by students who have lower academic achievement scores compared to their nondisabled peers (Gage et al., 2017). Limited research and theory are available to guide and support teachers of students with emotional disabilities due to the lack of tolerance and support for this group of students (Nikolaros, 2015). As a result, these teachers do not have information on best practices that work for these students that could remediate deficits (Nikolaros, 2015).

Although there is considerable research on instructional practices, student achievement, and classroom management, the question remains why some teachers are effective and able to

experience success in the classroom by increasing student achievement outcomes while others

cannot meet teaching expectations (Schawarzer & Hallum, 2008). Perceived self-efficacy is one

reason identified by researchers and pertains to one's perceived competence to deal with

challenges through adversity (Schawarzer & Hallum, 2008). People construct beliefs about their

ability to perform at a given level, which influences how much effort they will put forth while

facing obstacles (Bandura, 2012). Teachers with high perceived self-efficacy set higher goals for

themselves and persist longer in trying to achieve those goals (Schawarzer & Hallum, 2008).

Many questions remain about the preparedness of alternatively certified teachers and

their actual teaching effectiveness (Gage et al., 2017). This study will help bridge the gap

between research on the perceived self-efficacy of SETs working with students with emotional

disabilities exhibiting challenging behaviors and teacher certification (traditional or alternative).

The debate continues about whether certification affects self-efficacy. Several studies have

found that certification has no influence on self-efficacy (Fox & Peters, 2013; Rocca &

Washburn, 2006). The problem is that inexperienced and alternatively certified SETs may not

have the perceived self-efficacy to meet effectively the needs of students with emotional

disabilities exhibiting challenging behaviors.

Purpose Statement

The purpose of this causal-comparative study was to determine if the perceived self-

efficacy of SETs working with students with emotional disabilities exhibiting challenging

behaviors is influenced by certification (traditional or alternative). This study tested Bandura's

social cognitive theory of self-efficacy and compared teachers' route to licensure (traditional or

alternative), the independent variable, to perceived self-efficacy, the dependent variable, for

SETs of students with emotional disabilities exhibiting challenging behaviors at alternative

schools in southeastern Virginia. Participants in the study included a convenience sample of 45

alternatively and traditionally certified SETs employed at alternative schools servicing students

with and without disabilities in southeastern Virginia.

Alternative routes to certification or licensure broadly describe any preparation program

other than a traditional, undergraduate degree-granting program leading to certification. The

traditional route to licensure typically requires candidates to successfully complete a university-

based teacher preparation program that meets state specifications and pass a licensure

examination, such as the nationally administered Praxis. The dependent variable of perceived

self-efficacy was defined as judgements of how well one can produce designated levels of

actions that influence events affecting their lives (Bandura, 1982). Data for this analysis were

collected using the long form of the TSES survey developed by Tschannen-Moran and Woolfolk

Hoy (2001).

Significance of the Study

Researchers have empirically connected teacher self-efficacy to student achievement

(Zee & Koomen, 2016). For school leaders interested in increasing student achievement for

students with emotional disabilities exhibiting challenging behaviors, understanding the

implications of perceived self-efficacy is essential. Teachers with a positive teacher efficacy

believe in their ability to teach students regardless of their students' abilities and family

background (Bandura, 1993) and take more innovative and creative approaches to teaching

(Tschannen-Moran & Woolfolk Hoy, 2001). The research literature acknowledges that we are

still in need of understanding how teacher certification affects the academic outcomes of students

with emotional and behavioral disorders (Gage et al., 2017), and how the route to teacher

certification affect teachers' sense of efficacy (Flores, Desjean-Perrotta, & Steinmetz, 2004).

This study will also expand the literature regarding the perceived self-efficacy of alternatively certified teachers hired to address the problem of teacher shortage because sparse research has been conducted surrounding the teacher efficacy of these candidates (Flores et al., 2004). It will also bring awareness about teacher efficacy to principals who supervise SETs working with students with emotional disabilities exhibiting challenging behaviors. Principals can then provide additional training in behavior management, social skills training, and instruction to support teachers working with this population of students to help increase teacher efficacy (Klassen & Tze, 2014).

Research Question

RQ1: Is there a significant difference in perceived self-efficacy between traditionally and alternatively certified SETs of students with emotional disabilities exhibiting challenging behaviors as measured by the long form of the Teachers' Sense of Efficacy Scale (TSES)?

Definitions

The following definitions are important to the understanding of this study.

1. *Alternative route to certification or licensure* – In common usage, an alternative route to certification or licensure broadly describes any preparation program other than a traditional undergraduate degree-granting program leading to certification (National Association for Alternative Certification, 2015).

2. *Alternative programs* – Alternative programs are designed to address the needs of students typically at risk of failure and are usually housed in regular schools.

3. *Alternative school* – Schools designed to address the needs of students typically at risk of failure, usually located in separate facilities where students are removed from regular schools.

4. *Challenging behavior* – Challenging behavior is any repeated pattern of behavior or perception of behavior that interferes with or is at risk of interfering with optimal learning or engagement in prosocial interactions with peers and adults (Powell et al., 2007, p. 83).

5. *Efficacy expectation* – Efficacy expectation is the belief that one has the skills and abilities to execute the actions required to produce the desired outcome (Bandura, 1977).

6. *Generality of self-efficacy* – The generality of self-efficacy is the degree to which a task can be applied or generalized across multiple situations (Bandura, 1977).

7. *General teacher efficacy* – General teacher efficacy is the belief that the reinforcement of student learning is external and out of the teacher's control (Tschannen-Moran et al., 1998).

8. *Highly qualified* – Highly qualified means that a teacher is certified and has demonstrated proficiency in the subject matter her or she teaches (Flores et al., 2004).

9. *Locus of control* – Locus of control is defined as the extent that individuals believe they can control events affecting them (Gibson & Dembo, 1984).

10. *Personal teacher efficacy* – Personal teacher efficacy is a teacher's belief in his or her internal capability to possess the skills to facilitate student learning (Tschannen-Moran et al., 1998).

11. *Outcome expectancy* – Outcome expectancy is the belief that an action will lead to an expected outcome (Bandura, 1977).

12. *Perceived self-efficacy* – Perceived self-efficacy is concerned with judgements of how well one can execute courses of action required to deal with prospective situations (Bandura, 1982, p. 122).

13. *Self-efficacy* – Self-efficacy is the degree to which people believe they are capable of performing behaviors in order to attain certain goals; it is one's belief in their ability to accomplish a goal (Bandura, 1977).

14. *Shortage* – Shortage is the inability to staff vacancies at current wages with individuals qualified to teach in the fields needed (Sutcher et al., 2016).

15. *Specially designed instruction* – Specially designed instruction means teachers appropriately adapt the content, methodology, and delivery of instruction to meet the needs of the child (Virginia Department of Education, 2016b).

16. *Teacher efficacy* – Teacher efficacy is the teacher's perception of his or her ability to have a positive impact on the management of a child's behavior (Gebbie et al., 2012).

CHAPTER TWO: LITERATURE REVIEW

Overview

SETs are faced with many challenges in the classroom and must be able to persevere. The review of the literature suggests that the effectiveness of the teacher highly depends on the teacher's perception of his or her ability to manage behavior and produce positive learning outcomes for students. Teacher efficacy affects student achievement and motivation and is characteristic of effective teachers. Following the theoretical framework, this literature review presents the findings of studies investigating self-efficacy, students with emotional disabilities, effectiveness of traditionally and alternatively certified teachers, and alternative schools and programs.

Theoretical Framework

The first studies on teacher efficacy were conducted in 1976 by researchers at the Rand Corporation who published a study examining the success of various reading programs and interventions (Armor et al., 1976; Gavora, 2010; Tschannen-Moran et al., 1998; Yoo, 2016). Rand researchers found that teachers who believed the external environment affected a teacher's ability to have an influence on student learning believed the reinforcement of their teaching was external and out of their control (Tschannen-Moran et al., 1998). Teacher's beliefs about the power of these external factors compared to the teacher's influence has since been termed *general teaching efficacy* (Gavora, 2010; Moseley & Taylor, 2011). External factors affecting GTE include low motivation or poor home environments for students (Gavora, 2010). Teachers who were confident about their abilities to teach unmotivated students expressed a belief that the reinforcement of teaching activities was within the teachers' control or was internal (Tschannen-Moran et al., 1998). Termed personal teaching efficacy (PTE), this aspect of efficacy is more

individual to the teacher's beliefs about their capabilities (Gavora, 2010; Moseley & Taylor, 2011; Tschannen-Moran et al., 1998).

The Rand studies later combined the sums of PTE and GTE to generate the teacher efficacy construct which sought to reveal the extent to which teachers believed the outcomes of teaching were internally controlled (Tschannen-Moran et al., 1998). From these studies also came intriguing results such as how PTE had a greater impact on language achievement and how GTE affected math achievement according to Tschannen-Moran et al. (1998). Several researchers also concluded that teacher efficacy could become stronger over time or change with the experience of the teacher (Harris & Sass, 2011; Hoy & Woolfolk, 1990). As researchers continued to study teacher efficacy, more reliable means of measuring this construct were developed (Bandura, 1997; Gibson & Dembo, 1984; Guskey, 1981; Rose & Medway 1981; Tschannen-Moran & Hoy, 2001).

During the 1960s and 1970s Bandura (1977) presented the social development theory, focusing on how humans operate cognitively during social experiences and the impact of these operations on behavior and development (Grusec, 1992). At the same time, the teacher efficacy construct continued to evolve from Bandura's (1977, 1997) work on self-efficacy and was developed from Bandura's own social learning theory. Commonly referred to as the social cognitive theory, this theory suggested that people learn from one another by watching, imitating, and modeling each other's behaviors (Grusec, 1992). Bandura (1997) posited that virtually all learning can occur from observing the behaviors of others and their subsequent consequences.

Teacher efficacy is grounded in the social cognitive theory, one of the most noted theories in research used in various disciplines such as education, sociology, psychology, health,

medicine, and business (Grusec, 1992). Based on the concepts of self-development adaptation

and change, the social cognitive theory is dependent on one's deliberate actions and is influenced

by human agency (Bandura, 2012). Bandura (2012) stated that, "To be an agent is to exert

intentional influence over one's functioning and the course of events by one's actions" (p. 11).

Humans have an advanced capacity for observational learning as a process of acquiring

information (Miller, 2011; Urlacher, Worley, & Ledford, 2016). We learn our attitudes, values,

and beliefs through social modeling, which varies culturally. People learn from watching others,

and after the actions have been observed, they can be combined to form more complex behaviors

(Miller, 2011).

The cause of human behavior has been debated by theorists over whether it resides in the

individual or in the environment (Bandura, 1977; Grusec, 1992). The social cognitive theory

conceptualizes this argument with a causal triad structure consisting of personal, behavioral, and

environmental influences operating as interacting determinants that bi-directionally influence

each other. Commonly referred to as the reciprocal causation model, it is noted that the three

causal factors identified do not have to make equal contributions to behavior, which depends on

the factor most prevalent at the time (Clark & Zimmerman, 2014). Bandura (1997) introduced

cognition into the social cognitive theory, which already included the roles of the environment

and behavior and their impact on learning new skills and knowledge (Miller, 2011). Bandura

(1977) believed learning was the acquisition of knowledge through the cognitive processing of

information and wanted to emphasize the critical role of cognition in people's ability to self-

regulate, construct reality, take in information, and perform behaviors (Grusec, 1992; Miller,

2011).

Shaped by culture, the social cognitive theory applies to three environments identified as imposed, selected, and created (Bandura, 1997). In his research, Bandura defined the imposed environment as automatically impinged on an individual who does have control in how they react to it. Bandura believed the selected environment depends on the individual and must be selected and activated by appropriate behaviors. Bandura also believed people have the ability to create environments, allowing them to have more control and influence over their own lives.

According to the self-efficacy theory, people develop specific beliefs about their own capabilities and characteristics that guide their behavior and determine what they will attempt to achieve and the effort they will put into their performance (Bandura, 1977). Bandura (2012) found an individual's belief in their efficacy to influence events affecting their lives to be one of the most essential ideas of human agency, and without this belief, people are not motivated to persevere during difficult times and do not believe that their actions can produce desired outcomes. Efficacy beliefs affect the way a person thinks on a daily basis and plays a key role in motivation set through goal challenges and outcome expectations (Bandura, 2012). It affects whether people think in a positive optimistic way or in a debilitating, pessimistic manner.

Efficacy beliefs also influence the types of activities and environments people choose to participate in (Grusec, 1992). These beliefs decide people's outcome expectations by determining whether favorable or adverse outcomes are expected (Bandura, 2012). The quality of emotional life is affected by efficacy beliefs and affects stress levels and depression. Low efficacy people easily give up trying while people with high efficacy are resilient to adversity and are reluctant to giving up (Bandura, 1977). Teachers with low efficacy are often more stressed (Gibson & Dembo, 1984) and have less job satisfaction, resulting in burnout from the teaching profession (Yoo, 2016). Important life choices are also affected by efficacy beliefs that

today are influenced socially by advances in communication and digital technology. With the

changes in globalization, humans are more connected which has profound effects on human

behavior, learning, and efficacy beliefs because people traditionally learn through social

modeling and experience (Bandura, 1977, 1997; Clark & Zimmerman, 2014; Seel, 2017).

Learning through experience can be time consuming and have devastating effects when

negative. This way of vicarious learning can impact vast populations effortlessly and with

accelerated speed with the assistance of technology. In the past, teachers learned from the

teacher preparation program they attended and received a traditional certificate. Today, many

alternatively certified teachers do not have formal teacher training before entering the classroom,

forcing some to rely heavily on technology and self-regulation to assist with planning and

implementing lessons once they begin teaching. The use of technology permits opportunities for

social modeling through observational learning and allows people to expand their knowledge by

observing the behaviors of others and their consequences (Bandura, 1977, 1997; Clarke &

Zimmerman, 2014; Seel, 2017).

Self-efficacy determines self-regulation (Grusec, 1992). Both are important

characteristics of teachers and affect academic productivity. Good self-regulators continuously

expand their knowledge, and efficacious teachers take control of their learning and display high

enthusiasm. Teachers with high teacher efficacy put more effort toward tasks and exhibit higher

levels of motivation to overcome difficult obstacles (Bandura, 2012). Research shows that

teacher efficacy directly affects students because the teacher's belief about their capabilities

affects student learning by impacting the teacher's instructional choices and level of persistence

(Yoo, 2016). Gibson and Dembo (1984) found that efficacious teachers spent more time with

their struggling students and continued to perceive them as teachable despite their learning

needs. Therefore, it is important to examine if alternatively certified SETs of students with emotional disabilities exhibiting challenging behaviors have the perceived self-efficacy to meet the needs of their students because these students tend to have academic and behavioral deficits (Malow, Gomez, Austin, & Barowsky, 2011; Nikolaros, 2015).

The acquisition of behavior by observation is considered by Bandura (1977) to be an efficient way to learn (Grusec, 1992; Miller, 2011). Bandura also believed that once established a person's sense of efficacy remains stable and is difficult to change (Yoo, 2016). This is another reason critics believe it is essential for teachers to be trained in traditional teaching certification programs (Williamson, Backman, Guy, Kay, & Turley, 1984). Alternatively certified teachers do not have the opportunity to learn necessary pedagogical theories or to gain experience obtainable in a teacher education program because they do not have the opportunity to observe veteran teachers in the classroom setting (Billingsley, 2004a). As a result, these teachers may not have the ability or confidence to deal with behaviors or plan appropriate lessons that could ultimately prevent them from fully meeting their students' needs, leading to lower student achievement (King, Shumow, & Lietz, 2001). Alternatively certified teachers may lack the experience to accommodate their students' educational needs, which may result in them having low teacher efficacy and being ineffective teachers.

Perceived Self-Efficacy

Self-efficacy is a theory by itself and a construct of the social cognitive theory. Bandura (1982) defined perceived self-efficacy as the degree to which people believe they are capable of producing behaviors in order to attain certain goals that affect their lives. It is one's belief in their ability to accomplish a goal and may increase and decrease over the course of a career (Klassen & Chiu, 2010). According to Bandura, perceived self-efficacy contained two

components: efficacy expectation and outcome expectancy (Gavora, 2010; Tschannen-Moran & Hoy, 2001). Efficacy expectation is the belief that one has the skills and abilities to execute the actions required to produce the desired outcome. Outcome expectancy is the belief that an action will lead to an expected outcome. Bandura found people are more likely to participate and persist in behaviors they believe will yield successful outcomes and avoid threatening situations that exceed their skill level. Bandura's (1977) efficacy expectations were found to help determine the level of effort and persistence people would expend when facing obstacles and varied in magnitude, generality, and strength.

The measurement of perceived self-efficacy is related to three dimensions. Bandura (1977) described magnitude as measuring the difficulty level perceived to perform a task. The degree to which a task can be applied or generalized across multiple situations is what Bandura termed the generality of self-efficacy. Bandura referred to strength as the confidence an individual has about successfully performing at multiple levels of difficulty. Bandura believed the more self-efficacious a person was, the more effort they would exude in accomplishing a goal. Consequently, those who ceased their efforts without reaching their goal would retain their fears over a long period.

Bandura's (1997) theory identified four sources of development that reinforce perceived self-efficacy: (a) mastery experiences, (b) vicarious experiences, (c) social persuasion, and (d) emotional and physiological states (Bandura, 1997; Gavora 2010; Tschannen-Moran et al., 1998). Mastery experiences were identified by Bandura as the most influential and occur when one is successful at completing something he or she set out to do. According to Bandura, this is the most effective way to increase perceived self-efficacy because it increases the likelihood that people will believe they can do something new if it is similar to something they have already

accomplished. Bandura found mastery experiences require difficult tasks to be attempted in

order to develop a strong sense of efficacy. Bandura also found that starting with simple tasks

and then increasing in complexity when completed can create mastery experiences that lead to

success when more challenging activities are introduced. In the classroom, mastery experiences

allow teachers to prove their competence by demonstrating teaching success. Success is

important because it helps teachers define their personal efficacy (Gavora, 2010) and provides

experiences that increase their ability to handle more diversified situations. Teachers who feel a

sense of achievement will want to strive and work harder to ensure that their students succeed.

Perceived self-efficacy is also influenced by vicarious experiences. Vicarious learning is

heavily influenced by watching others and increasing perceived self-efficacy by accomplishing

the skill (Bandura, 1977). Vicarious experiences allow teachers to learn from observing and

modeling other effective teachers (Gavora, 2010). Teachers who watch others similar to

themselves perform difficult activities without adversity are influenced by the belief that they too

can be successful and improve if they persist with their efforts (Bandura, 1977). Teachers learn

when they are able to watch others in action. The belief that, "If they can do it then I can do it,"

heavily relies on social comparisons and vicarious experiences that take place observing another

teacher's classroom, co-teaching, and during professional trainings or in-services where best

practices are shared and discussed.

Perceived self-efficacy is influenced by social persuasion such as coaching and positive

feedback from colleagues and supervisors (Gavora, 2010) and is widely used to influence

behavior because of its ease (Bandura, 1977). People can be persuaded to believe that they have

the skills they need to be successful. In the classroom, emotional factors such as enthusiasm and

excitement exhibited by the teacher can influence teaching success while anxiety and stress can

lead to negative teacher judgments and poor teacher performance. Teachers are more likely to achieve a task when they are verbally persuaded that they can complete the task and conversely, when told that they do not have the skills to complete a task, they often fail to complete it or give up quickly (Bandura, 1997). As a result, the efficacy expectations prompted in this manner are weaker and can easily be disconfirmed by negative experiences (Bandura, 1997). When teachers get verbal encouragement from their colleagues, they overcome their feelings of inadequacy and self-doubt and are able to focus on giving their students their best effort.

Bandura (1977) also believed emotional and physical states affect perceived self-efficacy. Bandura's research found stressful situations often lead to emotional arousal that can debilitate performance and affect a person's perceived self-efficacy. However, Bandura (2012) believed if the stress and arousal were removed, a change in perceived self-efficacy would likely occur. Perceived self-efficacy affects decisions that people make and can produce positive outcomes that support continued engagement in the behavior produced. Bandura stated that, "Self-efficacy beliefs influence how well people motivate themselves and persevere in the face of difficulties through the goals they set for themselves, their outcome expectations, and causal attributions for their successes and failures" (p.13).

According to Bandura (1977), psychological events create and strengthen personal efficacy expectations that are distinguished from response-outcome expectancies. Efficacy expectation is important to new teachers (both traditionally and alternatively certified) because new teachers arrive to the teaching profession with their efficacy expectation in place. Although similar, these two terms differ in expectations. Individuals can believe that certain actions will produce certain outcomes but doubt their capability to perform the action, thus impeding their influence on the behavior (Bandura, 1977). Successful teachers have both high efficacy

expectation and outcome expectancy (Gavora, 2010). Teachers feel more committed to teaching when their perceived self-efficacy is high (Zee & Komeen, 2016).

Teacher Efficacy

Teacher efficacy is a variable accounting for individual differences in teaching effectiveness and is influenced by the teachers' beliefs in their abilities to instruct their students (Gibson & Dembo, 1984; Holzberger, Philipp, & Kunter, 2013). Teachers' sense of efficacy has been related to student achievement (Armor et al., 1976; Tschannen-Moran et al., 1998; Varghese, Garwood, Bratsch-Hines, & Vernon-Feagans, 2016), motivation (Midgley, Feldlaufer, & Eccles, 1989; Thoonen, Sleegers, Peetsma, & Oort, 2011; Tschannen-Moran et al., 1998), and students' own sense of efficacy (Anderson, Green, & Loewen, 1988) and is a self-regulatory, extensive belief system that influences how teachers behave and perform (Gavora, 2010). More specifically, it is teachers' personal belief in their ability to plan instruction and achieve instructional goals and objectives (Gavora, 2010). Teachers with a high sense of efficacy exhibit greater enthusiasm and commitment to teaching (Allinder, 1994; Guskey, 1984), higher instructional quality (Holzberger et al., 2013), greater job satisfaction (Klassen & Chiu, 2010), and believe in their ability to bring about desired outcomes of student engagement and learning for their students (Tschannen-Moran & Hoy, 2001). Strong teaching efficacy results in teachers who plan rigorously and are more organized (Allinder, 1994). Examples of teacher efficacy include teachers' expectations to engage students in learning activities, maintaining discipline, or explaining assignments so that low-achieving students are able to demonstrate proficiency (Skaalvik & Skaalvik, 2014).

Measuring teachers' perceptions of their own capabilities was introduced by Rand researchers who sought to measure the sense of efficacy of teachers working with minority

students (Amor et al., 1976; Tschannen-Moran & Hoy, 2001). Rand researchers found that

students who had more efficacious teachers advanced in student reading (Amor et al., 1976;

Tschannen-Moran et al., 1998). Rand researchers found that these teachers expressed higher

PTE or confidence in their ability to teach difficult students, believing reinforcement of teaching

activities was internal and within the teacher's control (Tschannen-Moran et al., 1998). On the

other hand, external factors affecting teaching were contributed to GTE. Tschannen-Moran et al.

reported that the Rand studies combined the sum of these two aspects to generate teacher

efficacy that sought to reveal the extent to which teachers believed the outcomes of teaching

were internally controlled.

Teacher efficacy researchers have also been influenced by Bandura's (1977) concept of

self-efficacy (Klassen, Tze, Betts, & Gordon, 2011). Bandura contended that although locus of

control focuses on causal beliefs about action, perceived self-efficacy focuses on the belief that

one can execute the behavior required to produce the outcomes. Locus of control is defined as

the extent that individuals believe they can control events affecting them (Gibson & Dembo,

1984). People with an internal locus of control believe their behavior is the determinant factor in

what good or bad things occur in their lives (Bandura, 1977). Conversely, people with an

external locus of control believe that what happens to them is controlled by outside forces

(Bandura, 1977).

Gibson and Dembo (1984) sought to validate the construct of teacher efficacy and found

low efficacious teachers spent nearly half of their observed time in small group instruction

compared to high-efficacy teachers who only spent 28% of their time in small group instruction.

They also found that high-efficacy teachers spent more time monitoring students and checking

their seatwork. Gibson and Dembo also found that low-efficacy teachers criticized students for

giving incorrect answers while high-efficacy teachers did not and that high-efficacy teachers demonstrated more persistence by allowing students to correct answers than low-efficacy teachers. In relation to student engagement, their research concluded that high-efficacy teachers achieved higher student engagement rates using whole class instruction and that these teachers demonstrated the ability to keep their other students engaged while instructing small groups.

Knowing the factors that support teacher efficacy is important because once established, the teacher efficacy of experienced teachers is difficult to change (Hoy & Woolfolk, 1990). Unlike the teacher efficacy of new teachers who are still growing and acquiring experience, the teacher efficacy of veteran teachers is usually already in place. In their study on teacher efficacy, Hoy and Woolfolk (1990) found the two dimensions of teacher efficacy to be independent. Teachers believe either they are effective or that they do not have the ability to influence or make a difference in the learning of their students. Teachers can also believe that teaching in general has little to no impact on students. Gibson's and Dembo (1984) found evidence that general teaching efficacy increases during college courses and declines during student teaching. They believed new teachers, once confronted with the realities of the teaching profession, often show a decline in enthusiasm and optimism. The immersion into teaching often gives teachers insight about their teaching capabilities. The ability to manage a classroom effectively dictates teacher's sense of efficacy. Teachers who set high standards but view themselves as poor performers sometimes lower their teaching standards in order to reduce the gap between excellent teaching requirements and their teaching competence (Hoy & Woolfolk, 1990).

This is significant because, according to Hoy and Woolfolk (1990), research evidence shows that efficacy beliefs can change for new teachers once they enter the field. New teachers, specifically traditionally certified teachers, endure a process of socialization into the profession.

Hoy and Woolfolk suggested once these new teachers enter the classroom, they are met with norms and values usually somewhat contradictory to what they have learned from college professors. As these teachers gain experience, they begin to have better classroom management skills and more control over their students, thus increasing their teacher efficacy (Hoy & Woolfolk, 1990). Harris and Sass (2011) found that elementary and middle school teacher productivity increased with experience and that the largest gains for teachers occurred within their first 5 years of teaching. On the other hand, alternatively certified teachers do not have the opportunity to formally practice teaching before entering the classroom. As a result, these teachers miss the opportunity to find out about their own teaching capabilities. Without knowing their capabilities in the classroom, these inexperienced teachers may perceive themselves as ineffective and thus experience low teacher efficacy.

Teacher efficacy is an important aspect when considering the effectiveness of behavioral interventions and the impact it has on student performance (Varghese et al., 2016). It is important to understand how to help teachers increase their efficacy because many alternatively certified teachers do not receive sufficient training on how to meet the emotional and learning needs of their students (Alvarez, 2007). Teacher efficacy can be increased through training, practice, and social supports, which help to reduce teacher stress and increase teacher competence (Gebbie et al., 2012). Duyar, Gumas, and Bellibas (2013) found that professional collaboration amongst teachers predicted teacher efficacy. When teachers receive positive feedback from peers, they are likely to have altered perceptions of competence, and collaboration amongst teachers can positively influence teacher efficacy (Sehgal, Nambudiri, & Mishra, 2017). Helping teachers build a positive history of experiences has been identified as another effective way to increase teacher efficacy (Gebbie et al., 2012), increase job satisfaction and commitment

to students, and lower levels of stress and teacher burnout (Aloe, Amo, & Shanahan, 2014; Collie, Shapka, & Perry, 2012; Klassen & Chiu, 2010). This is important because teachers with high teacher efficacy stay motivated and subsequently on the job and in the teaching profession longer (Zee & Komeen, 2016).

Special Education Teacher Quality

The conception of special education teacher quality has evolved over the past 150 years from specialized, clinical programs in residential facilities to mandates for the Individuals with Disabilities Act (IDEA, 2004) requiring SWDs to have access to the general education curriculum (Brownell, Sindelar, Kiely, and Danielson, 2010). Mandated by No Child Left Behind (NCLB), schools are accountable for the performance of SWDs on high-stakes assessments aligned with the general education curriculum (Brownell et al., 2010). Qualified SETs are necessary to support SWDs and are needed to carry out research-based best practices (Billingsley, 2004a). In addition, Brownell et al. reported that these SETs must be highly qualified in the content areas that they teach and able to execute content area instruction for SWDs.

Research on teachers suggests that teacher quality is the most important factor affecting student achievement (Goldhaber, 2002). SETs must have vast knowledge and an understanding of (a) content and how to teach it, (b) problems that SWDs might experience in a content, (c) technology and how to use it to circumvent learning issues or provide access to advance learning opportunities, and (d) the role of interventions and assessments in providing students instruction within a broader curricular context (Brownell et al., 2010). These teachers must also have disability-specific knowledge and understand how processing deficits affect student learning

outcomes (Brownell et al., 2010). Unlike in past eras, SETs must have knowledge of the general education curriculum and possess the ability to collaborate with general education teachers.

SETs must be able to implement interventions for students with high-incidence disabilities such as emotional and learning disabilities, behavior disorders, and intellectual disabilities because these students require specialized instruction and on-going assessments to address their literacy, numeracy and writing deficits (Brownell et al., 2010). In order to remediate students with high-incidence disabilities, SETs must have pedagogical knowledge in these content areas and the ability to teach students in elementary, middle, and high school. This requires SETs to have expertise in both general and special education. Feng and Sass (2013) found that SETs with preparation in special education produced higher achievement scores for students in reading and math. Thus, Feng and Sass argued that SETs should participate in advanced special education preparation focused on either the primary or the secondary level to support the achievement of SWDs. This is essential because it is expected for SETs to help SWDs access the general curriculum. The ability of SWDs to access the general education curriculum and make adequate yearly progress often depends on the skills and motivation of their teachers (Brownell et al., 2010).

In order to improve the quality of SETs, policymakers must address the concerns about the inadequate training of general education teachers and the shortages of SETs which continue to be severe (Brownell et al., 2010). General education teachers are often unprepared to instruct SWDs and have a hard time differentiating instruction for these at-risk learners (Baker & Zigmond, 1995). Many uncertified teachers are hired to teach SWDs through alternative routes to licensure (Billingsley, 2004a). Alternative routes to licensure reflect special education's attempt to address teacher shortage, although this practice negates the need for quality teachers

in special education classrooms. Students needing the most assistance lose learning opportunities as new teachers become acclimated to the profession (Billingsley, 2004a). States must step in and implement standards and licensure systems that clearly outline the knowledge and skills general education teachers need for teaching SWDs and the knowledge and skills SETs need to access both the general education curriculum and more specialized instruction for SWDs (Feng & Sass, 2009). Although commonly acknowledged that highly qualified teachers significantly increase student achievement (Darling-Hammond & Youngs, 2002), requiring SETs to become highly qualified in the subject areas that they teach may not be enough to mitigate the fact that SWDs continue to lag behind their peers academically (Brownell et al., 2010).

Alternatively and Traditionally Certified Teachers

The push for educational reform has impacted classrooms throughout the United States. The passing of NCLB in 2001 affected what students learn, how they are tested, and the way money is allocated for educational spending and has had a positive impact on math student achievement scores (Whitford, Zhang, & Katsiyannis, 2018). Signed into law by President George W. Bush in 2002, this act also focused on the issue of teacher certification and preparation, requiring all teachers in core content areas to be highly qualified in each subject they teach. The new education law, Every Student Succeeds Act (ESSA) signed by President Barack Obama in 2015 eliminated the highly qualified teacher requirement beginning with the 2016-2017 school year (U.S. Department of Education, 2017). Under ESSA, each state has the authority to determine appropriate teacher qualifications and certification requirements (U.S. Department of Education, 2017). According to the ESSA, SETs must (a) obtain full certification as a special education teacher or pass the state special education teacher licensing exam and hold a special education license to teach in the state; (b) not have had special education certification or

license requirements waived on a provisional, emergency, or temporary basis; and (c) hold at least a bachelor's degree (U.S. Department of Education, 2017).

Historically, the government attempted to improve teacher quality by requiring teachers to be certified (Shuls & Trivitt, 2015). However, due to an increased demand for teachers across the nation, alternative routes to teacher certification were established in the 1980s (Shuls & Trivitt, 2015) to provide nontraditional entrants access to the teaching workforce (Flores et al., 2004). When teacher supply does not meet demand, schools with the least resources and with the least desirable working conditions are left with the most vacancies (Sutcher et al, 2016). Teacher shortages vary across states and subjects areas and have traditionally affected the most disadvantaged population of students (Sutcher et al., 2016). School settings such as alternative, urban, and multicultural schools are also affected by the teacher shortage in the nation. Teacher shortages in subject areas like math, science, bilingual, and special education continue to persist in America's schools (Goldhaber et al., 2015; Sutcher et al., 2016).

Special education is experiencing the greatest teacher shortages (Sutcher et al., 2016). Despite years of growth, the number of SETs is declining (Boe et al., 2013). School administrators consistently report more difficulty filling special education positions compared to positions in alternative endorsements (Goldhaber et al., 2015). This demand is due in part to an increase in the number of SWDs (Boe et al., 2013) and the shortage of teachers qualified to meet their needs (Robertson & Singleton, 2010). The shortage of SETs has left many school districts no alternative but to hire unqualified teachers to fill these special education positions (Sutcher et al., 2016), allowing college graduates to delay formal education training and begin teaching immediately.

Originally developed to fill openings in emergencies, alternative licensure is used to diversify and fill teaching positions (Whitford et. al, 2017). Concern about the effectiveness of alternatively certified teachers filling these positions has grown. Many educators do not believe alternatively certified teachers have the same understanding of pedagogical theories and practice that traditionally certified teachers gain by completing formal education programs (Sutcher et al., 2016). These teachers may not have the perceived self-efficacy levels to meet the needs of their students.

The state of Virginia has ranked special education as their top teaching critical shortage area according to the Virginia Department of Education (2016a). School divisions in the state have a difficult time filling special education teaching positions with qualified teachers and as a result allow alternative routes to teaching licensure. One route to alternative licensure is available through the recommendation of the candidate's employing school division (Virginia Department of Education, 2016a). For SETs, a 3-year nonrenewable license is issued on a provisional basis to candidates who meet special education requirements. Alternative licensure can also be granted to individuals completing endorsement coursework and to individuals who meet the experimental learner criteria and have five years of documented work experience (Virginia Department of Education, 2016a).

The Virginia Department of Education (2016a) allows provisionally licensed SETs to work in the classroom and educate SWDs while completing required coursework to satisfy licensure requirements. The Virginia Department of Education also offers alternative ways for career professionals to enter the classroom in other teacher endorsement content areas through programs such as The Career Switcher Alternative Route to Licensure Program. This program is available for career switchers seeking to teach students in pre-kindergarten through 12th-grade,

with the exception of special education (Virginia Department of Education, 2016a). The proponents of traditional teacher education programs do not agree with this practice and believe that students are best served from teachers who received a rigorous, standards-based approach to education (Williamson et al., 1984). Advocates for alternative routes to teacher certification support the idea of opening the teaching field to individuals with real-world experience and allowing professionals to train and learn on the job.

Compounding the issues of providing SWDs quality teachers, policymakers must consider the problem of attrition that affects teacher shortage in many special education classrooms (Brownell et al., 2002). Brownell et al. (2002) reported the most consistent predictors related to teacher attrition are age, experience, and certification status. Younger SETs leave the teaching profession at higher rates than older SETs (Vittek, 2015). Strunk and Robinson (as cited in Schonfeld & Feinman, 2012) found that teachers with less experience leave the teaching profession at greater rates than veteran teachers. Redding and Smith (2016) found that alternatively certified teachers were more likely than traditionally certified teachers to leave the profession. Researchers have also found that SETs of students with EBD reported leaving the profession at higher rates than teachers of students with learning disabilities or other mild intellectual disabilities (Cancio, Albrecht, & Johns, 2014; Tyler & Brunner, 2014).

Pros and Cons of Traditional Certification Programs

The debate over the best way to train SETs and prepare them for the classroom remains controversial. Traditionally, certified teachers typically graduate from a college or university with a degree in education from a traditional teacher licensure program. Often criticized for their rigor, it has been debated that the coursework required for these programs is excessive and provides little benefit to new teachers (Shuls & Trivitt, 2015). New teachers are not necessarily

better prepared for the classroom after training. However, the data from these studies show that teacher preparation programs contribute positively to teacher retention (Brownell et al., 2002).

Alternatively certified teachers entering the profession without student teaching experience left the teaching profession nearly twice the rate of traditionally certified teachers (Henke, Chen, Geis, &Knepper, 2000). Darling-Hammond (1999) reported that graduates from traditionally certified programs were more likely to remain in the classroom than were teachers from alternatively certified teaching programs. Research on traditional and alternative routes to certification show that program duration affects teacher retention. For example, Andrew and Schwab (1995) found that traditionally certified graduates of 5-year teacher education programs were more likely to remain in the teaching profession than were graduates of 4-year teacher education programs.

Researchers have sought to examine the difference between traditionally and alternatively certified teachers and their affect on student achievement. The results of these studies are mixed. Darling-Hammond and Cobb (1996) reported that certified teachers are more successful and highly rated than alternatively certified teachers. Alternatively certified teachers in New York were found to be worse than traditionally certified teachers (Boyd, Lankford, Loeb, Rockoff, & Wyckoff (2008). Clotfelter, Ladd, and Vigdor (2010) found alternatively certified teachers to be worse than traditionally certified high school and third through fifth grade teachers in North Carolina. Critics of alternative teacher certification argue that placing inexperienced teachers in challenging classrooms is a disservice to students (Nikolaros, 2015) because they lack pedagogical knowledge, making it difficult to deliver lessons effectively, resulting in lower student achievement. There were no differences in classroom management found between traditional and alternative certified teachers (Uriegas, Kupczynski, & Mundy, 2014).

Pros and Cons of Alternative Certification Programs

On the other hand, many studies have found no difference in performance between traditionally and alternatively certified teachers. Zeichner and Schulte (2001) reported no difference in performance between traditionally and alternatively certified teachers after reviewing results of several studies. Goldhaber and Brewer (2000) found no significant differences between alternative and traditional certified math teachers. Even though the results of these studies are mixed, they suggest that there is not a large difference in quality between traditionally and alternatively certified teachers (Shuls & Trivitt, 2015).

Alternatively certified teachers may not initially have confidence in their teaching ability but may become successful as their experience and knowledge grows, impacting their sense of efficacy and student success. Flores et al. (2004) found a difference in the teacher efficacy of traditionally and alternatively certified teachers. Traditionally certified teachers reported greater confidence in their teaching abilities and exhibited higher teacher efficacy. Flores et al. noted this confidence possibly resulted from a greater depth of knowledge in pedagogy. Traditionally certified teachers also exhibited a variety of instructional techniques and were willing to experiment with instruction as opposed to alternatively certified teachers who exhibited low teacher efficacy (Flores et al., 2004). Traditionally certified teachers may exhibit more confidence in their teaching and higher teacher efficacy because of having the opportunity to observe, practice, and be mentored during their teacher training program.

<center>**Students with Emotional Disabilities and Challenging Behaviors**</center>

IDEA guarantees a free and appropriate education to eligible SWDs (Virginia Department of Education, 2016b). Special education students require specially designed instruction to meet their educational needs. Specially designed instruction requires teachers to

adapt the content, methodology, and delivery of instruction to meet the needs of the child

(Virginia Department of Education, 2016b). This is done so the unique needs of the child are

met. It also ensures that the child has access to the general curriculum so that the child can meet

the required educational standards applying to all students within their jurisdiction. Educators

teaching these students have voiced concern about how to serve this growing population of

students and require systematic educational programming and support in order to meet these

students' needs (Malow et al., 2011). SETs working with this population of students must be

equipped with interventions to meet both behavioral and learning challenges exhibited by these

students in the classroom (Malow et al., 2011).

Students with emotional disabilities exhibit one or more of the following characteristics

over a long period of time and to a degree which has a negative impact on their school

performance: (a) an inability to learn which cannot be explained by health, intellectual, or

sensory factors; (b) an inability to sustain satisfactory interpersonal relationships with teachers

and peers; (c) demonstration or feelings of inappropriate types of behaviors under normal

conditions; (d) a general pervasive mood of depression or unhappiness; and (e) a tendency to

develop physical symptoms or fears that are associated with personal or school problems

(Virginia Department of Education, 2016b). The term also includes students who are

schizophrenic and maladjusted that are emotionally disturbed (Virginia Department of

Education, 2016b). The identification of these students may span a range from mild to severe.

Properly identifying students with emotional disabilities is vital to properly serving these

students in the school environment. The Thirty-Eighth Annual Report to Congress on the

Implementation of IDEA provided a breakdown for students receiving services for emotional

disabilities (U.S. Department of Education, 2016). The U.S. Department of Education reported

that of the nearly six million students being served in the United States, 5.9% have an emotional disability. Of this group, African-American students were 2.08 times more likely to be served under this disability category than students in other racial groups were, and males were the most prominent gender group served under this disability category according to the same report.

In addition to emotional disabilities, managing students exhibiting challenging behaviors in the classroom is becoming a serious problem (Dunlap et al., 2006; Gebbie et al., 2012). Recognized as an obstacle to social and emotional development, there is a need to resolve challenging behaviors early in young children. Dunlap et al. (2006) reported if left unresolved, students exhibiting challenging behaviors in childhood often experience problems in socialization, adjusting to school, school success, and adapting to vocations in adolescence and as adults. Professionals and advocates across disciplines continue to research ways to prevent challenging behaviors from developing and ways to intervene when they do.

Dunlap et al. (2006) found longitudinal outcomes showing that the presence of challenging behaviors and the absence of treatment in children caused long lasting effects and the increasing need for intensive services and resources. The impact of not addressing these behaviors early on increased the likelihood of poor academic outcomes, peer rejection, adverse family effects, and mental health issues (Gebbie et al., 2012). Studies show the identification of children with challenging behaviors is low, leading to an under identification and lack of intervention for this population (Dunlap et al., 2006). Dunlap et al. reported that 10% to 20% of preschoolers exhibit challenging behaviors, making it is difficult to distinguish developmentally typical behaviors, such as tantrums, from challenging behaviors in early childhood when interventions are needed most.

Teachers view students with behavior problems as more challenging than children with any other disability (Alvarez, 2007; Gebbie et al., 2012). SETs of students with emotional disabilities have an effect on student achievement and the emotional context of their students (Nikolaros, 2015). They must be able to modify instruction and provide their students a safe classroom environment. SETs must be able to implement classroom management strategies because students with emotional disabilities must be supported in structured school environments (Nikolaros, 2015). Consequences for inappropriate behaviors must be immediate and consistent.

Teachers must be equipped with the skills and knowledge to be able to handle students exhibiting challenging behaviors such as implementing interventions based on functional assessments. Functional assessments involve gathering data on the antecedent and the behaviors that occur after an event along with the challenging behaviors exhibited (Dunlap et al., 2006). Once these environmental variables are identified, interventions can be developed and the function of the behavior identified. Research supports the use of functional assessments for children who engage in challenging behaviors (Dunlap et al., 2006). Dunlap et al. suggested that teachers must be able to develop interventions that address environmental variables in order to decrease challenging behaviors exhibited and increase appropriate behaviors.

Aggressive behaviors in school are a significant problem for educators and can interrupt students' academic development and prosocial interactions (Alvarez, 2007). Functional assessments reveal that students with emotional issues exhibit challenging behaviors for various reasons. Behaviors can escalate quickly in the classroom and can range from yelling, swearing, and refusing to complete academic assignments to throwing objects and acts of physical aggression. Teaching procedures on how to handle behaviors has been found beneficial in reducing challenging behaviors (Dunlap et al., 2006) and help avoid removing aggressive

students from the classroom. Research has found that disciplinary exclusion measures have been used against SWDs far more often than their non-disabled peers (Bowman-Perrott et al., 2011) resulting in less academic exposure and increasing the likelihood of problem behaviors.

Dunlap et al. (2006) reported that students with minimal language and social skills often engage in challenging behaviors and must be taught replacement behaviors. Urlacher et al. (2016) found that teaching children age-appropriate social behaviors improved outcomes for children with disabilities. Strategies used to increase appropriate behaviors are also effective in decreasing challenging behaviors. Students must be taught problem-solving skills and alternative behaviors that align with classroom rules and are positively reinforced by teachers.

Altering the features of the child's physical and social environments is a strategy used to prevent challenging behaviors. Interventions that are antecedent-based increase the probability that the appropriate behavior will be exhibited, thus decreasing the challenging behavior (Dunlap et al., 2006). Antecedent interventions such as the use of *choice* and *preference* are effective interventions teachers can use in the classroom (Dunlap et al., 2006). Dunlap et al. found that changes in the classroom environment, including arrangement of furniture and schedules have decreased challenging behaviors and increased appropriate behaviors.

When classroom supports are ineffective, students may need interventions outside of the classroom. Students may have to take a break from the learning environment and be removed from the classroom to an alternative setting such as another classroom, a crisis room, or office. Classroom removals may escalate students' emotions and aggression and require skillful staff to assist students with de-escalation and problem-solving techniques. Teachers must stay calm and display a positive demeanor during and after crises. They must also minimize classroom disruptions and demonstrate flexibility when working with this population of students.

The effectiveness of the interventions used in classrooms depends on the skill and perceived self-efficacy of the teacher implementing them. Studies show that teachers with high efficacy use more positive interventions and reinforcements than teachers with low efficacy who use more authoritative methods when dealing with students with challenging behaviors (Gebbie et al., 2012). These teachers often exhibit an assured sense of perceived self-efficacy and demonstrate the ability to manage student behaviors (Chacon, 2005; Woolfolk, Rosoff, & Hoy, 1990). Training, peer support, and reflection groups may increase teacher efficacy. These methods are beneficial when teachers transfer the knowledge gained from trainings to actual classroom practice. In-services focusing on classroom management can be beneficial to teachers and the classroom setting. Research has shown the importance of training teachers on their response to problem behaviors in the classroom (Alvarez, 2007).

Teacher Effectiveness

Teacher effectiveness is a critical factor affecting student achievement and has been found to be more influential than class size, student socioeconomic status, classroom arrangement, or previous student achievement (Darling-Hammond & Youngs, 2002; Klassen & Tze, 2014). Student achievement is largely influenced by effective instruction (Scott, Hirn, & Alter, 2014) and is defined as the aggregated effects of a set of teacher behaviors in the classroom on student learning and is typically measured by student achievement or teaching observations (Klassen & Tze, 2014; Rimm-Kaufman & Hamre, 2010). The growing population of students with emotional and behavioral disabilities and the demand for these students to spend increasing time in the general education setting has caused an increased need in instructional behavior. Correlations have been found between student engagement, teaching, and disruptive behaviors (Scott et al., 2014). Teachers are required to mitigate disruptive and off-task students

to prevent them from inhibiting their own learning and the learning of others. Quality teachers are needed in schools to implement school-based interventions and to provide effective instruction to students. Principals must be able to use new teacher effectiveness measures to screen and hire effective teachers who may not be traditionally certified and with no classroom teaching experience due to teacher shortages and alternative paths to licensing.

President Barack Obama commented, the "single most important factor in the classroom is the quality of the person standing at the front of the classroom," during a town hall meeting in 2009 (Shuls & Trivitt, 2015, p. 645). Teachers remain the most important factor in explaining student learning gains (Cannata et al., 2017) and as a result are an essential part of the classroom environment (Midgley et al., 1989). School districts across the country struggle to find teachers capable of implementing best practices and effective instruction. As a result, high-quality teachers equipped to meet the needs of all students are in demand. In addition, school districts must attract teachers capable of instructing students with exceptionalities such as emotional and behavioral disorders who exhibit disruptive and off-task behaviors (Scott et al., 2014).

Effective teachers must be prepared to work with SWDs to address both their learning and behavior challenges (Malow et al., 2011). Despite the challenges of working with students with emotional disabilities, many teachers have reported success teaching this population (Malow et al., 2011). Teachers must be confident and believe they are effective and capable of having an impact on their students in order to be effective in their profession (Page et al., 2014). Other research reports teachers must create safe classroom environments that are supportive and lack conflict and disruptions for student success to be achieved (Sullivan et al., 2015). Effective SETs must be able to help SWDs identify conflicts and problem solve. Common themes identified impacting SWDs, including those with EBD, are peer influence, provocation, teasing,

academic challenges, and student-teacher relationships (Sullivan et al., 2015). Teachers whose classrooms were disruptive responded punitively toward students experiencing these problems, impacting their emotional and behavioral adjustment (Sullivan et al., 2015).

Teachers continue to have concern about how to serve best the growing population of SWDs, especially those experiencing emotional disabilities. Researchers believe effective teachers of SWDs have a vast knowledge of special education instruction and are able to meet the individual needs of their students (Malow et al., 2011). Effective teachers exhibit high teacher efficacy and believe that all of their students can learn (Moseley & Taylor, 2011). Malow et al. (2011) found that successful SETs embrace student differences and have the ability to show care and empathy for their students and are willing to work collaboratively with their students' families. They exhibit teacher practices associated with student achievement such as modeling, the ability to set clear learning expectations, and positive reinforcement (Scott et al., 2014). Scott et al. found a positive correlation between teachers' instructional behaviors and student behaviors of engagement. Classroom management and student engagement were found to be correlated according to Shaukat and Iqbal (2012). Teaching negatively correlated with disruption, confirming the association of teaching and decreased rates of disruption in the classroom. Researchers suggested that students with a history of academic and social failures commonly associated with EBD will exhibit increased disruptive and off-task behaviors (Scott et al., 2014). Pratt (2008) found that students preferred teachers who provided them with learning activity choices and cooperative projects and who made learning fun. Shaukat and Iqbal reported that younger teachers engaged their students more than older students.

Alternative Schools and Programs

Students with EBD present a challenge to schools whenever disciplinary action must take place (Wilkerson et al., 2016). Provisions in IDEA do not permit students to be expelled from school for behaviors related to their disability (Wilkerson, et al., 2016). However, students can be placed in alternative settings. Alternative settings include schools that are normally housed in a facility separate from regular schools and programs that are typically housed within regular schools (U.S. Department of Education, 2010). Alternative schools and programs are designed to meet the needs of students that cannot be met in a regular school setting. School districts across the nation are increasingly using alternative settings to educate students at risk of failure (as indicated by factors such as truancy, poor grades, and disruptive behavior; Hoge, Liaupsin, Umbreit, & Ferro, 2014). Students with emotional disabilities exhibiting challenging behaviors are often placed in alternative educational settings to address their problem behaviors (Hoge et al., 2014). Unlike their typical peers, these students have a difficult time succeeding academically and behaviorally (Smith et al., 2017) and often pose a threat to themselves or others, ultimately preventing learning from occurring in classrooms (Hoge et al., 2014).

SWDs must be placed in the most appropriate and least restrictive educational setting (Hoge et al., 2014). This placement is based on the student's individualized education program and educational needs. Hoge et al. (2014) examined factors affecting the entry and exit of students with emotional disabilities into and out of alternative settings. Results showed once placed in alternative settings, students seldom transitioned back to less restrictive school environments (Hoge et al., 2014). Aggression was the primary factor for placement in the alternative school setting, followed by defiance. Schools in their study used schoolwide systems

to identify students ready to transition to less restrictive environments and failure to meet requirements was the main reason students were denied transition (Hoge et al., 2014).

Students with emotional disabilities are most affected by alternative setting placements (Hoge et al., 2014). The U.S. Department of Education (as cited in Hoge et al., 2014), reported that nearly 13% of students with emotional disabilities were educated in alternative settings. This number increases when placements such as residential facilities, juvenile correctional programs, or hospital-based facilities are considered. Research on alternative settings, specifically for students with emotional disabilities, has received greater attention in recent years as the number of students requiring this level of service continues to rise (Hoge et al., 2014).

Summary

Student enrollments have steadily grown since the beginning of the mid-1980s and continue to grow presently (Ingersoll & May, 2011). The demand for teachers has increased and the annual rate of teachers retiring has increased. Simply put, the nation is running out of qualified teachers to educate its children. Sutcher et al. (2016) reported that historical data on the teacher pipeline show a steady decline in teacher supply due to attrition and a decline in teacher preparation enrollments. This decline has contributed to a shortage of licensed SETs with more and more leaving the teaching the profession at alarming rates (Cancio, Albrecht, & Johns, 2014; Tyler & Brunner, 2014; Vittek, 2015).

Although the cause of the increased attrition amongst SETs varies, excessive paperwork, constantly changing special education laws, and the emotional and behavioral challenges of students have been identified as reasons triggering many SETs to transfer to regular education or leave the teaching profession altogether (Nougaret et al., 2005). Critics believe the lack of qualified SETs in the profession may impact the quality of education that SWDs receive. This

could lead to lower student achievement outcomes, students receiving inadequate education, and incompetent students in the workplace (Billingsley, 2004b). Gage et al. (2017) examined the relationship between teacher characteristics such as teacher certification, level of education, and experience, and found these factors were not associated with the academic achievement growth of elementary students with EBD. Therefore, placing students with emotional disabilities with fully certified, experienced teachers with advanced degrees may not result in improved achievement (Gage et al., 2017). Policymakers and administrators may find a need to support alternatively certified SETs and increase their teacher efficacy by building capacity amongst these professionals because critical shortages in special education persist. This is important because teacher efficacy may be a better predictor of teacher effectiveness than route to teacher certification (alternative or traditional), especially for teachers working with students with emotional disabilities exhibiting challenging behaviors.

Principals and stakeholders involved in the hiring process of teachers need the ability to identify teachers capable of delivering effective instruction because it is an important predictor of student achievement (Scott et al., 2014). Cannata et al. (2017) suggested the most successful schools at hiring effective teachers have greater achievement growth. Teacher evaluation reforms have changed how principals hire teachers due to the influence of new teacher effectiveness measures, such as teacher growth scores and evidence-based observations, which provide richer information about teacher candidates and help principals identify effective teachers (Cannata et al., 2017). Written in common language, these evaluations have the capability of improving teacher performance. Although teacher effectiveness data can be used to influence hiring decisions, principals still vary in how they are using this information (Cannata et

al., 2017). School systems must focus on making sure principals have the skills and knowledge to use this data to make effective operational decisions.

Rimm-Kaufman and Hamre (2010) suggested a more scientific-based approach to hiring teachers. Psychologically profiling effective teachers may help with the hiring, training, and professional development of new and experienced teachers (Klassen & Tze, 2014). Researchers have begun to use self-efficacy inventories and personality measurements to design new procedures to select and retain effective teachers (Klassen & Tze, 2014). This, in conjunction with skillful probing and questioning of teacher candidates, may prove more useful in evaluating teacher effectiveness.

Schools must also find interventions to support teachers of students with emotional disabilities who exhibit challenging behaviors whether they are being served in a traditional or alternative setting. Instructing students with emotional disabilities can be difficult because teachers must be able to remediate academic deficits and address behavioral needs (Bettini, Kimberling, Park, & Murphy, 2015). The dual demand of addressing these students' needs require teachers to have knowledge in multiple content areas, classroom management skills, and academic and behavioral interventions. The demands required to meet the needs of these students are often overwhelming for SETs. Bettini et al. (2015) suggested that administrators must take responsibility in making sure SETs of students with EBD in self-contained classrooms have adequate time to prepare instructionally for their students. Bettini et al. reported that, "Administrators are essential for ensuring the best use of human capital within schools" (p. 126). SETs must be supported by their administrators in order to meet the demands of their complex jobs. Administrators should make efforts to reduce the quantity of complex tasks assigned to SETs to allow them time to prepare for their students.

CHAPTER THREE: METHODS

Overview

This chapter includes a description of the research methods used in this study. The design, participants, and setting are discussed. The TSES survey and research procedures are described. A description of the statistical procedures used in the study concludes the chapter.

Design

Teachers' route to licensure, traditionally or alternatively (independent variables), was compared to perceived self-efficacy (dependent variable) to determine if a significant difference exists. This research used quantitative analysis to test for differences using a causal comparative design. Causal-comparative research is a nonexperimental investigation that involves selecting two groups that differ on a variable of interest and comparing them on one or more dependent variables (Gall, Gall, & Borg, 2007). Gall et al. (2007) suggested using this type of investigation to find cause-and-effect relationships and then determine if the groups differ on the dependent variable. The two groups compared, traditionally or alternatively certified SETs, already existed thus eliminating the possibility for randomization (Gay & Mills, 2012).

Research Question

RQ: Is there a significant difference in perceived self-efficacy between traditionally and alternatively certified special education teachers of students with emotional disabilities exhibiting challenging behaviors as measured by the long form of the TSES?

H$_0$: There is no significant difference in perceived self-efficacy between traditionally and alternatively certified special education teachers of students with emotional disabilities exhibiting challenging behaviors as measured by the long form of the TSES.

Participants and Setting

The participants for the study were drawn from a convenience sample of teachers employed at an alternative program that services students with emotional disabilities who exhibit challenging behaviors in the southeastern region of the United States during the spring semester of the 2017–2018 school year. The program for students with emotional disabilities serves students exhibiting challenging behaviors who were unable to maintain appropriate behavior control in their previous educational placement. There are 259 licensed teachers employed with Southeastern Alternative Program (SAP, pseudonym) serving 1,271 students with various disabilities such as autism, intellectual disabilities, EBD, and specific learning disabilities.

This study is concerned with the perceived self-efficacy of traditionally and alternatively certified SETs. All SETSs who work at SAP with students identified as having an emotional disability were invited to participate in the study. Participation in this study was voluntary. SETs instructing students in either elementary, middle, or high school at alternative programs at SAP who were serving students with emotional disabilities participated in the study and were administered the long form of the TSES. Participants were asked to identify how they were initially licensed (alternatively or traditionally) and for their demographic information.

Data were collected from SAP 56 teachers. However, 11 of the participants identified themselves as general education teachers and thus their surveys were removed from the dataset. The sample consisted of 30 alternative certified SETs and 15 traditional certified SETs. Table 1 contains the descriptive statistics about the population of SETs analyzed. The majority of participants in both groups identified themselves as Caucasian. A majority of the traditionally certified participants (67%) were women, while more of the alternatively certified participants (57%) were men. Half of the alternative certified participants reported 10 or fewer years of

teaching experience, while the other half reported more than 10 years of experience. The

majority of traditional participants (60%) reported having more than 10 years of teaching

experience.

Table 1

Demographic Characterizes of Participants

| | Type of certificate | | | |
| | Alternative (*n* = 30) | | Traditional (*n* = 15) | |
Characteristics	*N*	%	*n*	%
Age				
25–35	6	20.0	3	20.0
36–45	8	26.7	3	20.0
46–55	10	33.3	8	53.3
56–65	6	20.0	1	6.7
Gender				
Female	13	43.3	10	66.7
Male	17	56.7	5	33.3
Ethnicity				
African American	13	43.3	6	40.0
Hispanic	0	0.0	1	6.7
Caucasian	17	56.7	8	53.3
Years of experience				
0–1	2	6.7	3	20.0
2–5	3	10.0	3	20.0
6–10	10	33.3	0	0.0
11–15	6	20.0	2	13.3
15–20	6	20.0	2	13.3
More than 20	3	10.0	5	33.3

Instrumentation

Teacher efficacy continues to be researched worldwide and is used consistently to

validate a wide range of instructional variables and student-teacher outcomes (Duffin, French, &

Patrick, 2012). The TSES was developed by Tschannen-Moran and Hoy (2001) and is the most

widely used measure of teacher efficacy today (Duffin et al., 2012). The scale has been used in a

number of teacher efficacy studies (Duffin et al., 2012; Klassen et al., 2009; Page et al., 2014;

Tschannen-Moran & Johnson, 2011; Yoo, 2016). The scale includes three subscales: efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement. Items on the TSES are assessed using a 9-point Likert Scale that ranges from 1 (*none at all*) to 9 (*a great deal*) to describe how teachers believe they can do each of 24 statements. A low score reflects a low sense of teacher efficacy and a high score reflects a high sense of teacher efficacy.

Short and long forms of the instrument were developed and the construct validity of each examined. Both the 24 and 12 item forms of the TSES proved to be valid and reliable (Tschannen-Moran & Hoy, 2001). The internal consistency of the long form of the TSES was assessed as an index of reliability and the alpha value for the overall measure was found to be .94 indicating that the instrument is highly reliable (Tschannen-Moran & Hoy, 2001). Tschannen-Moran and Hoy's research found the alpha values for the subscales to be .91 for efficacy in instructional strategies, .90 for efficacy in classroom management, and .87 for efficacy in student engagement. The development of the TSES is considered a step forward in capturing the elusive construct of teacher efficacy. The long form of the TSES was used in this study to measure teacher efficacy (see Appendix A) and the researcher received permission to use this instrument (see Appendix B).

Procedures

Permission to conduct the study was obtained from the Institutional Review Board of Liberty University (see Appendix C). The researcher obtained permission from the Executive Director of SAP to contact and survey teachers in the program who work with emotionally disabled students. Approval was obtained in writing from the Executive Director (see Appendix D). After approval from the Executive Director of SAP and Institutional Review Board of

Liberty University, the researcher contacted principals at the participating schools and scheduled

a date to conduct the study.

Teachers were provided a verbal rationale and a hard copy of the purpose and method of

the study during the designated staff meeting (see Appendix E). Teachers were informed of their

rights to withdraw from the study and that the results of the study may be published. Because

the survey was anonymous, signatures to participate in the study were not required. Teachers

who agreed to participate in the study reviewed the informed consent and the researcher

administered the questionnaire at that time (see Appendix A). Teachers completed the long form

of the TSES and provided demographic information about themselves. After participants

completed the study, the surveys were collected and placed in an envelope. The completed

surveys were analyzed using SPSS (Version 25) software. Data were stored in a locked file by

the researcher and will be kept for 7 years as required. The researcher will be the only person

with access to the locked file. The results of the study will be provided to the SAP Coordinator

for Professional Development and Quality Assurance and upon request to SETs who participated

in the study.

Data Analysis

The researcher used SPSS (v.25) to compute descriptive and inferential statistics on the

data collected from the participants. The means and standard deviations of the TSES total scale

and each subscale were computed and described in tabular form. A multivariate analysis of

variance (MANOVA) was conducted to determine if there were significant differences in

the perceived self-efficacy of traditionally and alternatively certified SETs of students with

emotional disabilities exhibiting challenging behaviors. A MANOVA is an appropriate

statistical analysis when the purpose of research is to assess if mean differences exist on two or

more continuous dependent variables by an independent variable with two or more separate groups (Gall et al., 2007). The dependent variable in this analysis is perceived self-efficacy (as measured by three subscales of the TSES) and the independent variable is route to licensure (traditional or alternative).

The assumptions of the MANOVA (absence of multivariate outliers, linearity, absence of multicollinearity, and equality of covariance matrices) were assessed. Mahalanobis Distances were used to determine if multivariate outliers were in the dataset. Scatterplot matrices for each group were used to determine if the dependent variables were linearly related. The absence of multicollinearity was evaluated by assessing correlation among the dependent variables. Any dependent variable correlated with the other dependent variables at values approaching .90 (Tabachnick & Fidell, 2013) are a concern for multicollinearity. Dependent variables were assessed using independent samples *t* test. Independent samples *t* test are used to determine whether differences exist between the means of two groups and whether the differences are statistically significant (Gall et al., 2007). The assumption of equality of covariance matrices was evaluated by running a Box's M test within the MANOVA. The MANOVA and independent samples *t* tests were evaluated at $p < .05$.

The assumptions for an independent samples *t* test are normality, adequate sample size, and equality of variance. Normality was assessed using skewness and kurtosis values obtained for the four dependent variables. The sample contains 45 cases. According to the central limit theorem, at least 30 participants are necessary in a study to reflect the mean of the population (Rice, 1995). The independent samples *t* tests use the Welch-Satterthwaite method to adjust the degrees of freedom if the Levene's test for equality of variances is statistically significant (Lund Research, 2018).

CHAPTER FOUR: FINDINGS

Overview

The purpose of this casual-comparative study was to determine if there was a statistically significant difference in perceived self-efficacy between alternatively and traditionally certified SETs. The study focused on SETs working with students with emotional disabilities exhibiting challenging behaviors. A MANOVA and independent samples t tests were used to make conclusions from the sample and evaluate the research question.

Research Question

RQ1: Is there a significant difference in perceived self-efficacy between traditionally and alternatively certified special education teachers of students with emotional disabilities exhibiting challenging behaviors as measured by the long form of the TSES?

H₀1: There is no significant difference in perceived self-efficacy between traditionally and alternatively certified special education teachers of students with emotional disabilities exhibiting challenging behaviors as measured by the TSES.

Descriptive Statistics

Approximately half of the 102 teachers at SAP who worked with students with emotional disabilities exhibiting challenging behaviors were certified to teach special education. Data were collected from 56 SAP teachers. However, 11 of the participants identified themselves as general education teachers. Their surveys were removed from all analyses. Of the remaining 45 surveys, 15 were from alternative certified SETs and 30 were from traditional certified SETs. The dependent variable of perceived self-efficacy was used to address the research question. The dependent variable included three perceived-self efficacy subscales. Each subscale contained eight items (see Table 2).

Table 2

TSES Subscale Items

Scale	Items
Student engagement	1, 2, 4, 6, 9, 12, 14, 22
Instructional strategies	7, 10, 11, 17, 18, 20, 23, 24
Classroom management	3, 5, 8, 13, 15, 16, 19, 21

The reliability values for each subscale and the overall TSES scale are presented in Table 3. The values were near or greater than .80, indicating good internal consistency of the TSES subscales and overall scale (see Nunnally, 1978). The reliability alpha coefficients obtained in the current study were similar to those found by Tschannen-Moran Hoy (2001).

Table 3

Reliability of TSES Scale and Subscales by Type of Certification

Scale	Total group ($n = 45$)	Alternative ($n = 30$)	Tradition ($n = 15$)	Tschannen-Moran & Hoy (2001)
Student engagement	.81	.79	.85	.91
Instructional strategies	.89	.84	.94	.90
Classroom management	.84	.79	.90	.87
Overall	.93	.92	.94	.94

Responses to the TSES were measured on a 9-point Likert scale that ranged from 1 (*none at all*) to 9 (*a great deal*). Composite scores were calculated for each subscale by averaging scores across each of the subscale's eight items. A composite score for the total TSES scale was calculated by averaging scores across all 24 items. Table 4 contains the descriptive statistics for each scale and the TSES overall scale. Both the alternative and traditional certified SETs

indicated less efficacy in student engagement and highest efficacy in instructional strategies. The data showed that traditionally certified teachers scored higher in overall perceived self-efficacy and in each of the three subscales. Skewness and kurtosis values were well within ranges, indicating normal distributions (Gravetter & Wallnau, 2014).

Table 4

Teachers' Perceived Self-Efficacy Scores by Certification Types

Dependent Variable	Min	Max	*M**	*SD*	Skewness	Kurtosis
Alternative (*n* = 30)						
Student engagement	4.88	8.50	6.51	0.93	-0.25	-0.50
Instructional strategies	5.25	8.88	7.23	0.83	-0.18	-0.26
Classroom management	5.25	8.38	7.10	0.81	-0.37	-0.40
TSES overall	5.17	8.33	6.95	0.79	-0.31	-0.57
Traditional (*n* = 15)						
Student engagement	4.88	8.88	6.70	1.09	-0.04	-0.11
Instructional strategies	5.00	9.00	7.54	1.20	-0.97	0.27
Classroom management	5.25	9.00	7.36	1.13	-0.39	-0.90
TSES overall	5.04	8.88	7.20	1.02	-0.63	0.20

* Likert scale ranged from 1 (*none at all*) to 9 (*a great deal*)

Appendix A1 contains the means and standard deviations for each item on each subscale by total sample and type of certification. In each subscale, traditionally certified SETs perceived their self-efficacy higher on more than half of the eight items in each scale. In the student engagement subscale, traditionally certified teachers reported higher perceived self-efficacy on seven of the eight items. In both the instructional strategies and classroom management subscales, the traditionally certified teachers reported higher perceived self-efficacy on five of the eight items. In each scale, the largest differences between the two groups of teachers were found in Item 6 (get students to believe they can do well in school), Item 7 (ability to respond to difficult questions from students), and Item 13 (get children to follow classroom rules).

Assumption Tests

Assumptions of the multivariate analysis of variance include absence of multivariate outliers, linearity (all dependent variables are linearly related to each other), absence of multicollinearity (dependent variables are not highly correlated with each other), and equality of covariance matrices. Absence of multivariate outliers is assessed by using Mahalanobis Distances found in the regression procedure in SPSS. Cases are identified as multivariate outliers if the Mahalanobis Distance is greater than the critical chi square value at $p < .001$ with four degrees of freedom (number of dependent variables) of 18.47. No cases were found with Mahalanobis Distances greater than 9.58.

Scatterplot matrices for each group (traditionally and alternatively certified special education teachers) were used to determine if the dependent variables were linearly related. The scatterplots (see Figure 1) show linearity is present in both groups. Multicollinearity (or its absence) is evaluated by the correlation among the dependent variables. The dependent variables should be moderately correlated, but correlations approaching .90 (Tabachnick & Fidell, 2013) are a concern for multicollinearity. The TSES overall scale is a linear combination of the subscales and is highly correlated with them (see Table 5). Therefore, the TSES overall scale
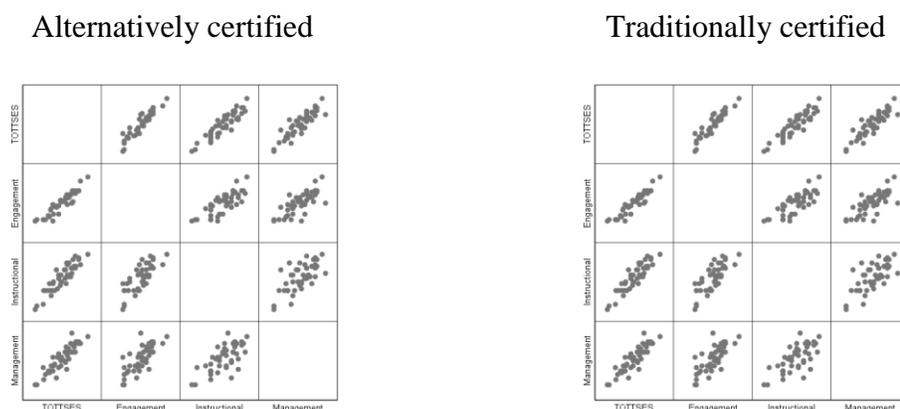

Figure 1. Scatterplots of dependent variables by type of certificate.

will not be used in the MANOVA. Instead, independent samples t tests were used to analyze the

TSES overall scale and subscales. The assumption of equality of covariance matrices is

evaluated by running a Box's M test. The Box's M (13.70, p = .05) obtained in the MANOVA

with the three TSES subscales was not significant. The assumptions for MANOVA were met.

Table 5

Correlation of Dependent Variables

Dependent variable	Instructional strategies	Classroom management	TSES overall
Student engagement	.79	.76	.93
Instructional strategies		.69	.91
Classroom management			.89

Results

A MANOVA was conducted to determine if perceived self-efficacy was different for

alternatively and traditionally certified teachers by comparing the mean TSES subscale scores of

the groups. The TSES overall scale scores were not used in this statistical procedure. The

overall scale score is a linear combination of the subscales and is highly correlated with them

(approaching r = .90). This dependent variable (TSES overall scale) provides information that is

redundant to the information available in the three subscales. The analysis of the TSES overall

scale was analyzed using an independent samples t test. In addition, TSES subscales were

analyzed using independent samples t tests.

Table 6 includes the means and standard deviations of alternatively and traditionally

certified special education teachers in overall perceived self-efficacy and the TSES subscales.

Table 6

Teachers' Perceived TSES Scale and Subscale Scores by Type of Certificate

| | Type of Certificate | | | | | |
| | Alternative (*n* = 30) | | Traditional (*n* = 15) | | Effect size | |
Dependent variable	*M*	*SD*	*M*	*SD*	partial η^2	*D*
Student engagement	6.51	0.93	6.70	1.09	.01	.19
Instructional strategies	7.23	0.83	7.54	1.20	.02	.30
Classroom management	7.10	0.81	7.36	1.13	.02	.26
TSES overall	6.95	0.79	7.20	1.02	NA	.24

* Likert scale ranged from 1 (*none at all*) to 9 (*a great deal*)

Tables 7 and 8 are the actual MANOVA output tables from SPSS (v.25). Table 9 includes a

Table 7

SPSS Output Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.985	910.379[b]	3.000	41.000	.000
	Wilks' Lambda	.015	910.379[b]	3.000	41.000	.000
	Hotelling's Trace	66.613	910.379[b]	3.000	41.000	.000
	Roy's Largest Root	66.613	910.379[b]	3.000	41.000	.000
License	Pillai's Trace	.029	.411[b]	3.000	41.000	.746
	Wilks' Lambda	.971	.411[b]	3.000	41.000	.746
	Hotelling's Trace	.030	.411[b]	3.000	41.000	.746
	Roy's Largest Root	.030	.411[b]	3.000	41.000	.746

a. Design: Intercept + license

b. Exact statistic

Table 8

SPSS Output Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	Engagement	.367[a]	1	.367	.381	.540
	Instructional	.951[b]	1	.951	1.022	.318
	Management	.646[c]	1	.646	.754	.390
Intercept	Engagement	1744.601	1	1744.601	1809.384	.000
	Instructional	2183.006	1	2183.006	2345.999	.000
	Management	2091.639	1	2091.639	2441.236	.000
License	Engagement	.367	1	.367	.381	.540
	Instructional	.951	1	.951	1.022	.318
	Management	.646	1	.646	.754	.390
Error	Engagement	41.460	43	.964		
	Instructional	40.012	43	.931		
	Management	36.842	43	.857		
Total	Engagement	1985.563	45			
	Instructional	2462.797	45			
	Management	2363.094	45			
Corrected Total	Engagement	41.828	44			
	Instructional	40.963	44			
	Management	37.488	44			

a. R Squared = .009 (Adjusted R Squared = -.014)

b. R Squared = .023 (Adjusted R Squared = .000)

c. R Squared = .017 (Adjusted R Squared = -.006)

summary of the MANOVA analysis of TSES subscales by certification type. In the MANOVA, a statistically significant difference was not found in the TSES subscales of alternatively and traditionally certified special education teachers, $F(3, 41) = .41$, $p = .75$ (see Table 9).

Table 9

MANOVA Analysis of TSES Subscales by Type of Certificate

Dependent variable	F	P
Multivariate test	0.41	.75
Test of between-subjects effects		
Student engagement	0.38	.54
Instructional strategies	1.02	.32
Classroom management	0.75	.39

In the *t* test, the TSES overall scale was not significantly different between the two groups of certified special education teachers, $t(43) = -.91$, $p = .37$ (see Table 10). In the *t* test, the TSES subscale for student engagement was not significantly different between the two groups of certified special education teachers, $t(43) = -.62$, $p = .54$ (see Table 11). In the *t* test, the TSES subscale for instructional strategies was not significantly different between the two groups of certified special education teachers, $t(43) = -1.01$, $p = .32$ (see Table 12). In the *t* test, the TSES subscale for classroom management was not significantly different between the two groups of certified special education teachers, $t(43) = -.87$, $p = .39$ (see Table 13). In both the MANOVA and the *t* tests results, the difference in mean scores between the groups was small (see partial η^2 and *d* effect sizes in Table 6) and not significant. Therefore, the null hypothesis was not rejected. There is no significant difference in perceived self-efficacy between traditionally and alternatively certified special education teachers of students with emotional disabilities exhibiting challenging behaviors as measured by the TSES.

Table 10

Independent Samples Test-TSES Overall

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
TSES overall	Equal variances assumed	.68	.42	-.91	43	.37
	Equal variances not assumed			-.84	22.60	.41

Table 11

Independent Samples Test-Student Engagement

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Student engagement	Equal variances assumed	.39	.54	-.62	43	.54
	Equal variances not assumed			-.58	22.42	.56

Table 12

Independent Samples Test-Instructional Strategies

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Instructional strategies	Equal variances assumed	1.82	.19	-1.01	43	.32
	Equal variances not assumed			-.90	20.91	.38

Table 13

Independent Samples Test-Classroom Management

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Classroom management	Equal variances assumed	3.77	.06	-.87	43	.39
	Equal variances not assumed			-.78	21.39	.45

Summary

The purpose of this causal-comparative study was to determine if the perceived self-efficacy of SETs working with students with emotional disabilities exhibiting challenging behaviors is influenced by type of certification. The analysis of the data from 45 traditionally and alternatively certified SETs found no significant differences in perceived self-efficacy. However, the small sample size created a potential risk that a Type II error was made in this research. Power analysis using G*Power (Version 3.1.9.2) indicated that in order for an effect size to be detected (80% chance) as significant at the .05 alpha level, a sample of 128 participants is required.

CHAPTER FIVE: CONCLUSIONS

Overview

The purpose of this causal-comparative study was to determine if the perceived self-efficacy of SETs working with students with emotional disabilities exhibiting challenging behaviors is influenced by certification (traditional or alternative). This study surveyed 56 teachers using the TSES and analyzed 45 responses to determine if perceived self-efficacy beliefs differed between the two groups of certified SETs. The implications and limitations of this study will be further explored and discussed in this chapter. Recommendations for future research will follow.

Discussion

A review of the literature suggests there is an increase in the number of alternatively certified teachers being hired to teach due to teacher shortage. Research indicates that there is particularly a shortage of SETs of students with EBD (Gage, Adamson, MacSuga-Gage, & Lewis, 2017). These students often exhibit challenging behaviors and are often met by inexperienced alternatively certified teachers in the classroom (Gage et al., 2017). As the number of alternatively certified teachers in the classroom continues to increase nationwide (National Association for Alternative Certification, 2015), concern about the effectiveness of this growing population of teachers continues to arise (Billingsley, 2004a). Stakeholders continue to inquire about the effectiveness of alternatively certified teachers (Sutcher et al., 2016) because teachers' perceived self-efficacy is associated with student academic success and achievement (Armor et al., 1976; Bandura, 1977; Gibson & Dembo, 1984). The increase of alternatively certified teachers entering the teaching profession has incited researchers to investigate the implications of untrained teachers entering our nation's classrooms. Many of these studies

determined that traditionally certified teachers performed better than alternatively certified teachers and that these teachers felt better prepared across most dimensions of teaching compared to alternatively certified teachers (Darling-Hammond, Chung, & Frelow, 2002; Nakai & Turley, 2003). Other studies have found that no difference in performance exists between traditionally and alternatively certified teachers (Goldhaber & Brewer, 2000; Zeichner & Schulte, 2001). Shuls and Trivitt (2015) concluded that little difference in terms of quality exists between traditional and alternative certified teachers.

The purpose of this study was to determine if the perceived self-efficacy of SETs working with students with emotional disabilities exhibiting challenging behaviors is influenced by certification (traditional or alternative). The research question examined if there was a significant difference in the perceived self-efficacy of SETs of students with emotional disabilities exhibiting challenging behaviors based on their route to certification (traditional or alternative) as measured by the long form of the TSES. The long form of the TSES was used to examine quantitatively teachers' overall perceived self-efficacy and their perceived self-efficacy beliefs on the three subscales of the survey: efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement. A MANOVA was conducted and the mean TSES subscale scores of alternatively and traditionally certified teachers were compared to determine if perceived self-efficacy was different. An independent samples *t* test was used to analyze the data and determine if there was a difference in overall perceived self-efficacy.

The data indicated there were no significant differences between overall perceived self-efficacy and the route to teacher certification (alternative or traditional) between the two groups of special education teachers. No statistically significant differences were found on the three

subscales of perceived self-efficacy (efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement) for the alternatively and traditionally certified SETs surveyed. Prior studies consistent with these findings include the research conducted by Fox and Peters (2013) who examined the self-efficacy of 288 traditional and alternative certified teachers using the TSES. Results of their study showed that certification had no influence on the self-efficacy of the teachers surveyed (Fox & Peters, 2013). Both traditionally and alternatively certified teachers reported experience and mentoring as critical elements needed to support their self-efficacy (Fox & Peters, 2013). Rocca and Washburn (2006) found that the self-efficacy of traditionally and alternatively certified teachers resulted in nearly equally summated means for the two groups. Results also showed a small positive correlation between teaching experience and teacher efficacy (Rocca & Washburn, 2006). These findings differ from the research conducted by Flores et al. (2004) who reported that traditionally certified teachers exhibited higher teacher efficacy than alternatively certified teachers. According to Flores et.al, traditionally certified teachers had a greater knowledge in pedagogy that contributed to their increased efficacy. Traditionally certified teachers also used a variety of instructional practices in the classroom to enhance learning and were open to experimentation when teaching (Flores et al., 2004).

Further results of this study showed that both traditional and alternative certified SETs indicated the highest efficacy in instructional strategies. Traditionally certified teachers may have scored highest in this subscale since these teachers have the opportunity to complete formal education programs where they are able to practice teaching. Under the guidance of mentors during teacher training, traditionally certified teachers are able to develop an understanding of pedagogical theories (Sutcher et al., 2016). These teachers are able to observe and practice in the

classroom before entering the profession. Based on Bandura's (1977, 1997) social learning theory, these teachers are able to learn from watching one another and from modeling each other's behaviors resulting in more confidence in their teaching abilities. On the other hand, alternatively certified teachers may have scored highest in this subscale due to their years of teaching experience. Over 80% of the alternatively certified teachers surveyed reported having at least 6-10 years teaching experience. According to Klassen and Chiu (2010), teachers' years of experience were linked to their instructional strategies self-efficacy. In their study, teachers with 23 years of experience averaged 88% more instructional strategies self-efficacy than new teachers.

Results of this study also showed that both traditional and alternative certified SETs indicated the lowest efficacy in student engagement. A possible reason for this finding may stem from the fact that 80% of both the traditionally and alternatively certified SETs surveyed were over the age of 36 years old. Shaukat and Iqbal (2012) found that younger teachers were more likely to engage their students than older teachers. This study also found that classroom management and student engagement were correlated (Shaukat & Iqbal, 2012). When students are engaged, they are better disciplined and cause less disruptions in the classroom. Another possible reason why efficacy in student engagement was low is that engagement is a multidimensional construct requiring a resourceful skillset in order to implement. Engagement focuses on three aspects: behavioral engagement, cognitive engagement, and emotional engagement. The eight items in student engagement on the TSES have questions that focus on each of these areas. The teachers at SAP working with students with emotional disabilities exhibiting challenging behaviors struggle to behaviorally engage students. In addition to academic instruction, SAP teachers working with this population must re-educate their students,

teaching them the rules and norms in structured classrooms. The students often have a difficult time engaging emotionally to learning. These students often have learning deficits that SAP teachers must mediate while finding ways to motivate students to want to learn. SAP teachers must be able to engage students cognitively so that students can accomplish their learning goals and put effort in learning.

Classroom management is an important aspect of maintaining order in the classroom so that learning can occur. SAP teachers working with students exhibiting challenging behaviors must be able to build relationships with their students and implement effective classroom management techniques. These teachers establish rituals and routines in a structured environment where policies and procedures are adhered. Students have clear expectations for learning and the ability of the teacher to manage the classroom effectively often determines the success or failure of their students. In this study, the difference in the efficacy in classroom management mean scores between traditionally ($M = 7.36$, $SD = 1.13$) and alternatively ($M = 7.10$, $SD = 0.81$) certified SETs was small indicating no significant difference. This is similar to findings in a study conducted by Uriegas, Kupczynski, and Mundy (2014) where no significant differences were found in the number of referrals written by traditional and alternative certified teachers. Teachers certified through a traditional program did not have any advantage over alternatively certified teachers in terms of classroom management (Uriegas et. al, 2014).

Implications

School leaders and stakeholders continue to question the preparedness of alternatively certified teachers and their effectiveness in the classroom (Gage et al., 2017). SETs serving students with emotional disabilities are often alternatively certified and less experienced compared to other SETs (Gage et al., 2017). School administrators must find alternative ways to

increase the perceived self-efficacy of SETs working with students with emotional disabilities exhibiting challenging behaviors regardless of certification because teacher self-efficacy is correlated to student achievement (Zee & Koomen, 2016). The implication of using the TSES to survey SETs in order to get feedback on their needs and to increase their perceived self-efficacy is important. Administrators can provide SETs training, instruction, and social support from co-workers based on the feedback they receive from their special education teachers. Since SETs are often at different stages of development in their careers, providing professional development opportunities based on teacher needs and interest is a way that school administrators can help increase the perceived self-efficacy of both alternatively and traditionally certified special education teachers.

Increasing the perceived efficacy of SETs working with students with emotional disabilities exhibiting challenging behaviors is also a way for school administrators to decrease teacher burnout and reduce outcomes associated with burnout such as teacher attrition. Research has identified a number of factors affiliated with teacher burnout such as lack of support from administrators (Skaalvik & Skaalvik, 2014), paperwork (Billingsley, 2004b), unrealistic expectations in the classroom and dealing with challenging student behaviors (Malow et al., 2011). SETs do not feel supported by their administrators and often report not having the resources they need to perform their teaching duties. Those working with students with emotional disabilities are experiencing burnout at higher rates than SETs working with students with other disabilities (Brunsting, Sreckovic, & Lane, 2014). Research shows that alternatively certified teachers are more probable to leave the teaching profession than traditionally certified teachers (Redding & Smith, 2016). The high attrition rates of alternatively certified teachers

affect student achievement, training cost and can put a strain on school resources (Redding & Smith, 2016).

The implication of this study also suggests that student engagement is an area that SETs working with students with emotional disabilities exhibiting challenging behaviors need support in. Results from the TSES indicated that traditionally and alternatively certified SETs scored items in the efficacy of student engagement the lowest. Wang and Degol (2014) reported that engagement is important because it is a predictor of educational outcomes for students. Students must engage in assignments and actively listen and participate in instruction in order to be successful. At the same time, teachers must have the ability to capture students' attention and engage them in instructional activities. This is important when working with students with emotional disabilities exhibiting challenging behaviors because these students often do not excel in instruction. For these students, high emotional engagement may lead to students using learning strategies during instruction, resulting in greater behavioral engagement within the classroom setting (Wang & Degol, 2014) and increased academic achievement.

Limitations

Internal threats to validity were limited in this study in selection, testing, instrumentation, and maturation. All SETs at SAP working with students with emotional disabilities exhibiting challenging behaviors were invited to participate in the study. Participants were provided the same instrumentation in the same format (paper/pencil). The long form of the TSES survey was administered to teachers over a three day window limiting maturation.

External threats to validity include the sample size of the population. This study surveyed a specific population of SETs at a location with a limited number of qualified participants. This limitation decreased the generalizability of the study and resulted in a small

sample size. An overall reduction of statistical power for the study also resulted from the small

sample size and increased the possibility that a Type II error occurred. Consideration was taken

to broaden the population of teachers surveyed by including SETs not employed at SAP from

nearby school districts. The researcher opted not to include other SETs in the study because

SAP is an alternative program and a more restrictive environment. The challenging behaviors

presented by the students with emotional disabilities at SAP are typically far greater than those

presented by students in the comprehensive school setting and require teachers skilled in

classroom management and the use of positive reinforcement and interventions. SAP students

also typically perform below grade level when compared to their same age peers. This requires

teachers to adjust their instructional strategies to differentiate instruction in order to increase

student engagement. The teachers at SAP also spend their entire day with students, forgoing

planning periods and breaks for lunch. The amount of time SAP teachers are required to spend

in a day with students may affect their resilience to manage behaviors, their belief in their ability

to mitigate behaviors and possibly their perceived self- efficacy.

Recommendations for Future Research

This study expands the literature on TSES and helps bridge the gap between research on

the perceived self-efficacy of alternatively and traditionally certified SETs who work with

students with emotional disabilities exhibiting challenging behaviors. Further research on the

perceived self-efficacy of SETs who work with this population of students is recommended

because little is known about this group. Based on the results of this study, future research

should include an increased sample size of participants. Research would benefit from finding

alternative programs similar to SAP and surveying their SETs to determine TSES scores and to

further explore if route to certification impacts the academic outcomes of students with

emotional and behavioral disorders. School leaders could then use this information to support these teachers by developing trainings to address their needs.

Second, further research recommendations include determining if professional development leads to increased perceived self-efficacy. Since many alternatively certified teachers enter the profession with no formal teacher training, they may lack the skills and abilities to deal with the behavioral and academic challenges presented by students with EBD which could lead to increased attrition rates (Brownell et al., 2002). Alternatively certified teachers continue to lessen the dilemma of teacher shortage in our schools but they may need training and mentoring from co-workers to increase their perceived self-efficacy. Research should be conducted to determine if professional development increases the perceived self-efficacy of SETs working with students with emotional disabilities exhibiting challenging behaviors.

Third, in addition to certification type, further research recommendations include comparing years of experience and the perceived self-efficacy of alternatively and traditionally certified SETs who work with students with emotional disabilities exhibiting challenging behaviors. Researchers should explore if perceived self-efficacy increases with experience or is contributed to other factors such as student success, gender, or job satisfaction. This is important because it is believed that teachers already have a sense of teacher-efficacy when they first arrive to the profession. The debate remains if perceived self-efficacy remains the same or changes over time, especially for SETs working with students with emotional disabilities exhibiting challenging behaviors because many critics continue to question the preparedness and effectiveness of alternatively certified teachers working with this population of students.

Lastly, teacher attrition continues to impact special education teachers. SETs, regardless of certification, must be ready to meet students' diverse learning needs. Research is needed on the perceived collective teaching efficacy (CTE) for SETs who work with students with emotional disabilities exhibiting challenging behaviors. Bandura (1997) proposed the construct of collective teacher efficacy to define and reveal how well members of a group relate to each other while working towards a common goal. This concept is similar to self-efficacy, relates to the goals of a group (Chu & Garcia, 2018), and has been associated with the group's willingness to persist during difficult times.

Working with students with emotional disabilities who exhibit challenging behaviors can have a negative impact on teachers' professional resilience. SETs of students with emotional disabilities exhibiting challenging behaviors must be supported in order for them to have job satisfaction and remain in the profession. These teachers must not operate alone in the classroom or within their school communities to help avoid burnout, stress, emotional exhaustion, and frustration. Instead, these teachers must have the ability to work together to plan and effectively implement lessons that result in positive student achievement outcomes and success. CTE is related to student achievement, learning, cognitive development, motivation and job satisfaction (as cited in Chu & Garcia, 2018). Considered a powerful construct for improving student learning outcomes, CTE is achievable in all schools (Chu & Garcia, 2018). Research on the interrelationships between perceived self-efficacy, CTE, and student achievement outcomes remains scarce for SETs working with students with emotional disabilities exhibiting challenging behaviors.

Perceived self-efficacy is linked to the academic outcome of students. Teachers with high perceived self-efficacy are able to meet the academic demands of students and manage their classrooms. They also have a high commitment to staying in the teaching profession. Many teachers are entering the teaching profession through alternative certification programs; now considered routine in credentialing new teachers. The findings of this current study did not yield a statistically significant difference in the perceived self-efficacy between alternative and traditional certified teachers working with students with emotional disabilities exhibiting challenging behaviors. However, the issue of teacher certification and its impact on student achievement warrants further examination; especially as policymakers focus on ESSA related requirements and implement evaluation systems linking teacher performance to student achievement.

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APPENDICES

Appendix A: TSES Long Form

The long form of the Teacher's Sense of Efficacy Scale was removed for copyright purposes.

Appendix A1: Item Descriptives by Type of Certificate and Total Group

	Type of certificate					
	Alternative (n = 30)		Traditional (n = 15)		Total (n = 45)	
	M	SD	M	SD	M	SD
Efficacy in student engagement items						
1. How much can you do to get through to the most difficult students?	6.37	1.35	6.93	1.75	6.56	1.50
2. How much can you do to help your students think critically?	6.57	1.59	6.27	1.53	6.47	1.56
4. How much can you do to motivate students who show low interest in schoolwork?	6.60	1.35	6.00	1.46	6.40	1.40
6. How much can you do to get students to believe they can do well in schoolwork?	6.63	1.52	7.33	1.50	6.87	1.53
9. How much can you do to help your students value learning?	6.37	1.43	6.93	1.62	6.56	1.50
12. How much can you do to foster student creativity?	7.07	1.39	7.33	1.45	7.16	1.40
14. How much can you do to improve the understanding of a student who is failing?	6.50	1.31	7.07	1.39	6.69	1.25
22. How much can you assist families in helping their children do well in school?	6.00	1.71	5.73	1.79	5.89	1.72
Efficacy in instructional strategies items						
7. How well can you respond to difficult questions from your students?	7.10	1.09	8.07	1.10	7.42	1.18
10. How much can you gauge student comprehension of what you have taught?	7.00	1.31	7.53	1.30	7.18	1.23
11. To what extent can you craft good questions for your students?	7.17	0.91	7.00	1.56	7.11	1.15
17. How much can you do to adjust your lessons to the proper level for individual students?	7.23	1.25	7.73	1.33	7.40	1.29
18. How much can you use a variety of assessment strategies?	7.37	1.19	7.27	1.62	7.33	1.33
20. To what extent can you provide an alternative explanation or example when students are confused?	7.23	1.25	7.80	1.32	7.42	1.29
23. How well can you implement alternative strategies in your classroom?	7.37	1.43	7.20	1.47	7.31	1.43
24. How well can you provide appropriate challenges for very capable students?	7.40	1.13	7.73	1.67	7.51	1.32
Efficacy in classroom management items						
3. How much can you do to control disruptive behavior in the classroom?	7.13	1.43	6.93	1.83	7.07	1.56
5. To what extent can you make your expectations clear about student behavior?	7.83	1.17	7.67	1.23	7.78	1.15
8. How well can you establish routines to keep activities running smoothly?	7.53	1.22	7.73	1.58	7.42	1.34
13. How much can you do to get children to follow classroom rules?	6.90	1.30	7.60	0.99	7.60	1.24
15. How much can you do to claim a student who is disruptive or noisy?	6.50	1.04	7.00	1.41	7.13	1.19
16. How well can you establish a classroom management system with each group of students?	7.43	1.41	7.47	1.73	6.67	1.50
19. How well can you keep a few problem students from ruining an entire lesson?	6.30	1.34	6.80	1.57	7.44	1.42
21. How well can you respond to defiant students?	7.20	1.16	7.67	1.40	6.47	1.25

Appendix B: Permission to Use TSES

Re: Permission to use your TSES in a Doctoral Study

Anita Woolfolk Hoy [anitahoy@mac.com]
Sent: Wednesday, March 28, 2018 11:09 PM
To: Maisha E. Williams

You are welcome to use the TSES in your research. This website might be helpful to you:
   http://u.osu.edu/hoy.17/research/instruments/

   Best wishes in your work.

   Anita

   Anita Woolfolk Hoy, PhD
   Professor Emerita
   The Ohio State University
   7655 Pebble Creek Circle, Unit 301
   Naples, FL 34108

   415-640-2017

   On Mar 28, 2018, at 2:53 PM, Maisha E. Williams <   > wrote:

   Dear Dr. Hoy,
      My name is Maisha Williams and I am a doctoral student at Liberty University. I am
   writing to request your permission to use the Teacher Sense of Efficacy Scale Long Form
   for my research titled The Effects of Teacher Certification on Perceived Self-Efficacy: A
   Comparison of Traditionally and Alternatively Certified Teachers of Students with
   Emotional Disabilities Exhibiting Challenging Behaviors. Please email me back with your
   permission to use the scale if granted. I look forward to your response and thank you for
   your consideration.

   Sincerely,

   Maisha Williams

Appendix C: IRB Approval

June 13, 2018

Maisha Williams
IRB Exemption 3290.061318: The Effects of Teacher Certification on the Perceived Self-Efficacy: A Comparison of Traditionally and Alternatively Certified Teachers of Students with Emotional Disabilities Exhibiting Challenging Behaviors

Dear Maisha Williams,

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

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

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

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

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

Sincerely,

████████████████████

Administrative Chair of Institutional Research
The Graduate School

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Appendix D: Approval from Executive Director to Conduct Research

April 13, 2018

Mrs. Maisha Williams

██████████████

Re: Application to Conduct Research

Dear Mrs. Williams,

This letter authorizes you to conduct research that will include teachers from the ████████ ████████ programs in your study "The Effects of Teacher Certification on Perceived Self-Efficacy: A Comparison of Traditionally and Alternatively Certified Teachers of Students with Emotional Disabilities Exhibiting Challenging Behaviors" as described in the documentation you provided. It is my understanding that this research is in partial fulfillment of the requirements for your doctoral degree from Liberty University.

It is noted that you have meet with ████████████, Assistant Director of Programs, to discuss your plans regarding staff participation in your study. If you have further questions or need additional information, please contact ████████████, Coordinator for Professional Development/Quality Assurance at ████████████.

Sincerely,

Executive Director

Appendix E: Consent Form

CONSENT FORM

The Effects of Teacher Certification on Perceived Self-Efficacy: A Comparison of Traditionally
and Alternatively Certified Teachers of Students with Emotional Disabilities Exhibiting
Challenging Behaviors
Maisha Williams, Ed.S
Liberty University
Graduate School of Education

You are invited to be in a research study related to the perceived self-efficacy of traditionally and
alternatively certified teachers of students with emotional disabilities exhibiting challenging
behaviors. You were selected as a possible participant because you are a male or female special
education teacher working with students with emotional disabilities exhibiting challenging
behaviors. Please read this form and ask any questions you may have before agreeing to be in
the study.

Maisha Williams, a doctoral student in the School of Education at Liberty University, is
conducting this study.

Background Information: The purpose of this study is to determine if the perceived self-
efficacy of special education teachers working with students with emotional disabilities
exhibiting challenging behaviors is influenced by certification (traditional or alternative).

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

  ☐ Complete the attached Teacher's Sense of Efficacy Scale and answer demographic
     questions. It should take approximately ten minutes for you to complete the survey.

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

Benefits: Benefits to society of this study include allowing principals to support special
education teachers through behavioral and instructional trainings to increase the perceived-self
efficacy of special education teachers, thus increasing student achievement for students with
emotional disabilities exhibiting challenging behaviors. This study will bring awareness to
principals about the importance of building capacity with their special education teachers so that
these teachers in turn will increase student achievement and have increased job satisfaction so

that the teacher shortage in special education is mitigated. Participants should not expect to receive a direct benefit from taking part in this study.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. The researcher, Maisha Williams, will not include any information that will make it possible to identify a subject in any report that I might publish. Research records will be stored securely, and only the researcher will have access to the records.

> The Liberty University Institutional
> Review Board has approved
> this document for use from
> 6/13/2018 to --
> Protocol # 3290.061318

- Surveys will be anonymous. Teachers will be distributed a paper copy of the survey to complete and will be seated at spread out tables in the room so that others cannot view their responses.
- Data will be stored in a locked file by the researcher and kept for three years as required. The data will be shredded by the researcher after three years. The researcher will be the only person with access to the locked file.

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 or SECEP. If you decide to participate, you are free to not answer any question or withdraw at any time prior to turning in the survey.

How to Withdraw from the Study: If you choose to withdraw from the study, please inform the researcher that you wish to discontinue your participation prior to submitting your survey. Your responses will not be recorded or included in the study.

Contacts and Questions: The researcher conducting this study is Maisha Williams. You may ask any questions you have now. If you have questions later, you are encouraged to contact Maisha Williams at ▓▓▓▓▓▓▓▓▓▓▓▓▓▓. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact ▓▓▓▓▓▓▓▓▓, Dissertation Chair, at ▓▓▓▓▓▓▓▓ or Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

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