

A COMPARATIVE STUDY OF SPECIAL EDUCATION TEACHERS' INCLUSION
PERCEPTIONS: THE ROLE OF CERTIFICATION ROUTES

by

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Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2019

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2019

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ABSTRACT

A primary goal of education is to increase student achievement. Many school districts are addressing increased student achievement by hiring and retaining effective teachers. Teacher effectiveness and student achievement are both influenced by teacher perception. Teachers with positive perceptions have been shown to contribute to increased student achievement and are perceived to be effective educators. Special education teachers hold both positive and negative perceptions about inclusion. In addition to varied perceptions of inclusion, teachers have taken different routes to obtain special education teacher certification. The purpose of this causal-comparative, quantitative study was to determine whether a statistically significant difference exists in inclusion perceptions between special education teachers who have earned their special education certification through a traditional certification program and those who have done so through an alternative certification program. A random sample of 112 special education teachers, obtained from a market research sample aggregator, participated in the study through an online anonymous survey. The Opinions Relative to the Integration of Students with Disabilities (Antonak & Larrivee, 1995) instrument measured participants' inclusion perceptions. Responses to the survey instrument were compiled and analyzed using an independent samples *t*-test to identify differences in inclusion perceptions between the two groups. The results of the study indicated that there is no significant difference in perceptions toward inclusion, as measured by the ORI scale, between special education teachers with traditional teacher certification and those with alternative teacher certification.

Keywords: special education teacher, inclusion, perceptions, alternative certification

Dedication

I dedicate this work to those who encouraged me to pursue this journey. To my late grandmother, Remella Taylor, thank you for your unconditional love. To my wonderful mother, Dr. Yvonne J. Francis, thank you for your listening ear, continued encouragement, wisdom, and biblically-based advice. To my dear friend, Richard Hall, thank you for your continued support and encouragement throughout this journey. To my sons Quincy, Warren, and Justin, I hope that my dedication and perseverance has been a model and motivation for you to accomplish whatever it is your heart's desire. Most importantly, I want you to know that the most significant title I will ever have is Mom. I thank God for placing all of you in my life to pray, encourage, support, and love me through the frustrating and difficult times during this journey. I love you all!

Acknowledgements

I would like to acknowledge my wonderful committee, Dr. Jeffrey Savage, chair of my dissertation committee, and Dr. Amy McLemore and Dr. Elaine Thurmond, members of my dissertation committee.

Dr. Jeffrey Savage, thank you for ensuring that I made it through this process. I would have been unable to complete this dissertation without your encouragement and critical guidance. Thank you for choosing me; I could not have been blessed with a better chairperson.

Dr. Elaine Thurmond and Dr. Amy McLemore thank you both for your willingness to serve on my committee. Dr. Thurmond, thanks for always believing in me; your words of encouragement were always right on time.

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CHAPTER ONE: INTRODUCTION

Overview

This chapter includes six sections. The background is the first section to be covered. It provides a background of the problem and summarizes previous research conducted on the topic of teacher perceptions of inclusion. The second section consists of the formal statement of the research problem. Previous research in the topic area provides support for the problem. The third section of this chapter is the purpose statement, and this section includes a description of the independent and dependent variables. The significance of the study is the fourth section and is purposed with convincing the reader that the study adds to the existing body of literature by building on studies that investigate similar issues. The research question is the fifth section, and the final section is the study definitions section.

Background

The inclusion setting has become the common placement option for students with high-incidence disabilities. The number of students with high-incidence disabilities placed in general education for 80% or more of the school day has increased 93% (McLeskey, Landers, Williamson, & Hoppey, 2012). As a result, special education teachers are tasked with utilizing evidence-based practices when implementing specialized instruction to accommodate a diverse group of learners who are expected to meet the same academic and behavioral standards as their non-disabled peers. Year after year, numerous reports indicate there are significant achievement gaps between students with disabilities and students without disabilities (Harr-Robins et al., 2012). Students with disabilities are being served in the inclusion setting, yet they are not making the necessary progress to meet proficiency (Feng & Sass, 2013; Klehm, 2014); the reason remains unclear, and the solution is elusive. With high-stakes testing scores as the litmus

for proficiency and student achievement, special education teachers now face demands that may negatively impact teachers' perception of inclusion (Kennedy, 2008; Lee, Patterson, & Vega, 2011).

Historical Context of the Issue

Over the past 50 years, the conceptual foundations as well as political and social factors of special education have changed with far-reaching implications for special education teachers and the institutions that are charged with preparing them to be teachers (Brownell, Sindelar, Kiely, & Danielson, 2010). At the onset of acknowledging the need for educating students with disabilities, prior to 1975, students with special needs were predominantly educated in residential settings and special schools (Skiba et al., 2008). As such, special education teachers were primarily employed in these types of settings, and their roles were defined by a clear set of expectations; teacher preparation was determined by disability categories mostly within clinical settings (Shepherd, Fowler, McCormick, Wilson, & Morgan, 2016).

The passage of the Individuals with Disabilities Education Act (IDEA) in 1975, brought about a free and appropriate public education for all students with disabilities. This law reshaped the roles and responsibilities of special educators, thereby introducing the need for significant changes in the programs charged with preparing special education teachers to educate students with disabilities. Special education teacher preparation has evolved significantly over the past 50 years. For example, in the 1970s, the focus was on preparing teachers to be skilled in diagnostic-prescriptive teaching (Brownell et al., 2010; Gartner & Lipsky, 1987; Will, 1986). Changes in federal policies beginning with NCLB have ultimately restructured the field regarding the purpose of special education and the roles of special educators, with an increased concentration on accountability and access to content standards, use of evidence-based instruction, and

collaboration among general and special education teachers (Brownell et al., 2010; Leko, Brownell, Sindelar, & Kiely, 2015; McCray, Butler, & Bettini, 2014; Shepherd et al., 2016).

Multiple groups and organizations declared the need for valid and reliable measures of teacher quality and teacher effectiveness. This included measures evaluating readiness for the profession, the effectiveness of in-service professionals, and effectiveness of teacher preparation programs (Shepherd et al., 2016). Solutions proposed by policymakers and private enterprises for improving teacher quality and PK-12 education focused on deregulation (McLeskey & Ross, 2004).

Deregulation allowed for alternative certification programs (ACP). ACPs are “fast-track” programs, such as Teach for America, that give priority to on-the-job training over pedagogical training. In addition, ACPs allow experienced professionals without pedagogical expertise to obtain teacher certification (Hardman, Rosenberg, & Sindelar, 2005). The decision for alternative certification programs was a result of the teacher shortage epidemic in special education. The rationale was based on the assumption that an increase in candidates and more efficient approaches to preparation will result in improved teacher quality and educational outcomes. This was supported by federal policy including the Every Student Succeeds Act (ESSA). ESSA focuses on high standards for students and increased accountability for teacher preparation and certification programs. However, shifting more decision-making authority to individual states and increasing funding for private programs, legislation such as IDEA and the No Child Left Behind Act, supported quicker entry into the education profession and the possibility of lower standards for preparation (McCray et al., 2014; Ravitch, 2015). This action sent mixed messages, especially to traditional, university-based certification programs that continuously face intense scrutiny and have an obligation to answer the call for increased

standards and expectations, while alternative, fast-track certification programs are not being held to the same rigorous standards.

From an historical view, studies of inclusion and their findings have varied. For example, an early study by Scruggs and Mastropieri (1996) revealed that two-thirds of surveyed teachers reported positive perceptions of inclusion. Hatchell (2009) pointed out that inclusion is a complex issue, and special education teachers report positive and negative opinions of inclusion. Multiple factors impact inclusion perceptions. One critical factor is teacher preparation (Smith, 2000; Taylor, Smiley, & Ramasamy, 2003).

Differences among special educators who received teacher preparation training through a traditional certification program and those that trained through an alternative certification program have been noted, but findings are not related to inclusion perceptions. For example, attrition rates for alternatively prepared teachers tend to be lower: these instructors tend to remain in the profession (Sass, 2015), and there are no differences regarding numbers of discipline referrals between the two groups of teachers (Uriegas, Kupczynski, & Mundy, 2014).

Social Context of the Issue

The society-at-large is impacted by the education of all students, even those in inclusion classes (Tkachyk, 2013). An inclusive society must consider the needs of all people, and the inclusive classroom regards the needs of all students (Tkachyk, 2013). Socially accepted behaviors are part of fitting into society. There are social stigmas attached to specific ways of behaving, and the practice of inclusion may help overcome these social issues (Bui, Quirk, Almazan, & Valenti, 2010; Danforth & Naraian, 2015). Bui et al. (2010) supported this conclusion with reports of literature findings. Specifically, Bui et al. noted that for the last 20 years, research results have indicated the inclusion of students with disabilities in general

education classrooms leads to positive outcomes. These findings are encouraging, but positive outcomes are not always found. According to Tkachyk (2013), there is a question regarding whether inclusive classrooms are always best for students. The education of students with disabilities in inclusive settings has become a focus in the United States with a goal of creating inclusive societies. Thus, there are potential societal benefits of inclusion (Tkachyk, 2013). However, teachers and parents continue to question whether or not inclusion is at the expense of the individual needs of the student.

Inclusion, which is the placement of students with disabilities in the general education classroom with their non-disabled peers, impacts students and teachers (Soukakou, Winton, West, Sideris, & Rucker, 2014). However, these impacts can be positive or negative depending on factors such as teacher perception which is influenced by teacher education (Taylor et al., 2003; Walker, 2012). Thus, there are social ramifications of inclusion and successful inclusion in particular.

Theoretical Context Issue

Social constructivism is an underlying theory that can be used to explain how the perceptions towards inclusion may be different between special education teachers who obtained their certification through a traditional route and those who obtained their certification through an alternative certification program (Barak, 2017; Li, 2015; Wang & Ha, 2012). Vygotsky's (1978) theory of social constructivism is a social theory of knowledge positing that individuals learn as a result of social interaction with others, and language use is not solely generated by individuals (Hyslop-Margison & Stroebe, 2008; Lucas & Frazier, 2014). According to Vygotsky (1978), all cognitive functions originate in, and must be explained as, products of social interactions and that learning was not simply the assimilation and accommodation of new

knowledge by learners. Based on this theory, one could expect the perceptions towards inclusion between traditionally certified and alternatively certified special education teachers to be different because the social environment and context where they obtained their knowledge related to education are different. Research by Linek et al. (2012) supported this theoretical claim. In their study on alternative and traditionally prepared teachers, traditionally certified teachers appeared to have a reflective framework as a result of receiving a year of consistent mentored practice as a part of their field-based teacher preparation experience (Linek et al., 2012). However, the alternative certification teachers were left to discover how to teach drawing, from their own limited experiences (Linek et al., 2012). Further, Houston-Powell (2014) established a similar foundation after investigating special education teachers with alternative and traditional certifications. Other research in the last five years (Dukes, Darling, & Doan, 2014; Flower, McKenna, & Haring, 2016; Ludlow, 2013) highlighted this important difference between certifications. Traditionally certified special education teachers receive pedagogical training in topics such as specialized instruction, personalized learning strategies, and collaborative learning (Redecker & Punie, 2013), where they utilized and practiced evidence-based teaching practices (Shepherd et al., 2016). In contrast to alternative certification teachers who may not receive any pedagogical training prior to teaching students, traditionally certified teachers gain initial pedagogical knowledge through student teaching experiences that are supported by university-level courses. These courses include curriculum, disabilities, lesson planning, behavior management, assessment, data collection, and special education law. This social environment where learning takes place is associated with unique vocabulary, skills, and social interactions (Li, 2015) through discussion, collaboration, and consistent feedback that is offered through a traditional certification program. Social learning environments of this nature

produce a more highly skilled teacher as it relates to students with disabilities (Houston-Powell, 2014); therefore, it is expected that the perceptions towards inclusion would be more positive than the alternatively trained special education teachers. This is expected because the social learning environment of the alternatively certified special education teacher is not as rich with social interactions or specialized knowledge gleaned from working with and learning from peers, mentors, professors, and various industry experts. The emphasis is on on-the-job training versus pedagogical training (Casey, Dunlap, Brister, Davidson, & Starrett, 2011). As such, alternatively trained special education teachers' skills are not as refined, and these teachers are not familiar with the evidence-based best practices that would enhance their ability to teach students with disabilities. Therefore, it is expected that alternatively certified special education teachers would be less comfortable with inclusion and, therefore, have more negative perceptions towards inclusion (Flower, McKenna, & Haring, 2016; Ruppard, Neeper, & Dalsen, 2016).

Problem Statement

Numerous reports indicate there are significant achievement gaps between students with disabilities and students without disabilities (Harr-Robins et al., 2012). Students with disabilities are being served in the inclusion setting, yet they are not making the necessary progress to meet academic proficiency at the same rate as their non-disabled peers, and the reason remains unclear while the solution is elusive (Morgan et al., 2014). Studies of inclusion and findings have varied. Hatchell (2009) pointed out that inclusion is a complex issue, and special education teachers report positive and negative perceptions towards inclusion. Research documents a correlation between teacher certification and student achievement (Kee, 2012; Linek et al., 2012). Teachers' perceptions are a significant part of the success or failure of inclusion (Sharma, Loreman, & Forlin, 2012). Teachers' perceptions, especially of their own ability to educate students with

disabilities, are a strong predictor of their actions in the classroom (Bruster, 2014; Jerald, 2007; Lusk, Thompson, & Daane, 2008). Additionally, factors that impact outcomes include teacher perceptions, which are influenced by teacher preparation (Walker, 2012). Although the studies cited here have examined teacher perceptions of students with disabilities, they leave unknown the issue of special educators' perceptions based on the type of teacher preparation leading to certification. Specifically, Bruster's (2014) indicated differences in the perceptions of inclusion of general education and special education teachers, but not differences within the special education certification types. Moreover, the other researchers tended to compare the differences between general education and special education teachers but failed to note the need to compare special education teachers.

However, there have been no studies that have examined the differences in perceptions of inclusion between traditionally certified special education teachers and alternatively certified special education teachers. The problem is not just a lack of research measuring special educators' perceptions toward inclusion; a lack of research could simply mean the topic is not worthy of study. However, for the special education community, the connection between teacher preparation and teacher perception appears to be of high value (Prater, Cramer, Wilder, & Carter, 2016). Not only does the current researcher's professional practice suggest this is true, but research confirms the importance of this connection (Conderman, Johnston-Rodriguez, Hartman, & Walker, 2013). For example, Ruppert et al. (2016) suggested in their study that more research is needed to discover these connections.

Purpose Statement

The purpose of this causal-comparative study is to determine if there is a difference in perceptions toward inclusion between special education teachers with traditional certification and

those with alternative teacher certification. The independent variable is the teacher certification program and has two levels: traditional and alternative (see Table 1). A traditional certification program is defined as a degree-seeking, university-based teacher education program that leads to initial teacher certification (U.S. Department of Education, Office of Postsecondary Education, 2013). In contrast, an alternative teacher certification program is defined as an accelerated teacher education program, leading to initial teacher certification, offered only to in-service teachers who have earned at least a bachelor's degree in a field other than education (U.S. Department of Education, Office of Postsecondary Education, 2013). The dependent variable is teachers' perceptions toward inclusion and is defined as the attitudes held by classroom teachers in the inclusion setting (Antonak & Larrivee, 1995). The dependent variable was measured by the scores on the ORI scale. Specifically, Antonak and Larrivee's (1995) definition and measurement instrument was used to conceptually and operationally define the dependent variable. This study contributes to the body of knowledge needed to understand inclusion efforts by measuring the attitudes of special educators in a southern state in regard to the inclusion of students with disabilities in the general education classroom.

Table 1

Special Education Certification Program Differences

Traditional Certification	Alternative Certification
Teaching experience	No teaching experience
Student teaching only - unpaid	Earn while you learn (paid teacher)
Extensive college coursework in subject area	Very little formal coursework in education
No previous degree required	Must already have a bachelor degree or higher in a field other than education
University-based teacher education program	Alternative teacher education program
Will earn a bachelor degree or higher in education	No degree can be earned in this program
Traditional program (4 years of coursework and student teaching)	Accelerated program (1-2 years, no student teaching, on-the-job training)
Leads to initial teacher certification	Leads to initial teacher certification

Significance of the Study

According to the Georgia Professional Standards Commission (2016), almost half of public school teachers leave the profession within five years of employment. Understanding teachers' perspectives and perceptions can provide information that will aid stakeholders in determining what changes, if any, need to occur to increase teacher retention, decrease the number of special education teachers that leave the teaching profession, and increase academic achievement of students with disabilities. Examining the perceptions of special education teachers provides insight into the effects of special education teacher preparation programs on inclusion perceptions. Understanding the differences in special educators' perceptions towards

inclusion based on the route to obtaining teacher certification will aid in making the inclusion setting better for students and teachers.

This study adds to the limited body of knowledge on the effectiveness of teacher preparation paths on inclusion perceptions. In addition, the research can offer school administrators information on areas of professional development for special education teachers in the inclusion setting and potential policy changes for traditional and alternative certification programs. Findings can help the educational community in that information regarding differences in outcomes based on the route to teacher certification can be used to help overcome these differences (Walker, 2012). The study adds to the existing body of knowledge by building off similar studies that investigated the same issue such as that by Bruster (2014). Bruster explored differences between special and general education teachers regarding perceptions of inclusion and recommended that a future study includes a training variable, specifically differences between teachers who earned certification through a traditional or alternative certification program. By examining the perceptions of special education teachers' perceptions who teach in inclusion settings, the research adds to the body of literature on special education teacher perceptions and provides information to help ensure that inclusion efforts are successful for all involved.

Research Question

The research question explored in this study is related to special education teachers' perceptions toward inclusion.

RQ: Is there a difference in perceptions toward inclusion, as measured by the ORI scale, between special education teachers with traditional teacher certification and those with alternative teacher certification?

Definitions

1. *Alternative Certification Program* - An alternative certification program refers to a field-based, on-the-job teacher preparation program that leads to initial teacher certification; the program does not require the acquisition of a degree in special education or formal university training in special education (Sass, 2015). Individuals who participate in this type of training do not have a degree in special education and will not be able to earn a degree in special education from this type of training; however, they hold at least a bachelor's degree in a field other than special education.
2. *High-Incidence Disabilities* – This category makes up over 60% of all students with disabilities; these includes learning disabilities, mild cognitive disabilities, and mild behavior disorders (Kent, Wanzek, Swanson, & Vaughn, 2015). These students are often educated in the inclusion classroom.
3. *Inclusion* - Inclusion refers to special education services that place students with disabilities in the general education classroom with their non-disabled peers (Soukakou et al., 2014). This term is used interchangeably with the word integration.
4. *Inclusion Perceptions* - Inclusion perceptions refer to teacher perceptions of students with various types of disabilities who are educated in the general education classroom with non-disabled peers. Inclusion perceptions are measured by the Opinions Relative to Integration of Students with Disabilities. Inclusion perceptions include four factors: the benefits of inclusion, inclusion classroom management, perceived ability to teach students with disabilities, and the special education setting versus inclusion settings (Antonak & Larrivee, 1995).
5. *Individuals with Disabilities Education Act* - This law governs the education of

- students with disabilities; it is also referred to as IDEA 2004 (Council for Exceptional Children, 2019).
6. *Integration* - The term integration is used synonymously with inclusion.
 7. *Low-Incidence Disabilities* – Low-incidence disabilities refer to severe disabilities; students in this category require intensive services that cannot be provided in a general education classroom and are educated in a special education classroom on a modified curriculum (Kurth, Morningstar, & Kozleski, 2014).
 8. *Special Education* - IDEA 2004 defined special education as “specially designed instruction, at no cost to parents, to meet the unique needs of a child with a disability” (National Dissemination Center for Children with Disabilities, 2017).
 9. *Students with Disabilities (SWD)* - This term refers to students who have been identified as having a disability and have been found eligible for special education services.
 10. *Traditional Certification Program* - A traditional program or traditional training refers to a college degree program that can only be offered through a university or four-year college, which leads to teacher certification (Sass, 2015).
 11. *Every Student Succeeds Act (ESSA)* - The ESSA is the primary federal K–12 education law in the U.S. Signed into law by President Obama on December 10, 2015 and “reauthorizes the 50-year-old Elementary and Secondary Education Act (ESEA), the nation’s national education law and longstanding commitment to equal opportunity for all students” (ESSA, n.d.).

CHAPTER TWO: LITERATURE REVIEW

Overview

This chapter will analyze the literature relating to the inclusion of students with disabilities in the general education classroom with emphasis on the perceptions of special education teachers who educate students in inclusive classrooms. Several laws, to include NCLB (2001), IDEA (2004), and Public Law 94-142 (1975), have contributed to changes in the ways that students with disabilities are educated. Due to these changes, special education teachers are now responsible for teaching students with disabilities in the general education setting as well as the special education setting. Those mandates have contributed to the differing perceptions regarding inclusion amongst special education teachers. Those perceptions are the stimulus for this study.

Theoretical Framework

The evolution of federal legislation in regard to students with disabilities over the past 40 years has provided the framework for what is known as inclusion in the public school setting today. Education laws that specifically address students with disabilities are a major part of the theoretical framework for this study. In 1975, the United States Congress passed Public Law 94-142 to ensure that students with disabilities experienced the same educational opportunities as their non-disabled peers (Barnes & Gaines, 2015). Public Law 94-142 was adopted for three main reasons: (a) to ensure that the rights of students with disabilities are protected; (b) to ensure that students with disabilities received a free appropriate public education; and (c) to ensure that local school districts and state departments of education provided students with disabilities accommodations (Wischnowski, Salmon, & Eaton, 2004). In an effort to provide students with disabilities better access to a quality education, the No Child Left Behind Act of 2002 ([NCLB],

2002) and the Individuals with Disabilities Education Act of 2004 ([IDEA], 2004) developed specific legislation that mandated students with disabilities receive an education alongside their peers without disabilities in general education classrooms to the greatest extent possible, and receive accommodations that would meet the individual needs of students with disabilities and to align them for success in their post-secondary endeavors, specifically in the areas of education, employment, and independent living (Barnes & Gaines, 2015; Wischnowski et al., 2004). IDEA (2004) aided in the emergence and widespread implementation of inclusion (Kloo & Zigmond, 2008). With the requirement of students with disabilities being educated alongside their nondisabled peers to the greatest extent possible, general education classrooms were now required to include, educate, and accommodate students with disabilities based on their individual needs. The inclusion model was designed to provide students with disabilities specialized instruction based on their individual learning style or profile while accessing the same general education curriculum as their nondisabled peers (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). While these changes were a step in the right direction and made strides in public education for students with disabilities, there were still areas that were at a standstill, and students with disabilities continued to underperform in academics when compared with their nondisabled peers. The NCLB Act of 2002 was ratified in 2011, and it included specific language in regards to the academic performance of students with disabilities (Polikoff, 2012). This ratification required that students with disabilities be evaluated with the same standardized testing instruments as their nondisabled peers (Polikoff, 2012).

The theory underpinning the issue is based on the theory of social constructivism. This theory posits that culture and context are important for an understanding of learning and the construction of knowledge (Vygotsky, 1978). Theory assumptions are that reality is constructed

through the process of human interactions and activity which are socially and culturally constructed. Thus, an individual creates meaning as he or she interacts with the environment and with others. Learning is a social process shaped by external forces, and this means that students learn more if they participate in social activities (Kim, 2011). This theory is consistent with Vygotsky's Social Development Theory and Bandura's Social Learning theory. Bandura's (1977) theory explicates that cognitive learning occurs through modeling and observation, and Vygotsky's (1978) theory is rooted in social interaction, which has a fundamental role in cognitive development or learning.

Vygotsky's (1978) Social Development Theory underscores three central themes: social interaction, the More Knowledgeable Other (MKO), and the Zone of Proximal Development. Vygotsky's (1978) theory emphasizes the role of social interaction. He posits that social interaction is critical to cognitive development; it plays a critical part in helping individuals to make meaning of things. Vygotsky's (1978) theory also indicates that individuals learn better with assistance versus independently; he identified this as the Zone of Proximal Development (ZPD). Vygotsky's (1978) research indicates that children with disabilities are not delayed in development but instead develop differently (Gindis, 1999); special education is founded on the idea the individuals develop differently. The concept of developing differently is the underpinning for Vygotsky's Zone of Proximal Development. The Zone of Proximal Development is the distance between actual developmental level and potential developmental level under the guidance of an adult or in collaboration with a peer (Vygotsky, 1978). A child's potential development level under the guidance of an adult is the foundation for inclusion. Based on Vygotsky's (1978) theory, students with disabilities can learn the general education curriculum when provided with accommodations, and modeling and scaffolding of the academic

content, although the content may be above the child's actual developmental level. Competent special educators equipped with a variety of evidence-based strategies provide effective academic and behavioral guidance to students with disabilities, aiding them in accessing the general education curriculum and accessing the highest level of potential development. In contrast, Vygotsky's (1978) theory also recognizes the contribution of peers to adult learning in regards to social engagement. The contribution of peers through collaboration is critical to the learning process of educators (Wang & Ha, 2012). Peer contributions are recognized when mutual understanding is achieved between the individual and the more knowledgeable peer through effective communication (Vygotsky, 1978). As such, enculturation occurs, enabling the individual or the teacher to learn the accepted values and norms of the culture in which he or she teaches. Both Vygotsky's and Bandura's theories posit that optimal learning for special education students would include modeling, imitation, and peer observations, which would take place in the general education classroom (Alquraini, 2012; Bruster, 2014; Obiakor, Harris, Mutua, Rotatori, & Algozzine, 2012).

The theory of social constructivism, applied to inclusion practices helps to explain the needs of all students, since inclusion involves social interactions among students and teachers. Cognitive skills develop and learning takes place within classroom social interactions (Lucas & Frazier, 2014). Learning through modeling and observation can occur consistently because students with disabilities can observe and model their teachers as well as their nondisabled peers. Inclusion allows for students with disabilities to be exposed to behavioral and academic habits not otherwise evident in a special education classroom. Learning differences in students with disabilities require the use of specialized instruction based on the students' strengths and weaknesses. Inclusion classrooms allow students with disabilities to access the general education

curriculum that would otherwise be unattainable in a special education setting that lacks a subject area expert, specialized instruction, and nondisabled peers for observation and modeling of academic and behavioral expectations. In addition, the theory also applies to new teachers. Inexperienced educators collaborating with more experienced teachers who provide modeling and peer observations also have the opportunity to increase their learning and improve their teaching skills. According to Creswell (2013), social constructivists believe that individuals attempt to understand the world in which they live and work and develop varied and multiple meanings based on their individual experiences. Wang and Ha (2012) also explain that teacher perceptions are developed by interactions with others, as well as through cultural and historical norms, and these interactions in the workplace impact teaching practices. Thus, the theory of social constructivism can be used to help understand teacher perspectives of inclusion, and this theory is relevant to the study of these views.

Related Literature

Opinions Relative to the Integration of Students with Disabilities

The Opinions Relative to the Integration of Students with Disabilities (ORI) scale, a revision of The Opinion Relative to Mainstreaming (ORM) scale, was designed to measure teachers' attitudes towards mainstreaming or integrating students with disabilities into general classrooms (Antonak & Larrivee, 1995). The original scale, the ORM, was developed in 1979 (Antonak & Larrivee, 1995). Since that time, revisions of the scale have occurred, to include the name change to the ORI, with the final revision in 1995. In addition to revisions to the scale, the nation's attitude has changed drastically over the past 30 years which resulted in changes in legislature. This also brought about changes in terminology, to include the use of person-first language.

Changes in terminology over the years are a reflection of how society's views have evolved. These changes reflect the current philosophy of society as it relates to people with disabilities. For example, the word *mainstreaming* became outdated and was replaced with the word *integration*, and consequently, the word *integration* has been replaced with the word *inclusion*. While the word *integration* is still used, *inclusion* has become more acceptable as it indicates a philosophy of acceptance, belonging, and community (Voltz, Brazil, & Ford, 2001).

The ORI is made up of four constructs: *Benefits of Integration*, *Integrated Classroom Management*, *Perceived Ability to Teach Students with Disabilities*, and *Special Versus Integrated General Education*. Below is a detailed description of each of the four constructs and their principal parts.

Benefits of Integration

The first construct is *Benefits of Integration*. The *Benefits of Integration* is defined as any and all benefits of integration or inclusion derived for students with and without disabilities (Antonak & Larrivee, 1995). It consists of eight principle components. These components focus on inclusion accomplishing the following: (a) fostering understanding and acceptance of differences among students; (b) promoting academic growth of students with disabilities, promoting acceptance of differences on the part of students without disabilities; (c) promoting social independence of students with disabilities; (d) offering opportunities for students with disabilities to function in the general classroom; (e) contributing to the emotional development of students with disabilities; (f) providing opportunities for students without disabilities; and (g) isolation in the special education classroom negatively impacting the social and emotional development of students with disabilities (Antonak & Larrivee, 1995).

Integrated Classroom Management

The second construct is *Integrated Classroom Management*. *Integrated Classroom Management* is classroom management of the inclusion general education classroom. Antonak and Larrivee (1995) defined it as everything that is associated with the behavior of the students in an inclusion classroom and classroom management procedures that this type of classroom might require. This construct comprises the following ten components regarding the inclusion classroom: (a) students with disabilities' ability to complete assignments; (b) behaviors of students with disabilities; (c) impact of the extra attention students with disabilities require of students without disabilities; (d) effects on the classroom functioning due to the increased freedom of students with disabilities; (e) examples set by the behaviors of students with disabilities; (f) maintaining order in the inclusion classroom; (g) amount of time students with disabilities need from the general education teacher; (h) amount of confusion caused by students with disabilities; (i) comparison of the behavior of students with and without disabilities; and (j) social isolation of students with disabilities in the general classroom (Antonak & Larrivee, 1995).

Perceived Ability to Teach Students with Disabilities

The third construct is *Perceived Ability to Teach Students with Disabilities*. This construct addresses a teacher's self-efficacy to teach students with disabilities. The three principal components of this construct include (a) extensive retraining of general classroom teachers; (b) the ability necessary to work with students with disabilities; and (c) having sufficient training to teach students with disabilities (Antonak & Larrivee, 1995).

Special Versus Integrated General Education

The final construct is *Special Versus Integrated General Education*. *Special Versus Integrated General Education* compares the provision of education for students with disabilities

in an isolated special education classroom setting and the general education inclusion classroom setting (Antonak & Larrivee, 1995). The four components of this construct include: (a) the best placement for students with disabilities to be served; (b) general classroom procedures; (c) students with disabilities' development of academic skills; and (d) the best type of teacher for students with disabilities (Antonak & Larrivee, 1995).

Special Education Teacher Shortage

Special education teachers continue to top the list of critical-needs teachers along with math and science teachers across the United States. Special education has been an area of shortage for over two decades and continues to be a projected area of concern (U.S. Department of Education, Office of Postsecondary Education, 2012). In addition to the growing number of special education teachers who are not highly qualified or certified, the chronic shortage in special education is amplified by high attrition rates, specifically among new teachers or inexperienced teachers (McLeskey & Billingsley, 2008). Approximately 40% to 50% of new teachers leave the field within the first five years of teaching; however, Georgia's special education attrition rates surpass the national average at 47% to 53% of new special education teachers leaving the field within the first five years (Afolabi & Stephens, 2010). One reason could be attributed to a lack of preparation as reported by some that they were inadequately prepared for the tasks and workload of special educators (Billingsley, Griffin, Smith, Kamman, & Israel, 2009). Beginning teachers report difficulties in effective instructional strategies, classroom management, and managing the workload of a special education teacher (Billingsley et al., 2009). These high attrition percentages would indicate that new teachers are inadequately prepared to perform their duties as special education teachers. Despite efforts to improve special education services, only 54% of students with disabilities in Georgia exited from IDEA service

in 2015 with a regular high school diploma (Georgia Department of Education, 2015). Georgia has experienced years of low graduation rates among students with disabilities and remains at the bottom in the country. These types of outcomes lead to questioning the quality of instruction provided to students with disabilities. According to the National Comprehensive Center for Teacher Quality (2007), a highly effective teacher is the most important component that contributes to student achievement. According to Bandura (2012), self-efficacy is the powerful belief that one's actions can produce a specific outcome. There is a positive relationship between teachers' self-efficacy, and their instructional practices and student progress.

Special education teachers with high levels of self-efficacy demonstrate preparation in the essential components required to educate students with disabilities, to include knowledge of evidence-based pedagogy and a working knowledge of the content. Years of research indicate critical components needed for effective teacher preparation; however, special education teachers continue to enter inclusion classrooms poorly prepared to facilitate the success of students with disabilities (McLeskey & Billingsley, 2008). Due to the critical shortage of special education teachers for the past two decades, individuals without a degree in special education can bypass the years required in the traditional route to certification through an alternative route which places teachers into inclusion classrooms quickly, ultimately addressing the teacher shortage. There are differences in training between the traditional and the alternative routes to certification. However, there is little research in regards to the effectiveness or efficacy of special education teachers based on the type of program completed, traditional or alternative, to gain special education certification.

Teacher Self-efficacy

Based on Bandura's cognitive theory of social learning, teacher self-efficacy has been

researched since the late 1970's (Bandura, 1977). Teacher self-efficacy is a teacher's belief in his or her own capability to produce desired outcomes in his or her students (Lee, Patterson, & Vega, 2011). One's belief about one's capabilities may or may not align with one's actual capability. Research indicates that most people overestimate their capabilities (Bandura 1997). Bandura (1986) indicated that efficacy beliefs that are a slight overestimation of an individual's actual capability increase persistence and effort. Individual efficacy judgments are made in reference to an outcome, performance, or goal which reflects the task-specific and situation-specific nature of efficacy beliefs (Lee et al., 2011). Bandura (1977) believed that self-efficacy influences an individual's choices, effort, and persistence.

Teacher perceptions of inclusion and a lack of self-efficacy were found to be the primary barriers to successful inclusion (Davis & Layton, 2011). It is assumed that teachers are qualified to teach children, suggesting that they have the knowledge and skills necessary to teach; however, based on their route to teacher certification, they may or may not have the knowledge, skills, or confidence to effectively teach students experiencing difficulties in learning. Study after study has closely examined the perception of various groups of general education teachers and compared the differences between general education and special education teachers; however, there were no studies found to compare the perceptions of groups of special education teachers. Individuals with low self-efficacy may avoid a task or lack persistence, and consequently, individuals who feel efficacious may be persistent and exert more effort (Bandura, 1977). "Low self-efficacy becomes a self-limiting process" (Artino, 2012, p. 78).

Differences in Teacher Preparation

The literature on differences between special education teachers' perceptions is sparse, and there is a lack of information regarding differences in perceptions of these educators toward

inclusion based on initial teacher preparation. Literature findings do, however, support the conclusion that there are some differences in outcomes related to the two training paths of special educators. For example, differences among traditionally trained and alternatively trained educators include those related to the training itself. The traditional route requires the completion of a formal teacher preparation program with a major in education offered by a university or four-year college. Alternative routes do not require formal college training in education (Economics, 2014); these include programs such as Teach for America (TFA) and the American Board for Certification of Teacher Excellence Passport (ABCTE). Such programs have variations in length, structure, and delivery. Alternative route programs are designed to support non-teacher candidates that have not completed an undergraduate training in education. These alternatives to certification have become increasingly popular (Economics, 2014).

According to Sass (2015), data from a longitudinal database from Florida used to compare characteristics of alternatively certified teachers with traditionally prepared teachers, revealed differences in effectiveness. For example, alternatively prepared teachers demonstrated stronger pre-service qualifications compared to traditionally prepared teachers, and the least restrictive alternative certification programs attracted the most qualified prospective teachers. Teachers who were certified in a manner that required no coursework had greater effects on student achievement, compared to traditionally prepared teachers (Sass, 2015). However, the alternative pathway that required substantial occupation-specific human capital investment resulted in the least effective teachers (Sass, 2015). Individuals prepared through alternative routes are minimally prepared, and therefore, lack the skills necessary to be successful and are more likely to leave the field (Rosenberg & Sindelar, 2005). Additional research findings are that attrition rates for alternatively prepared teachers are lower in general and they tend to remain

in the profession since they also tend to be second-career individuals with the conscious choice of transitioning into teaching (Economics, 2014).

Alternative Certification Program

Special education teachers from alternative certification programs may be more or less effective, overall, compared to special education teachers from traditional programs, and outcomes may be related to content. Alternatively, differences were not found regarding other issues such as the number of discipline referrals written throughout the school year for middle and high school teachers from alternative and traditional programs (Uriegas, Kupczynski, & Mundy, 2014). In areas that are difficult to recruit and retain special education teachers, such as in rural Georgia or high poverty urban schools, alternative certification programs provide an advantage with recruitment that is designed to reach a diverse student population by recruiting teachers that reflect the diversity of the community. For some areas of high need, alternative certification programs are the lone option to hiring special education teachers. A major pitfall in the alternative certification route is that a special education teacher can serve as many as three years in the inclusion classroom without completing any requirements towards certification. This offers individuals an opportunity to work in special education for many years without investing time or money into the children they are serving by obtaining training through an alternative program or a traditional program. Due to limited research involving this population, it is unknown if the route to certification impacts inclusion perceptions. More information is needed to determine if these differences are related to perceptions of inclusion (Economics, 2014; Sass, 2015). This study adds to the limited body of knowledge about the inclusion perceptions of special education teachers in relation to the type of pre-service training completed.

General Perceptions of Inclusion

Inclusion is a practice that includes the placement of students with disabilities in the general education classroom with their non-disabled peers (Soukakou, Winton, West, Sideris, & Rucker, 2014). This practice of inclusion is designed to help ensure that the disabled student receives an optimal education in the least restrictive environment as stipulated in IDEA. Inclusion practices are assumed to benefit all students and their teachers (Soukakou et al., 2014). However, this is not always the case, and this implies that factors to facilitate positive impact outcomes must be understood.

Inclusive education became a professional area of research and practice in the 1980s (Danforth & Naraian, 2015). Inclusion was assumed to be a conceptual and practical outgrowth of the field of special education. Inclusion was developed and proposed by special educators to reduce the segregation, isolation, and social stigma of students with disabilities. While special education teachers continue to deal with inclusion issues, input from general education teachers is also needed since inclusive classrooms contain non-disabled students as well. According to Danforth and Naraian (2015) it is essential to understand all factors related to inclusion outcomes.

Special Education Placement

As noted by Taylor, Smiley, and Ramasamy (2003), as of the enactment of Public Law 94-142 in 1975, there have been constant changes regarding placement models and the types of services to be provided to students with disabilities. As of the mandate of the least restrictive environment, service delivery models have included the use of self-contained classrooms, separate schools, resource rooms, and general education classrooms depending on the type and severity of the student's disability. However, in many of these situations, these students had minimal or no interaction with non-disabled peers. In addition, most of these situations limited

peer interactions to nonacademic settings. School reform efforts such as the Regular Education Initiative in the 1980s resulted in students with disabilities having more interactions with general education students in academic settings. The adoption of full inclusion has become more popular and is considered consistent with the need to provide appropriate educational services to all students in regular classes. However, there are others who find this inclusion to be a civil rights violation and a hardship for general education teachers.

Taylor et al. (2003) noted further that early findings conflict and include that the needs of students with learning difficulties in inclusive classrooms may barely be met, versus the finding that full-inclusive education settings have a positive impact on these students with disabilities. In fact, inclusion can potentially provide more effective education for all students with increased self-esteem, social skills, self-worth, and feelings of pride (Kalambouka, Farrell, Dyson, & Kaplan, 2007). Others have found that there is only a small or moderate positive impact of inclusion on academic and social outcomes of children with special needs (Kalambouka et al., 2007).

Thus, to fully understand the impacts of inclusion and how to ensure its effectiveness, general education and special education teachers must support it with positive attitudes. However, this is not always the case. In some instances, special education teachers and general education teachers may be for inclusion but apprehensive about its implementation (Bruster, 2014). Perceptions of inclusion are dependent on factors such as experience, the intensity of inclusion, and severity level of the disabled student. When special education and general education educators are opposed to inclusion, it is typically due to drawbacks such as lack of necessary services needed to meet the needs of most students with special needs, and the unwillingness of general educators to accept individuals with disabilities and work with special

educators in general education settings (Bruster, 2014). Thus, inclusion impacts the students as well as the teachers.

From a historical perspective, perceptions of inclusion have varied along with the study of them. Scruggs and Mastropieri (1996) conducted an early research analysis of teacher perceptions of mainstreaming/inclusion from 1958 to 1995. These authors reported findings from 28 investigations which showed that two-thirds of these surveyed general education teachers reported positive perceptions of inclusion. Additional studies have explored differences between special educators and general educators with regard to inclusion. For example, Hatchell (2009) explored the issue of inclusion of special education students in the general education setting and noted that this is a very complex topic that includes debates among administrators, teachers, and parents about what is best for all students. Hatchell specifically investigated middle school general education and special education teacher attitudes and opinions about inclusion. All special education and general education teachers in one middle school located in south central Wisconsin in 2008 received surveys.

Hatchell (2009) reported findings from a sample of 35 teachers; findings indicated that there were both positive and negative attitudes and opinions of all teachers. There was also a significant difference in attitudes and opinions of general and special education teachers. For example, special education teachers agreed significantly more than general education teachers that the special education room should only be used as a resource, and students with emotional or behavioral disabilities and cognitive disabilities can actively participate in classroom learning. Special education teachers reported views that general education teachers would be concerned about disruptions from students with disabilities. General education teachers, significantly more than special education teachers, reported that students with disabilities have more behavior

problems and require more assistance than is provided in the general education classroom. Most participants reported that collaboration between all staff members is key to successful inclusion, and staff development, resources, and services are required to meet student needs and ensure successful inclusion.

Differences Between General and Special Educators

More recently, Bruster (2014) explored this issue of differences among special and general education teachers regarding inclusion. Bruster conducted a causal-comparative, quantitative study with teachers at six rural high schools in Northeast Georgia. The Opinions Relative to the Integration of Students with Disabilities survey was used to gather data. Findings from t-tests were that special education teachers were more positive than general education teachers about the inclusion of students with disabilities in general education classrooms. There were also differences regarding perceptions of the influence of students with disabilities on the general education classroom and its students and issues of management of behavior in the inclusive classroom. Teacher self-efficacy did not differ between the two groups. Thus, Bruster also reported findings that there were differences among special and general education teachers regarding perceptions of inclusion. Bruster recommended that a future study explore the differences between teachers based on their route to certification regarding perceptions of inclusion. Studies have indicated the need for more research in classroom teachers' perceptions regarding the inclusion of students with disabilities (Beacham & Rouse, 2012; McCray & McHatton, 2011; Solis, Vaughn, Swanson, & McCulley, 2012). Additional knowledge of teacher perceptions supports the need for the proposed study of these differences to further understand factors that influence positive impacts of inclusion on all students.

Factors Impacting Teacher Perceptions Toward Inclusion

There are multiple factors that have the potential to influence teacher perceptions toward inclusion. Early views of this issue were discussed by Smith (2000), who presented a case study to examine the role of preservice teachers' backgrounds in inclusion. Background experiences explained preservice teachers' receptiveness to a multicultural teaching perspective. Taylor et al. (2003) also explored the impact of educational background and experience on teacher perceptions of inclusion, with a sample of 180 general education and special education preservice and in-service teachers. Questionnaire findings revealed that initially, there were no significant differences for educational type or experience with regard to items focused on the intensity level of the disability, including students with mild or severe disabilities; however, there were significant differences for collaboration issues. Following a viewing of a videotape of a child with autism, the researcher noted significant differences for educational type and experience for items on the intensity of inclusion. Teachers reported a preference for a continuum of services.

Walker (2012) presented findings regarding factors that may influence positive teacher attitudes toward inclusion of students with special needs. Walker's study included general education teachers only and factors of experience, professional development, and administrative support. Walker specifically explored these issues in a group of elementary general education teachers who were surveyed to determine their attitudes. Walker found that principal support (emotional, instrumental, and informational), and professional development were factors that positively impacted teachers' attitudes toward inclusion.

The effects of training on teacher attitudes toward inclusion have been explored. Lucas and Frazier (2014) provided an example of this research. These authors investigated the specific impact of a service-based course in diversity on preservice teachers' attitudes toward inclusion.

Findings from a survey of 110 students indicated that this course or training had a positive impact in improving pre-service teachers' attitudes toward inclusion. However, Lucas and Frazier also made the important point that this early training is not enough to ensure success for the students with special needs taught in the general education classroom. Instead, consideration of the curricula must include training to better prepare students for the inclusive classroom. From the teacher's view, factors that impact teacher attitudes toward inclusion include support and training. McGhie-Richmond, Irvine, Loreman, Cizman, and Lupart (2013) supported this conclusion with a study of 123 elementary-to-secondary teachers who were surveyed and findings from 14 in-depth qualitative interviews with these teachers. The teachers elaborated on the need for supportive communication and collaboration, and support and training. These findings point to the need to further explore the impact of early training to understand related attitude differences regarding inclusion such as that received by traditionally and alternatively trained educators. A clear understanding of how to ensure the success of inclusion is crucial for the teacher, student, community, and society.

Sosu, Mtika, and Colucci-Gray (2010) examined the impact of teacher preparation on attitudes towards inclusion; the results of the study concluded that teacher training contributed to significant changes in attitudes with the most positive increases being observed in inclusive mindset and learning expectations. Sosu et al. noted that attitudes can be significantly affected by experiences and teacher preparation programs, and consequently an absence in inclusion experiences may weaken teachers' attitudes. In addition, the findings of this study indicated that one's level of knowledge about inclusion is attributed to his or her teacher education program (Sosu et al., 2010). Additional research confirms that educators who obtain inclusive pedagogy on teaching children with learning disabilities show more favorable perceptions or attitudes

towards inclusion than those who did not (Beh-Pajoooh, 1992).

Special education teacher perceptions and attitudes are affected by internal and external influences and contribute to the successful implementation of inclusion. Avramidis & Kalyva (2007) noted that positive teacher attitudes are paramount to the successful implementation of inclusion. Teachers' judgments may have a marked influence on children's development (Parasuram, 2006). Numerous studies have been conducted to examine teachers' attitudes toward the inclusion of students with disabilities in the general education setting (Avramidis & Norwich, 2002), and based on the research, teachers' attitudes and perceptions towards inclusion seem to be influenced by several interrelated factors that include teacher-related variables, student-related variables, and environment-related variables (Avramidis & Norwich, 2002). Based on the significant amount of research available that focuses on teacher-related variables, factors such as self-efficacy, experience, and demographic information have been examined with variable outcomes.

Additional research states that students with disabilities in the general education inclusion setting perform academically and socially better than students with disabilities in resource, small group, or self-contained settings (Nakken & Pijl, 2002; Peetsma, Vergeer, Roeleveld & Karsten, 2001). Organizational and instructional changes that occur in inclusion classrooms have led to positive outcomes for students without disabilities as well. A study conducted by Saint-Laurent et al. (1998) found that the math and reading achievement of students without disabilities in inclusion settings was significantly better than their non-disabled peers taught in the traditional general education setting. A review of 26 studies (Kalambouka et al., 2007) on the inclusion of students with disabilities in the general education setting determined that there were no adverse effects on the social or academic outcomes of students without disabilities, but in fact, stated that

81% reported positive or neutral effects. Furthermore, the inclusion of students with disabilities in the general education inclusion setting also promotes acceptance. The inclusion of students with disabilities in the general education setting teaches students the value of human differences and develops positive attitudes toward students with disabilities (Sirlopu et al., 2008).

Inclusion in Public Schools

During the late 1980's and 1990's, it became clear that students with disabilities were not making satisfactory academic progress, and as a result, federal and state policies were implemented to remedy this issue (McLaughlin & Rhim, 2007). One response to this issue was a mandate that all students with disabilities be educated by highly qualified teachers and in the general education setting unless compelling evidence indicated that the general education setting was not the least restrictive environment (Friend et al., 2010). Students with disabilities served in general education as the least restrictive environment are provided with instruction through general education inclusion classes that implement co-teaching. Inclusion classrooms integrate or include students with special education needs and without special education needs in a general education classroom.

While there are many definitions of co-teaching, most of them are similar. According to Cook and Friend (1995), co-teaching is the interaction and instruction by two or more educators to a group of diverse learners in a single space. Instructional responsibilities are shared; however, the main role of the general educator is content and curriculum, and the primary focus of the special educator is the learning process (Kloo & Zigmond, 2008). Unlike in years past, the roles of the general education teacher and the special education teacher have evolved and now require collaboration to provide services for students with disabilities in general education classrooms (Murawski & Swanson, 2001). The implementation of co-teaching programs has

become the norm in public schools across the United States to meet the needs of students with disabilities. Special educators are required to understand the characteristics of the various types of disabilities, know the various strategies and interventions needed to address specific student strengths and weaknesses, design special instruction based on each student's needs, and teach academic content in the general education classroom to all students including those with a variety of disabilities. Some special education teachers provide instruction in a self-contained classroom utilizing a modified curriculum. The vast majority of special education teachers are required to teach students with disabilities in the least restrictive environment alongside their non-disabled peers; this places these students in the general education classroom.

Georgia was awarded \$400 million dollars in federal funds for the Race to the Top Initiative in 2010 to address several areas of needed reform, to include strengthening alternative and traditional teacher preparation programs (Georgia Department of Education, 2011). However, almost a decade later, both alternative and traditional certification programs continue to dispute how to best prepare special education teachers for the demands of providing special education services in the inclusion setting (Friend, Embury, & Clarke, 2015). According to many researchers, teachers' attitudes are the impetus of successful inclusion (Avramidis, Bayliss, & Burden, 2000; Lewis & Doorlag, 2003; Salend, 2005). However, research on teachers' attitudes toward inclusion has shown that teachers feel unprepared to serve students with disabilities (Scruggs & Mastropieri, 1996). Murawski (2006) compared the achievement of students with disabilities across three different settings and determined that there was no increased achievement in inclusion classes possibly due a lack of adequate teacher training, and ultimately fragmented implementation. Special education teachers continue to enter the workforce without the knowledge-base and skills to perform the essential duties required.

Effective Inclusion Practices

Implementation of effective inclusion practices requires collaboration between two highly qualified teachers, one special education teacher and one general education teacher. The No Child Left Behind Act of 2001 (NCLB) and the reauthorization of the Individuals with Disabilities Act of 2004 (IDEA) mandated requirements for educator collaboration (Cook & Friend, 2010). Many schools utilize the co-teaching model to meet the requirement for educator collaboration and to serve students with disabilities in the inclusion setting: “Co-teaching seems to be a vehicle through which legislative expectations can be met while students with disabilities at the same time can receive the specially designed instruction and other supports to which they are entitled (Friend et al., 2010, p. 10). The purpose of this service delivery model is to ensure that students with disabilities have access to the same curriculum as their non-disabled peers in the least restrictive environment while simultaneously receiving the specially designed instruction they are entitled driven by each student’s IEP (Friend et al., 2015). There are six common co-teaching models: team teaching, one teach one assist, one teach one observe, parallel teaching, station teaching, and alternative teaching.

The general education teacher is considered the subject area or content expert, and the special education teacher is considered the differentiation and strategy expert with the purpose of implementing each student’s IEP and providing specially designed instruction for students with disabilities (Friend, 2007). General education teachers must be highly qualified in the specific subject area or content in which they teach and are expected to be the content expert. Special education teachers are expected to be highly qualified; however, it is not required to be highly qualified in special education before teaching students with disabilities (Georgia Professional Standards Commission, 2016). From a practical standpoint, school districts expect special

education teachers to learn and maintain a proficient level of content knowledge in order to create specially designed instruction. However, special educators are not mandated to be highly qualified in the subject area or content in which they teach, only in special education, and they are given years to earn the highly qualified status (Georgia Professional Standards Commission, 2016). Co-teaching is designed for both the general education and special education teacher to share instructional responsibility while delivering the general education curriculum with specially designed instruction based on the needs of students with the intent to increase the academic achievement of students with disabilities (Friend, 2014). Similar to students without disabilities, based on the individual needs of each student with a disability, the level of special education support provided by co-teachers varies.

Co-teaching Models

Team teaching is a co-teaching strategy that requires extensive co-planning with the general education and special education teacher both being actively involved in the lesson (Bacharach, Heck, & Dahlberg, 2010). Within the context of the classroom, students are unable to define the leader in the classroom because both teachers share the instruction and support all of the students (Bacharach et al., 2010). In this model, it is the expectation that both teachers lead whole group instruction with both teachers lecturing, illustrating different ways to problem solve, representing opposing views, and providing a variety of ways for students to understand the content (Friend et al., 2010). This approach is most beneficial when co-teachers share a level of comfort with each other, have experience with the co-teaching process, and when the goal is interaction with students (Cook, 2004).

Parallel teaching is another model of co-teaching that educators are encouraged to implement because of its benefit in reducing the student to teacher ratio (Bacharach et al., 2010).

In the parallel teaching model, the class is divided into two heterogeneous groups, and each teacher instructs half the students while presenting the same material (Bacharach et al., 2010). This method is used to increase student participation and foster instructional differentiation (Friend et al., 2010). Parallel teaching is considered to be a difficult model to implement because lessons must be paced to ensure that both groups receive the same amount of instruction with the same degree of mastery (Division for Learning Disabilities, 2001).

Like parallel teaching, alternative teaching also utilizes two groups; however, one teacher instructs the majority of the students, and the other teacher works with a small group of students within the classroom (Friend et al., 2010). The purpose of this model is to provide pre-teaching, remediation, assessment, or a variety of other purposes that meets the differentiated needs of the students (Friend et al., 2010). At the secondary level, this method is commonly implemented with the special education teacher working with the small group and the general education teacher working with the large group (Friend et al., 2010).

Station teaching is rarely used in co-teaching classrooms. It requires a significant amount of co-planning, and due to scheduling issues in secondary schools, co-teaching teams often do not share common planning times (Friend et al., 2010). The instruction in this method is divided into parts with each teacher instructing one of the groups and the group rotating through each station for a designated amount of time at each station (Bacharach et al., 2010). The students may be grouped by a variety of methods such as flexible, homogeneous, or heterogeneous grouping. All students rotate through each station with instruction from the teachers at two stations and independent work at the additional station or stations (Bacharach et al., 2010).

The one teach one assist co-teaching approach is the most widely used at the secondary level. Cook (2004) indicated that this approach is suitable when one teacher is less proficient

with the content of the material presented. One teacher, usually the general education teacher, leads the instruction, and the other teacher circulates the room offering individual assistance to students that need additional support (Friend et al., 2010).

The final co-teaching method is one teach, one observe. One teacher leads whole-group instruction while the other teacher gathers data on specific students or the class (Friend et al., 2010). This model requires little to no planning and is a common approach used in new co-teaching situations. The one teach one observe model is used to check student progress, monitor student behaviors, and to compare learners (Cook, 2004).

The co-teaching service delivery system was designed to be implemented within the inclusion setting. The goals of co-teaching were to provide more instructional alternatives, enhance and increase the participation of students with disabilities in the inclusion setting, and to improve academic achievement (Division of Learning Disabilities, 2001). Theoretically, all six approaches offer teachers the opportunity to address the goals and objectives outlined in the IEPs of students with disabilities while meeting the needs of all students in the classroom (Friend et al., 2010). While much research has been produced on the roles and responsibilities of co-teaching, the actual implementation and execution of co-teaching has not upheld the expectations due to many factors. In the inclusion setting, the roles of the co-teachers are designed to be fluid with each taking on any of the co-teaching responsibilities and sharing through collaboration in the instructional design, delivery of instruction, and the teaching chores, such as grading (Friend et al., 2010). While co-teaching has evolved over the past decade, the actual implementation of co-teaching does not meet the expectations of its design. Model practices vary from typical practices. Model roles and responsibilities are meant to be fluid; however, special educators tend to accept the role of assistant to the general education teacher rather than co-teacher; this is

partially because they lack the content knowledge or expertise (Friend et al., 2010). The topic of co-teaching is gradually entering special education teacher preparation programs (Duke, 2004); however, it has not reached the stage of mandate in every traditional and alternative special education teacher preparation program.

Inclusion: Teacher Attitudes, Perceptions, and Beliefs

Van Reusen, Shoho, and Barker (2001) surveyed high school teachers as part of an examination to assess “high school teacher attitudes toward the inclusion of students with disabilities in general education classrooms” with an emphasis on determining the influences on those attitudes of “classroom experience level, gender, amount of special education training, and content or subject area taught” (p. 7). The study found that teachers reporting the most positive attitudes towards inclusive education for students with special needs were those teachers with “the highest level of special education training or experiences” (Van Reusen et al., 2001, p. 13). The researchers also found the 54% of the teachers in the research sample displayed “negative attitudes toward the inclusion of special education students into their general education classrooms” (Van Reusen et al., 2001, p. 13). This group of teachers also reported the lowest levels of “special education training, knowledge, or experiences in teaching students with disabilities” (Van Reusen et al., 2001, p. 13).

Peters (2003) contended that a strong focus on the development of positive teacher attitudes should be at the core of education and training for teachers concerning inclusive education. Peters noted further, negative teacher attitudes toward inclusive education leads to increases in the achievement gap between students with disabilities and students without disabilities.

Lifshitz, Glaubman, and Issawi (2004) examined the effects of an intervention program

designed to improve teacher attitudes towards the inclusion of special education students in general education classrooms. The research sample included both Palestinian and Israeli teachers in Israel. At one level, Lifshitz et al. found that Israeli teachers showed a much greater willingness to accept students with disabilities in general education classrooms than did Palestinian teachers. The researchers attributed this finding to the “clash between the individualistic nature of special education and the national orientation of the Palestinian teachers, coupled with the ‘stigmatizing effect’” as causal factors that “may explain their being high in conservatism and progressiveness, and their negative attitudes towards inclusion of pupils with sensory impairment and mental retardation” (p. 171). The study also found that intervention training led to improved teacher attitudes toward inclusive education, and to greater improvement in attitudes among “regular teachers, compared to the special education teachers” (Lifshitz et al., 2004, p. 171).

Searle (2004) found that regarding effective inclusive education, “Teachers who plan and work in teams will serve more students effectively than teachers who work in isolation” (p. 65). Searle also found that “General education teachers can deliver services to students with disabilities, with or without an intervention specialist present, depending upon student needs” (p. 65).

Idol (2006) examined inclusive education in elementary and secondary schools. Concerning secondary schools, Idol found that “very few educators thought that students with special education needs should be taught in the general education classroom without some form of supportive assistance” (p. 88). Only two of the teachers surveyed “thought that students with disabilities should be taught in self-contained special education classes,” and “no one thought that students with disabilities should be educated in separate, special education schools” (Idol,

2006, p. 88). Forty-five percent of the teachers surveyed favored including special education students in grade-level classes with both a general education teacher and a special education teacher (Idol, 2006). Importantly, 58% of the secondary school teachers surveyed “reported that the other students in the general education classroom remained unaffected by the presence of students with disabilities in their class” (Idol, 2006, p. 89). The issue of social behavior in classrooms, however, produced somewhat different responses from secondary school teachers. Approximately one-third of secondary educators “thought that the social behaviors of all students were worse... when students with disabilities were included in general education” classrooms (Idol, 2006, p. 89).

Niesyn (2009) examined inclusive education in relation to the inclusion of students with an emotional and behavioral disorder (EBD). The study author set the situation with the following hypothetical narrative situation:

Imagine that 20 second grade students are actively engaged in classroom activities. Suddenly, without any apparent antecedent, desks are flipped over and materials are strewn about the room. Nineteen students abandon their work, line up, and exit the classroom as quickly as possible. What has happened? An earthquake perhaps? No, this is the scene in a second-grade classroom in which one child’s emotional variability resulted in what may appear to be drastic safety procedures. More and more frequently, general education teachers are finding themselves in similar situations, working with students whose specialized needs surpass the teacher’s repertoire of effective strategies. (p. 227)

Niesyn (2009) noted that students with EBD “demonstrate difficulty using self-management strategies in school settings” (p. 230). Thus, one of the more productive

approaches to the situation involving students with EBD is the development and implementation of strategies that can teach such students how to “use proactive self-management strategies” (Niesyn, 2009, p. 230). Such approaches, however, are not widespread. Niesyn concluded that “Only one-third of students with EBD receive 60% or more of their education outside the general education classroom” (p. 227). As a result, general education teachers are finding themselves working with students whose specialized needs surpass the teacher’s training in behavior management strategies.

Acedo, Ferrer, and Pàmies (2009) posed the following question: “Is inclusive education based on a need to establish high expectations for students based on a belief in their capabilities? Or is it adopting a paternalistic attitude in the face of the limited potential attributed to some students?” (p. 232). The authors note that to be effective, inclusion in education requires the participation of multiple factors – family, teachers, school administrators, and government. Acedo, Ferrer, and Pàmies contend that “inclusive education is not just about providing access to education for all, but rather about offering meaningful, lifelong learning to all. The concern is that equity and quality are not always acknowledged as interconnected objectives or given the attention that they merit” (p. 236). The study authors contend further without a “doubt that government plays a critical role in the development and implementation of inclusive education policies” (p. 236).

Brandes and Crowson (2009) studied preservice teachers for the purpose of identifying the links between socio-political ideologies and attitudes toward inclusive education. Brandes and Crowson reported that based on the results of correlation analyses, “preservice educators who report being higher in social dominance orientation, right-wing authoritarianism, economic and cultural conservatism, and discomfort with disabilities are more likely to oppose inclusion

and to hold negative attitudes toward students with disabilities” (p. 271). Further, however, it was found that based on the results of regression analyses, “social dominance orientation and discomfort with a disability were stronger predictors of negative attitudes toward students with disabilities and opposition to inclusion than cultural conservatism/right-wing authoritarianism” (Brandes & Crowson, 2009, p. 271).

Conderman and Johnston-Rodriguez (2009) suggested that the most productive approach to overcome issues such as those described above by Brandes and Crowson (2009) is to provide support for new teachers by assisting them to “learn the ropes and become members of a collaborative community of practice that may result in improved practice and counter their sense of isolation” (p. 243). The researchers added: “Teachers are more apt to assume collaborative roles when situated within the context of collaborative school cultures. Moreover, surrounded by a supportive, collaborative culture, beginning teachers may be better adjusted, innovative, and resilient” (Conderman & Johnston-Rodriguez, 2009, p. 243).

Special Education vs General Education Teachers

Brownell, Sindelar, Kiely, and Danielson (2010) concluded that special education students continue to underperform in comparison to general education students. The study authors contend that one problem is associated with efforts to require special education teachers to become highly qualified as teachers in academic subjects. Instead, they contend, a much more productive policy is to persuade highly qualified general education teachers to acquire special education teaching skills to complement their skills as academic teachers.

Cook and Cameron (2010) found that special education students with a learning disability (LD) or with a behavioral disorder (BD) are more likely to be rejected by teachers than are students with a cognitive disability (CD) or attention-deficit disorder (ADD). Thus, negative

teacher perceptions regarding students with disabilities are not only differentiated by special education-general education student classifications, but also by the type of disability that characterizes a special education student.

Harpell and Andrews (2010) argued that teacher perceptions of inclusive education are not the only perceptions of concern. Additionally, they indicate that the perceptions of school administrators about inclusive education are of equal importance. They argue that “well-trained and knowledgeable leaders who are capable of empowering teachers to adopt new instructional methods can overcome the challenges of inclusive education” (Harpell & Andrews, 2010, p. 203).

Donnelly and Watkins (2011) explicate that not all of the responsibility for creating successful inclusive education should fall on the collective shoulders of teachers. They argue that, while teachers “play a critical role ... inclusive education must be seen as a responsibility to be shared by all teachers and stakeholders in education, not just a few” (Donnelly & Watkins 2011, p. 350). One approach to promoting shared responsibilities is through the conduct of in-service training for school counselors (Sahbaz, 2011).

Opertti and Brady (2011) noted that the issues confronting inclusive education that must be addressed effectively include “the widening gap in learning outcomes, closely related to social and economic conditions; the increasing diversity of classrooms with respect to cultural and linguistic origins; the shortage of experienced teachers working where they are needed most (but where the working conditions are often the most challenging); the difficulties in recruiting teachers from diverse social backgrounds; and the low pay and status of the teaching profession” (p. 460). These issues go far beyond teacher perceptions of inclusive classrooms and special education students.

Bennett and Gallagher (2013) determined that successful inclusive education stems largely from shared perceptions. Considering inclusive education at the high school level, Bennett and Gallagher found that the several groups: “hold similar values related to inclusion and the rights of students to appropriate educational program delivery. Overall, job coaches and parents embrace the most positive attitudes and beliefs about inclusion, with parents particularly affirmative about inclusion experiences in both the classroom and workplace. Employers believe that students with intellectual disabilities are supported and interacting with others in the workplace. Teachers most often agree that students without disabilities experience positive effects as a function of inclusion” (p. 96). Findings reported by McGhie-Richmond et al. (2013) also indicated that teacher perceptions of inclusive education “are generally positive;” however, they also found that secondary school teachers “hold more negative views of inclusion than elementary-level teachers” (p. 228).

Cambridge-Johnson, Hunter-Johnson, and Newton (2014) found that teachers, for the most part, have positive perceptions of inclusive education. They also found, however, that “lack of funding, administrative support and minimal opportunities for training and development were identified as negative influential factors regarding teachers’ attitude towards inclusive education” (Cambridge-Johnson, Hunter-Johnson, & Newton, 2014, p. 1). Crowson and Brandes (2014) found that, among teachers, “Stereotype use and intergroup anxiety were positive predictors of opposition to inclusion” (p. 161).

An important issue that continues to create discussions at a minimum and conflict at the other extreme is the appropriate model for teaching in inclusive classrooms. Solis et al. (2012) found “that the most typical model for implementing inclusion was one in which the general education teacher provided the majority of instruction and the special education teacher,

typically in a subordinate role, provided support to students and suggestions to teachers” (p. 507). The researchers also found that this co-teaching approach is likely to be associated with improved performance by special education students in inclusive classrooms. Solis et al. also found that “alternative grouping” strategies (small groups; peer-pairing; cooperative groups) can lead to improved performance in inclusive classrooms.

Swain, Nordness, and Leader-Janssen (2012) found that many teachers “continue to have mixed feelings about their preparedness to educate students with disabilities in the general education setting” (p. 75). They also found, however, that teachers whose attitudes toward inclusive education are positive in character are more likely than are other teachers to adjust their teaching practices to more effectively serve the needs of students with disabilities in inclusive classrooms. One issue that continues to beg for appropriate answers is how best to develop positive teacher attitudes toward inclusive education. Swain, Nordness, and Leader-Janssen recommended the pairing of special education coursework with field experience wherein teachers would work directly with students with disabilities.

Conley, Marchant, and Caldarella (2014), recognizing the diverse forms of student disabilities that are found in inclusive classrooms, conducted a study to determine (a) which forms of student disability are most often associated with problematic student performance, and (b) the extent to which teachers in inclusive classrooms recognized the same forms of student disability as those that are the most challenging for teachers in inclusive classrooms to address effectively. Emotional and behavioral disorders (EBD) are associated with higher proportions of low-performance levels than is the case with other forms of student disability. The manifestations of EBD that are the most problematic with student performance in inclusive classrooms were identified as “unsuccessful peer relationships, antisocial behavior, internalizing

behavior, aggression, academic problems, and attention problems” (Conley et al., 2014, p. 439). Conley et al. found that teachers in inclusive classrooms recognized these forms of EBD as problematic factors in teaching students with disabilities in inclusive classrooms; however, teachers also identified two additional manifestations of EBD as problem areas — “disrespect and hyperactivity” (p. 448).

Kent and Giles (2016) examined the concept of dual certification for teachers wherein certification would be provided for general education and special education simultaneously. An important finding of the study was that such a “program is challenging to implement, especially in terms of scheduling logistics, but beneficial to the preparation of new teachers” (Kent & Giles, 2016, p. 18). Kent and Giles concluded that “a classroom evolution” has created a situation wherein “teachers must be able to meet the multidimensional needs of all of the students they teach. It is a simple fact that in our global classrooms, students do not fit into neat categories and cannot be taught using a one-size-fits-all approach” (p. 29).

An abundance of challenges exist in being prepared to meet such needs in present-day inclusive classrooms; however, Ruppert, Neeper, and Dalsen (2016) found teachers are better prepared to “manage educational programs than to provide direct services to students with severe disabilities” (p. 273). Teachers with masters’ degrees, however, were found to be more prepared to provide direct services to students with severe disabilities (Ruppert et al., 2016). Pence and Dymond (2016) found that the performance and assimilation of students with disabilities in inclusive classrooms tend to be enhanced by the participation of students with disabilities in school-sponsored clubs or activities.

Social Ramifications

Socially accepted behaviors are part of fitting into society. There are social stigmas

attached to specific ways of behaving, and the practice of inclusion may help overcome these social issues (Bui, Quirk, Almazan, & Valenti, 2010; Danforth & Naraian, 2015). Bui et al. (2010) supported this conclusion with reports of literature findings. Specifically, Bui et al. noted that for the last 20 years, research findings have shown that inclusion of students with disabilities in general education classrooms has resulted in positive outcomes for these students. These findings are encouraging, but positive outcomes are not always the case. According to Tkachyk (2013), there is a question regarding whether inclusive classrooms are always best for students. The education of students with disabilities in inclusive settings has become a focus in the United States with a goal of creating inclusive societies. Thus, there are potential societal benefits of inclusion (Tkachyk, 2013). However, teachers and parents continue to question whether or not inclusion is at the expense of the individual needs of the student; this may be a particular concern for the student with cognitive disabilities in the general classroom. There are social ramifications of inclusion and successful inclusion in particular. An inclusive society must consider the needs of all people, as in the inclusive classroom, which must regard the needs of all students.

Summary

Literature findings have pointed out the positive potential for inclusion (Bui et al., 2010). When students with disabilities are taught in the general education classroom, social stigmas may be reduced, but it remains unclear whether all students receive the attention they need to be academically successful (Tkachyk, 2013). Consistent with the theory of social constructivism, individuals, including students with disabilities, benefit from modeling, imitation, and peer observations (Alquraini, 2012; Bruster, 2014; Obiakor et al., 2012). Students with disabilities would gain this experience in the general education classroom. Special education teachers would

also gain this experience within the general education classroom through student teaching. Teacher attitudes impact outcomes, and studies have shown that teachers' attitudes toward inclusion vary and are affected by multiple variables (McGhie-Richmond et al., 2013; Walker, 2012). There are differences between attitudes of special and general education teachers, and there are factors, such as previous training, that impact these attitudes (Lucas & Frazier, 2014). Literature findings also reveal that there are differences in outcomes for traditionally and alternatively trained teachers with regard to some student issues (Economics, 2014; Sass, 2015; Uriegas et al., 2014). However, the problem is that there is a lack of literature regarding differences in attitudes toward inclusion for the traditionally and alternatively trained educator. Since background and training are essential factors related to teacher attitudes, it is important to explore how traditional and alternative training backgrounds impact teacher attitudes toward inclusion. Inclusion is a goal of society as well as the classroom (Tkachyk, 2013), and an understanding of all factors that impact inclusion is needed (Danforth & Naraian, 2015).

CHAPTER THREE: METHODS

Overview

Chapter Three has seven sections. Design is the first section and describes in detail the research design used for this study. The second section contains the research question explored by this study, while the third section consists of the null hypotheses for this study. The fourth and fifth sections contain detailed descriptions of the participant and setting and the instrumentation. The final section of this chapter is the data analysis section, where the details of the statistical analyses are outlined.

Design

This causal-comparative design study compared differences in perceptions toward inclusion, as measured by the ORI scale, between special education teachers with traditional teacher certification and those with alternative teacher certification. The selected design is appropriate for this research because its purpose is to explore possible relationships by looking at differences in pre-existing groups (Gall, Gall, & Borg, 2007) and inferring a possible cause from the independent variables to a dependent variable that has already occurred. Causal-comparative research is also known as retrospective research (as opposed to prospective research) and is characterized by post hoc analysis in that events, which have already happened, are posited to have a cause based on previously occurring group differences (Gay & Airasian, 2003; Novella, 2012). According to Gall et al. (2007), the causal-comparative design must have an independent variable with natural, preexisting variations. The independent variable in this research design is the type of special education teacher certification program completed by the participant, either traditional or alternative, which is a natural, pre-existing variation (Gall et al., 2007). A traditional certification program is a university-based, degree-seeking teacher education program

that leads to initial teacher certification (U.S. Department of Education, Office of Postsecondary Education, 2013), and an alternative teacher certification program is an accelerated teacher education program that leads to initial teacher certification (U.S. Department of Education, Office of Postsecondary Education, 2013). Participants of alternative certification programs are in-service teachers who have previously earned at least a bachelor's degree in a field other than education and have been approved by their individual states to begin teaching (U.S. Department of Education, Office of Postsecondary Education (2013). The dependent variable is the teachers' perceptions of the inclusion of students with disabilities in the general education classroom, specifically teachers' attitudes towards the following: the benefits of inclusion, inclusion classroom management, teachers' perceived ability to educate students with disabilities, and the special education setting versus the inclusion general education setting (Antonak & Larrivee, 1995).

Research Question

The research question relates to the Opinions Relative to Integration of Students with Disabilities (Antonak & Larrivee, 1995) instrument.

RQ1: Is there a difference in perceptions toward inclusion, as measured by the Opinions Relative to Integration of Students with Disabilities (ORI) scale, between special education teachers with traditional teacher certification and those with alternative teacher certification?

Null Hypothesis

The following null hypothesis was proposed:

H₀1: There is no significant difference in perceptions toward inclusion, as measured by the Opinions Relative to Integration of Students with Disabilities (ORI) scale, between special education teachers with traditional teacher certification and those with alternative teacher

certification.

Participants and Setting

The participants for the study were selected by random sampling through, QuestionPro, an online market research sample aggregator (QuestionPro, 2019). The data collection portion of this study took place during the summer semester of 2018. Special education teachers in Georgia with more than one full academic year of special education inclusion teaching experience participated. Members of the sample aggregator panel residing in Georgia received an email requesting their participation in the anonymous, online survey that could be completed from any computer at any time (see Appendix A). A total of 1,233 surveys were emailed to potential participants, and a total of 112 surveys were completed. The sample consisted of 12 males and 102 females. The distribution of grade level percentages was 55.3% for elementary, 21.9% middle school, and 22.8% high school. The ethnic composition of respondents in this study was 68.4% White, 21.1% Black, 2.6% Hispanic, 3.5% Asian, and 4.4% multiracial.

Sample

A total of 1,233 surveys were emailed to special education inclusion teachers in a market research sample aggregator panel. A total of 112 surveys were completed, which exceeded the required minimum of 100 participants for a medium effect size with a statistical power of .7 at the .05 alpha level (Gall et al., 2007). The sample included a total of 62 special education teachers who completed a traditional certification program (55.4%) and 50 special education teachers who completed an alternative certification program (44.6%). All participants self-identified their gender: 100 participants as female (89.3%) and 12 participants as male (10.7%). All participants self-identified their age range: 6 participants as 18-25 years old (5.4%), 30 participants as 25-35 years old (26.8%), 35 participants as 36-45 years old (31.3%), 28

participants as 46-55 years old (25.0%), 11 participants as 56-65 years old (9.8%), and 2 participants as over 65 years old (1.8%). All participants self-identified their ethnicity: 23 participants as Black or African American (20.5%), 77 participants as White (68.8%), 3 participants as Hispanic/Latino (2.7%), 4 participants as Asian (3.6%), and 5 participants as Multi-Racial (4.5%). All participants self-identified the current grade level at which they are currently teaching: 61 participants at the elementary school level (54.5%), 25 participants at the middle school level (22.3%), and 26 participants at the high school level (23.2%).

Participants self-reported having completed a traditional certification program or having completed an alternative certification program: 62 reported 'I completed a traditional special education certification program' (55.4%), and 50 reported 'I completed an alternative special education certification program' (44.6%). Participants self-reported having earned a degree in special education: 74 reported 'I have a degree in special education' (66.1%), and 38 reported 'I have not earned a degree in special education' (33.9%). Participants who have earned a degree in special education self-reported the highest level of special education degree earned: 26 participants reported earning a Bachelor of Science (BS) or Bachelor of Arts (BA) degree (35.1%), 36 participants reported earning a Master's (M) degree (48.6%), 9 participants reported earning a Specialist (S) degree (12.2%), and 3 reported earning a Doctorate (D) degree (4.1%). Participants self-reported their total years of overall teaching experience: 12 reported 1-2 years' (10.7%) experience, 21 reported 3-5 years' (18.8%) experience, 29 reported 6-10 years' (25.9%) experience, 23 reported 11-20 years' (20.5) experience, and 27 more than 20 years' (24.1%) experience. Participants self-reported their total years of special education inclusion teaching experience: 26 reported 1-2 years' (23.2%) experience, 41 reported 3-5 years' (36.6%) experience, 24 reported 6-10 years' (21.4%) experience, 12 reported 11-20 years' (10.7)

experience, and 9 more than 20 years' (8.0%) experience.

Special Educators Who Completed a Traditional Certification Program (Group 1)

The special education teachers who completed a traditional special education certification program, Group 1, included a total of 62 special education teachers (55.4% of all participants). Group 1 participants self-identified their gender: 58 participants as female (93.5%) and 4 participants as male (6.5%). Group 1 participants self-identified their age range: 5 participants 18-25 years old (8.1%), 16 participants as 26-35 years old (25.8%), 21 participants as 36-45 years old (33.9%), 16 participants as 46-55 years old (24.2%), 5 participants as 56-65 years old (8.1%), and 0 participants as 65 and over (0.0%). Group 1 participants self-identified their ethnicity: 9 participants as Black or African American (14.5%), 49 participants as White (79.0%), 2 participants as Hispanic/Latino (3.2%), 1 participant as Asian (1.6%), 1 participant as Multi-Racial (1.6%), 0 participants as Native American (0.0%), and 0 participants as Pacific Islander (0.0%). Group 1 participants self-identified the current grade level at which they are currently teaching: 33 participants at the elementary school level (53.2%), 14 participants at the middle school level (22.6%), and 15 participants at the high school level (24.2%). Group 1 participants self-reported having completed a traditional special education certification program or having completed an alternative special education certification program: 62 reported 'I completed a traditional special education certification program' (100.0%) and 0 reported 'I completed an alternative special education certification program' (00.0%). Group 1 participants self-reported having earned a degree in special education: 53 reported 'I have a degree in special education' (85.5%) and 9 reported 'I have not earned a degree in special education' (14.5%). Participants who have earned a degree in special education self-reported their highest level of special education degree earned: 21 participants reported earning a Bachelor of Science (BS) or

Bachelor of Arts (BA) degree (39.6%), 27 participants reported earning a Master's (M) degree (50.9%), 4 participants reported earning a Specialist (S) degree (7.5%), and 1 reported earning a Doctorate (D) degree (1.9%). Group 1 participants self-reported their total years of overall teaching experience: 4 reported 1-2 years' (6.5%) experience, 11 reported 3-5 years' (17.7%) experience, 19 reported 6-10 years' (30.6%) experience, 12 reported 11-20 years' (19.4%) experience, and 16 more than 20 years' (25.8%) experience. Group 1 participants self-reported their total years of special education inclusion teaching experience: 13 reported 1-2 years' (21.0%) experience, 20 reported 3-5 years' (32.3%) experience, 16 reported 6-10 years' (25.8%) experience, 8 reported 11-20 years' (12.9) experience, and 5 more than 20 years' (8.1%) experience.

Special Educators Who Completed an Alternative Certification Program (Group 2)

The special educators who completed an alternative special education certification program, Group 2, included a total of 50 special education teachers (44.6% of all participants). Group 2 participants self-reported their gender: 42 participants as female (84.0%) and 8 participants as male (16.0%). Group 2 participants self-reported their age range: 1 participant 18-25 years old (2.0%), 14 participants as 26-35 years old (28.0%), 14 participants as 36-45 years old (28.0%), 13 participants as 46-55 years old (26.0%), 6 participants as 56-65 years old (12.0%), and 2 participants as over 65 years old (4.0%). Group 2 participants self-reported their ethnicity: 14 participants as Black or African American (28.0%), 28 participants as White (56.0%), 1 participant as Hispanic/Latino (2.0%), 3 participants as Asian (6.0%), 4 participants as Multi-Racial (8.0%), 0 participants as Native American, and 0 participants as Pacific Islander (0.0%). Group 2 participants self-reported the current grade level at which they are currently teaching: 28 participants at the elementary school level (56.0%), 11 participants at the middle

school level (22.0%), and 11 participants at the high school level (22.0%). Group 2 participants self-reported having completed a traditional certification program or having completed an alternative certification program: 00 reported 'I completed a traditional special education certification program' (00.0%), and 50 reported 'I completed an alternative special education certification program' (100.0%). Group 2 participants self-reported having earned a degree in special education: 21 reported 'I have a degree in special education' (42.0%), and 29 reported 'I have not earned a degree in special education' (58.0%). Participants who have earned a degree in special education self-report the highest level of special education degree earned: 5 participants reported earning a Bachelor of Science (BS) or Bachelor of Arts (BA) degree (23.8%), 9 participants reported earning a Master's (M) degree (42.9%), 5 participants reported earning a Specialist (S) degree (23.8%), and 2 reported earning a Doctorate (D) degree (9.5%). Group 2 participants self-reported their total years of overall teaching experience: 8 reported 1-2 years' (16.0%) experience, 10 reported 2-5 years' (20.0%) experience, 10 reported 6-10 years' (20.0%) experience, 11 reported 11-20 years' (22.0) experience, and 11 more than 20 years' (22.0%) experience. Group 2 participants self-reported their total years of special education inclusion teaching experience: 13 reported 1-2 years' (26.0%) experience, 21 reported 3-5 years' (42.0%) experience, 8 reported 6-10 years' (16.0%) experience, 4 reported 11-20 years' (8.0%) experience, 4 more than 20 years' (8.0%) experience.

Instrumentation

The Opinions Relative to Integration of Students with Disabilities (ORI) (Antonak & Larrivee, 1995) instrument was used to gather data for this study. The purpose of the ORI is to assess teachers' perceptions of inclusion specifically as it relates to the benefits of inclusion, inclusion classroom management, perceived teacher ability to teach students with disabilities,

and the special education versus the inclusion setting (Antonak & Larrivee, 1995). The ORI has been used in numerous studies to assess educators' perceptions toward inclusion (i.e. Antonak & Larrivee, 1995; Bruster, 2014; Dedrick, Marfo, & Harris, 2007; Dupoux, Wolman, & Estrada, 2005; Whitaker, 2011).

The Opinions Relative to Integration of Students with Disabilities (ORI) (Antonak & Larrivee, 1995) instrument is a revision of Larrivee and Cook's (1979) Opinions Related to Mainstreaming instrument. The ORI is used to evaluate the perceptions of teachers toward the inclusion of students with disabilities being served or educated in the general education inclusion classroom. Antonak and Livneh (1988) realized that there were a limited number of summated-rating scales that measured attitudes towards inclusion. Only four instruments met the minimum set of requisite psychometric criteria: Attitudes Toward Mainstreaming Scale (ATMS) (Berryman & Neal, 1980), Educational Attitude Survey (EAS) (Reynolds & Greco, 1980), Mainstreaming Opinionnaire (MO) (Schmelkin, 1981), and Opinions Relative to Mainstreaming (ORM) scale (Larrivee & Cook, 1979).

Antonak and Larrivee (1995) noted that there were weaknesses in all of the existing instruments. The ATMS and the EAS lacked confirmatory reliability and validity evidence, the MO contained issues such as response style biases, and the ORM had concerns with structural items like the response format and also required significant modifications (Antonak & Larrivee, 1995). A revision of at least one of the four scales was needed to offer researchers a contemporary, easy-to-use, psychometrically-sound instrument (Antonak & Larrivee, 1995). Antonak and Larrivee conducted item, scale, and factor analyses on the ORM, and the results suggested a four-factor multidimensional structured scale instead of the five-factor structure reported previously by Antonak and Larrivee. Larrivee and Cook's (1979) scale, ORM, was

revised to 25-items instead of 30 items, combined two of the previous factors and re-labeled it *Perceived Ability to Teach Students with Disabilities*, added a new factor, and labeled it *Special Versus Integrated General Education* (Antonak & Larrivee, 1995). The revision of the ORM generated the ORI. According to Antonak and Larrivee (1995), the validity of the ORI was investigated as a measure of attitudes toward the integration of students with disabilities into general classrooms. Antonak and Larrivee (1995) indicated that the Spearman-Brown corrected split-half reliability estimate is 0.82. The ORI was given with the Scales of Attitudes toward Disabled Persons, and a hierarchical multi-regression analysis was conducted; the value of Cronbach's alpha homogeneity coefficient was 0.83 (Antonak & Larrivee, 1995). The purpose of this instrument is to gain information that will assist school systems in increasing the effectiveness of classroom teachers that teach students with disabilities (Antonak & Larrivee, 1995). The ORI assesses educators' perceptions of the inclusion of students with disabilities in general education classrooms. The ORI is considered a reliable and valid instrument and has been routinely used by numerous researchers to assess attitudes, perceptions, and beliefs about inclusion (Alquraini, 2012; Antonak & Larrivee, 1995; Bruce, 2010; Whitaker, 2011).

For this survey, participants rated items on a 6-point Likert scale ranging from strongly agree to strongly disagree (I disagree very much, I disagree pretty much, I disagree a little, I agree a little, I agree pretty much, or I agree very much):

-3: I disagree very much

-2: I disagree pretty much

-1: I disagree a little

+1: I agree a little

+2: I agree pretty much

+3: I agree very much

Participants were required to read and follow the directions printed on the ORI; the directions required the participant to read each statement and using the Likert scale key listed on the ORI, choose the number to the left of the statement that best describes agreement or disagreement with the statement. The ORI scale contains 25 Likert-style statements; there are 13 positively-worded statements and 12 negatively-worded statements. Table 2 shows the scale names in relation with the scale questions. Responses were scored by reversing the sign of the negatively worded questions and then finding the sum of the 25 items; a constant score of 75 was added to each score to eliminate negative scores. Scores ranged from 0 to 150. Higher scores represented a more favorable perception of inclusion. Due to the simplicity of the scoring mechanism, rater training was not needed. However, inclusion was examined in total, so all 25 items were summed together, based on the instructions of the authors of *The Opinions Relative to Integration of Students with Disabilities (ORI)* (Antonak & Larrivee, 1995).

Table 2

Scale Names and the Associated Scale Item Questions

Scale Name	Scale Items
Benefits of Integration	3, 7, 11, 14, 17, 20, 21, 24
Integrated Classroom Management	1, 4, 6, 9, 12, 15, 16, 18, 22, 25
Perceived Ability to Teach Students with Disabilities	2, 10, 19,
Special versus Integrated General Education	5, 8,13, 23

The researcher obtained permission to use this survey. She sent an email to Dr. Richard F. Antonak at RFAntonak@me.com requesting permission to use the ORI. Dr. Antonak

responded to the email request with a letter granting permission to use the ORI instrument (see Appendix B), a copy of the ORI instrument, and the scoring key.

Procedures

The researcher sought and obtained IRB approval. Following IRB approval (see Appendix C), the researcher contacted QuestionPro to set-up a corporate account. QuestionPro is an online market research sample aggregator, and was used to acquire the sample. There are over 4.3 million members from the United States in the QuestionPro sample panel. The sample obtained from the sample aggregator used a random sampling approach targeting special education inclusion teachers in the state of Georgia. This sampling approach decreased the possibility of sampling bias and ensured that the sample was more representative of the larger population (Creswell, 2013; Leedy & Omrod, 2013).

The criteria for sample inclusion was special education teachers in the US/Georgia with at least one year of special education inclusion teaching experience, specifically those who earned their certification through a traditional certification program or through an alternative certification program. Members of the sample aggregator's panel who met these criteria were randomly selected to receive an invitation to participate in an anonymous online survey that could be completed from any computer at any time. The respondents clicked the survey link inside the email and were asked to agree to the informed consent agreement. The informed consent form was used to protect participants by addressing issues of confidentiality, protection from harm, and anonymity. The researcher used Liberty University's IRB requirements for informed consent (see Appendix D). All data collection information is stored in an encrypted file located on a computer not connected to the internet.

Data collection continued until 20% above the target sample was achieved. This was to

account for the loss of sample during the data cleaning process due to incomplete or data errors. Upon completion of the survey, each respondent received a note thanking them for their participation and then the survey terminated. The steps in the data collection process were as follows:

Step 1: Before respondents began the survey they were required to read and agree to the terms of the informed consent form by clicking on the "I agree" box.

Step 2: Once the respondents agreed to the informed consent by clicking on the appropriate box, they were taken to the screening questions relating to:

- 1) The job title of the respondent
- 2) Location of employment
- 3) The length of time spent as a special education teacher
- 4) How special education certification was obtained

Step 3: If the respondents met the criteria they were able to move on to the survey questions. If they did not meet the criteria, respondents were thanked for their interest in the study and their survey was terminated.

Step 4: After the screener questions were answered, the respondents began answering demographic questions related to their age, gender, number of years teaching special education, and total years of special education inclusion experience (see Appendix E).

Step 5: After the demographic questions were completed, the next questions were the ORI survey questions.

Step 6: Once the researcher received 112 completed surveys, the study was closed. The researcher securely downloaded and saved the data file containing all survey responses. No personally identifiable information was contained in the data file, and no survey information was

made available to survey respondents.

Data Analysis

The researcher used statistical software, Statistics Package for the Social Science (SPSS) version 24, to analyze the data collected. The researcher first input the data into SPSS, and then checked for errors and missing values using the frequencies procedures. ORI responses from two groups, special education teachers with traditional teacher certification and those with alternative teacher certification, were compared based on the research question. An independent samples *t*-test was conducted to determine if there were statistically significant differences between the two groups on the ORI scale (Gall et al., 2007). The participants in each of the two groups were not the same individuals, making the independent sample's *t*-test the most appropriate because it compares the mean scores of each group independent of the other (Field, 2013; Pallant, 2016).

An independent samples *t*-test was utilized to test the null hypothesis to examine the differences in inclusion perceptions between the two populations (special education teachers with traditional teacher certification and those with alternative teacher certification). The researcher conducted preliminary analyses to check for violations of the assumptions of normality using the Kolmogorov-Smirnov (k-S) test, equal variance test using Levene's Test of Equality of Error Variance, and extreme outliers using the box and whisker plots. If the independent samples *t*-test produces a *p* value of less than .05, then there is a statistically significant difference in the mean scores between the special education teachers with traditional teacher certification and those with alternative teacher certification (Field, 2013; Pallant, 2016). In addition, the effect size was calculated using Cohen's *d*. The effect size statistic is useful in judging the practical significance of a research result; however, it is only an aid to interpretation

and should not be used as the final determination of practical significance (Gall et al., 2007). A statistically significant result simply means that a difference in the data exists due to something other than chance.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this causal-comparative study was to determine if there is a statistically significant difference in perceptions toward inclusion between special education teachers with traditional certification and those with alternative teacher certification. The research question asked: Is there a difference in perceptions toward inclusion, as measured by the ORI scale, between special education teachers with traditional teacher certification and those with alternative teacher certification? The null hypothesis stated that there is no significant difference in perceptions toward inclusion, as measured by the ORI scale, between special education teachers with traditional teacher certification and those with alternative teacher certification. This chapter, along with the research question and null hypothesis, contains descriptive statistics, and the three phases of the data analysis process. A reporting of the statistical analysis, along with whether the null hypothesis was rejected, is contained below.

Research Question

The research question relates to the Opinions Relative to Integration of Students with Disabilities (Antonak & Larrivee, 1995) instrument (ORI).

RQ1: Is there a difference in perceptions toward inclusion, as measured by the ORI scale, between special education teachers with traditional teacher certification and those with alternative teacher certification?

Null Hypothesis

H₀1: There is no significant difference in perceptions toward inclusion, as measured by the ORI scale, between special education teachers with traditional teacher certification and those with alternative teacher certification.

Descriptive Statistics

There was a total of 112 respondents in this study, of which 100 were female and 12 were male. The majority of the respondents were white (68.8%) and achieved their special education certification through traditional teacher certification (55.3%) versus an alternative certification means (44.7%). The majority of respondents (83.3%) were between 26 and 55 years of age. Approximately 26% of respondents had 6-10 years of teaching experience, and another 24% had 20 or more years of teaching experience. See Table 3 for the descriptive statistics by certification type. Finally, the ORI mean score for the total population was 60.29 ($SD = 12.90$), 61.87 ($SD = 11.89$) for the traditional group, and 58.25 ($SD = 13.95$) for the alternative group (see Table 4).

Table 3

Demographic Descriptive Statistics

	Traditional		Alternative		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Gender						
Female	58	93.5%	42	84.0%	100	89.3%
Male	4	6.5%	8	16.0%	12	10.7%
Age						
18-25	5	8.1%	1	2.0%	6	5.4%
26-35	16	25.8%	14	28.0%	30	26.8%
36-45	21	33.9%	14	28.0%	35	31.3%
46-55	15	24.2%	13	26.0%	28	25.0%
56-65	5	8.1%	6	12.0%	11	9.8%
Over 65	0	0.0%	2	4.0%	2	1.8%
Ethnicity						
Black	9	14.5%	14	28.0%	23	20.5%
White	49	79.0%	28	56.0%	77	68.8%
Hispanic	2	3.2%	1	2.0%	3	2.7%
Asian	1	1.6%	3	6.0%	4	3.6%
Multiracial	1	1.6%	4	8.0%	5	4.5%
Teaching Experience						
1-2 years	4	6.5%	8	16.0%	12	10.7%
3-5 years	11	17.7%	10	20.0%	21	18.8%
6-10 years	19	30.6%	10	20.0%	29	25.9%
11-20 years	12	19.4%	11	22.0%	23	20.5%
Over 20 years	16	25.8%	11	22.0%	27	24.1%
Special Education Inclusion Experience						
1-2 years	13	21.0%	13	26.0%	26	22.8%
3-5 years	20	32.3%	21	42.0%	42	36.8%
6-10 years	16	25.8%	8	16.0%	24	21.1%
11-20 years	8	12.9%	4	8.0%	13	11.4%
Over 20 years	5	8.1%	4	8.0%	9	7.9%

Table 4

ORI Mean Scores by Certification Type

Certification	<i>N</i>	Mean	SD	Range	Minimum	Maximum
Traditional	63	61.87	11.89	69.00	37.00	106.00
Alternative	49	58.25	13.95	54.00	34.00	88.00
Total	112	60.29	12.90	72.00	34.00	106.00

Results

Data Screening

The data analysis consisted of three phases: the data preparation phase, the preliminary analysis phase, and the primary analysis phase. In the data preparation phase, the data were entered into SPSS and then checked for errors and missing values using the frequencies procedures in SPSS. Results of the frequencies procedure indicated that there were no missing values or data errors. Additionally, in this phase, ORI scale scores were reversed coded. Questions 2, 4, 6, 8, 9, 11, 12, 14, 18, 20, 23, and 24 were reversed coded. After the questions were reversed coded, ORI scores were computed by summing all 25 questions and then adding 75 to the total to eliminate the negative scores (Antonak & Larrivee, 1995).

Assumptions Testing

The second phase in the data analysis process was the preliminary analysis phase. In this phase, Cronbach's alpha was computed along with the test of the assumption of the independent samples *t*-test. It is recommended that a survey instrument's reliability be tested with each use to ensure that the instrument remains reliable with the current sample being used for the study (Nunnally, 1978; Pallant, 2016; Tabachnick & Fidell, 2013). Results of the Cronbach's alpha analysis produced a score of .739. A score of .7 or higher is considered acceptable reliability (Field, 2013; Nunally, 1978; Pallant, 2016). The assumptions of the independent sample *t*-test of normality were determined using the Kolmogorov-Smirnov (K-S) test, the assumption of equal variance test using Levene's Test of Equality of Error Variance, and extreme outliers using box-and-whisker plots. Next, the researcher computed boxplots to determine if there were any extreme outliers. The boxplots revealed that there were no extreme outliers, as there were no values with asterisks, indicating that the values were 3 times larger than the interquartile range.

There were two outliers that were 1.5 times larger than the interquartile range, but they were not extreme. See Figure 1.

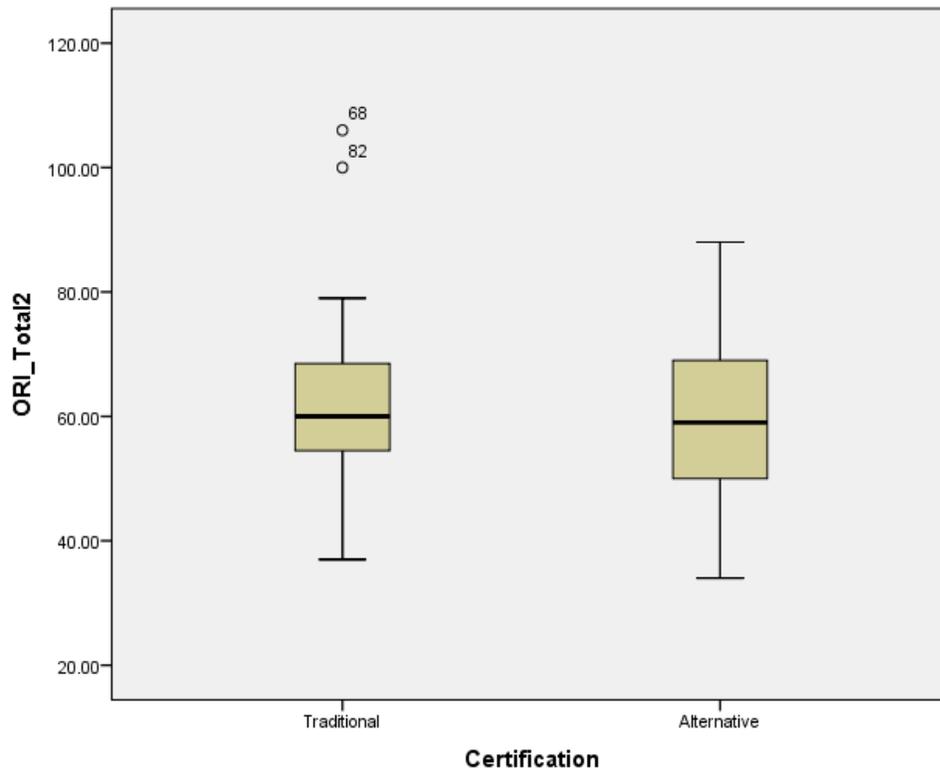


Figure 1. Test of extreme outliers.

Results of the K-S test of normality indicated that there were no violations in the assumption of normality for the traditional certification group $D(63) = .096$, $p = .200$ or the alternative certification group $D(49) = .068$, $p = .200$ (see Table 5). There was also no violation in the assumption of homogeneity of variance, $F(1, 110) = 3.212$, $p = .076$. The central limit theorem states that when sample sizes are reasonably large, i.e. greater than 30, the distribution of sample means will be normal, even when the sample distributions are non-normal. This is because t -test, ANOVA and linear regression are robust tests, meaning they will produce

relatively accurate p values (i.e. within $\pm .02$ of the true p value) even when normality has been violated (Boneau, 1960; Posten, 1984; Schmider et al., 2010; Wilcox, 2001). The sample size of the study was 112. Therefore, violations in normality are not critical.

Table 5

ORI Kolmogorov-Smirnov Scores for Traditional and Alternative Certification Groups

		Statistic	df	p
ORI_Total2	Traditional	.096	63	.200
	Alternative	.068	49	.200

The assumption that data were normally distributed was determined by a visual examination of the normality histogram. The normality histogram is displayed in Figure 2.

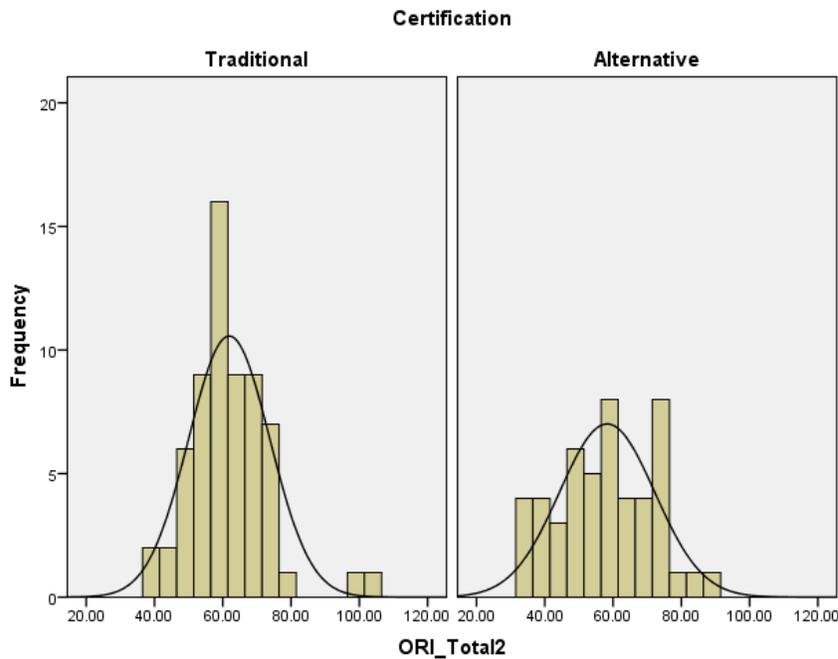


Figure 2. Normality histogram of ORI scores for traditional and alternative certification groups.

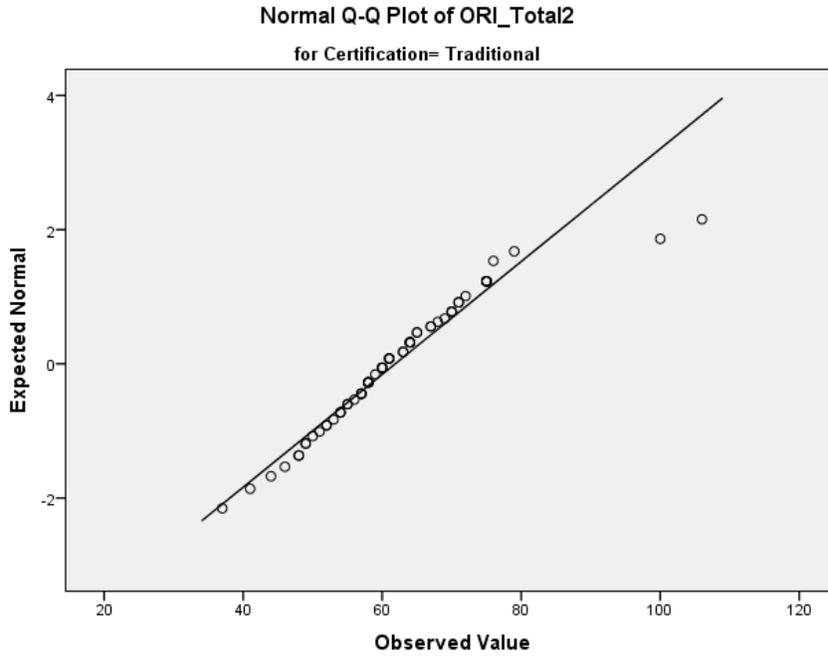


Figure 3. Q-Q plot of ORI scores for traditional certification group.

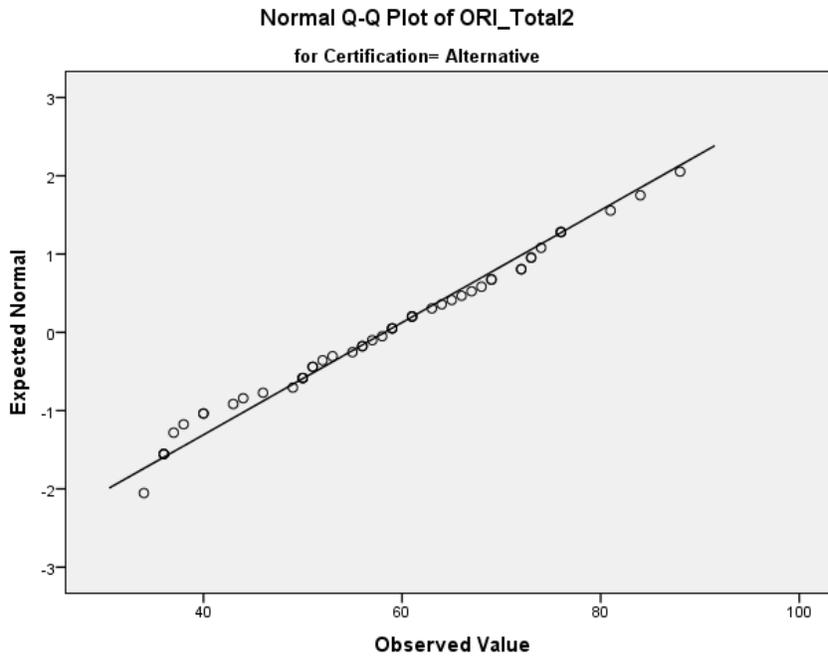


Figure 4. Q-Q plot of ORI scores for alternative certification group.

The third and final phase of the data analysis process was the primary analysis, during which the statistical test was performed to assess the null hypothesis. In this study, the null hypothesis stated the following: There is no significant difference in perceptions toward inclusion, as measured by the ORI scale, between special education teachers with traditional teacher certification and those with alternative teacher certification. An independent samples *t*-test was conducted to evaluate the null hypothesis. Results of the test indicated that there was no statistically significant difference in ORI mean scores between special education teachers with traditional education certification ($M = 61.87, SD = 11.89$) and alternative education certification ($M = 58.35, SD = 13.94$), $t(110) = 1.485, p = .140$, two-tailed. Cohen's *d* effect size measure is .28, indicating that the magnitude of the mean ORI score differences between the traditional and alternative groups was small (Cohen, 1988). Based on the results of the independent samples *t*-test, the null hypothesis failed to be rejected (see Table 6).

Table 6

Independent Samples t-Test Results

<i>T</i>	<i>df</i>	<i>p</i>	<i>d</i>
1.485	110	.140	.28

Summary

A study was conducted to determine if there was a difference in perceptions toward inclusion, as measured by the ORI scale, between special education teachers with traditional teacher certification and those with alternative teacher certification. The stated null hypothesis was as follows: There is no significant difference in perceptions toward inclusion, as measured

by the ORI scale, between special education teachers with traditional teacher certification and those with alternative teacher certification. There were 112 respondents who participated in the study. An independent samples *t*-test was conducted to assess the null hypothesis. Results of the independent samples *t*-test indicated that there was no statistically significant differences in ORI mean scores between special education teachers with traditional education certification and those with alternative certification. Based on the results of the independent samples *t*-test, the researcher failed to reject the null hypothesis. Chapter Five will review the results in the context of the literature review and the theoretical framework.

CHAPTER FIVE: CONCLUSIONS

Overview

The purpose of Chapter Five is to review the results of Chapter Four in the context of the theoretical framework and literature review. The chapter is divided into four sections: discussion, implications, limitations, and recommendations for further research.

Discussion

The purpose of this causal-comparative study was to determine if a difference existed in perceptions toward inclusion between Georgia special educators with traditional certification and those with alternative teacher certification. The paucity of evidence-based research on special education teacher perceptions of inclusion has prompted the need for additional quantitative inquiry. This research study built upon the initial knowledge base related to special education teacher certification and teacher perceptions toward the inclusion of students with disabilities in the general education classroom. With extensive research comparing the differences between general education and special education teachers' perceptions of inclusion with varying outcomes (Avramidis, Bayliss, & Burden, 2000), it was worth looking into the differences in special educators' perceptions through a more in-depth lens. The literature was unclear on whether or not the route to teacher certification, traditional or alternative, makes a difference in teachers' perceptions toward the inclusion of students with disabilities in the general education classroom. An independent samples *t*-test analysis was conducted to examine the mean differences in inclusion perceptions between special education teachers with traditional teacher certification and those with alternative teacher certification. The study consisted of one research question and one null hypothesis.

This study utilized the Opinions Relative to the Integration of Students with Disabilities (ORI), constructed by Antonak and Larrivee (1995), to quantitatively evaluate the attitudes of educators toward the inclusion of students with disabilities in general education classrooms. This instrument examines teacher perceptions as they relate to the inclusion of students with disabilities in the general education classroom, the benefits of inclusion, inclusion classroom management, teachers' perceived self-efficacy, and the special education setting versus the general education inclusion setting. The ORI instrument was used to answer the following research question: Is there a difference in perceptions toward inclusion, as measured by the ORI scale, between special education teachers with traditional teacher certification and those with alternative teacher certification?

An independent samples *t*-test design was appropriate for this study since its purpose was to compare mean scores of each group independent of the other (Field, 2013; Pallant, 2016). The independent variable in this study was the type of special education teacher certification program completed by the participant, either traditional or alternative. The dependent variable was the teachers' perceptions of the inclusion of students with disabilities in the general education classroom, specifically teachers' perceptions towards the following: the benefits of inclusion, inclusion classroom management, teachers' perceived ability to educate students with disabilities, and the special education setting versus the inclusion general education setting, as measured by the ORI. The target population for this study included ($N = 112$) special education teachers located in Georgia. The participants in this study were determined using random sampling.

Research Question

The research question asked if there was a statistically significant difference in perceptions toward inclusion, as measured by the ORI scale, between special education teachers with traditional certification and those with alternative teacher certification. This researcher hypothesized that there would be a significant difference in the perceptions of the educators based on the route to obtaining teacher certification (traditional or alternative). The results of the independent samples *t*-test did not confirm this hypothesis because the difference in the mean scores between the two groups was not statistically significant and had a small effect size ($d = .28$); the null hypothesis failed to be rejected.

The descriptive statistics indicate that both groups of special educators hold similar perceptions of inclusion. Special educators with a traditional certification held slightly, although not significantly, more positive perceptions ($M = 61.87$) than those with an alternative certification ($M = 58.25$). The expectation was that special educators who completed a traditional certification program would hold significantly more positive perceptions toward inclusion than those who completed an alternative certification program; however, this was not the case. Surprisingly, both groups of special educators held less-than-favorable perceptions toward the inclusion of students with disabilities in the general education setting. While the literature has not compared groups of special educators, it has compared the perceptions of general education teachers to special education teachers, and an abundance of outcomes indicate that special educators held favorable perceptions of inclusion (Bruce, 2010; Bruster, 2014; Hettiarachchi & Das, 2014; Tortu, 2015; Wiggins, 2012).

Research suggests that perceptions of inclusion are influenced by many factors, such as teacher preparation, professional development, years of experience, school culture, and administrative support (Alquraini, 2012; Barnes & Gaines, 2015; Kee, 2012; Kim, 2011;

Puchalik, 2016). Since educational background has been identified as an essential factor related to teacher attitudes and perceptions toward inclusion (Taylor, Smiley, & Ramasamy (2003), it was important for this researcher to explore if traditional and alternative certification, specifically the educational route to obtaining certification, influenced teacher perceptions toward inclusion. The results of this study indicated that there was no significant difference in teacher perceptions towards inclusion based on initial teacher certification.

Studies comparing special education and general education teacher perceptions indicate that special education teacher perceptions reflect that the general education classroom is the best placement for students with disabilities to be educated (Alquraini, 2012; Obiakor, Harris, Mutua, Rotatori, & Algozzine, 2012). However, the results of this study revealed less-than-favorable special education teacher perceptions of inclusion towards students with disabilities in the general education classroom by both traditionally certified and alternatively certified teachers (although the finding was not statistically significant), suggesting that at least some special education teachers may not believe the general education classroom to be the ideal place for students with disabilities.

The ORI instrument measures teachers' overall perceptions toward inclusion as they relate to four constructs: the benefits of inclusion, classroom management, teacher self-efficacy, and the special education classroom versus the general education inclusion classroom (Antonak & Larrivee, 1995). The authors of the instrument define the *benefits of inclusion* as any benefits of inclusion gained for students with or without disabilities, and these comprise eight components. These components require specific knowledge about the characteristics of individuals with disabilities, how to promote academic growth of students with disabilities, student functioning in a general education classroom, and the social and emotional development

of students with disabilities. The second construct, *inclusion classroom management*, also requires a specific skill set and knowledge to include the various behaviors of students with disabilities, classroom management, student abilities, differences between students with and without disabilities, and the amount of time needed to learn grade level concepts. The third construct, *perceived ability to teach students with disabilities*, reflects a teacher's self-efficacy to teach students with disabilities; this construct includes the ability to work with students with disabilities and having sufficient training to teach students with disabilities. The fourth and final construct, *special versus general education inclusion class*, compares the provision of education for students with disabilities in a self-contained special education classroom setting and the general education classroom setting. This construct requires teachers to know and understand general classroom procedures, the various types of placement for students with disabilities, the development of academic skills, and the best type of teacher for students with disabilities.

Based on the literature, there are marked differences between the two types of certification. The traditional route to special education teacher certification requires the completion of a formal teacher preparation program offered by a university or four-year college with a major in special education. The traditional pathway includes coursework in various disabilities, pedagogy skills, behavior management, planning, curriculum development, assessment strategies, working knowledge of special education and content, and interventions to better student outcomes. The alternative route lacks much of the aforementioned and allows individuals with a four-year degree in any field other than education to enter the inclusion classroom and begin teaching students with disabilities without any preparation to facilitate the success of students with disabilities (McLeskey & Billingsley, 2008).

Considering the major differences in the preparation of the two certification types, one would surmise that it would be difficult for the alternatively certified educator to possess the skills and abilities needed to meet the requirements of the four constructs to demonstrate favorable or high perceptions of inclusion without extensive training. The results of this study aligned with the statement above; the special educators who completed an alternative teacher certification program held less-than-favorable perceptions of inclusion. Surprisingly, based on the results of this study, the educators who completed a traditional certification program that contained extensive training in special education and evidence-based pedagogy also revealed less-than-favorable perceptions of inclusion. These results contradict what was expected based on some of the scholarship that exists in this area. For example, Van Reusen, Shoho, and Barker (2001) reported that teachers with the most positive attitudes toward inclusion were those teachers with the highest level of special education training, and the teachers who displayed negative attitudes toward inclusion were those who reported the lowest levels of special education training, knowledge, or experiences in teaching students with disabilities. Additional studies have shown that educators with higher levels of special education training are more positive towards inclusion than those with less or limited special education training (Forlin, Loreman, Sharma, & Earle, 2009). More recently, according to a study conducted by Puchalik (2016), educators who completed more special education coursework in college held significantly more positive perceptions toward inclusion than those who completed fewer courses in special education. Given the nature of this research, what might explain the contrary findings of the present study?

While the results of this study indicated that special educators with traditional certification had slightly more favorable perceptions of inclusion than their alternatively certified

counterparts, their perceptions were not significantly different. One possible explanation of why there was no significant difference in both groups' perceptions may be rooted in the theoretical framework of social constructivism. Vygotsky's theory of social constructivism (1978) explains that all cognitive functions originate as a product of social interactions; therefore, learning occurs through communication in a context related to real-life skills (Wang & Ha, 2012). This means that contributions from experts, professors, student teaching supervisors, mentors, peers, and colleagues subsidize individual learning that aids in formulating teacher perceptions. The theory of social constructivism stresses the importance of culture and context in developing personal and shared interpretations of reality (Vygotsky, 1978). Based on this theory, the inclusion perceptions of special educators who were alternatively certified and traditionally certified may not differ.

Social interaction is the premise driving social constructivism. Even though teachers who were traditionally certified received more in-depth, extensive training that covered all aspects of teaching and theoretically had more social interaction, it may be that the level of social interaction during the traditional certification program training process was relatively equivalent to the social interaction achieved through the alternative certification training process. Based on the results of this study, the limited socialization experienced through on-the-job training of alternatively certified special educators may have been adequate enough to match the social engagement process of traditionally certified special educators, thereby, resulting in a non-significant difference in teacher perceptions toward the inclusion of students with disabilities in the general education setting.

Another possible explanation for the results of this study is that the training leading to traditional or alternative certification is simply not a factor that contributes to special educators'

perceptions toward inclusion. Avramidis and Norwich (2000) reported that educators who were traditionally certified and those with no special education inclusion training scored lower on perceptions toward inclusion measures than those who received in-service training. Nishimura (2014) indicated that in order to change perceptions and attitudes, on-going support and training with time for repeated practice and reflection as opposed to a one-time program completion is needed. A traditional, university-based certification program may discourage positive attitudes toward inclusion by approaching special education as a constant problem for educators to bear (O'Hara, 2016).

There was no research found comparing groups of special educators' perceptions toward the inclusion of students with disabilities in the general education classroom; however, there were numerous studies comparing the inclusion perceptions of general education teachers and special education teachers. Based on the available literature, other explanations may have also contributed to the results of this study. Teacher perceptions toward the inclusion of students with disabilities in the general education setting may have been influenced by other factors not taken into account in this study. Walker (2012) stated that experience, professional development, and administrative support could impact teacher perceptions and attitudes. McGhie-Richmond, Irvine, Loreman, Cizman, and Lupart (2013) reported that teachers elaborated on the need for support and training as a factor that influenced their perceptions. The results of several studies have indicated that the number of years of teaching experience may also be a factor that influences teachers' perceptions; however, research has yielded various outcomes. Studies have indicated that teachers with fewer years of experience held more favorable views than more experienced educators (Avramidis & Norwich, 2002; Buford & Casey, 2012; MacFarlane & Woolfson, 2013).

In contrast, additional research has found opposing outcomes indicating that teachers with more classroom experience held more positive views about inclusion than those with fewer years of experience (Alghazo, Gaad, & El, 2004). In addition to years of teaching experience, research has also found that teachers with past training in the awareness of disabilities feel capable of providing effective instruction to students with disabilities and tend to have positive perceptions toward inclusion (Avramidis, Bayliss & Burden, 2000; Ernst & Rogers, 2009; Sze, 2009). Studies also suggested that school culture and climate play a major role in influencing teachers' perceptions (Allen & Harriott, 2011). Lastly, Taylor et al. (2003) explored educational background on teacher perceptions on inclusion, and findings revealed no significant differences for educational type with regard to the intensity level of the students' disability, but differences were found with respect to collaboration issues.

Implications

Numerous studies have reported that inclusion has a positive effect on student achievement, and teachers, students, and administrators perceive inclusion to be academically and socially beneficial for students with and without disabilities (Murawski & Swanson, 2001; Scruggs, Mastropieri, & McDuffie, 2007). Therefore, the main purpose of this study was to determine if the training received through one of two types of teacher certification programs positively influenced teacher perceptions of inclusion more than the other.

The first implication of this study relates to teacher inclusion perceptions and student achievement. Previous research indicated that there was a relationship between teacher perception and student achievement, such that favorable perceptions of inclusion were related to better student achievement (Contreras, 2011; Klehm, 2014). The results of this study indicated that there was no difference between traditionally trained and alternatively trained special

education teachers, which implies that there is no difference between the two groups regarding student achievement. Studies indicate that traditionally certified teachers are better prepared to positively impact student achievement (Nougaret, Scruggs, & Mastropieri, 2005; Sindelar, Daunic, & Rennells, 2004; Wayman, Foster, & Mantle-Bromley, 2003). However, some research suggested otherwise and indicated that traditionally certified and alternatively certified special education teachers fare the same in regard to student achievement (Constantine et al., 2009; Goldhaber & Brewer, 2000; Miller, McKenna, & McKenna, 1998). The downside of this as it relates to this study is that both groups of special educators held less than favorable perceptions of the inclusion of students with disabilities in the general education setting. This implies that both groups of special educators may not have a positive impact on student achievement. This is a troubling finding given that teacher perceptions shape the learning of their students (Torff, 2011); consequently, educators with negative perceptions and beliefs can become an obstacle to student achievement (Contreras, 2011). The results of this study may encourage special education leaders to reflect less on the long-standing debate of traditionally certified versus alternative certified teachers and more on other factors that impact teacher perceptions, and ultimately student achievement, such as ongoing special education professional development, school culture, school climate, or a lack of support.

Given that there is a critical shortage of special education teachers in Georgia, there is an urgency to recruit people from other professions into the teaching field (Brownell, Bishop, & Sindelar, 2018). There is still debate on whether this is the best policy move for special students (Bowling & Ball, 2018). Based on the results of this study, the policy of recruiting non-education degreed professionals for special education positions may be adequate, as there was no difference in inclusion perceptions between traditionally certified and alternatively certified

special education teachers. These results could be valuable to several school districts and principals across Georgia that maintain preference for hiring special education teachers who completed a traditional certification program. Understanding that both types of special education teachers' perceptions are similar, special education leaders who refused to hire alternatively certified educators in the past may now be able to access a larger pool of potential applicants for this critical need field.

The final implication of this study is that individual differences, not the type of training, appears to matter more for how teachers perceive inclusion. Although one must use caution in overgeneralizing the conclusions of this research, it was clear from the results of this study that type of certification did not matter regarding attitudes toward inclusion. Given the strong influence of personality on human behavior (Little, 2014; Nettle, 2007; Rothbart, 2011), one could argue that the long shadow of temperament (Kagan & Snidman, 2003) mediates, moderates, or better explains the difference in inclusion perceptions. A related implication, consequently, is that educational leaders, to include teachers, need to use caution in holding and communicating strong perceptions of teacher training programs that are anecdotal instead of empirical. Perceptions and self-fulfilling beliefs play a strong role in human behavior and can lead to outcome differences not explained by the actual difference between people or in the contexts of learning (Johnson & Hackman, 2018; Slavin, 2018). As one who was trained in an alternative special education program, this researcher can attest to the professional attributions made and perceptions held by others as to the relative weakness of alternative certifications. Moreover, empirical research, not just professional experience, supports negative perceptions about alternative certification programs (Humphrey & Wechsler, 2007).

Limitations

This study had several limitations. First, special education teacher preparation and certification programs do not have a standard curriculum. This means that traditional certification programs can teach various topics, strategies, and interventions that are not addressed in other traditional certification programs. Likewise, there is no standard curriculum, structure, or length of program delivery for alternative certification programs. The variability, especially related to content, within certification program types were a limitation of this study. This limitation is particularly important because, based on the theoretical framework of social constructivism, social interaction or socialization is a critical component of learning and developing individual perceptions, and the level of social interaction differences between the two types of certification programs are unknown. Also, the level of social interaction within each certification program type is assumed equivalent, which is yet another limitation.

The next limitation of this study was that it was quantitative; as such, it does not include in-depth descriptive data, conversational data, or reflections from each respondent that could bring greater clarity to the results of this study. In addition, it involved a structured questionnaire with limited options of responses limiting the outcomes. Another limitation of this study is that the results can only apply to the special education teacher certification process in Georgia. Also, the rules regarding the route to certification of alternatively certified educators vary from state to state.

While the ORI instrument has been widely used since its original development in 1979 and revision in 1988, many researchers have utilized the survey instrument to measure educators' perceptions, attitudes, and beliefs of inclusion. The instrument remains reliable with a Cronbach alpha of .73. However, due to the age of the instrument, the terminology is outdated and has

been updated to reflect the current climate of special education. The term “integration” is no longer used; the term most commonly used now is “inclusion.” The use of outdated terminology with a variety of meanings could have impacted participants’ responses.

Because the study used a cross-sectional, non-experimental design, limitations exist regarding the explanatory power of the current findings. Using an experimental or quasi-experimental design nested within longitudinal research would produce stronger outcomes that might peel back more of the complexity within this research problem.

The final limitation of this study relates to the point in the special educator’s career in which this study was completed. In Georgia, special education teachers with alternative teacher certification are afforded three years to complete all certification requirements. It is unknown if all participants completed all certification requirements prior to the completion of the questionnaire; this may or may not influence the educator’s perception toward inclusion.

Recommendations for Future Research

Upon reflection of this study, the following recommendations for future research have been determined:

1. Conduct the same study using an updated instrument to measure inclusion perceptions. While the instrument’s reliability was adequate with a Cronbach alpha of .73, an instrument with greater reliability may provide different results in terms of respondents having more favorable perceptions of inclusion. Moreover, an instrument that uses current terminology may also be more appropriate, limiting any misunderstanding in verbiage.
2. Narrow down a specific type of alternative certification program for comparison or compare the various types of alternative certification programs. In the state of Georgia

there are a variety of alternative certification programs that vary in admission requirement, structure, length, and content.

3. Conduct a qualitative study or mixed methods study that would offer reflective data that provided explanations and offered additional insight into the rationale behind the educators' perceptions toward inclusion.

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APPENDICES

Appendix A: Participant Email Script

My name is Dannette Taylor Estes, and I am conducting research for my Doctor of Education dissertation with Liberty University. I am inviting you to participate in a research study regarding special education teacher perceptions of inclusion. Your participation in this research would be much appreciated; please consider participating. Click on the link below for information about the study, consent, and confidentiality. The survey will take approximately 5 minutes to complete, and the information gathered in this survey will help determine the perceptions of inclusion held by special education teachers.

To take the online survey, please click on the link below. This study has no affiliation with your employer, school, or school district, and all surveys are anonymous. There are no studies without potential risks; however, the risks associated are no more than you would encounter on a daily basis in your profession. The benefits of this study includes a better understanding of special education teachers' perceptions to assist leaders in better preparing special education teachers for inclusion classrooms, improving special education teacher preparation programs, and improving academic outcomes for students with disabilities.

Thank you in advance for participating in this study. Your input is critical to learning more about the perceptions of special educators.

Click here to take the survey:

Appendix B: Permission to Use Instrument

Richard F. Antonak

RFAntonak@me.com

Dear Inquirer:

Thank you for your inquiry about the scale entitled *Opinions Relative to Mainstreaming Special-Needs Children*. This scale was completely revised and is now entitled *Opinions Relative to the Integration of Students with Disabilities* (ORI). I have enclosed with this letter a copy of the *ORI* and a scoring key for your use.

You may reproduce the *ORI* in any form that suits your research needs. The only requirement for the use of the instrument is that you ascribe authorship to Drs. Larrivee and Antonak, using the citation below, in any publication that may arise from your use of it.

Good luck with your research.

Very truly yours,

s/Richard F. Antonak

Richard F. Antonak, Ed.D.
Retired

Appropriate citation:

Antonak, R. F., & Larrivee, B. (1995). Psychometric analysis and revision of the Opinions Relative to Mainstreaming Scale. *Exceptional Children*, 62, 139-149.

Appendix C: IRB Approval

LIBERTY UNIVERSITY

INSTITUTIONAL REVIEW BOARD

June 28, 2018

Dannette Taylor Estes

IRB Exemption 3320.062818: A Comparative Study of Special Education Teachers' Inclusion Perceptions: The Role of Certification Routes

Dear Dannette Taylor Estes,

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

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

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

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

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

Sincerely,



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

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Appendix D: Informed Consent

The Liberty University Institutional
Review Board has approved
this document for use from
6/28/2018 to –
Protocol # 3320.062818

CONSENT FORM

A Comparative Study of Special Education Teachers' Inclusion Perceptions:
The Role of Certification Routes

Dannette Taylor Estes
Liberty University
School of Education

You are invited to be in a research study comparing inclusion perceptions held by special education teachers. You were selected as a possible participant because you are a Georgia certified secondary special education teacher with at least one year of teaching experience in a general education inclusion setting. Please read this form and ask any questions you may have before agreeing to be in the study.

Dannette Taylor Estes, a student in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to compare the inclusion perceptions of secondary special education teachers who completed a traditional teacher certification program and those who completed an alternative teacher certification program.

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

1. Click on "I Agree" to access the online survey.
2. Complete the demographic teacher questionnaire.
3. Complete the 25-question survey.

It should take approximately 10 minutes to complete the demographic information and survey.

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

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

Benefits to society include understanding special education teachers' perceptions to assist leaders in better preparing special education teachers for inclusion classrooms, improving special education teacher preparation programs, and improving academic outcomes for students with disabilities.

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

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

- The participant survey is an anonymous online survey. The researcher will not be able to link data to a specific participant.
- The data will be maintained on a USB flash drive secured in a locked box at the researcher's home, and destroyed four years after completion of the study.

The Liberty University Institutional
Review Board has approved
this document for use from
6/28/2018 to --
Protocol # 3320.062818

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

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

Contacts and Questions: The researcher conducting this study is Dannette Taylor Estes. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at [REDACTED] or [REDACTED]. You may also contact the researcher's faculty advisor, Dr. Jeffrey Savage, at [REDACTED].

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd., 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.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. Continuing to the survey site constitutes consent to participate in this study.

Appendix E: Demographic Questions

Teacher Questionnaire

Please respond to ALL items in this questionnaire.

1. Select your gender: female male

2. Select your age:
 under 25 25-35 36-45 46-55 56-65 over 65

3. Select your ethnicity:
 Black/African American White Hispanic/Latino Asian
 Multi-racial Native American Pacific Islander Other

4. At which grade level do you currently teach: elementary middle high

5. How did you earn your special education initial teacher certification?
 traditional, university-based, degree seeking teacher certification program
 alternative, accelerated (on-the-job) certification program
 was initially a general education teacher who passed the special education GACE

6. Have you earned a degree in special education: yes no
 If so, at which level: bachelor master specialist doctorate

7. Select your total years of teaching experience:
 0 less than 1 1-2 3-5 6-10 11-20 20+

8. Select your total years of special education inclusion experience:
 0 less than 1 1-2 3-5 6-10 11-20 20+

9. Select your total years of special education inclusion experience at the secondary level:
 0 less than 1 1-2 3-5 6-10 11-20 20+