A COMPARISON OF PERSPECTIVES OF SPECIAL AND REGULAR EDUCATION

TEACHERS ON INCLUSIVE EDUCATION

by

Bryanan Stefanie Salita Laughlin Callicutt

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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ABSTRACT

Many teachers feel unprepared to meet the educational needs of students with disabilities in the general education classroom setting. Presently, limited information exists about the separate viewpoints general and special education teachers hold about providing inclusive education. The purpose of this causal-comparative study is to compare the perspectives of inclusive education held by general and special education teachers located in the state of North Carolina. The perspective about inclusive education will be measured using the Multidimensional Attitudes toward Inclusive Education Scales (MATIES). The framework guiding this study is the Ajzen theory of planned behavior which explains that one's beliefs, attitude toward behavior, subjective norms, and perceived control, together shape an individual's behavioral intentions and behaviors. Therefore, to understand teacher behavior in relation to teaching in an inclusive classroom, this study looked to understand their attitude about inclusive education, their belief of social norms, and the control they have over their own behavior through the use of the MATIES. The instruments were administered through the use of SurveyMonkey online survey platform. A MANOVA was used to analyze the data.

Keywords: Inclusive Education, Special Education, Teacher Perspectives, Theory of Planned Behavior

Copyright Page

Dedication

First and foremost, this work is dedicated "To the only God, Our Savior, through Jesus Christ our Lord, be glory, majesty, dominion and authority, before all time now and forever. Amen." – Jude 1:25, ESV.

This work is also dedicated to my husband, Chris, I am thankful for your support, encouragement, and understanding throughout this process. Thank you for all the things that you took on that others did not see to make this achievement possible.

Lastly, this work is dedicated to my children, Johnathon Dean and Carli Emma-Jean. I hope that I have shown you that you can achieve your dreams. Know that Mommy loves you more than anything.

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To my mom, dad, and family who have always supported and encouraged me and my dreams.

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To my mentor and friend, Dr. Nathan Street, thank you for your support, encouragement, direction, and much more.

To the Randleman Church of God, thank you for loving me, praying for me, and supporting me not only in this but in many things.

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List of Abbreviations

Analysis of Variance (ANOVA)

Elementary and Secondary Education Act (ESEA)

Every Student Succeeds Act (ESSA)

Free and Appropriate Public Education (FAPE)

Individual with Disabilities Education Improvement Act (IDEIA)

Individualized Education Plans (IEP)

Institutional Review Board (IRB)

Least Restrictive Environment (LRE)

Multidimensional Attitudes toward Inclusive Education Scales (MATIES)

Multivariate Analysis of Variance (MANOVA)

No Child Left Behind (NCLB)

Theory of Planned Behavior (TPB)

CHAPTER ONE: INTRODUCTION

Overview

Practices and expectations of special education have been evolving continually since its introduction in the 1970s. The roles of special education teachers, the curriculum to which students with disabilities are exposed, and the facilities where students with disabilities receive education have changed overtime (Zigmond, Kloo, & Volonino, 2009). An increasing number of students with disabilities now have access to general education. Inclusion of students with disabilities means that these students are being allowed to attend their neighborhood schools and be taught in the general education classroom with their non-disabled peers to increase their exposure to social interactions and to the general education curriculum (Kauffman & Hallahan, 1997; Zigmond et al., 2009).

The practice of inclusive education, as an educational framework, has reshaped the role of special education teachers. Torff (2011) suggested that a teacher's perspective of the educational environment influences the educational achievement of all students within that environment. The degree to which teachers buy-in to a program influences the success of the inclusive education directly (Bruster, 2014; Chhabbra, Srivastava, & Srivastava, 2010; MacFarlane & Woolfson, 2013; Stoler, 1992; Smith, 2000; Tiwari, Das & Sharma, 2015; Yadav, Das, Sharma, & Tiwari, 2015). This study examines the attitudes and perceptions of special education teachers toward inclusive education and the differences between special education teachers and general education teachers in these attitudes and perceptions.

Background

Changes in Special Education Placements

The Individuals with Disabilities Education Improvement Act (IDEIA, 2004) includes the clause known as the least restrictive environment (LRE), which states that "to the maximum extent appropriate, children with disabilities, are educated with children who are non-disabled" (34.C.F.R. Sec. 300.550 (b)(1)). IDEIA stipulates that students with disabilities can only be removed to separate classes or schools when the nature or severity of their disability is such that they cannot receive an appropriate education in a regular education classroom with supplementary aids and services (i.e., 34 C.F.R. 300.550 (b)(2)) (Yell, Katsiyannas, & Shiner, 2006). Moreover, under IDEA, schools are mandated to ensure that such students are educated in the LRE which must meet their needs, and that a full continuum of alternative placements is available to address their needs if they cannot be educated/placed with their non-disabled peers (i.e., 34 C.F.R. Sec. 300.551) (Yell & Katsiyannis, 2004).

The concept of LRE is an important topic within special education. Authors have documented the influence of the full inclusion movement, the proponents of which believe that *all* children should receive their academic instruction within the general education classroom, regardless of level of disability (Anastasiou, Kauffman & Di Nuovo, 2015; Dorn, Fuchs, & Fuchs, 1996; Fuchs & Fuchs, 1995, 1998). This push for all students to be in the general education classroom raises many questions and concerns about the effectiveness of instruction in such diverse environment, the ability of teachers to meet the needs of all students, and the level of support teachers provide within the inclusive classroom (MacFarlane & Woolfson, 2013; Ross-Hill, 2009; Tiwari et al., 2015). The full inclusion movement has used the LRE and the free and appropriate public education (FAPE) clauses to encourage the push for the practice of

inclusion for all students, regardless of the severity of the student's disability (Anastasiou et al., 2015; Dorn et al., 1996; Fuchs & Fuchs, 1995, 1998). This practice has been considered to be in violation of IDEIA since students may be denied the continuum of services needed to meet their individual needs (Anastasiou et al., 2015; Kauffman, Landrum, Mock, Sayeski & Sayeski, 2005; Zigmond & Baker, 1996). Even with this continued debate about special education placement, many 6- to 21-year-old students with disabilities are currently being served in regular schools (American Youth Policy Forum & Center on Education Policy, 2002; National Center of Educational Statistics, 2012).

Changes in Accountability

The use of standardized accountability measures in education encourages the practice of inclusion by requiring all students to perform at the same high standard (Kaufman & Badar, 2014). Specifically, the push for highly qualified teachers in the areas they teach as required by No Child Left Behind (NCLB) (Selwyn, 2007). This push for teachers to be highly qualified in academic areas has required special education teachers to be qualified in both special education and the core content area they teach/support (Brownell, Sindelar, Kiely, & Danielson, 2010). Brownell et al. (2010) discussed that this change has had an impact on the delivery of special education services. Smith, Robb, West, and Tyler (2010) discussed the importance of inclusive environments because of the accountability measures now in place for all students.

The focus on the high academic performance of students with disabilities is supported in the Every Student Succeeds Act (ESSA) which was signed into law by President Barack Obama in December 2015 (Davis, 2015). ESSA specifically describes children with disabilities as a group who must demonstrate academic growth under this reauthorization regardless of location of service. More students with disabilities are being assessed through the same standardized

tests as their non-disabled peers. This push for accountability makes it critical that students with disabilities receive instruction from teachers are highly qualified in their content as well as in how to support students with a variety of learning needs (Smith et al., 2010).

This push for accountability remains to be a guiding policy in the field of special education. The focus on academic assessments as a measure of academic achievement and growth requires that all students participate in high-stakes testing (Cook-Harvey et al., 2016; Fránquis & Ortiz, 2016; Hess & Eden, 2017). To be able to demonstrate academic growth on these assessments, students with disabilities need to be exposed to the same grade level content as their typically developing peers and to be taught by a teacher qualified in that specific content. The practice of inclusion addresses this need but again, it is still unclear whether teachers are able to meet a wide variety of student needs and whether students with disabilities are receiving an adequate education (Kaufman & Badar, 2013; Kaufman et al., 2005; Kirby, 2013; Zigmond & Baker, 1996).

Changes in Teacher Perspectives

Teacher perspectives have an effect on practices in the classroom (Torff, 2011). The current literature includes the perspectives of a various stakeholders on inclusive education. Ross-Hill (2009) examined the perspectives on inclusion held by 100 elementary and secondary regular education teachers and found that students with disabilities are generally accepted in the general education classroom. On the contrary, Hammond and Ingalls (2003) demonstrated that general education teachers have limited acceptance of inclusive practices, with most attitudes being negative or uncertain. Research conducted among special education teachers revealed uncertainty. Inclusion is perceived as "too difficult for regular education teachers" (Lopes, Monterro, & Sil, 2004, p. 412; MacFarlane & Woolfson, 2013; Ross-Hill, 2009; Yadav et al.,

2015). Much of the research on inclusion that has included special education teachers

emphasizes co-teaching. Several concerns with co-teaching have been reported in the literature,

questioning its effect on the education of students with disabilities. Furthermore, it is unclear

whether teachers would be accepting of all the modifications and accommodations needed for

full inclusion to occur (Dorn et al., 1996; Fuchs & Fuchs, 1994; Kauffman et al., 2005; Zigmond

et al., 2009). Bruster (2014) found that special education teachers have a more positive

perception of the overall benefits of inclusion. It is important to investigate the effectiveness of

inclusion education, as well as, to understand teachers' perspectives on inclusion and its effect on

students' achievement.

Teachers' attitudes and behaviors toward students have been investigated in various

ways. The theory of planned behavior offers the theoretical framework through which teacher

attitudes in the classroom can be evaluated (Ajzen, 1991). The discussion of full inclusion in

special education and its effect on both students with and students without disabilities is also

important to have a current understanding of inclusive education (Agran et al., 2017; Ballard &

Dymond, 2017; Cavioni, Grazzani, & Ornaghi, 2017; Florian, 2008; McMahon, Keys, Berardi,

Crouch, & Crocker, 2016; Prohn, Kelley, & Westling, 2015; Ring & Travers, 2016; Shavlev,

Asmus, Carter, & Moss, 2016; Shrogren et al., 2015; Shuster et al., 2016). Because of the lack

of a common definition of inclusive education, it is important to define inclusive education

within a district or school appropriately to better understand teachers' perspectives of inclusive

education.

The literature on teachers' perspectives of inclusion discusses several concerns which

need to be addressed by future research. Current topics of concern are teachers' professional

development regarding teaching students with disabilities in their classrooms (Zagona, Kurth, &

MacFarland, 2017) and the availability and implementation of collaboration (Da Fonte &

Barton-Arwood, 2017; Vaughan & Henderson, 2016). The exploration of teachers' perspectives

on inclusion would address both these concerns. Previous research has indicated that general

education teachers are not sufficiently trained, either by their university or through continued

professional development to implement inclusive education (Able, Sreckovic, Schultz, Garwood,

& Sherman, 2015; Liasidou & Antoniou, 2013). This is especially the case when it comes to

students with severe disabilities such as Down syndrome or Autism Spectrum Disorder (Able et

al., 2015; Carter & Hughes, 2006). To effectively educate students with severe disabilities,

regular education teachers rely on special educators to provide modifications, accommodations,

and specifically designed instruction.

Special educators must know "when to adapt the curriculum or when to teach something else"

(Zagona et al., 2017, p. 172) as well as, student progress on the goals created for their

Individualized Education Plans (IEPs). This quote demonstrates the responsibility and struggle

placed on special educators in practicing inclusion. Lopes et al. (2004) shared special educators'

negative perspective of their general education counterparts. This type of negativity hinders

effective collaboration and affects the ability of special education teachers to effectively support

students with disabilities in the inclusive classroom. A full understanding of the perspectives of

inclusion held by special educators is important for the continued development of this practice.

Problem Statement

Kauffman and Badar (2013) explained that instruction rather than location should be the

focus of discussion surrounding inclusion, yet this does not appear to be the current perspective

of school systems as the number of students participating in inclusive education continues to be

increasing, but student academic growth doesn't seem to be occurring at a sufficient rate.

Gilmour, Fuchs, and Wehby (2018) found that most students with disabilities are still exhibiting reading achievement skills 3.3 years behind their non-disabled peers. The American Youth Policy Forum and Center on Education Policy (2002) noted that many inclusion teachers feel unprepared to meet the educational needs of students with disabilities. Ross-Hill (2009) stated "researching the exploration of attitudes of regular education teachers on a larger scale is important" (p. 196).

A review of the literature has shown that various studies have focused on the perspectives of principals, general education teachers, parents, and students who provide or receive their education within an inclusive classroom. Except for dissertations completed within the past five years, a limited amount of research (Carter & Hughes, 2006; Cook, Semmel, & Gerber, 1999; Liasidou & Antoniou, 2013; Olson, Leko, & Roberts, 2016; Zagona et al., 2017) has directly examined the perspectives of inclusive education held by special education teachers (Bruster 2014; Wiggins, 2012). Most peer-reviewed articles do not separate special educators from their general education counterparts in their analysis (Able et al., 2015; Carter & Hughes, 2006; Liasidou & Antoniou, 2013; Vaughan & Henderson, 2016; Zagona et al., 2017).

The perspectives of all stakeholders are important when considering the successful implementation of an instructional practice (Carter & Hughes, 2006). Much of the current literature has shown that special education teachers often have a negative view of their general education counterparts, but it is difficult to determine how widespread this issue is given the limited amount of research conducted in this area (Carter & Hughes, 2006; Cook et al., 1999; Liasidou & Antoniou, 2013). The lack or limited amount of evidence affects the knowledge of the effects of special educators' views of inclusion on student achievement, professional preparedness to implement inclusion, and collaboration of special educators with general

educators regarding the inclusive setting. To address the lack of research in this area, the special education teachers' perspective on inclusive education must be explored.

Purpose Statement

This study will employ a causal-comparative research design. Causal-comparative research seeks to understand the reasons why, or if, there are differences between independent and dependent variables after an event has *already* occurred (Brewer & Kuhn, 2010; Gall, Gall, & Borg, 2007), an approach that is *retrospective* in nature (i.e., ex post facto); however, as Gay, Mills, and Airasian (2011) pointed out, there are also *prospective* variations of the design that starts with a cause and investigates its effect on some variable. Specifically, the aim of this dissertation is to examine whether there are significant differences in attitudes about inclusive education with students with disabilities based on whether the study participant is a general education or special education teacher.

In causal-comparative studies, groups are defined by a particular characteristic (Brewer & Kuhn, 2010); the defining characteristic in this study is whether the participant is a general or special education teacher. Prospective participants within the study will *already* be classified (or grouped) as special education teachers or general education teachers based on their pre-service university/college training and present job position at the research site. Participants will be recruited using a nonprobability convenience sampling method (Gravetter & Forzano, 2012).

This study will utilize The Multidimensional Attitudes toward Inclusive Education Scale (MATIES) developed by Mahat (2008) with participant scores on the measure serving as the dependent variable. This survey "was developed to effectively measure the affective, cognitive, and behavioral aspects of attitudes within the realm of inclusive education" (Mahat, 2008, p. 82).

Both special education teachers and general education teachers in this study completed the survey to determine their perspectives on inclusive education.

To determine the needed sample size for a multivariate analysis of variance (MANOVA), the G* power 3.1 software program (Faul, Erdfelder, Lang, & Buchner, 2009) was used. With two independent variables (special education teachers, and general education teachers) and three dependent variables (affective, cognitive, and behavioral scales) a sample size of 44 would be a sufficient sample size. This amount is based on a medium effect size ($f_2 = .25$), an alpha level of $\alpha = .05$, and a power of .80. For this study, the total number was 88 participants in the study with 44 in each independent variable; however, additional participants were recruited (i.e., beyond 88) as a "pad" for events such as sample attrition that could occur during the study. The data will be analyzed using the Statistical Software for Social Science (SPSS). Specifically, a 2x3 MANOVA was run to test all hypotheses since a MANOVA can be used to determine the difference of several outcomes in groups that occur naturally (Warner, 2013).

Significance of the Study

This study will provide a comparison of the perspective of inclusive education held by special education teachers and general education teachers. The MATIES will help develop a better understanding of perspectives of inclusive education and the teachers' likelihood to implement inclusive education. The theory of planned behavior (Ajzen, 1991) will guide the analysis to see that behavioral intention is important for the implementation of educational programs like inclusion. By completing the research to better understand the perspectives of special education teachers on the inclusion of students with disabilities, researchers can better understand the impact of these perspectives on the implementation of inclusion. They can also

be used to improve the collaborative relationship between special and general education teachers that is needed to better facilitate an inclusive co-taught classroom.

Collaboration is imperative to the practice of inclusive education (Mulholland & O'Connor, 2016). Zagona et al. (2017) reported that collaboration between general education and special education teachers who have differing views of inclusive education is often difficult, as teachers struggle to determine their roles and the goals of inclusion in their classroom. The current literature has a limited understanding of the perspective of inclusive education help by special education teacher. This limits the discussion of how teacher perspectives compare and how perspectives affect practices in the inclusive classrooms. This study will provide a description of the perspectives of special educators and general educators. An exploration of similarities and differences between these perspectives will also be created. This description will help to provide the background currently lacking in the literature and generate future inquiries in other areas of concerns like collaborative strategies and perspectives.

Research Question

The overall question addressed in this study is: What are the perspectives of special education teachers on inclusive education and in what ways are these perspectives similar and/or different from those of their general education counterparts? A research question developed from this general question is as follows:

RQ1: Do general education teachers and special education teachers have overall differences in perceptions of inclusive education as shown by the Multidimensional Attitudes toward Inclusive Education Survey scores?

Definitions

The following definitions are provided to ensure uniformity and understanding throughout the study.

1. *Attitude* – Attitude is the "emotion for or against the attitude object" *(*Avramidis, Bayliss, & Burden, 2000a, p. 282).

2. *Full Inclusion* – Full inclusion advocates the inclusion of all students in the general education classroom regardless of students' level of disability (Anastasiou et al., 2014; Dorn et al., 1996; Fuchs & Fuchs, 1994, 1995, 1998; Kauffman & Hallahan, 1997).

3. *General Education Teacher* – A teacher who is well versed in the general education curriculum and provides feedback related to programming issues (Eccleton, 2010).

4. *Inclusive Education* – The merger of general and special education toward a unified system that respects and supports individual differences and responds to the diverse strengths, challenges, and experiences of all students with fairness and equity (Harpbell & Andrews, 2010).

5. *Perception* – Perception is the way that people judge or evaluate others (Chhabra et al., 2010).

6. *Special Education Teacher* – Special education teachers provide special designed instruction of the general education curriculum to meet the needs of students with disabilities and monitor their progress on IEP goals (Eccleton, 2010).

CHAPTER TWO: LITERATURE REVIEW

Overview

Recent literature on the perspectives of stakeholders on inclusive education indicate that there are positive and negative thoughts surrounding the implementation of inclusive education. The attitudes and perceptions of teachers influence the success of inclusive practices and have changed overtime through continued implementation and growth in the field of education (Cameron & Cook, 2013; Smith, 2000). This review demonstrates the lack of information regarding the perspectives of special education teachers as well as other stakeholder groups on inclusive education and also describes the methods used to conduct the literature review, theoretical frameworks underlying teachers' perspectives on inclusive education, inclusive education and its benefits, the perspectives of various stakeholders, and factors that influence inclusive education.

Introduction

The National Center for Educational Statistics (2012) documented that 61.1% of all students with disabilities are educated in the general education setting with their non-disabled peers. This percentage is consistent with the 39th Annual Report to Congress on Special Education (2017), which reported that 62.7% of students spend 80% or more of their day in the general education classroom, 18.7% of students spend 40-79% of their day in the general education classroom, and only 18.5% of students spend most of their day outside of the general education classroom or in a separate environment. With so many students participating in inclusive education, a full understanding of inclusion practices is needed from multiple stakeholder perspectives. Stakeholders are "individual(s) or group with an interest in the success of an organization in fulfilling its mission" (RMC Research Corporation, 2009, p. 4). RMC

Research Corporation (2009) listed the following groups as stakeholders supporting educational initiatives: community, taxpayers, school district leaders, administrators, staff, students, and parents. Regarding inclusive education, these same stakeholders affect the implementation of inclusion of students with disabilities in their local schools. The research reviewed in this literature review has been conducted to examine the perspectives of many of these stakeholders and to establish the effect of these perspectives on the academic achievement of students with disabilities.

The goal of this literature review is to examine stakeholder perspectives and the commonalities and differences in these perspectives. Theoretical frameworks of inclusion practices for students with disabilities are also discussed with the goal of establishing an understanding of the current perspectives of inclusive education and to identify areas of concern that continually arise within the literature. To understand inclusive practices and their effect on the lives of students, these influencers cannot be overlooked. The knowledge gained will generate further research on inclusive practices that have not been thoroughly explored.

To complete this literature review, I conducted a keyword search of the following topics: administration and inclusive education, inclusive education, inclusive education and parent perspectives, inclusive education and teacher perspectives, inclusive education and regular teachers, inclusive education and special education teachers, and student perspectives of inclusive education. From the first 100 articles, I chose those that were published after 2005. Articles before this date were rejected because they were considered older publications at that time and could not be included in an understanding of current research. From those articles, I manually checked each journal article for other references published after 2005. This process was reiterated several times with each set of new articles to ensure that the literature had been

thoroughly explored using this method.

The following databases were used most consistently: Academic Search Complete, EBSCOhost, ERIC, Google Scholar, and Proquest. Most articles were selected from the following Journals: *British Journal of Special Education, Education, Educational Psychology, European Journal of Special Needs Education, Exceptional Children, International Journal of Inclusive Education, International Journal of Special Education, Journal of Research in Special Education, Journal of Special Education, Remedial and Special Education, and Rural Special Education Quarterly.*

Theoretical Frameworks

Teacher Attitudes: Theory of Planned Behavior

One theory framing the understanding of attitudes, social norms, and behavioral implementation is the theory of planned behavior (TPB). TPB was developed by Ajzen (1991) to explore the effect of individual attitudes, expectations of others, and perceived control over one's behaviors on actual behavior (Armitage & Christian, 2003; Bleakly & Hennessey, 2012; Cox, 2003; Fishbein & Ajzen, 2014). TPB was modified from the theory of reasoned action by including perceived behavioral control and its effect on a subject's intention to act in a specific situation as well as his/her actual actions (Armitage & Christian, 2003). The inclusion of perceived behavioral control in the TPB facilitates the examination of complex behaviors, which are likely influenced by various factors.

The TPB behavior looks at the ability to perform specific behaviors and at the ways in which different factors influence one's ability to do so (Armitage & Christian, 2003; Bleakly & Hennessey, 2012; Cox, 2003; Fishbein & Ajzen, 2014). In the TPB model, three factors, specifically attitude toward behavior, subjective norms, and perceived behavioral control,

influence behavior through intention to engage in a given behavior (Armitage & Christian, 2003; Bleakly & Hennessey, 2012; Cox, 2003; Fishbein & Ajzen, 2014).

Attitudes are defined as one's beliefs about the positive or negative consequences of completing a task (Bleakly & Hennessey, 2012). Fishbein and Ajzen (2014) described attitudes as "a person's disposition to respond favorably or unfavorably with respect to a psychological object" (p. 77). Regarding inclusive education, this theory examines teachers' perspectives and beliefs toward inclusion and the influence of those beliefs on their intention to implement inclusive education.

Subjective norms refer to the social pressures that others, typically significantly important others, such as spouses, friends, and co-workers, place on individuals to complete a specific behavior (Bleakly & Hennessey, 2012; Cox, 2003; Freitag & Dunsmir, 2015; MacFarlane & Woolfson, 2012). When considering inclusive education, the opinions and expectations of other stakeholders affect a teacher's desires to implement inclusive education. Teachers also affect each other's perspectives (Dupoux, Wolman, & Estrada, 2005). MacFarlane and Woolfson (2012) examined teachers' attitudes and behaviors toward inclusive education using the TPB. They found that subjective norm established by administration was the strongest predictor of behavioral intent within their sample (MacFarlane & Woolfson, 2012, p. 51).

Perceived behavioral control is the person's beliefs about the difficulty of the behavior and his/her own ability to accomplish the behavior (Stampoltzis, Tsitsou, & Papachristopoulus, 2018). Armitage and Christian (2003) described perceived control as "a measure of confidence in one's own ability" (p. 7). Perceived behavioral control suggests that the perception of successfully completing a specific behavior increases the likelihood of engaging in that behavior. Teachers' perceptions of their efficacy to implement inclusive education influences their

implementation of inclusive education (Bender, Vail, & Scott, 1995; Bisol, Valentini, & Braun, 2014; Dupoux et al., 2005; Heiman, 2001; Smith, 2000). Perceived behavioral control may also moderate the relationship between perceived efficacy to successfully engage in a behavior and actual behavior within TPB. Simple ability to complete the task does not always translate to the completion of the task (Fishbein & Ajzen, 2014). Stampoltzis et al. (2018) described this influence as either direct (I complete the task) or indirect (I can do the task). Understanding the additional power of this domain is important to better understanding complex behaviors.

The TPB is considered "the dominant model of attitude-behavior relations" (Armitage & Christian, 2003, p. 192). Gwernan-Jones and Burden (2009) stated that the TPB provides a framework that can be used to explore teachers' attitudes. Nevertheless, the TPB has not been used to examine teachers' attitudes and perspectives toward inclusion. The research that has been conducted has not included all aspects of the theory, which is necessary to establish a link between attitude and subsequent behavior (MacFarlane & Woolfson, 2012). The TPB was included in this study to explore the attitudes and perspectives of special education teachers to implement inclusive education.

Full Inclusion vs. Inclusion

The practice of inclusion has various practical definitions since the concept is not formally defined in IDEIA (2004). Wiggins (2012) stated that inclusion occurs "when students with disabilities receive their entire academic curriculum in the general education program" (p. 7). According to Carter and Hughes (2006), inclusion means that "students with disabilities are full-time members of general education classrooms and provided the appropriate supports, modification, and services to learn" (p. 174). Sacks (2009) described inclusion as "a collaborative process among students, parents, and educators which enables students with and

without disabilities to learn in the same class to the greatest extent possible utilizing appropriate supports services" (p. 79). Many of these definitions support the philosophy of full inclusion. These definitions do not support of IDEA (2004) and revoke the LRE clause. These definitions demonstrate that for full inclusion to happen for any student the collaboration of multiple stakeholders is required. This is why it is essential to understand perspectives of inclusion held by those stakeholders.

Within the field of special education, two distinct perspectives exist surrounding the education of students with disabilities in an inclusive environment, full inclusion versus inclusion (Anastasiou et al., 2014; Dorn et al., 1996; Fuchs & Fuchs, 1995, 1998). Those who advocate for inclusive education understand that there is a limit to which the general education classroom can accommodate students allowing them to access the general education curriculum (Fuchs & Fuchs, 1995; Kauffman & Badar, 2013; Kavale, 2002; Zigmond et al, 2009). Anastasiou et al. (2015) defined inclusion as the education of students with disabilities in the general education classroom when appropriate, with an understanding that other settings may be deemed appropriate based on student need. The practice of inclusion education offers a full continuum of services, as described by IDEIA (2004). This perspective focuses on the academic achievement of students (Fuchs & Fuchs, 1994). The supporters of this definition of inclusive education understand that not every student within the general education classroom may be served adequately. These advocates focus on the academic progress of students rather than their social growth and emphasize that to understand the current needs in education, both the individual student as well as the classroom as a unit must be considered (Fuchs & Fuchs, 1994, 1995, 1998; Zigmond & Baker, 1996).

Full inclusion advocates encourage the inclusion of all students in the general education classroom regardless of their level of disability (Anastasiou et al., 2015; Dorn et al., 1996; Fuchs & Fuchs, 1994, 1995, 1998; Kauffman & Hallahan, 1997). Anastasiou et al. (2015) added to this definition the concept of any education setting outside of the general education classroom in which "legitimate" education does not take place. Fuchs and Fuchs (1995) discussed the full inclusion position as a goal of dismantling special education, by supporting inclusive education only. Full inclusion advocates support a curriculum that focuses on building social skills over academic skills (Fuchs & Fuchs, 1994, 1998) and that socialization with non-disabled peers should be the goal of inclusive education, not academic growth (Fuchs & Fuchs, 1998). The full inclusion perspective frames inclusion within the general education classroom as an opportunity for students with severe disabilities to socialize with peers from whom they can learn from. Because the practice of full inclusion focuses more on social rather than academic learning, it has a different goal than inclusive education as described above (Fuchs & Fuchs, 1994, 1998).

Upon examining the literature on topics surrounding inclusive education, it is imperative to understand which perspective of inclusion is being used. Articles that focus on the inclusion of students with severe disabilities focus on full inclusion and therefore have a different goal compared to those that are discussing inclusion of those with minor disabilities. When evaluating stakeholder perspectives of inclusion, the discussion of full inclusion versus inclusion can skew teachers' responses positively or negatively because students with severe disabilities have more needs and different goals for their education. Throughout the literature, it is not always clear which perspective the researchers support, even though these perspectives frame the understanding of the text and results presented. The current study focused on the inclusion of students with learning disabilities; therefore, it will not follow the definition provided by the full

inclusion movement. Instead, the definition by Harpbell and Andrews (2010), as stated below, is more appropriate when interpreting the findings of this study.

Inclusive Education

What is Inclusive Education?

Inclusive education is defined as "the merger of regular and special education toward a unified system that respects and supports individual differences and responds to the diverse strengths, challenges, and experiences of all students with fairness and equity" (Harpbell & Andrews, 2010, p. 190). According to IDEIA (2004), students can be placed along a continuum of services ranging from separate schools to the general education classroom together with their non-disabled peers. This has not always been the case. Without the passing of laws such as the Elementary and Secondary Education Act (P.L. 89-10) (1965), IDEIA (P.L. 94-142) (2004), NCLB (P.L. 107-110) (2002), and ESSA (S. 117) (2015), inclusion might not have been the current reality of students with disabilities. Sacks (2009) insisted that legislation has made the general education classroom "the first placement considered" for students with disabilities (p. 79).

Legal cases throughout the years have framed the understanding of special education and the practice of inclusion. There are some laws that have greatly impacted the framework of inclusive education. Some of these cases helped to clarify concepts found in federal legislation while others helped to begin important conversations that have shaped the practice of special education. Several laws have greatly affected the framework of inclusive education. These laws have established the following precedents: (a) students with disabilities should receive educational instruction that is tailored to meet their individual needs (*Board of Education of the Hendrick Hudson Central School District v. Amy Rowley,* 1981), (b) students must have the

opportunity to meet their academic goals like graduation with the appropriate requirements *(Brookhart v. Illinois State Board of Education,* 1983), and (c) students must have the opportunity to progress within the curriculum *(Edward F. Joseph et al. v. Douglas County School District,* 2016*).* Academic progress of students seems to be the focus of these laws, as schools are held accountable for student progress towards IEP goals and within the general education curriculum.

Inclusive education provides students with disabilities the opportunity to participate in the educational environment, supporting their engagement in the academic process. The practice of inclusion allows most students with disabilities to participate in the general education classroom and to engage in the least restrictive learning and social environment. This understanding of joint progress in both academics and socialization makes the views of full inclusion and inclusion interesting when examining teacher perspectives of inclusive education.

Current statistics regarding student educational placement raise questions about whether students with disabilities are being educated in the LRE and to the greatest extent possible to reach their full potential. Artiles and Kozleski (2007) reported that the top ten schools, which provide educational opportunities to students with disabilities in inclusive settings, supported less than 70% of this population in the general education classroom. The 39th Annual Report to Congress on the Implementation of IDEIA (2017) documented that 62.7% of all students with disabilities are educated in the general education setting with their non-disabled peers 80% of their school day. More students (94.9%) participate in the general education classroom at some point throughout the school day. Only 5.2% are still being educated separated from their typically developing peers, which could be deemed appropriate and the LRE based on their unique educational needs.

This Annual Report indicated that children with specific disability labels that are more likely to participate in inclusive environments and specific disabilities are more likely to be included in inclusive environments while children with other types of disabilities are more likely to be educated in separate environments for part of or all of their school day. Students with speech impairments, specific learning disabilities, developmental delays, hearing impairment, visual impairments, orthopedic impairment, and other health impairment were mainly educated in the general education classroom (39th Annual Report to Congress, 2017). Students with intellectual disabilities, deaf-blindness, and multiple disabilities are more likely to be educated in a separate setting away from their non-disabled peers (National Center for Educational Statistics, 2012). Students with autism and traumatic brain injuries were equally likely to participate in the general education environment or in a separate classroom. Inclusion has grown minimally over time with an increase of only 1.6% since 2012 (39th Annual Report to Congress, 2017; National Center for Educational Statistics, 2012). Special education needs to continue to expand to include students regardless of the disability in their LRE regardless of educational environment if positive student achievement is to be achieved.

What are the Benefits of Inclusive Education?

One important question when considering inclusive education is whether the implementation is successful for students with and without disability. To understand inclusive education, it is important to understand the effect of inclusive education on the educational experience of students with disabilities and students without disabilities. This understanding of pros and cons of inclusive education also varies based on which students are the focus of the research.

For students with disabilities, the purpose of inclusion must be established. As stated above, full inclusion focuses on the social development of students with disabilities. Therefore, to determine the benefits of inclusion, the social development of students with disabilities must be explored. Ring and Travers (2005) observed an interaction of a sixth-grade student with a specific learning disability at recess with his non-disabled peers from his inclusive classroom. The observation revealed that the non-disabled peers did not respond to the student's attempts at play.

Other studies within the past five years explored the social development of students with disabilities in inclusive classrooms. Cavioni et al. (2017) stated that inclusion supports students with learning disabilities by supporting good work habits, collaboration with non-disabled peers, and healthy peer relationships, but this does not convert to academic gains as students with disabilities continue to achieve behind their grade level peers (Gilmour et al., 2018). Agran et al. (2017) looked at the inclusion of students with intellectual disabilities in extracurricular activities. They found that students with intellectual disabilities were rarely included within recreational and social activities. Sports in school were seen to be the most inclusive activity.

From some perspectives, the goal of inclusive education is to allow students with disabilities to be taught by a teacher who is highly qualified in the subject area. McMahon et al. (2016) defined academic inclusion as "enabling students with disabilities to participate as fully as possible in academic activities with all students" (p. 658). The literature indicates that academic progress can occur within the inclusive classroom when appropriate supports are provided. Ballard and Dymond (2017) completed a literature review of the inclusion of students with severe disabilities. Their review included 10 articles which examined method of access to the curriculum, the type of curriculum, barriers/concerns about inclusion, and benefits of

inclusion. They found that teachers expressed concerns with the appropriateness and adaption of curriculum, as well as collaboration. They further observed that students with disabilities within the classroom showed improved math skills, vocabulary, and writing skills across several of these studies.

Within inclusive education, both students with disabilities and students without disabilities influence each other. Prohn et al. (2015) looked at perspectives held by a group of college students who participated in an inclusive study abroad on inclusion. The researchers found that all students created a common identity through the experience. Students without disabilities who participated reported professional growth and changes in their perspectives on individuals with disabilities in general. Shrogren et al. (2015) examined perspectives of students with and without disabilities on inclusion. They found that both groups of students supported inclusion. The perspectives of students without disabilities were positive and that they had opportunities to build positive relationships. These students discussed that they welcome the opportunity to "help" their peers with disabilities. Shavlev et al. (2016) examined perspectives of students without disabilities toward their peers with severe disabilities. This study found that attitudes were positive overall. Ninety-two percent of students saw that inclusive education supports the idea of diversity. The common support of inclusion throughout the literature indicates that inclusion is beneficial for students without disabilities as they develop social empathy and learn to support ideas of diversity and social justice.

Perspectives of Stakeholders

Within a school setting, many different stakeholders affect the daily educational experiences of students with disabilities. Ainscow and Sandill (2010) stated that "it is important to remember that there is no one perspective on inclusion within a county, state, or even school"

(p. 402). This was confirmed by Wood, Evans, and Spandagou (2014) who stated that "interest in the attitudes of educators is viewed as a critical component of both understanding practice and exploring ways to promote inclusive practice in schools" (p. 15). Students are surrounded by many stakeholders whose perspectives affect the product of their education. Understanding the perspectives of administrators and teachers in various teaching assignments provide an overall view of the practice of inclusive education and information to direct future research surrounding these practices. Current research has also focused on the effect of pre-service training on teacher perspectives on inclusive education. Therefore, research that has evaluated the perspectives of pre-service teachers is also included in this literature review.

Administrators Perspectives of Inclusive Education

Administrators play an important role in choosing programs for their schools and encouraging practices that would benefit their students. Administrators are the key figures in implementing educational practices and encouraging or detouring change within their schools (Avissar, Reiter, & Leyser, 2003; Cobb, 2014). Praisner (2003) stated, "Principals are now required to design, lead, manage and implement programs for all students with disabilities" (p. 135). Administrators have responsibilities to create an environment that encourages the policies and programs that they deem beneficial for student achievement: "A principal's school vision is crucial because his/her attitudes and beliefs about heterogeneous classroom effect teacher practices about inclusion" (Cobb, 2014, p. 221). Cobb (2014) stated that 36-58% of a principal's time is focused on the facilitation of inclusive education. This can be in the form of active participation by completing their leadership role that enables the implementation of inclusive education (Shani & Koss, 2015) or indirect participation through choices that encourage inclusive education like collaboration time (Cobb, 2014).

A positive perspective of inclusion (held by administration) promotes inclusion throughout the school (Shani & Koss, 2014). The perspectives held by administration affect the implementation of inclusion as well as the resources and supports that principals will try to implement in their schools to benefit the practice of inclusion throughout the school climate (Shani & Koss, 2014). Villa, Thousand, Meyers, and Nevin (1996) stated that the principals' definition and application of LRE within each school has a direct effect on the implementation of inclusive education. The positive perspectives of inclusion held by administrators affect successful implementation of inclusion within a school (Horricks, White, & Roberts, 2008; Kuyini & Desai, 2007; Obiakor, Harris, Mutua, Rotatori, & Algozzine, 2012; Paisner, 2003). Because the administration plays an important role in the implementation of inclusive education, it is important to understand principals' perspectives on inclusive education. The current research indicates that the perspectives of administrators range from positive attitudes, negative attitudes, and uncertainty about inclusive education.

Some researchers have found that principals have a positive perspective on inclusive education. Avissar et al. (2003) examined the principal's role as a change agent when examining the implementation of inclusive education. They found that principals had a clear vision of inclusion and its implementation within their schools. Bain and Dolbel (1991) compared principals' perspectives on their inclusive program for students with intellectual disabilities. Their results indicated that both special education principals and regular education principals held positive perspectives on the inclusion of students with disabilities. Horricks et al. (2008) examined principals' attitudes toward inclusion of students with autism. The results indicated that higher perspectives on inclusive education in general were associated with principals' support of the inclusion of students with autism. These studies also revealed that administrative

support of the inclusion of students with disabilities in their neighborhood schools increased considerably over time.

  The results of other studies, however, suggest that some principals are not optimistic about the implementation of inclusion in their schools. In an early study by Barnett and Monda-Amaya (1998), the examined principals' knowledge of and attitudes toward inclusive education which showed that many principals were apprehensive of inclusive education, especially when the term "all children" is included in the definition of inclusion. Barnett and Monda-Amaya (1998) examined administrators' knowledge of inclusion and their attitudes towards inclusion and found that "the overwhelming majority [of administrators] were not yet comfortable with the inclusive philosophy" (p. 190). Conrad and Brown (2011) found that most principals disagreed with inclusive education because they did not believe that integrating students with disabilities in public schools does not benefit them or students without disabilities. Praisner (2003) found that many principals were uncertain about inclusive education, but very few (2.7%) were negative toward the implementation of inclusive education. Shani and Koss (2015) stated that "the best-case scenario of inclusion would be to limit inclusion only to children with disabilities who will benefit from it" (p.78). Wood et al. (2014) measured attitudes toward inclusion and knowledge of students with disruptive behavior. Although principals noticed the positive effect of inclusive education on students with mental health diagnosis, their perspectives were more negative when they considered the effect on students without a diagnosis. Specifically, principals were more concerned about the possible negative effects on typically developing students. These negative and uncertain perspectives on inclusive education shape the understanding of teachers' perspectives, as they are affected by the social norm created by their administrators.

One common theme throughout the literature regarding principals' perspectives of inclusive education is their lack of preparation and knowledge to support inclusive education (Cobb, 2015). Conrad and Brown (2011) also found that administrators are unprepared to support inclusion and require further professional development. Praisner (2003) found that principals who had experience with inclusive education were more positive. In another study, Wood et al. (2014) also found that the number of students with difficult behaviors with whom the administrator had worked influenced the administrator's perspectives on inclusive education. This common finding in the literature raises concerns about preparation, especially regarding understanding special and inclusive education, that administrators receive in graduate school to support the education of students with disabilities.

Another common belief of principals is that not all teachers and members of the community are ready to support the implementation of inclusion (Barnett & Monda-Amaya, 1998). The need for professional development to support students with disabilities was documented within the literature as well (Conrad & Brown, 2011). Kuyini and Dai (2007) found that principals have a moderate to low expectation of teachers and their ability to facilitate inclusive education. This lack of preparation for the principals' and teachers' roles in inclusive education affects the implementation of inclusive education and the perspectives of those stakeholders.

Lastly, the concern about student disability level is ever present. The literature indicates that perspectives of inclusion can change based on the severity of disability. Students with more severe disabilities are likely to receive less support when it came to inclusive education. Horricks et al. (2008) found that profiles of students with autism had an effect on whether principals would recommend an inclusive placement. Principals assessed social detachment and

academic performance when determining whether to support an inclusive placement of a student with autism. As administrators consider the implementation of inclusion, they must also consider the needs of their students and truly provide the LRE for all students.

Overall, the literature on principals' perspectives on inclusive education indicates some important factors and influencers of those perspectives. Many of the negative traits attributed to inclusion have been connected to student behaviors and the level of student disability as well as to their influence on the classroom environment, the teachers' ability to teach, and student achievement (Advissar et al., 2003; Horricks et al., 2008; Praisner, 2000, 2003). Experience and training also had a positive effect on the perspectives of administrators (Avissar et al., 2003; Barnett & Monda-Amaya, 1998; Horrick et al., 2008; Kuyini & Desal, 2007; Praisner, 2000). Shani and Koss (2014) found that administrators' experiences with students with disability, acceptance of their supervising role, and communication with parents of children with disability affect their perspectives on inclusive education. The school level (elementary, middle, and high) and years of experience as a principal are also factors that influence the administrators' perspectives on inclusion (Horricks et al., 2008). Many of the administrators' reservations about inclusion seemed to hinge on the need to support students with disabilities and on their perceptions of whether they can offer such support within the general education setting.

The review of the literature on administration and inclusive education of educational leaders has its limits. Much of the current literature has not been conducted in the United States because of the recent acceptance and growth of inclusion in developing countries. The perspectives being studied are pervasive mainly in third world countries that are beginning to implement inclusive education for all students, not only those with disabilities but also those who are considered societal outcast, since the establishment of Salamanca Statement of 1994 (Kuyini

& Desal, 2007). This raises the question of whether research on the perspectives of principals within the United States has been fully established. Within many of the articles referenced, the population examined was elementary principals. This also raises the question of whether perspectives at other levels of education have been examined to the fullest extent possible. The important factors described above seems to indicate that there are still questions about principal perspectives and their effect on the educational environment that need to continue to be addressed in future research.

The perspective of administrators toward inclusion is an important aspect to consider when determining the views of stakeholders in education on inclusion and the methods taken to implement inclusive education: "Positive administrator attitudes are associated with higher levels of enthusiasm for educational procedures among various stakeholders" (Harpbell & Andrews, 2010, p. 202). Administrators play an important role in choosing educational practices that they want their teachers to implement and in guiding teachers to understand and buy into the process being presented. This includes the level of inclusion they want present within the school building and the frameworks to support inclusion available for teachers. For students with disabilities to be an accepted, active, and achieving portion of the school population, the administration needs to understand the importance of inclusive education, their stance on inclusive education, and the ways to best prepare their teachers and the school climate to actively participate in inclusive education.

General Education Teachers Perspectives of Inclusive Education

Within the current literature, it is apparent that teacher perspectives have a powerful effect on the implementation of inclusive education. Teacher commitment to any initiative is critical for the successful implementation of that initiative (Villa et al., 1996). Teachers'

attitudes toward inclusive education significantly impact the success or failure of inclusive education in their classrooms (Avramidis & Norwich, 2002; Bruster, 2014). Teacher attitudes influence the effectiveness of inclusive education (Chhabra et al., 2010; MacFarlane & Woolfson, 2013; Smith, 2000; Stoler, 1992; Tiwari et al., 2015; Yadav et al., 2015). The perspectives of general education teachers are important for research, as the general educators are responsible for delivering the content area to students with disabilities.

The importance of studying the perspectives of general education teachers, including teachers' perceived ability to effectively educate students with disabilities in their classrooms, is well established within the current educational literature (MacFarlane & Woolfson, 2013; Ross-Hill, 2009; Tiwari et al., 2015). The teachers' perspectives on inclusion also affect student academic achievement (Tiwari et al., 2015). A deeper understanding of these perspectives would have an effect on classroom environment and climate, teaching practices within an inclusive classroom, and the academic achievement of students with disabilities.

The perspectives of general education teachers can be examined in the light of the severity level of the disability, such as high-incidence mild disabilities, such as specific learning disability, or low-incidence severe disabilities, like traumatic brain injury. Able et al. (2015) evaluated the full inclusion of students with autism spectrum disorder. The findings of their study indicated that teachers recognize that students with autism need support to form social relationships, understand social academics, gain self-advocacy skills, transition to post-secondary life, and form peer-relations but they also acknowledged their struggle to understand autism and the accommodation needed for inclusive classrooms. This is similar to the results of Cook (2001) who found that differences in opinion about inclusion could also be due to the lack of understanding of how to support students with severe disabilities, which has also been linked to

greater acceptance and nurture of these students compared to students with mild disabilities, as teachers may feel that students with mild disabilities should progress faster within the inclusive classroom. In Forlin, Keen, and Barrett's (2008) study teachers cited lack of preparation in their pre-service training, which they stated impacted their perspectives and subsequently implementation of inclusion for students with an intellectual disability.

Grieve (2009) found that a sizable group ($N = 67$) of teachers felt that students with emotional and behavioral disabilities within inclusive classrooms would have a detrimental effect on traditional students. Lopes et al. (2004) focused on students who exhibit problem behaviors in the inclusive classroom. The participants agreed that students with behavioral issues will struggle to have their educational needs met in the inclusive classroom without additional support. MacFarlane and Woolfson (2013) looked at the inclusion of students with social emotional disabilities and the effect of the inclusion on education perspectives of teachers and found that perspectives differed based on teacher efficacy and experience. Segall and Campbell (2012) examined teacher perspectives on the inclusion of students with autism spectrum disorder and found that overall, perspectives on inclusion were positive. They did find that including classroom behaviors in the discussion had a negative effect on perspectives of inclusion. Smith (2000) explored the perspectives held by general education teachers in high school on including students with severe disabilities in the inclusive classroom. Overall, 78% of the participants felt negatively or neutrally about the concept of inclusion of students with severe disabilities in neighborhood schools. Zagona et al. (2017) specifically looked at the inclusion of students with severe disabilities and the implementation of inclusive practices. The results indicated a significant relationship between the type of teacher and his/her preparation to practice effective inclusive education.

The recurrent findings in the literature indicate that general education teachers struggle with the idea of inclusion of students with severe disabilities and whether teachers are more positive about the inclusion of students with mild disabilities than about the inclusion of students with severe disabilities has been discussed in several studies. Blecker and Boakes' (2010) study revealed that participants believed that students with learning disabilities profit from relationships with non-disabled students and therefore should participate in the school life to form these relationships. This study also demonstrated a strong belief from teachers that the curriculum should be modified to improve student success in the general education classroom. Cook (2001) compared teachers' expectations of inclusive education when considering the students' level of disability. The results indicated that students with hidden disabilities, such as attention deficit hyperactivity disorder and learning disabilities, were more likely to be viewed more negatively compared to students with obvious disabilities, such as intellectual disabilities and autism.

Perspectives on inclusive education have been found to be positive or negative in different studies. Avramidis et al. (2000a) reported positive attitudes were held toward the general concept of inclusive education. DeSimone and Parmar (2006) found that 41.6% of the participants in their study felt the inclusive environment provided the best opportunity for students with disabilities to learn mathematical concepts. Monsen, Ewing, and Kwoka's (2014) research indicated that teachers with positive attitudes toward inclusion were more likely to create learning environments supportive of inclusive education. Ross-Hill (2009) found overall positive perspectives on inclusive education in his analysis of elementary and secondary general education teachers.

Negative perspectives have also been reported throughout the literature. Bender et al. (1995) found that 26% of teachers within the sample did not have positive attitudes toward inclusive education. The researchers indicated that this was because of lack of support, lack of consistency in cooperative teaching, and lack of teacher efficacy. This coincides with the theory of planned behavior as teachers' understanding of their own skills to implement inclusive education affects their perspective of inclusive education in either a positive or a negative way. Hammond and Ingalls (2003) found many teachers had either negative or uncertain perspectives of inclusive education. Although teachers were participating in inclusion, they had not fully bought-into the process of inclusive education. Smith (2000) demonstrated that the level of disability presented for inclusion affects teachers' rejection of inclusion. Van Reusen, Shoho, and Barker (2001) found that over half of those surveyed demonstrated negative attitudes toward inclusive education, and many may have seen it as an obstacle to their teaching responsibilities.

Lastly, a large portion of the current literature on inclusive education has been conducted in other countries, mostly due to the passing of the United Nations' stance on the rights to inclusive education for students with disabilities at the United Nations Convention on the Rights of Persons with Disabilities in 2006. Chhabra et al. (2010) examined the perception of teachers in Botswana on inclusive education. They used the Attitudes toward Inclusive Education Scale, the results of which demonstrated negative perspectives on inclusive education of students who could not control their behavior, who were shy and withdrawn and whose achievement was multiple years behind their peers.

Dupoux et al. (2005) compared perspectives of teachers in Haiti with those of their U.S. counterparts. In both Haiti and the United States, teachers had the same attitudes toward the concept of inclusive education. The researchers found that attitudes of other teachers, advanced

degrees, and teacher efficiency influenced teachers' attitudes toward inclusive education. Forlin et al. (2008) examined the concerns about inclusive education held by mainstream teachers in Australia, who reported that when implementing inclusive education, they were most concerned with the behavior of the child, teachers' professional competency, short attention span, and inappropriate social skills.

Heiman (2001) looked specifically at the middle school teachers' perceptions on inclusion in Israel. Overall, 82% of participants were in favor of inclusive education. Moreno, Jáen, Nvio, and Moreno (2015) examined perspectives on inclusive education in Spain, as the practice of inclusion has started to be implemented throughout the country. Moreno et al. (2015) found teachers felt that they were prepared to support students with disabilities in their classrooms. Sandhu (2017) investigated secondary educators' perspectives on inclusive education in Hayana state, India, and found that teachers have an overall positive attitude toward inclusive education. Female teachers had more positive attitude toward inclusive education compared to their male counterparts.

Tiwari et al. (2015) examined teachers' perspectives and beliefs on inclusion in Delhi, India, and found that overall, only a few teachers viewed inclusion positively. Yadav et al. (2015) conducted a study to understand the perspective of general educators in Gurgaon, India on inclusion and found that teachers with positive perspectives of inclusive education were more likely to use effective instructional strategies to enhance student academic performance.

Experience with and training in inclusive education was one evident area of concern across studies. Avramidis, Bayliss, and Burden (2000b) found teachers' experience with inclusive education and training in special education affects their overall perspective of inclusive education (Dupoux et al., 2005; Tiwari et al., 2015; Villa et al., 1996). Bisol et al. (2014) found

training in special education and inclusive practices had a positive effect on teachers'
perspectives on inclusion (Dupoux et al., 2005; Sandhu, 2017). Teachers in the study by
DeSimone and Parmar (2006) felt capable of teaching mathematics to students with disabilities.
Teachers in Grieve's (2009) sample felt they did not have the support and knowledge that they
needed in order for these students to feel successful in inclusive classrooms. In Heiman's (2001)
study, teachers were mostly concerned about being inadequately trained and being unable to
meet the needs of students with disabilities in their classrooms. Royster, Reglin, and Losike-
Sedimo (2014) found professional development could help teachers feel that they could
competently support students with disabilities in their classroom. Similarly, Van Reusen et al.
(2001) indicated that training in special education affected the perspectives of inclusive
education in a positive way.

Collaboration was one common factor that was found repeatedly in the literature: "Only
one-third or less [of teachers] believed they had sufficient time, skills, training, and resources to
implement inclusive education" (Avramidis et al., 2000b, p. 206). Limited collaboration is seen
constantly throughout the literature as a reason for the lack of support for inclusive education
(Avramidis et al., 2000b; Bender et al., 1995; Mackey, 2014; Mulholland & O'Connor, 2016;
Villa et al, 1996; Zagona et al., 2017). Mackey (2014) found teachers' perspectives were
influenced by (a) the lack of adequate preparation by pre-service training programs, (b)
differences in standards/expectations for students with disabilities, (c) lack of collaboration with
and support from special education teacher or paraprofessionals, and (d) lack of administrative
support in terms of collaboration, co-teaching, and professional development. Teachers did not
feel their teacher preparation program fully prepared them for collaboration (Zagona et al.,
2017).

Villa et al. (1996) raised concerns about collaboration, questioning whether general education teachers and special education teachers can "share responsibility for meeting the needs of children and be coequal partners" (p. 40) or whether this responsibility is seen as being solely on the special education teacher. Through interviews, Mulholland and O'Connor (2016) established that teachers understood the importance of collaboration because it could improve educational outcomes for students with disabilities, but stated that, the lack of time for collaboration was the barrier. The discussion of collaboration and the combining of general education and special education perspectives is important for understanding inclusive education and efforts needed to make these approaches successful.

As demonstrated by the theory of planned behavior, teachers' perspectives affect classroom practice (Torff, 2011). Individuals who feel that they can successfully complete a task are more likely to do it (Ajzen, 1991). This coincides with teacher self-efficacy as discussed by Fishbein and Ajzen (2014). MacFarlane and Woolfson (2013) supported this when they found teachers who had higher perceptions of inclusive education also had higher expectations of their own self-efficacy to support students with disabilities (Monsen et al., 2014). This indicates that attitude of inclusion affects not only thought and perspectives but also teacher actions within their classrooms (Ajzen, 1991; Armitage & Christian, 2003; Fishbein & Ajzen, 2014). It is important to know attitudes, perspectives, and behavioral choices of all stakeholders in order to better support inclusive education and students with disabilities.

Special Education Teachers Perspectives on Inclusive Education

Special education teachers are a group of stakeholders whose perspective on inclusion has not been a focus of much of the literature on inclusive education. Many times, throughout the literature, the perspectives of special education teachers are grouped with their general

education counterparts or with other professionals (Able et al., 2015; Carter & Hughes, 2006; Cook et al., 1999; Liasidou & Antoniou, 2013; Vaughan & Henderson, 2016; Zagona et al., 2017). Special education teachers have not always been included in research on inclusion to the same degree as general education teachers. This lack of clear participation by special educators in research makes it difficult to identify their perspectives on inclusion.

Because of the lack of research studies focusing on special education teachers' perspectives, it is important to fully explore and discuss similarities and differences within the literature. Carter and Hughes (2006) and Zagona et al. (2017) demonstrated positive perspectives of inclusive education of general educators, special educators, paraprofessionals, and administrators. They found that all stakeholders discussed the benefits of inclusive education. Furthermore, Zagona et al. (2017) found special education teachers felt better prepared to implement inclusive education compared to their general education counterparts.

When reviewing the literature on special education teachers' perspectives on inclusive education, the negative perspectives are clearer. Cook et al. (1999) examined the attitudes of both principals and special education teachers toward inclusion. The results indicated special educators did not seem to fully support inclusion while principals supported the ideals of inclusive education. The participants were also concerned about teachers' preparedness to meet the academic needs of students with mild disabilities. Liasidou and Antoniou (2013) expressed some concerns about inclusive education, especially considering collaboration within a co-teaching environment. They found many of the general education teachers saw special education teachers as "inadequate, in much the same way as the wider special education framework is inadequate" (p. 500). The understanding of the aspects that make the special education teacher successful was also limited. Special education teachers disclosed that they struggled to prove

their value and role in the classroom. These negative perspectives are concerning in the current climate of increased inclusion and collaboration.

Some concerns found throughout the literature are limited support for inclusion (Carter & Hughes, 2006), limited collaboration time (Liasidou & Antoniou, 2013), and different perspectives of inclusion (Zagona et al., 2017). Cook et al. (1999) found concerns about teacher preparedness to meet the academic needs of students with disabilities. These concerns while similar to their general education counterparts are important to consider when researching factors that impact the perspectives of inclusive education held by special education teachers and how they compare to their general education counterparts.

Some dissertations have focused on the perspectives special education teachers have on inclusive education. For example, Bruster (2014) examined the perceptions of inclusive education by high school general education teachers and special education teachers. The *Opinions Related to Inclusion* surveys were sent electronically and 42 special education teachers responded (Bruster, 2014). Their responses revealed that inclusion is seen positively by special education teachers as they consider the benefits for students. Another dissertation by Wiggins (2012) examined the perspectives of both general education teachers and special education teachers in high school on inclusion. The *Inclusion Scale for High School Teachers* survey was completed by 173 respondents, including 36 special education teachers (Wiggins, 2012). This study found no statistically significant difference in high school teachers' perception on inclusion based on whether they were certified in general education or special education (Wiggins, 2012). These findings provide an unclear picture of the current perspectives of inclusive education held by special education teachers.

The existing research indicates that there is still much that is not known about inclusive

education and the perspectives of special education teachers. The perceptions of special

education teachers on inclusion should be an area of interest in future research. Liasidou and

Antoniou (2013) stated it is important to understand the special education teacher's voice in

education as it influences the professional roles of special education teachers and current policy

framework. Special education teachers in an inclusive setting are responsible in part for

providing and monitoring the accommodations and modifications necessary for the students to be

successful in the general education classroom (Zigmond et al., 2009). They are responsible for

collaborating with and supporting their general education counterparts. Their responsibility is to

make the truly inclusive classroom, as they meet the individual needs of students with

disabilities. Able et al. (2015) discussed continued concerns of general education teachers about

the implementation of inclusive education, as they believed that meeting the needs of so many

individual students is too difficult. Lopes et al. (2004) stated, "special education teachers saw

inclusion as too difficult for regular education teachers" (p. 412). This mindset, which reflects

the common perspective, limits the potential benefits of inclusive education on students with

disabilities because it does not demonstrate the partnership that has been found to be beneficial

for inclusive education. Because of the variety of roles that exists within the profession of

special education, it would be beneficial to better understand the effects of classroom experience,

disability focus, classroom setting, and level of education on the perceptions of special educators

regarding inclusion.

Pre-Service Teachers Perspectives of Inclusive Education

   One common factor found to influence perspectives of inclusive education is former

training and experience with special education or with students who have a disability (Van

Reusen et al., 2001; Yadav et al., 2015). Accordingly, much of the current research is being

directed toward the pre-service teachers' perspectives on inclusion and the effect of coursework on teachers' perspectives. This section examines that current research and its place in the discussion of inclusive education perspectives. Avramidis et al. (2000b) stated pre-service teachers' perspectives on inclusion were based on limited experience, which was more likely to lead to either "excessively cautious or radical" views (p. 281). This is also a limitation of this whole stakeholder group, but it does not undermine the importance of understanding their perspectives and their power on future teaching practices.

It is important to fully understand a pre-service teacher's knowledge of a specific disabilities and supports for students with disabilities. Pre-service teachers who participated in Avramidis et al.'s (2000b) study expressed concerns about having a student with an emotional behavioral disability in the classroom. Yet, the findings of this report demonstrated that pre-service teachers have positive views of inclusive education overall. Another important concept that Avramidis et al. (2000b) noted was the lack of confidence reported by pre-service teachers in IEP meetings. This could be because of the lack of contact hours that pre-service educators have with the IEP process and students with disabilities (Chhabra et al., 2010; Moreno et al., 2015; Tiwari et al., 2015; Yadav et al., 2015).

Education was found to be an important factor in this case because general education teachers felt less prepared to support inclusive education compared to their special education counterparts. General education teachers felt less prepared to implement inclusive education and support collaboration while special education teachers felt more prepared to meet the individual needs of students (Conderman & Johnston-Rodriguez, 2009). Shippen, Crites, Houchins, Ramsey, and Simon (2005) also found pre-service special education teachers were more positive about inclusive education compared to their counterparts in general education programs. They

also found general education teachers had more anxiety about inclusive education compared to their special education counterparts. It is important to continue research with pre-service teachers, as the current research emphasizes the importance of working with students with disabilities.

Another common area that emerged in the literature concerns the influence of field experience on the perspectives of pre-service teachers. Burton and Pace (2009) also found students had a positive attitude toward inclusive education and that field experience positively affected the perspectives of pre-service teachers. Specifically, as Conderman and Johnston-Rodriguez (2009) indicated, field experiences influenced pre-service teachers' understanding of inclusive practices and collaboration. Greenfield, Mackey, and Nelson (2016) also indicated field experience had an effect on pre-service teachers' perspective. In their study, the participants who participated in the IESE program demonstrated an increase in positive attitudes compared to participants who were not in the IESE program. The results of McCray and McHatton (2011) all indicated that coursework can change pre-service teachers' perspectives. Lambe and Bones (2006) found attitudes of teachers and peers, inadequate teacher preparation, and lack of resources to support inclusive education were seen as barriers to successful of inclusion, which is consistent with the theory of planned behavior, which suggests that teachers' own beliefs, the beliefs of others, and their thoughts about their own ability to implement inclusive education affect whether they view inclusive education positively or negatively.

The literature on pre-service teachers has emphasized a few important points concerning other stakeholders. The finding that younger teachers have a more positive opinion of inclusive education is consistent with the literature (Forlin et al., 2008; Yadav et al., 2015); therefore, the overall finding that pre-service teachers have a positive perspective of inclusion is important.

There is mixed data within the literature about whether coursework is beneficial to impact pre-service teachers' perspectives on inclusive education. In some studies, coursework had little or no effect on change in disposition toward inclusive education. The addition of the field service component influenced the perspective of students in a positive way in several of the studies presented above. McCray and McHatton (2011) found coursework can affect change in pre-service teachers' perspectives, but additional support will continue to be needed to address all areas of concern. This finding is consistent with the research on general education teachers, which also indicates the need for more support, resources, and training to support inclusive education.

Lastly, a common finding across studies is that students with severe disabilities, such as emotional behavioral disabilities, severe intellectual disabilities, and multiple disabilities, are consistently viewed as too difficult to include within the general education classroom. This raises to question what definition of inclusive education (full inclusion versus inclusion) is the framework for research and education at the collegiate level. None of the reviewed articles (see for example, Avramidis et al., 2000b; Burton & Pace, 2009; Cameron & Cook, 2007; Campbell et al., 2003; Chhabra et al, 2010; Conderman & Johnston-Rodriguez, 2009; Forlin et al., 2008; Greenfield et al., 2016; Lambe & Bones, 2006; McCray & McHatton, 2011; Moreno et al., 2015; Shippen et al., 2005; Tiwari et al., 2015; Van Reusen et al., 2001; & Yadav et al., 2015) included a definition of inclusive education. Therefore, it would be of interest to further explore whether they discussed full inclusion, although many of these pre-service teachers receive minimum instruction in inclusive education.

Two consistent limitations across the reviewed studies were small sample sizes and lack of generalization. Many of these studies were conducted only at one university or in a small

geographical area. This limits the generalization of the findings. The sample sizes varied

greatly, with some being very small ($n = 13$) while others being quite large ($n = 326$). Small

samples limit the generalization to other populations. Both McCray and McHatton (2011) and

McHatton and McCray (2007) discussed that content areas have not been explored as well. This

is important for the current research study, as this research aims to examine whether there will be

a significant difference in perspectives of inclusive education based on teaching assignment

(general education versus special education).

Factors that Affect Teacher Perspectives

Factors such as years of teaching experience, number of students in classroom, advanced

degree, gender, and other teacher attitudes have been documented to affect a positive outlook

toward inclusion (Dupoux et al., 2005). First of all, attitudes of others influence teachers such

that "teachers who perceived other teachers' attitudes as favorable had a more positive attitude

themselves" (Dupoux et al, 2005, p. 52) toward programs implemented within the school,

including inclusive education. This is why it is important that administrators and school leaders

support inclusive education and help to establish an inclusive culture within their school. By

creating an inclusive environment, many of these factors can help form a supportive view of

inclusion throughout the school. Secondly, teachers with advanced degrees and/or more years of

teaching experience were found to have more favorable attitudes toward inclusive education

(Van Reusen et al., 2001; Yadav et al., 2015). Teachers who had more experience with inclusion

had a more positive outlook toward inclusion. Teachers who had more knowledge of inclusion

and IEPs felt more confident about including students with disabilities in their classrooms and

meeting their educational needs.

Teachers' perceived efficacy in teaching inclusion was an important factor that

influenced the developing perspective of inclusive education (Dupoux et al, 2005). Teachers need to be taught the skills, methods, and strategies needed to successfully accommodate students with disabilities. Chhabra et al. (2010) discussed that teachers do not have enough knowledge and training to support students with disabilities in their classrooms. Van Reusen et al. (2001) found that "positive attitudes about including and teaching students with disabilities appears to be related to special education training, knowledge and experience" (p. 13). It has been documented, though, that many programs do not provide pre-service teachers with the exposure and practice of teaching students with disabilities (Chhabra et al., 2010; Moreno et al., 2015; Tiwari et al., 2015; Yadav et al., 2015). Avramidis et al. (2000a) stated "high quality professional development results in the acquisition of teaching skills necessary to meet the needs of all students" (p. 205). Able et al. (2015) claimed collaborative teacher professional development focusing on collaborative skills and teacher roles would increase the support for inclusive education as teachers better understand their roles and the role of their supporting special education teacher. With limited time and resources, enhancing collaboration or professional development to better equip teachers to support students with disabilities is of concern.

Bisol et al. (2014) examined the use of virtual professional development and its effect on teachers' perspectives of inclusion. They found virtual training successfully affected the beliefs of teachers surrounding disability. Virtual learning and training should be further explored because of its ability to affect teachers' professional development. Teachers need to receive the support and complete professional development as well as pre-service education to meet the needs of their students with disabilities in the general education classrooms. Only with the necessary training and administrative support can inclusive education become a reality for the

thousands of students with disabilities throughout the United States.

The student's disability also has an effect on teachers' perspectives on inclusion. Smith (2000) stated that the severity of a student's disability influenced teacher perceptions of inclusive education. This idea was echoed throughout the literature (Chhabra et al., 2010; MacFarlane & Woolfson, 2013). Students with disabilities such as autism, moderate or severe intellectual disability, and social-emotional disability were more likely to be viewed negatively by teachers when considering their inclusion in the general education classroom (Dorn et al., 1996; Kirby, 2017). This lack of support for these students goes back to teacher preparation and teachers' feelings that they lack the training and experience necessary to support students with severe disabilities in their classrooms (Smith, 2000). Able et al. (2015) stated that some general education teachers do not support an inclusive model of teaching and they exhibit a lack of confidence and feelings of low self-efficacy in working with students who have disabilities. Furthermore, Ross-Hill (2009) stated that teachers have fears surrounding their "inability to accommodate students with special needs in their classrooms" (p. 197). This statement is consistent with statements in the current literature, which emphasize that "general education teachers do not traditionally provide the adaptions and accommodations that many students with disabilities need to succeed in inclusive environments" (Cook et al., 2007, p. 230).

Chhabbra et al. (2010) also documented apprehension on the part of teachers in trying to meet the needs of students with special needs within the inclusive classroom. This concern of whether students with this level of disability can be adequately supported within the inclusive classroom should be explored in future research on academic progress as seen within current legislation and court decisions. With these apprehensions, the support of special education teachers through collaboration should ease some of these concerns of general education teachers.

Villa et al. (1996) noted the experience with administrative support and time required for collaboration affect inclusion of students with disabilities. Collaboration has become a staple of the inclusive education process. In 1996, Villa et al. discussed the roles of general and special education teachers in an inclusive classroom in stating "the classroom teachers (are) primarily responsible for supervising special educators and the education of all children" (p. 40). Moreno et al. (2015) discussed a deep-rooted opinion that "inclusion is the responsibility only of special needs departments" (p. 112). Over the last 20 years of implementing inclusive education, this view has been changing: "Teacher collaboration is a powerful tool for the implementation of effective inclusive practices" (Mulholland & O'Connor, 2016, p. 1079). Da Fonte and Barton-Arwood (2017) defined collaboration as "a professional partnership between two or more coequal educators who share responsibility, accountability, and resources" (p. 99). Tiwari et al. (2015) discussed that special education teachers are perceived to be responsible for the achievement of students with disabilities. Other researchers, including Mulholland and O'Connor (2016), stated teacher collaboration should expand instructional options and improve academic outcomes for students with disabilities. The presence of collaborative practices does not guarantee successful implementation.

Concerns about developing a collaborative culture have been examined in the special education literature. The development of a collaborative relationship between general education teachers and special education teachers is required for inclusive education to be successful (Blecker & Boakes, 2010). Although collaboration offers many benefits, many barriers to effective collaboration have been identified, such as time constraints, lack of common planning, and lack of administrative support (Mulholland & O'Connor, 2016). Da Fonte and Barton-Arwood (2017) discussed time management, content knowledge, and communication as barriers

to collaboration. The teachers' perspective on inclusion may also influence the implementation of collaborative practices. Zagona et al. (2017) found differing philosophies about inclusive education also prevented collaboration between teachers. It is important for future research to examine collaboration and determine methods to effectively remove barriers for the benefit of students with disabilities and the practice of inclusive education. Further research should examine these factors and their effects on the perspectives of teachers (Able et al., 2015; Zagona et al., 2017) to influence teacher training and student achievement.

Summary

The current literature indicates a mixed understanding of inclusive education among stakeholders. Some stakeholders, such as administrators, have received greater attention in the literature. Special education teachers are currently underrepresented in studies focusing on the perspectives of inclusive education. The perspectives of special education teachers are important to understanding the process of inclusive education, which, as the literature review has indicated need to be analyzed in a descriptive manner to facilitate their understanding. The next chapter describes the analysis and data collection methods, to provide clear information on the process of the study to allow for its future replication, as the research on this topic needs to continue to expand.

CHAPTER THREE: METHODS

Overview

This chapter provides an overview of the study methods used to examine the attitudes and perspectives special education teachers hold of inclusive education and compare those perspectives to their general education counterparts. Specifically, this chapter discusses the design of the study, the research questions, and hypotheses. It also provides information about the following aspects of the study: setting, participants, instruments, study procedures, and data analysis. The goal of this chapter is to provide a clear understanding of how the research will be completed to allow future replication of the study.

Design

This study employed a causal-comparative research design. Causal-comparative research seeks to understand the reasons why or if there are differences between independent and dependent variables after an event has already occurred (Brewer & Kuhn, 2010; Gall et al., 2007), an approach that is *retrospective* in nature (i.e., ex post facto); however, as Gay et al. (2011) pointed out, there are also *prospective* variations of the design that starts with a cause and investigates its effect on some variable. Specifically, the aim of this dissertation was to examine whether there are significant differences in attitudes about inclusive education with students with disabilities based on whether the study participant is a general education or special education teacher.

In causal-comparative studies, groups are defined by a particular characteristic (Brewer & Kuhn, 2010); the defining characteristic in this study is whether the participant is a general or special education teacher. Prospective participants within the study were *already* classified (or grouped) as special education teachers or general education teachers based on their pre-service

university/college training and present job position at the research site. Because participants were already assigned to a particular grouping variable, an experimental design was not appropriate or applicable because random selection/assignment to groups was not possible; it was also not possible to directly or experimentally manipulate the independent variables of "general education teacher" and "special education teacher" to observe/measure any changes that might occur with the dependent variable. Participants in this study were recruited using a nonprobability convenience sampling method (Gravetter & Forzano, 2012).

Research Question

The overall question posed in this study is: What are the perspectives of special education teachers on inclusive education, and in what ways do these perspectives compare to their general education counterparts?

Research question that emerge from this overall question is as follows:

RQ1: Do general education teachers and special education teachers have overall differences in perceptions of inclusive education as shown by the Multidimensional Attitudes toward Inclusive Education Survey scores?

Hypotheses

The following null hypotheses were developed to address the research questions:

H_01: There will be no significant differences between general education teachers and special education teachers in their perceptions of inclusive education as measured by the Multidimensional Attitudes toward Inclusive Education Survey total test score.

H_02: There will be no significant differences between general education teachers and special education teachers in their perceptions of inclusive education as measured by the Multidimensional Attitudes toward Inclusive Education Survey affective score.

H₀3: There will be no significant differences between general education teachers and special education teachers in their perceptions of inclusive education as measured by the Multidimensional Attitudes toward Inclusive Education Survey cognitive score.

H₀4: There will be no significant differences between general education teachers and special education teachers in their perceptions of inclusive education as measured by the Multidimensional Attitudes toward Inclusive Education Survey behavioral score.

Participants and Setting

The participants for the study were drawn from random sample of general education and special education teachers located in eight school districts in the state of North Carolina. These districts are representative of most of the state with two districts located in the mountain region, three districts located in the piedmont region, and three districts located in the coastal region. This was done specifically to ensure that both groups (special education and general education teachers) were represented in the sample and that adequate sample size was achieved from both groups.

To create the sample for this study, the link to the online survey was shared with teachers throughout the school system. To determine the required minimum sample size for a MANOVA, the G* power 3.1 software program (Faul et al., 2009) was used. With two quasi-independent variables (special education teachers, and general education teachers) and three dependent variables (affective, cognitive, and behavioral scales), a sample size of 44 would be a sufficient sample size, based on a medium effect size ($f_2 = .25$), an alpha level of $\alpha = .05$, and a power of .80. For this study, the total number was 88 participants with 44 in each group; however, additional participants were recruited (i.e., beyond 88) as a "pad" for events such as sample attrition that could have occurred during the study.

Instrumentation

For this study, a survey was used to gain an understanding of the sampled teachers' perspectives on inclusive education. To analyze teachers' perspectives on inclusive education, all teachers were given the Multidimensional Attitudes toward Inclusive Education Scale (MATIES) survey through SurveyMonkey, an online survey platform. MATIES was developed by Mahat (2008) to allow examination of the multiple dimensions of attitudes toward inclusive education in order to better determine teachers' attitudes and their likelihood of acting on those attitudes. This survey questions are based on the theory of planned behavior, which delineates a relationship between attitude and behavior (Mahat, 2008).

The MATIES includes three subscales: cognitive, affective, and behavioral. Each subscale contains six items and provides an ordinal scale (6-26) for the aspect of attitude being explored (Mahat, 2008). The cognitive subscale examines what teachers think about inclusion. An example question from the cognitive subscale is: *I believe that students with a disability should be taught in special education schools.* The affective subscale examines teachers' feelings toward inclusion. The following is an example question from the affective subscale: *I get irritated when I am unable to understand students with a disability*. The behavioral subscale examines how a teacher will act in response to the responsibility of inclusion. The following is an example question from the behavioral subscale: *I am willing to adapt the assessments of individual students in order for inclusive education to take place.*

Both special education teachers and general education teachers completed the MATIES to determine their perspectives on inclusive education. The data was also evaluated to determine any significant differences between teachers' perspectives based on teaching assignment (general

education versus special education) on all three subscales of the MATIES (affective, cognitive, and behavioral).

Survey Development

To create the items for this survey, a construct map was used to verify the connection between the questions and teachers' attitudes toward inclusive education. Teachers who had a positive attitude toward inclusion were more likely to agree with the harder statements. More than 100 items were created along these constructs. These were reduced to 41 items that fit along the three domains of attitude: affective, cognitive, and behavioral. The items were measured on a 6-point Likert scale, ranging from *strongly agree* to *strongly disagree* (Mahat, 2008). The final survey contained 36 items assessing the three domains of attitude. The affective dimension questions focused on teachers' feelings and emotions toward inclusive education. The cognitive dimension questions focused on teachers' perceptions and beliefs about inclusive education. The behavioral dimension questions focused on teachers' intent to act in a manner that supports inclusive education (Mahat, 2008).

Following the survey development, the 41 items were reviewed by seven experts in the field of special education, inclusive education, and measurement. Five items were deleted after this review and others were rewritten to ensure clarity. The 36-item survey was then reviewed by 14 special and general education teachers. This was done to ensure that all items were clear and understandable. The items were considered user-friendly, supporting the accuracy of the newly developed survey. The analysis was also completed using the multidimensional random coefficients multinomial logit model. Through this analysis, items that did not fit with the model well were discarded from the survey. Furthermore, factor analysis was also conducted to ensure items loaded on their corresponding latent variables. Items with weak loadings were removed.

The final survey contained 18 items, six items per subscale (Mahat, 2008). It should take 15-20 minutes for a teacher to complete the survey through the online SurveyMonkey platform. By using an online platform, the primary investigator was able to ensure the anonymity of the subjects because there was no direct contact between the subjects and the candidate to complete the survey.

Only individual subscales, cognitive (items 1-6), affective (items 7-12), and behavioral (items 13-18), measured on an ordinal scale, should be scored rather than the overall scale (Mahat, 2008). The scores for each subscale should range from 6 – minimal effect on attitude towards inclusive education to 26 – maximum effect on attitude toward inclusive education. To determine the score, the number the participant selects for the items within the subscale are added together. These scores determine whether the overall attitude toward inclusive education is negative, positive, or undecided, as well as identify the specific part of attitude based on the theory of planned behavior that has the greatest effect on teachers' overall perspective (Mahat, 2008).

Validity and Reliability

A pilot study of 115 respondents was completed by the author to evaluate the reliability of the survey. A Cronbach's reliability was completed for each subscale within the survey, yielding alpha coefficients of 0.77, 0.78, and 0.91 for cognitive, affective, and behavioral subscales, respectively. Gall et al. (2007) discussed that a reliability score of 80 or higher suggests sufficient reliability. Accordingly, the behavioral scale appears to have a strong reliability. DeVellis (2003) and Kline (2005) suggested that 0.70 is a moderate Cronbach alpha that indicates a good level of reliability. This indicates that the subscales of the MATIES have met the minimum acceptable reliability for similar instruments.

Construct validity was established by the author through high factor loading. The factor analysis indicates that the MATIES questionnaire will correctly identify a teacher who thinks positively about inclusion and attempts to practice inclusive behaviors in his/her classroom(s) (Mahat, 2008). The MATIES questionnaire has not been used repeatedly for research in the current literature because it is a relatively new scale. The MATIES has been evaluated by Ewing, Monsen, and Keilblock (2017) and DeBoer, Timmerman, Pijil, and Minnaert (2012). The results from both studies indicated that the MATIES is appropriate for evaluating teachers' attitudes. It is especially appropriate for evaluating the different dimensions of attitude described by the theory of planned behavior (Mahat, 2008). To use the MATIES questionnaire, I contacted the author and gained permission to use this questionnaire. A copy of the email granting permission to use the MATIES questionnaire is included as Appendix A.

Procedures

To carry out the proposed study the following procedures were followed: obtained permission for the district-level Institutional Review Board (IRB), secured IRB approval from Liberty University, gained permission to recruit at each school from the site administrator, recruited participants for the study by sharing the survey link with staff, gathered the data, and recorded the data. To gain permission to complete testing in the county school systems, the research request application was completed, where applicable, and superintendents were contacted through email to request permission to conduct research within the district. Each district was provided with the following information: contact information, purpose of the study, stakeholders involved in the study, number of participants, research design, type of data collected, and purpose of the study. A copy of the MATIES was provided to the school system as part of their IRB procedure. The recruitment email was also shared with some districts based

on superintendent request. The process of obtaining permission to carry out the study required six weeks to complete. Many districts waited until conditional approval had been gained by Liberty's IRB before granting permission for research to be conducted within their district. Approval from each district was reported to Liberty IRB. See Appendix C-K for IRB approval from each school system.

The IRB of Liberty University is responsible for reviewing research studies that involve human participants. The IRB process was completed after receiving research approval from the school systems but before beginning any data collection and research. See Appendix L for IRB approval.

Upon receiving permission to conduct research from the IRB, the candidate communicated with principals to explain to them the purpose of the research and to share with them the recruitment email. To recruit teachers, principals who agreed to have their teachers participate in the study shared the recruitment email with teachers. The recruitment email (see Appendix J) explains the study to teachers and provides the SurveyMonkey link to access the survey. The survey link was set-up as an anonymous survey through the SurveyMonkey program. No identifiable questions are asked and ISP addresses are not collected to protect participant identities. Teachers had two weeks to complete the survey before a reminder was sent. After a month of the survey being available, it was removed from the website to allow analysis of the collected data.

SurveyMonkey offers various methods of documenting the collected data such as charts, data tables, individual responses, basic statistics, and more. This platform also easily allows anonymous access to participants. It also provides the opportunity to screen participants. This allowed the researcher to limit the participants only to those who had experience in inclusive

classrooms. It also allowed teachers to identify themselves as special educators or general educators. It also provided the option to ask for consent to use anonymous information and opinions in the research. Data collection using SurveyMonkey could also be integrated into SPSS.

Data Analysis

The primary test for this study was a one-way multivariate analysis of variance (MANOVA). The two quasi-independent variable factors are special education teachers and general education teachers. The three dependent variable factors are the affective, cognitive, and behavioral subscales of the MATIES. The MANOVA can be used in nonexperimental research such as the current study to explore the difference of several outcomes that occur in groups that occur naturally (Warner, 2013). This test allowed all the null hypotheses to be evaluated by only running one test. In the current study, the perspectives of inclusive education held by special educators and general educators as determined by the MATIES subscales (affective, cognitive, and behavioral) was compared to each other to determine what differences exist between the subgroups. This aided the researcher in determining whether teaching assignments could be considered as cause and effect on the perspectives of inclusive education held by the sample.

When conducting a MANOVA, one should consider several assumptions. The first assumption is the dependent variables (two or more) need to be continuous in nature. Each of the aggregated scale scores are measured as intervals. The MATIES has 18 individual Likert scale items (strongly agree to strongly disagree) which are aggregated into subscales (cognitive, affective, and behavioral). Historically, in the behavioral sciences, when individual ordinal items are aggregated and the resulting aggregation has established validity and reliability, items are considered to be measured as intervals (Allen & Seaman, 2007; Gabriel & Sen, 1968; Kruskal &

Wallis, 1952; Zhang et al., 2014). Considering interval scales are continuous, this assumption is satisfied in the nature of the MATIES instrument.

Other assumptions include that fact that, for a MANOVA, there are two or more independent variables (Green & Salkind, 2014) and that observations should be independent (not correlated). These assumptions are addressed in the design of the study. Central to the design, the group categories (general education versus special education) are considered *quasi-*independent variables (Gravetter & Forzano, 2012). Individuals who volunteer for the study were asked to identify whether they are a general education teacher or a special education teacher (variables that cannot be manipulated but are used to describe the characteristics of the groups). A limitation to consider is in North Carolina, a teacher may hold dual licensure and could possibly fall into both categories. The impact will be minimal because inclusion in both groups is not an option and participants were only allowed one-time access to the survey in order to complete it.

MANOVA also assumes an appropriate sample size (Green & Salkind, 2014; Warner, 2013). The researcher conducted a descriptive statistics analysis that revealed the researcher to determine whether the sample size is adequate. Power and effect size analysis demonstrated a total sample size of 44 would be a sufficient sample size, based on a medium effect size ($f_2 = .25$), an alpha level of $\alpha = .05$, and a power of .80 (Faul et al, 2009). For this study, the total number was 88 participants in the study with 44 in each independent variable; however, additional participants were recruited (i.e., beyond 88) as a "pad" for events such sample attrition that could occur during the study.

MANOVA requires that there be no univariate or multivariate outliers (Warner, 2013). The researcher investigated raw the data to determine whether there were any univariate or

multivariate outliers by conducting data analysis through SPSS. Univariate outliers were examined and suppressed based on the results of the boxplots (Green & Salkind, 2014; Warner, 2013). Multivariate outliers were identified and suppressed based on the results of the Mahalanobis distance test (Green & Salkind, 2014; Warner 2013).

To evaluate the assumption of normality, the Shapiro-Wilks statistic was conducted through SPSS to obtain skewness and kurtosis coefficients (Steven, 2002). This statistic also aided in determining whether the overall shape of the data distribution appears normal (Warner, 2013). To verify that the distribution is normal, histograms were also created through the use of SPSS. The creation of histograms allowed the researcher to visually demonstrate the skewedness present within the data (Green & Salkind, 2014).

The assumption of multivariate normal distribution demonstrates that each variable must be normally distributed and whether there is any linear combination of variables (Steven, 2002; Warner, 2013). The researcher created scatterplots of the variables using SPSS to determine if they are "cigar shaped" and to aid in identifying outliers. Scatterplots were analyzed to demonstrate the linear relationship between the three dependent variables for both groups of teachers.

To evaluate whether the Assumption of Homogeneity of Variance-Covariance is met or violated, the Box's M test of equality of covariance and the Levene's test of homogeneity were completed by the researcher using SPSS (Warner, 2013). This statistic determined whether the f value is less than .05. This demonstrates whether the variance and covariance of all dependent variables are equivalent (Green & Salkind, 2014). If the f value is significant, it can be determined that the matrices contain differences that impacted the study.

MANOVA provides an overall *F*-score that may or may not be significant. If the *F*-score is not significant, the researcher will report the statistical significance. If the *F*-score is significant, post hoc test will be completed through SPSS to determine the which means are significant. The decision of what post hoc test to conduct depends on whether equal variance can be assumed or not (Green & Salkind, 2014). Either the Tukey post hoc test or the Dunnett's C will be conducted in order to create multiple pairwise comparisons. These tests helped to better understand and analyze significant statistics thus determining which dependent variable produced the greatest affect between the groups.

Summary

This chapter outlined the design of the study and the steps required to gain permission to conduct research by both the local school district and Liberty University. This study used a causal-comparative design and convenience sampling to recruit from a population of special education teachers and general education teachers in one county. The aim of the study is to explore the perspectives that special education and general education teachers have about inclusive education and test whether there are significant differences between the two groups of teachers. The MATIES was used to collect dependent variable scores and the MANOVA was used to analyze those scores in order to answer the research questions.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this study was to compare special and general education teachers' perspectives of inclusive education and their likelihood to implement inclusive educational practices with students with disabilities in the general education setting. The Multidimensional Attitudes Towards Inclusive Education Scale (MATIES) (Mahat, 2008) detected group perceptions as designed by the theory of planned behavior. This chapter addressed the organization of the data, descriptive statistics, and a summary of findings.

Research Question

This study sought to understand the perspectives of special education teachers about inclusive education and how their perspectives differed from those of their general education counterparts. The following research question emerged:

RQ1: Do general education teachers and special education teachers have overall differences in perceptions of inclusive education as shown by the Multidimensional Attitudes toward Inclusive Education Survey scores?

Null Hypotheses

The following null hypotheses sought to address the research questions:

H_01: There will be no significant differences between general education teachers and special education teachers in their perceptions of inclusive education as measured by the Multidimensional Attitudes toward Inclusive Education Survey total test score.

H_02: There will be no significant differences between general education teachers and special education teachers in their perceptions of inclusive education as measured by the Multidimensional Attitudes toward Inclusive Education Survey affective score.

H₀3: There will be no significant differences between general education teachers and special education teachers in their perceptions of inclusive education as measured by the Multidimensional Attitudes toward Inclusive Education Survey cognitive score.

H₀4: There will be no significant differences between general education teachers and special education teachers in their perceptions of inclusive education as measured by the Multidimensional Attitudes toward Inclusive Education Survey behavioral score.

Descriptive Statistics

The study sample included both special educators and general educators. The research included demographic composition of the total 176 respondents in terms of years of teaching experience, level of education, and teaching assignments. Analysis of the data included an examination of the variables, possible compounding features, and consistency.

Fifty-six participants were teachers self-identified as "Other," meaning neither a special education nor general education teacher. These participants were disqualified from participating in the study resulting in a reduction of total participants to 120. The 120 remaining participants were general and special educators throughout eight participating districts in North Carolina. Of the 120 participants, 46 self-identified as special education teachers while 74 self-identified as general education teachers. Thirteen males and 105 females comprised the total sample while two declined to identify their gender; however, because demographic information was not an influential part of overall hypotheses analysis, these participants were still included in the overall study. This disparity between the genders means that the overall significance of the study is a greater implication of female educators' perspectives than male educators' perspectives. This will limit generalizability when comparing the specific demographics of a school district.

Grade-Band Assignment

Participants self-identified as teachers employed in an elementary, middle, K-8, or secondary school. Sample participants indicated their employment as follows: 46 (33%) were employed in elementary schools, 40 (27.3%) were employed in middle schools, 21 (13.1%) were employed in secondary schools, and 5 (2.8%) in K-8 schools.

Years of Experience

Participants also reported years of experience. Twenty-one participants (22.4%) reported 0-5 years of experience. Twenty-one participants (14.2%) reported 5-10 years of experience while 44 participants (25.8%) reported 10-20 years of experience. Twenty-six (23.1%) participants (23.1%) reported over 20 years of experience. This demonstrates that participants represented a variety of professional experiences.

Level of Education

Participants also self-reported the level of education obtained through the demographic survey. Sixty-six of the participants reported obtaining bachelor's degrees while 44 of the participants reported having earned master's degrees. Seven participants had obtained post-graduate degrees. Three participants declined to answer this question; however, they were retained in the overall analysis because demographic questions were voluntary.

Instrumentation

The MATIES (Mahat, 2008) is a Likert-type scale (i.e., 1 = strongly agree, 6 = strongly disagree) by which statements about inclusive education encourage teachers to select how they feel about statements. Items 1, 3, and 4 of the cognitive scale as well as all items on the behavioral scale included a reverse response continuum. No items inherent to the affective scale were subjected to reverse response continuum (i.e., 1 = strongly disagree, 6 = strongly agree).

This response continuum was important because the nature of the item did not fit the Likert scale as described. By using a reverse response continuum, Mahat (2008) did not alter the wording and expectation of the survey but was able to modify the orientation of responses from positive to negative when considering inclusive education. The researcher completed this reversal in the design of the digital survey.

According to Mahat (2008), each scale of the MATIES is to be summed in order to create a variable. Upon summation, the researcher created the variables: cognitive, affective, and behavioral as directed by Mahat (2008).

Descriptive Statistics

The researcher completed dependent variable statistics for this study via SPSS 23. The researcher used the descriptive statistics to report the mean, median, and standard deviation for each dependent variable based on the independent variable "teacher type." Table 1 depicts the descriptive statistics for all dependent variables.

Table 1

Descriptive Statistics

Item	Teacher Type	*M*	*Md*	*SD*
Cognitive	Special Ed	29.978	31.00	4.181
	Regular Ed	27.797	29.00	5.856
Affective	Special Ed	26.934	28.00	3.580
	Regular Ed	23.473	24.50	4.985
Behavioral	Special Ed	32.456	35.00	5.616
	Regular Ed	30.135	31.00	6.361

These statistics demonstrate that special education teachers produced a greater mean and median for all three dependent variables. This means, on average, special education teachers scored two to three points higher than their general education counterparts on all dependent variables. The researcher examined the standard deviation for every dependent variable and noted an abnormal deviation (Warner, 2013) with each dependent variable being skewed and kurtosis within acceptable limits.

Tables 2, 3, and 4 record the mean for gender, experience, education, and grade-band assignment for each of the dependent variables. Table 2 indicates that on all three subscales the mean score was slightly higher for females than males. It is interesting that despite a significantly imbalanced ratio of males to females, male participant responses consistently tracked female participants. This was supported by Dupoux et al. (2005).

Table 2

Gender by MATIES Subscales

Gender	Cognitive Mean	Affective Mean	Behavioral Mean
Female	29.622	25.632	32.469
Male	27.785	24.642	30.785

In terms of teacher classification by experience, there was less than a .5 difference between means of each dependent variable category as seen in Table 3. This is in contradiction of much of the literature indicating that years of experience produced a positive impact on perspectives of inclusive education (Chhabra et al., 2010; Dupoux et al, 2005; Moreno et al., 2015; Tiwari et al., 2015; Van Reusen et al., 2001; Yadav et al., 2015).

Table 3

Experience by MATIES Subscales

Item	Cognitive Mean	Affective Mean	Behavioral Mean
0-5 years	29.57	24.62	32.76
5-10 years	28.62	25.62	31.86
10-20 years	29.30	25.89	32.59
20+ years	30.04	25.50	31.61

Table 4 indicated a mean difference of less than 1.0 for all education levels except for graduate degrees on the affective and behavioral subscale. While these mean differences are not large, they do demonstrate consistency with the literature indicating that continued education via in-service training and professional development produced a positive impact on perspectives of inclusive education (Avramidis et al. , 2000a; Able et al., 2015; Bisol et al., 2014; Dupoux et al, 2005).

Table 4

Education Level by MATIES Subscales

Degree	Cognitive Mean	Affective Mean	Behavioral Mean
Bachelor's Degree	28.9	24.9	31.93
Master's Degree	29.86	25.90	32.39
Post-Graduate Degree	30.71	28.29	34.29

Table 5 displayed means indicating there were insignificant differences between school assignment and perceptions of inclusive education as supported by the literature (Heiman, 2001;

Horricks et al., 2008; Ross-Hill, 2009; Sandhu, 2017). The only exception was the results for the

affective scale which decreased 1.26 points between elementary school and middle school.

Consistent with the literature, teachers from secondary schools have been depicted as opposed to

inclusive education (Ross-Hill, 2009; Sandhu, 2017); however, the results indicated this may

actually not be as influential a factor as previously considered.

Table 5

Grade-band Assignment by MATIES Subscales

School Level	Cognitive Mean	Affective Mean	Behavioral Mean
Elementary School	29.65	26.21	32.91
Middle School	28.92	24.95	32.20
Secondary School	29.80	24.67	30.95
Kindergarten-8 Grade School	29.00	27.00	32.20

Assumption Tests

A one-way MANOVA can be employed in nonexperimental research to explore the

differences between several outcomes that occur in groups naturally (Warner, 2013). This test

facilitated simultaneous evaluation of all null hypotheses. Inherent to MANOVA, there are

several assumptions that must be addressed both in the design of the study and through statistical

analysis (Green & Salkind, 2014; Warner, 2013).

Assumptions Addressed in Study Design

When conducting a MANOVA, one should consider several assumptions. The first

assumption is the dependent variables (two or more) need to be continuous in nature. The

MATIES consists of 18 individual Likert-type scale items (strongly agree to strongly disagree)

which are disaggregated into subscales (cognitive, affective, and behavioral). Historically, in the

behavioral sciences, when individual ordinal items are aggregated and the resulting aggregation

has established validity and reliability, items are considered to be measured as intervals (Allen &

Seaman, 2007; Gabriel & Sen, 1968; Kruskal & Wallis, 1952; Zhang et al., 2014). Considering

interval scales are continuous, this assumption is satisfied by the MATIES instrument.

The next assumption is there must be two or more independent variables (Green &

Salkind, 2014) and observations should be independent (not correlated). Central to the design,

the group categories (general education versus special education) are considered *quasi*-

independent variables (Gravetter & Forzano, 2012). Participants completed the survey

anonymously and independently thus satisfying this assumption.

MANOVA also assumes an appropriate sample size (Green & Salkind, 2014; Warner,

2013). Power and effect size demonstrated a total sample size of 44 would be a sufficient sample

size, based on a medium effect size ($f_2 = .25$), an alpha level of $\alpha = .05$, and a power of .80 (Faul

et al., 2009). The descriptive statistics described the total sample as 46 self-identified special

education teachers and 74 self-identified general education teachers; thus, this assumption is

satisfied.

Assumption of Normality

The researcher assessed the assumption of normality using the Shapiro-Wilks statistic to

obtain skewness and kurtosis coefficients (Steven, 2002) as presented in Table 6. These values

indicated that the data distribution demonstrated a negative skew for all dependent and

independent variable combinations with a standard error of .354 for special education teachers

and a standard error of .285 for general education teachers. These values indicated positive

kurtosis for all dependent and independent variables combinations with a standard error of .695

for special education teachers and a standard error of .563 for general education teachers. Kim

(2013) described the desired kurtosis value for a normal distribution as 0. With a medium

sample size ($50 < n < 300$), absolute z-value over 3.29 is appropriate (Kim, 2013). Given this

limit, only the behavioral scale for special education teachers could be described as

demonstrating positive kurtosis.

Table 6

Descriptive Statistics

Item	Teacher Type	Skewedness	Kurtosis
Cognitive_Sum	Special Ed	-.614	-.427
	Regular Ed	-.837	.840
Affective_Sum	Special Ed	-.942	.932
	Regular Ed	-.472	-.011
Behavioral_Sum	Special Ed	-2.096	6.062
	Regular Ed	-1.375	2.906

Table 7 demonstrates that all three domains of the MATIES did not pass the assumption

of normality. Histograms were created to allow for visual investigation of normality (see Figures

1-6). The histograms illustrated the distributions were negatively skewed.

Table 7

Shapiro-Wilk

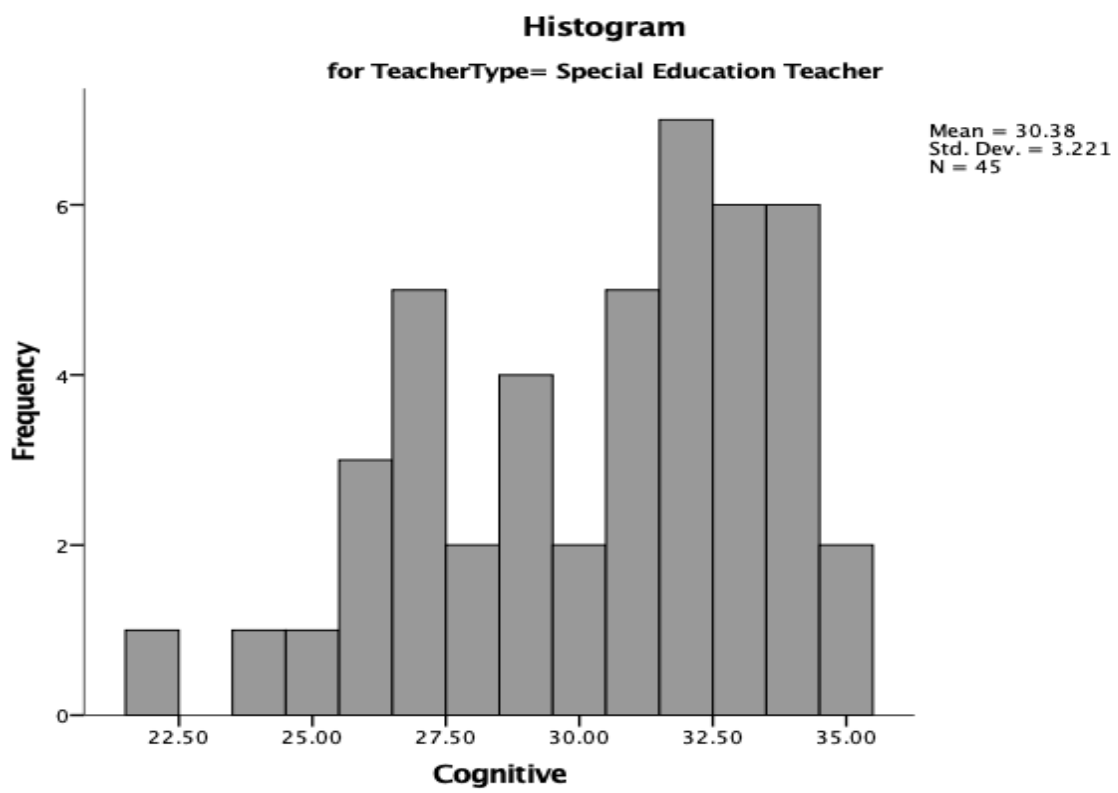| Item	Teacher Type	Statistic	df	Sig.
Cognitive_Sum	Special Ed	.937	45	.017
	Regular Ed	.947	71	.005
Affective_Sum	Special Ed	.885	45	.000
	Regular Ed	.958	71	.018
Behavioral_Sum	Special Ed	.725	45	.000
	Regular Ed	.866	71	.000

Figure 1. Cognitive histogram for special education teachers.

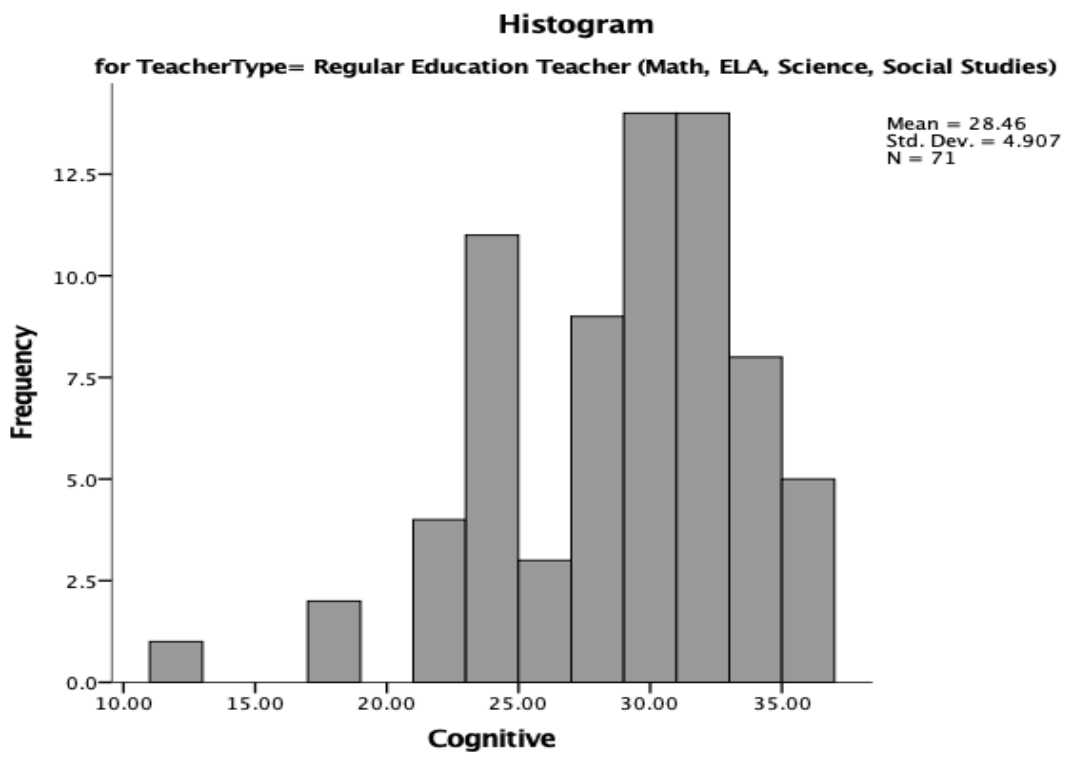*Figure 2.* Cognitive histogram for general education teachers.
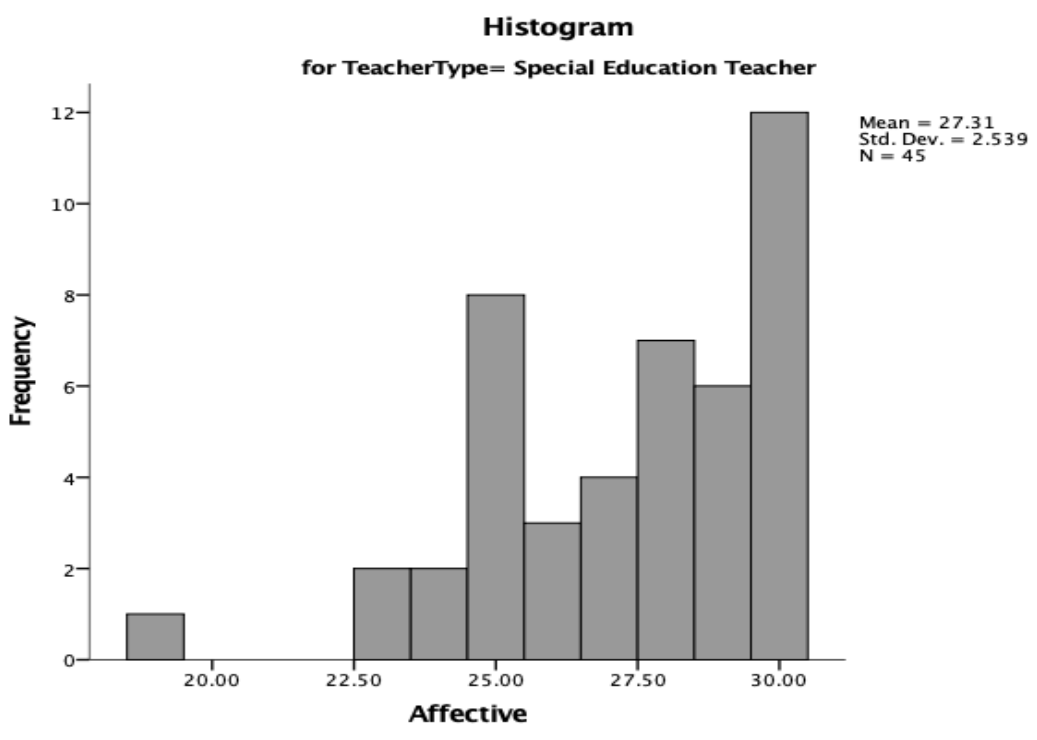
Figure 3. Affective histogram for special education teachers.

Histogram

for TeacherType= Regular Education Teacher (Math, ELA, Science, Social Studies)
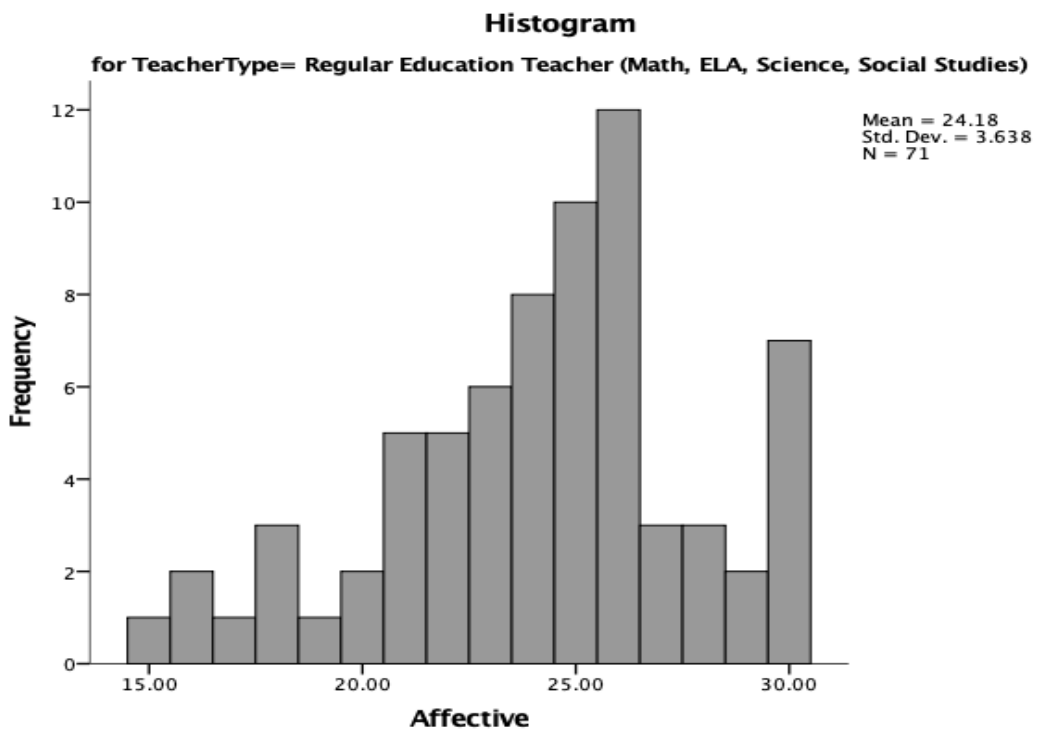
Figure 4. Affective histogram for general education teachers.

Histogram

for TeacherType= Special Education Teacher
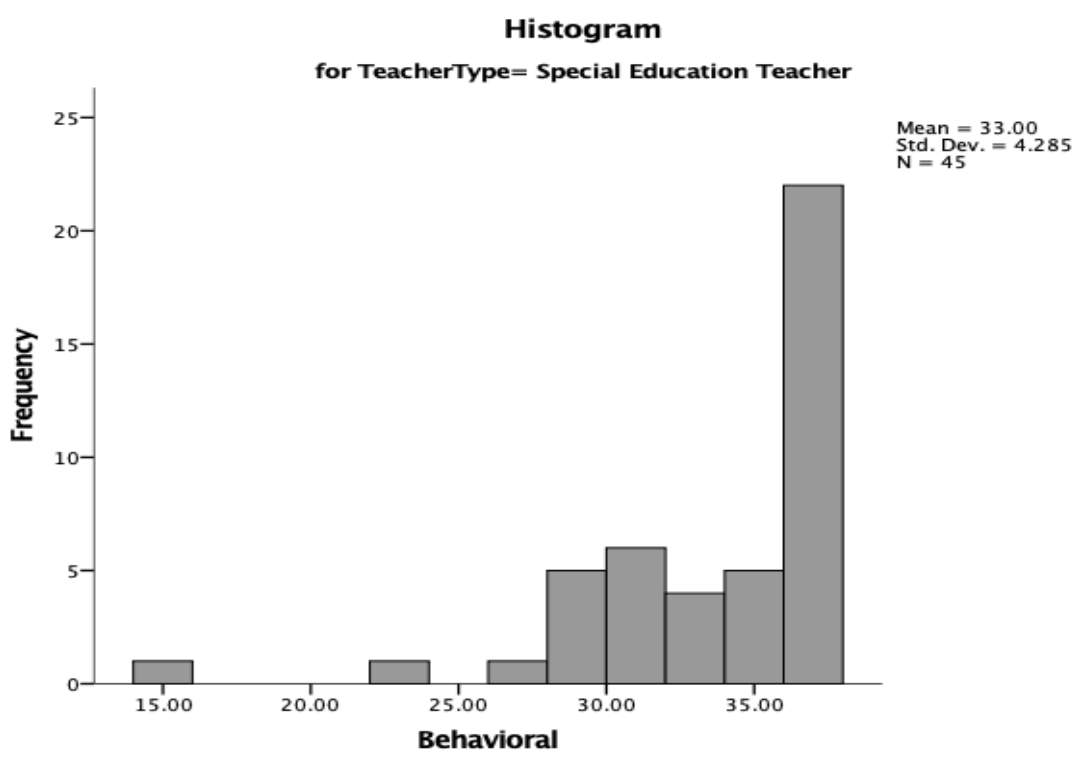
Figure 5. Behavioral histogram for special education teachers.

Histogram

for TeacherType= Regular Education Teacher (Math, ELA, Science, Social Studies)

Mean = 30.99
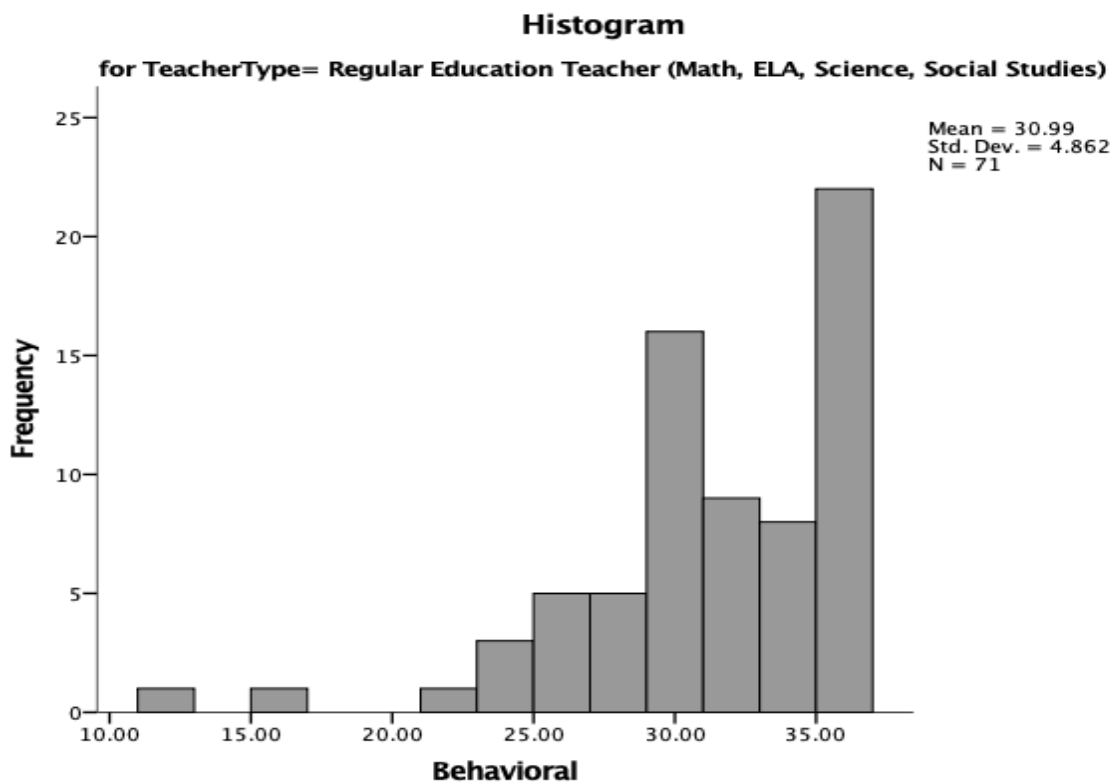Std. Dev. = 4.862
N = 71

Figure 6. Behavioral histogram for general education teachers.

Even though the one-way MANOVA is fairly robust to deviations from normality with

regard to Type I error (Bray & Maxwell, 1985), the negative skewness of the distribution was

sufficiently significant to warrant data transformation. While data transformations are not

widely recommended (because transformed data are sometimes harder to interpret), they are

often recommended as a solution to resolve failures of normality (Tabachnick & Fidell, 2007).

In order to ensure that the data could be consistently interpreted, the researcher completed

Log_{10} transformations to the data to reduce the effects of severe skewness (Feng et al., 2013).

This process converted the problematic distribution to a more normalized distribution. Keene

(1995) recommended utilizing log transformed data in the analysis untransformed and then

transformed to better understand and determine what statistical method is best. Feng et al.

(2013) stated that Log_{10} transformations are used by researchers as an attempt to "normal[ize]" the distribution (p. 105). This would allow non-normalized data to be used in parametric analysis.

Corder and Foreman (2009) described the use of nonparametric statistics to address the violation of the assumption of normality. The Kruskal-Wallis H test is designed to compare more than two samples, is the equivalent of a one-way analysis of variance (ANOVA), and has a multivariate option equivalent to a one-way MANOVA (Corder & Foreman, 2009). Because of the relationship and collaboration of special education and general education teachers, the researcher determined that the groups could be reasonably related (Corder & Foreman, 2009; Green & Salkind, 2014) and, therefore, a multivariate Kruskal-Wallis could not be employed with confidence as it is a foundational expectation of this nonparametric statistic (Green & Salkind, 2014; Warner, 2013). Teachers are often influenced by those with whom they work; therefore, because many special education teacher and general education teachers collaborate to support students in the inclusive classroom (Dupoux et al., 2005), it is reasonable to assume relation. Therefore, Log_{10} transformation was preferable (Keene, 1995).

Assumption of normality retest. The researcher completed another Shapiro-Wilk test to assess the normality of the data after transformation (see Table 8). Histograms allowed for visual assessments of distribution normality after data transformations (see Figures 7-12). The results of the second Shapiro-Wilk test resulted in a skewed distribution of the dependent variable; therefore, the assumption was still violated. Visual examination of the histograms determined that while the transformed data was slightly negatively skewed, the distribution was significantly more normalized than before the Log_{10} transformation. Because the data distribution was closer to normality required in parametric statistics, the transformed data

provided greater confidence for relying on the robust nature of the MANOVA to prevent Type I

errors (Bray & Maxwell, 1985).

Table 8

Shapiro-Wilk Log$_{10}$ Data

Item	Teacher Type	Statistic	df	Sig.
Log$_{10}$Cognitive	Special Ed	.921	45	.005
	Regular Ed	.875	71	.000
Log$_{10}$Affective	Special Ed	.861	45	.000
	Regular Ed	.928	71	.000
Log$_{10}$Behavioral	Special Ed	.641	45	.000
	Regular Ed	.766	71	.000
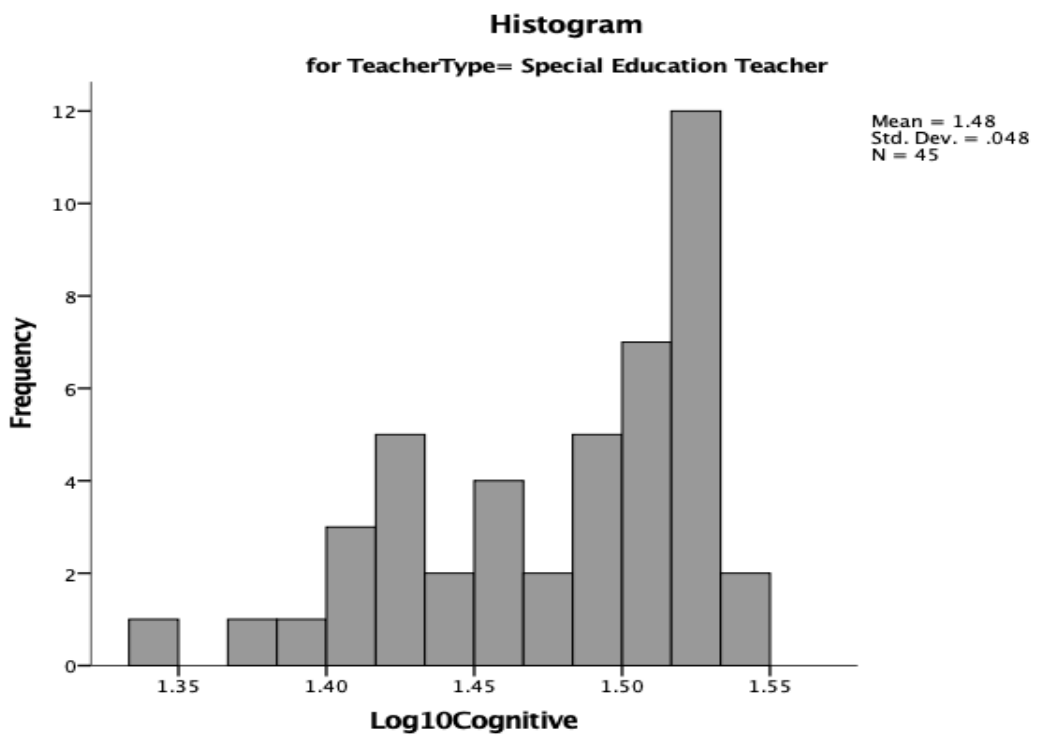
Figure 7. Cognitive Log$_{10}$ histogram for special education teachers.
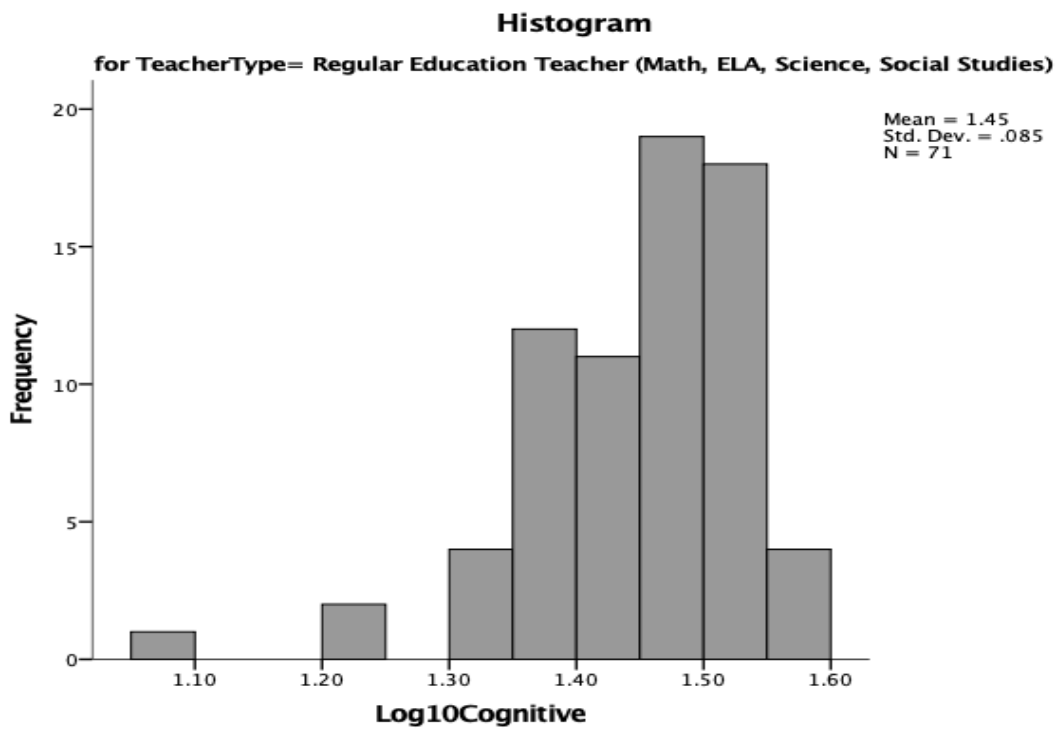
Figure 8. Cognitive Log10 histogram for general education teachers
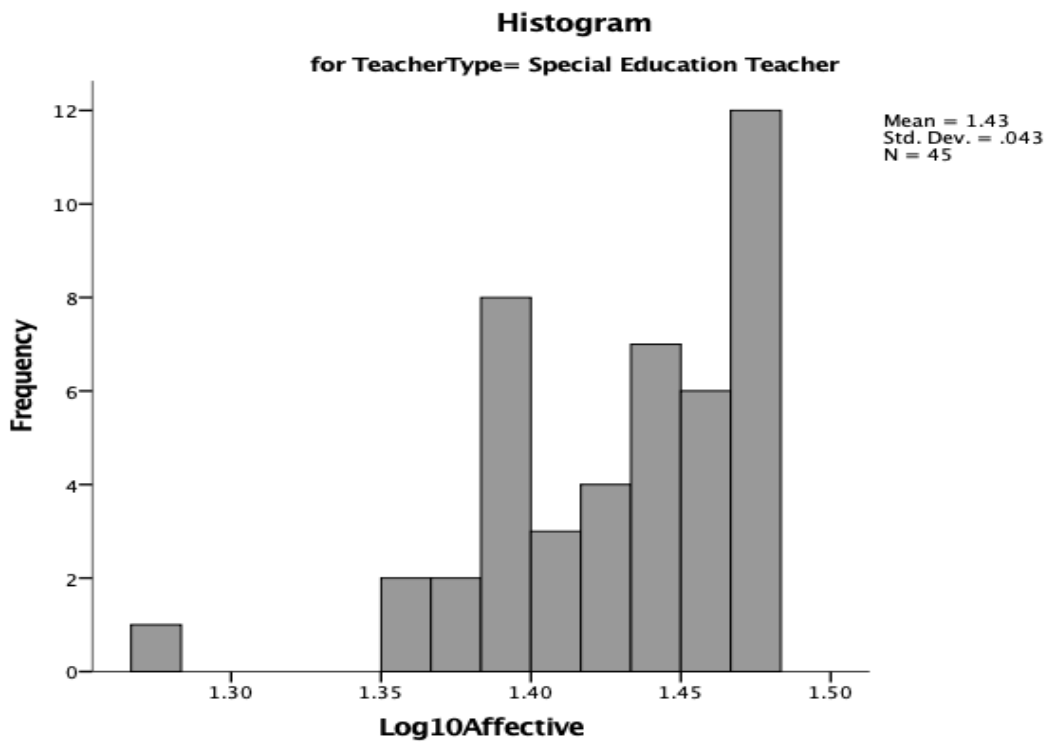
Figure 9. Affective Log10 histogram for special education teachers

Histogram

for TeacherType= Regular Education Teacher (Math, ELA, Science, Social Studies)

Mean = 1.38
Std. Dev. = .07
N = 71
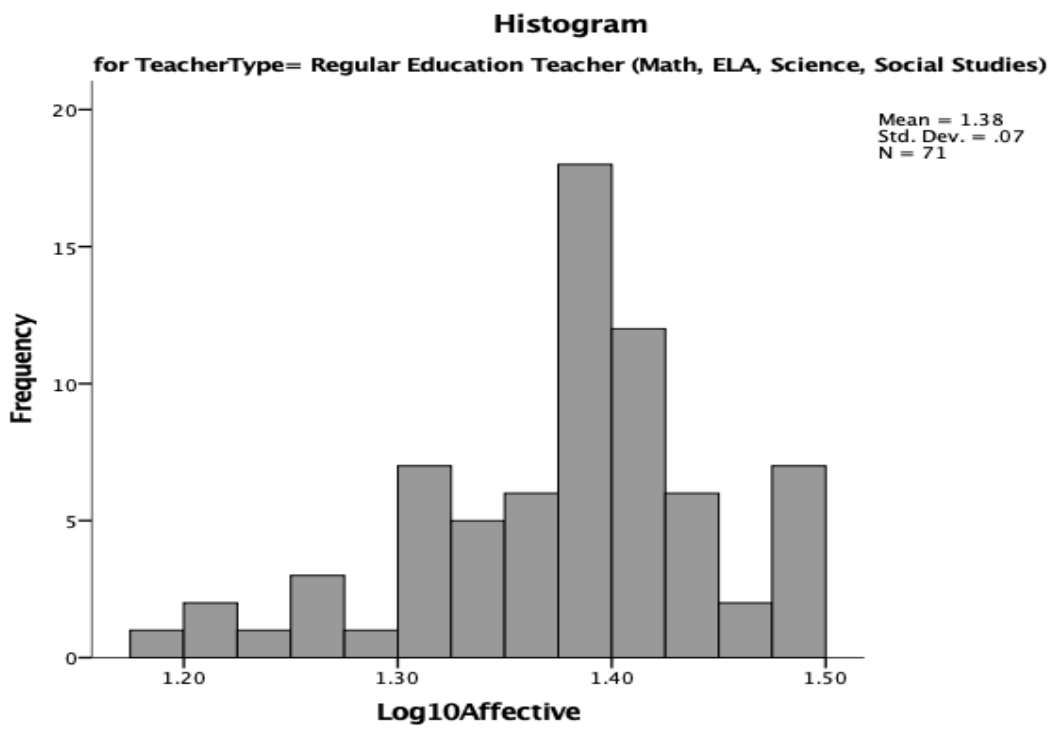
Figure 10. Affective Log10 histogram for general education teachers

Histogram

for TeacherType= Special Education Teacher

Mean = 1.51
Std. Dev. = .069
N = 45
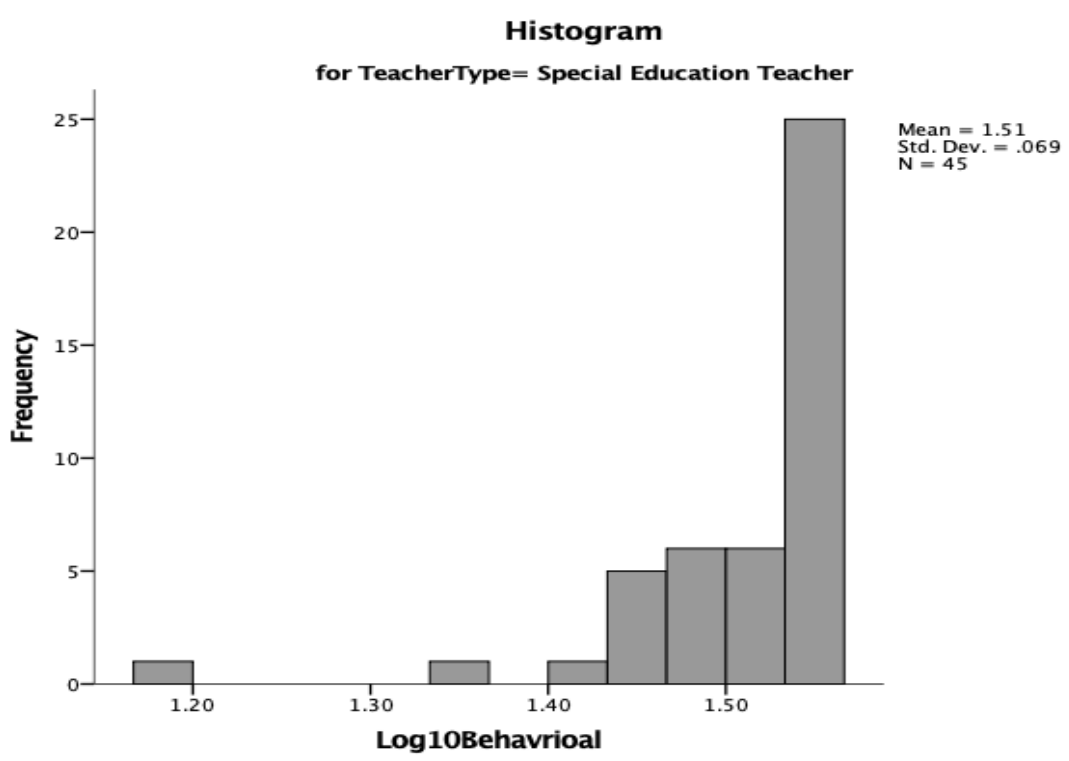
Figure 11. Behavioral Log10 histogram for special education teachers
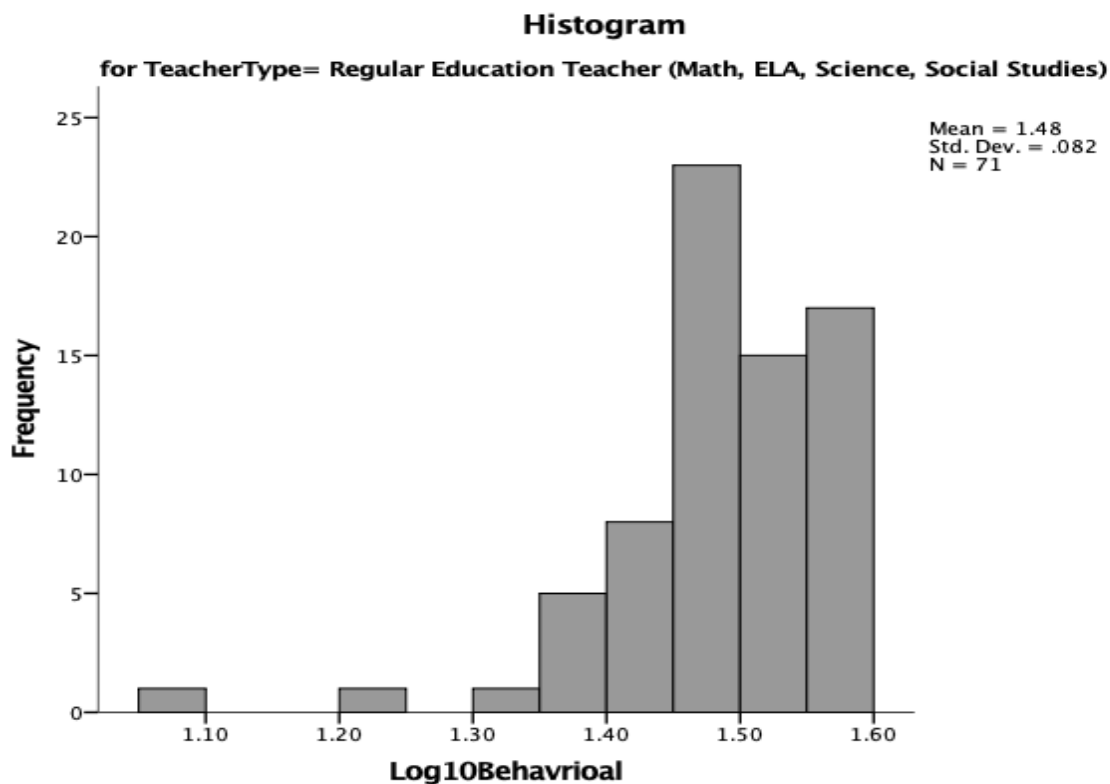
Figure 12. Behavioral Log10 histogram for general education teachers

Assumption of Multivariate Normal Distribution and Univariate or Multivariate Outliers

Matrix scatter plots facilitated an investigation of the assumption of multivariate normal distribution. Matrix scatter plots allowed for visual examination of outliers. Scatter plots revealed a linear relationship between the dependent variables (see Figure 13); however, there existed a few outliers throughout the data set. The scatter plots also depicted data groups with a slight negative skew consistent with previous analysis.
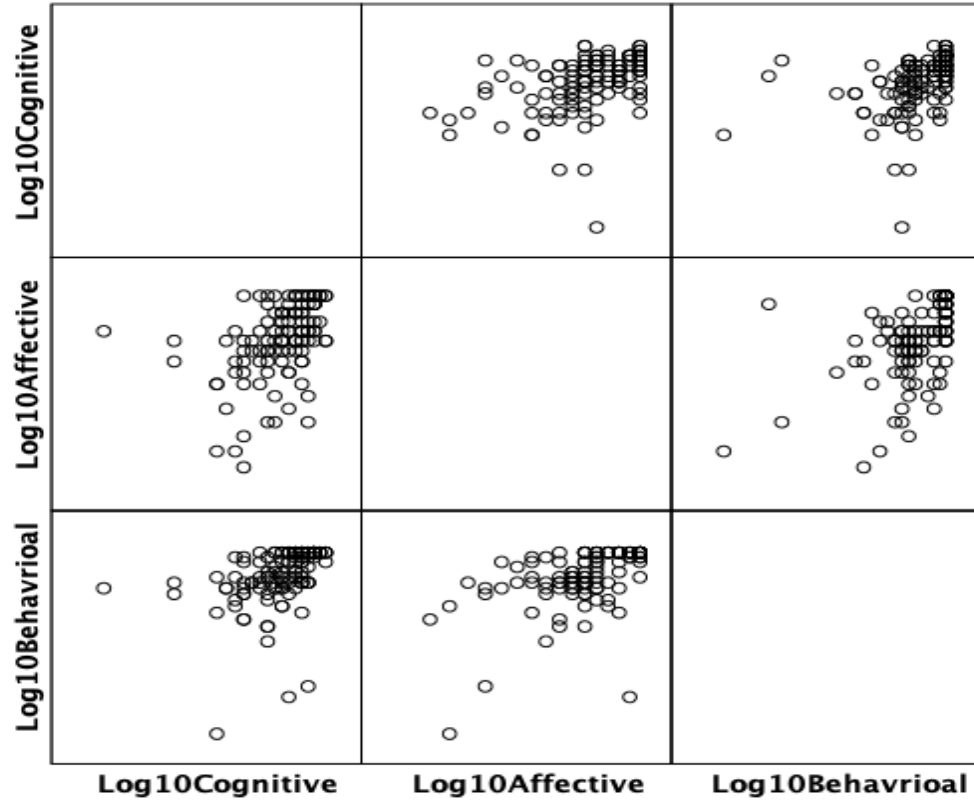
Figure 13. Matrix scatter plots.

Box plots facilitated an examination of the assumption of univariate outliers. Univariate outliers were identified within every domain of the MATIES. The researcher examined the data for entry or measurement errors. The univariate outliers are identified in the box plots (see Figures 14, 15, and 16).

Figure 14. Cognitive box plot
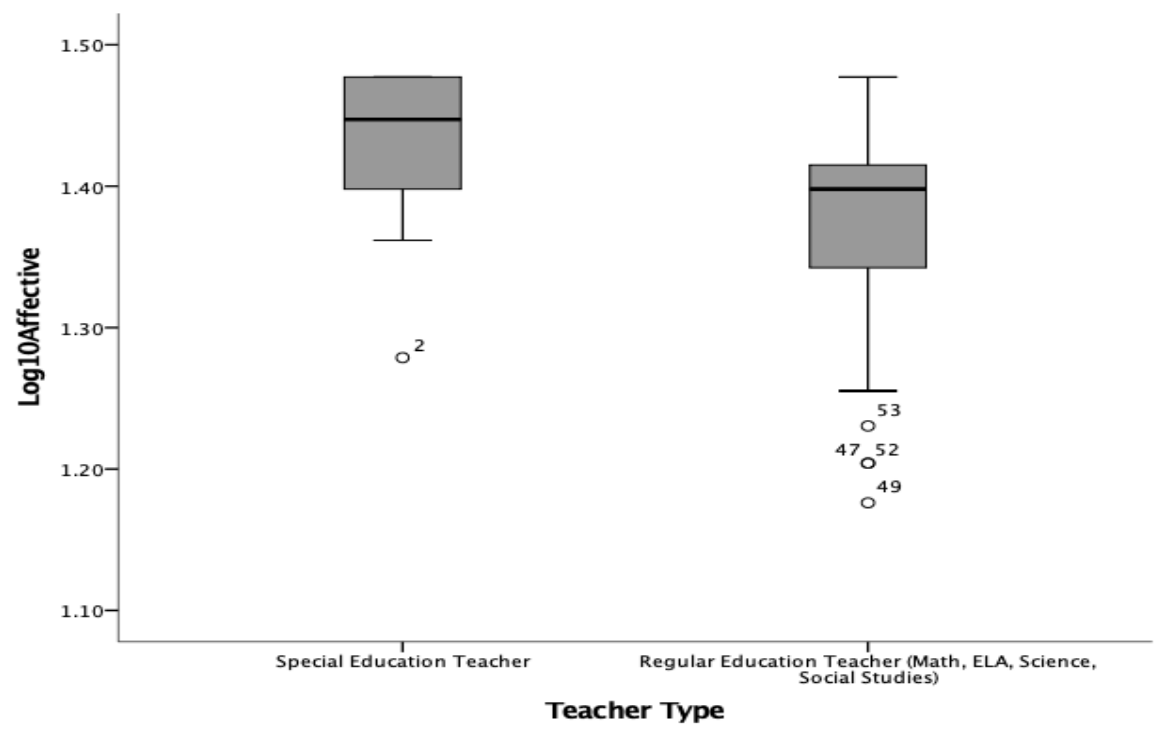
Figure 15. Affective box plot

Figure 16. Behavioral box plot

Warner (2013) recommended the Mahalanobis distance test for multivariate outliers. Four multivariate outliers presented in the sample. The researcher examined the data for entry or measurement errors. The outliers were identified as items 1, 46, 47, and 48. SPSS case selection provided the mechanism for suppressing these outliers. Suppressing outliers does not remove them from the sample but does prevent the extreme data points from affecting the analysis (Aguinis, Gottfredson, & Joo, 2013).

Assumption of Multicollinearity

The assumption of multicollinearity ensures that there is no correlation between dependent variables (Warner, 2013) because, if multicollinearity exists, independent variables are related and the results would be unreliable. A Pearson Product Moment correlation test

revealed a moderate correlation which is preferable when using a MANOVA because it demonstrates that dependent variables are sufficiently related to be evaluated by one test. There was no evidence of multicollinearity as assessed by the Pearson Product Moment correlation ($r <$ 0.8) (see Table 9). All dependent variables were slightly to moderately correlated. This assumption was met.

Table 9

Pearson Correlation

	Log_{10}Cognitive	Log_{10}Affective	Log_{10}Behavioral
Log_{10}Cognitive		.411	.386
Log_{10}Affective	.411		.523
Log_{10}Behavioral	.386	.523	

Assumption of Homogeneity of Variance-Covariance

The Box's Test of Equality of Covariance Matrixes (Warner, 2013) addressed the assumption of homogeneity of variance-covariance: $M = 19.242$, $F (6,57203.265) = 3.105$, $p = 0.005$. This means that the assumption of homogeneity of variance-covariance matrixes was met.

The researcher assessed the homogeneity of variance by utilizing Levene's Test of Equality of Error Variance on the affective subscales, $p < 0.05$, but not the cognitive and behavioral subscale (see Table 10). Therefore, the assumption of homogeneity of variance is not met. Continuing analysis with a lower level of significance ($\alpha = .10$ or $\alpha = .20$) was necessary to address this as well as completing different post-hoc tests with follow-up analysis of variance tests.

Table 10

Levene's Test of Equality of Error Variance

Domain	Significance
Cognitive	0.073
Affective	0.050
Behavioral	0.216

Results

A MANOVA provided for the researcher an evaluation of whether there is a difference in two or more groups within a data set. This provided an understanding of whether there is an overall difference between the perspectives of inclusion special education and general education teachers. While the follow-up ANOVAs allowed for the evaluation of each null hypothesis. An examination of each hypothesis resulted in rejection or failure to reject. Because the ANOVAs do not have any specific assumptions that differ from the MANOVA, exploration of additional assumptions was not necessary in this analysis.

Null Hypothesis One

Null hypothesis one indicated there were no differences in the overall perspectives of the subgroups. A MANOVA determined there was a significant difference between teacher type on the combined dependent variables, $F(3,108) = 6.947$, $p < .000$; Wilks' $\Delta = .838$; partial $\eta_2 = .162$. This indicated that special and general education teachers differ in their overall perspectives of inclusive education resulting in rejection of this null. However, the MANOVA does not provide detailed information about each dependent variable and their level of statistical significance.

Borg (2007) stated "If a significant MANOVA is obtained, then do an ANOVA on each dependent variable to determined which of the variables is statistically significant" (p. 322).

Table 11

MANOVA

	Value	F	Hypothesis df	Error df	Significance
Pillai's Trace	.162	6.947	3.000	108	0.000
Wilk's Lambda	.838	6.947	3.000	108	0.000
Hotelling's Trace	1.93	6.947	3.000	108	0.000
Roy's Largest Root	.193	6.947	3.000	108	0.000

Null Hypothesis Two

Null hypothesis two indicated there were no significant differences between subgroups on the affective subscale. With the homogeneity of variance assumption for this subscale met (p = .050), an ANOVA revealed that the results for the affective subscale of the MATIES demonstrated significant differences related to teacher type, $F(1,108) = 21.100 \ p < .00$) resulting in a rejection of this null hypothesis.

Table 12

ANOVA- Affective

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	.071	1	.071	21.110	0.000
Within Groups	.371	108	.003		

Null Hypothesis Three

Null hypothesis three indicated there were no significant differences between subgroups on the cognitive subscale. With the homogeneity of variance assumption for this subscale met (p = .073), an ANOVA revealed that the results for the cognitive subscale of the MATIES demonstrated there were no significant differences related to teacher type, $F(1,108) = 4.767$, $p >$ .05) resulting in the failure to rejected this null hypothesis.

Table 13

ANOVA- Cognitive

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	.020	1	.020	4.767	0.031
Within Groups	.453	108	.004		

Null Hypothesis Four

Null hypothesis four indicated there were no significant differences between subgroups on the behavioral subscale. With the homogeneity of variance assumption for this subscale met (p = .216) an ANOVA revealed that the results for the behavioral subscale of the MATIES demonstrated significant differences related to teacher type, $F(1,108) = 6.690$, $p < .05$) resulting in the rejection of this null hypothesis.

Table 14

ANOVA- Behavioral

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	.019	1	.019	6.690	0.011
Within Groups	.312	108	.003		

Post-Hoc Tests

Post-hoc tests are commonly utilized to determine specified differences between groups (Warner, 2013). For this analysis, ANOVAs for each subscale provided the information regarding statistical differences between subscales. In order to reinforce the slight difference regardless of teacher type, a *t*-test provided the necessary confidence (see Table 15). There is a small difference between each subgroup regardless of teacher type within the sample.

Table 15

T-test of Dependent Variables

Domain	M	SD
Cognitive	1.4665	.06135
Affective	1.4045	.05988
Behavioral	1.5071	.05345

Summary

Throughout this chapter, the researcher provided detailed analysis and statistical results directed toward the research question and null hypotheses. The researcher discussed data error in standard deviation and how these were addressed to continue analysis. The researcher discussed the null hypotheses in depth and failed to reject hypotheses one, three, and four while rejecting hypothesis two. In the next chapter, the researcher will discuss these results and the impact of this study in comparison to the current literature and future research.

CHAPTER FIVE: CONCLUSIONS

Overview

The MANOVA and ANOVA analyses provided generalizable results with regard to using MATIES in distinguisihing perceptions of inclusive and general education teachers in the central region of North Carolina. The use of ANOVA to analyze those differences on each subscale of the MATIES was also presented by the researcher. Descriptive statistics and summaries illustrated a clear understanding of the data. This chapter is a discussion of the research question: In what ways do the perspectives of general education and special education teachers' perspective of inclusive education statistically differ? The findings, their support for or rejection of literature, an examination of the planned behavior theory, correlations, and new contributions to the literature are critical components of formulating a conclusion to this study. However, the study is somewhat limited; therefore, recommendations for future research presented opportunities for continued application of findings.

Discussion

The purpose of the study was to determine differences in general and special educators' perceptions of inclusive education. The study findings underscored significant differences between general and special education teachers that correlates with the current literature. Conversely, the findings differ from the literature in some aspects. The theory of planned behavior is a foundational support to the results of the study. Lastly, the study contributes to the literature specifically regarding significant differences in teacher perceptions.

Summary of Inferential Findings

Null hypothesis one. There was a statistically significant difference between teacher type on the combined dependent variables, $F(3,106) = 6.380$, $p < .000$; Wilks' $\Delta = .838$; partial $\eta_2 =$

.162. This indicated that special and general education teachers' perspectives differ with regard to inclusive education resulting in a rejection of the null hypothesis.

Null hypothesis two. The affective subscale of the MATIES quantified teachers' feelings toward inclusion. This subscale result was significantly different for teacher type, $F(1,108) = 20.667$, $p < .05$). This effect size for this calculation was $\eta_2 = .171$. This indicated that special and general education teachers' feelings do not differ with regard to inclusive education resulting in a failure to reject this null hypothesis. The significant effect size is indicative of a strong relationship between teacher type and their feelings towards inclusion.

Null hypothesis three. The cognitive subscale of the MATIES quantified teachers' thoughts about inclusion. This result was not significantly different with regard to teacher type, $F(1,108) = 3.681$, $p > .05$). This effect size for this calculation was $\eta_2 = .047$. This indicated that special and general education teachers do not differ with regard to their thoughts about inclusive education resulting in a failure to reject this null hypothesis.

Null hypothesis four. The behavioral subscale of the MATIES quantified teacher action with regard to inclusion. This result was significantly different for teacher type, $F(1,108) = 5.633$, $p < .05$). This effect size for this calculation was $\eta_2 = .034$. This indicated that special and general education teachers differ with regard to action in an inclusive education environment resulting in the rejection of this null hypothesis.

Demographic, Professional, and Grade-Band Findings

While these findings were not related to a specific hypothesis, the demographic survey included findings that corresponded to the current literature. For gender, the sample did not present equal representation (13 males and 105 females). There was a significant difference between male and female perspectives with females presenting a more positive attitude toward

inclusive education (Dupoux et al., 2005; Sandhu, 2017). Because of the inequity in gender distribution, it is more appropriate to interpret findings related to female educator perspectives of inclusive education.

Teacher professional experience was another factor supported by the literature as important to producing a positive impact on inclusive education (Chhabra et al., 2010; Dupoux et al, 2005; Moreno et al., 2015; Tiwari et al., 2015; Van Reusen et al., 2001; Yadav et al., 2015); however, this study's findings did not demonstrate a significant difference between means for any of the subscales. The findings for level of teacher education demonstrated that there is a slight difference between means. The mean difference increased as the level of education increased and is consistent with the literature (Avramidis et al., 2000a; Able et al., 2015; Bisol et al., 2014; Dupoux et al, 2005).

Grade-band assignment results indicated there were insignificant differences between school assignment and perceptions of inclusive education (Heiman, 2001; Horricks et al., 2008; Ross-Hill, 2009; Sandhu, 2017). This is different than the current findings of the literature, but this may be because of the lack of studies focusing on these specific school levels and perspectives of inclusive education.

These findings demonstrated that while special and general education teachers differ slightly with regard to perspective on inclusive education, they do not differ in every aspect. While they do not differ in thought about inclusion, they differ with regard to their feelings and actions toward inclusive education. A teacher may "believe that any student can learn in the regular curriculum of the school if the curriculum is adapted to meet their individual needs" (Mahat, 2008, p. #). Positive thoughts about inclusion may not be activated due to a level of discomfort with "including students with a disability in a regular classroom with other students

without a disability" (Mahat, 2008, p. #) ultimately indicating an overall negative feeling towards inclusion. This feeling is often exacerbated by the unwillingness "to adapt the assessment of individual students in order for inclusive education to take place" (Mahat, 2008, p. #). Teachers may agree with the idea of inclusive education but feel unable or unwilling to include students with disabilities by adapting assessments so all students can fully participate in the learning process. This can have an impact on the implementation of inclusive education and, ultimately, the success of students with disabilities included in general education classrooms.

Connections to the Literature

The research question for this study examined potential differences existing between special and general educators' perspectives of inclusion. The data indicated that there existed an overall statistical difference between special and general educators' perspectives of inclusive education. With the theory of planned behavior (Ajzen, 1991) as the primary framework, this study examined the effects of attitude, feelings, subjective norms, or perceived behavioral control on the perspectives of inclusion held by teachers. The results indicated that social norms did not significantly influence the inclusive perspectives of inclusion whereas feelings and perceived behavioral norms did produce a significant influence.

When considering the full inclusion versus inclusion movement, these findings support future research. Full inclusion advocates encourage the inclusion of all students in the general education classroom regardless of their level of disability (Anastasiou et al., 2015; Dorn et al., 1996; Fuchs & Fuchs, 1994, 1995, 1998; Kauffman & Hallahan, 1997). Anastasiou et al. (2015) defined inclusion as the education of students with disabilities in the general education classroom when appropriate with an understanding that other settings may be deemed appropriate based on student need. This definition supports the full continuum of services established by IDEIA

(2004) as students can be placed along a continuum of services with their typical peers ranging from separate schools to the general education classroom. When considering the perspectives of teachers and their support for this continuum, the results indicated that students placed within an inclusive classroom supported by both special education and general education teachers who feel positive about the environment will benefit typical students and those with disabilities.

Researchers must understand the effectiveness of inclusive education in reaching the educational goals for students with disabilities. Full inclusion advocates support a curriculum focused on developing social over academic skills (Fuchs & Fuchs, 1994, 1998). Partial inclusion education advocates focus on the academic progress of students as well as the progress of classrooms as the whole (Fuchs & Fuchs, 1994, 1995, 1998; Zigmond & Baker, 1996). Imaniah and Fitria (2018) asserted, "the key element of inclusion in not individualization but the diversification of educational provision" (p. 2). For special education, the importance of individualized education is essential to student support. To best meet the needs of each student with a disability, it is critical to eliminate standardized approaches.

Even though inclusive education without the continuum of service is illegal, this change seems to be the trend emerging for special education. To redirect and promote better educational practice, researchers must understand how these decisions are affecting the current educational system. The literature described the impact of inclusive education on the areas of social skills and academic skills. Dessermontet, Bless, and Moring (2012) examined the progress of students with intellectual disabilities within the inclusive classroom. They administered academic achievement tests as well as the ABAS-II to a group of 68 students; 34 participating in inclusive classrooms and 34 participating in separate classrooms. Their study found that students in the inclusive classroom demonstrated progress in literacy skills but not in mathematics or adaptive

skills. Another study conducted by Waldron and McLeskey (1998) demonstrated students with a learning disability made greater academic gains when compared to their peers in non-inclusive classrooms. These studies indicated that inclusion may produce positive achievement for students based on student need as well as subject area.

Special education teachers' feelings toward inclusive education was significantly different from their general education counterparts. Throughout the literature, the feelings of these groups of teachers toward inclusive education is more directed at their colleagues. Liasidou and Antoniou (2013) discussed that many general education teachers find their special education counterparts inadequate to implement inclusive education. Lopes et al. (2004) stated, "special education teachers saw inclusion as too difficult for regular education teachers" (p. 412). These controversial feelings can impact the inclusive classroom as educators struggle to work together. The literature also underscored concerns about the lack of collaboration with and support from special education teachers or paraprofessionals and lack of administrative support in terms of collaboration, co-teaching, and professional development (Mackey, 2014). "Teacher collaboration is a powerful tool for the implementation of effective inclusive practices" (Mulholland & O'Connor, 2016, p. 1079). Collaboration can expand instructional options and improve academic outcomes for students with disabilities. By taking the time to nurture collaborative relationships, inclusive environments can be created to meet the needs of more students and aid in providing academic and social growth in the best possible environment for each individual student.

Special and general education teachers' perspectives differed significantly with regard to perceived behavioral control. While the results demonstrated that this area of concern produced a small effect, the discussion of teacher control is a constant throughout the literature. Mackey

(2014) found that teachers' perspectives were influenced by the lack of adequate preparation by pre-service training programs (Cook et al., 1999; Zagona et al., 2017). Avramidis et al. (2000b) noted the lack of pre-service teacher confidence, reported in IEP meetings, because of a lack of contact hours with the IEP process (Chhabra et al., 2010; Moreno et al., 2015; Tiwari et al., 2015; Yadav et al., 2015). Van Reusen et al. (2001) found that "positive attitudes about including and teaching students with disabilities appears to be related to special education training, knowledge and experience" (p. 13). This training is necessary to increase positive perspectives about inclusion as schools try to create inclusive classrooms and environments.

This coincides with teacher self-efficacy as discussed by Fishbein and Ajzen (2014). Individuals who feel that they can successfully complete a task are more likely to do it (Ajzen, 1991). Therefore, teachers who feel more successful about implementing inclusive education are more likely to do so. Because of the training special education programs provide for meeting the needs of students with disabilities, special education teachers should maintain high standards for their own self-efficacy in implementing inclusion. Teachers who demonstrated higher positive perceptions of inclusive education also demonstrated higher self-efficacy expectations in supporting students with disabilities (MacFarlane & Woolfson, 2013; Monsen et al., 2014). Conderman and Johnston-Rodriguez (2009) described that general education teachers felt less prepared to implement inclusive education and support collaboration whereas special education teachers felt more prepared to meet the individual needs of students (Shippen et al., 2005). Providing pre-service and in-service training to develop personalized learning skills could be an influential promotion to inclusive education.

The results of this study aligned with literature in supporting the importance of teacher efficacy, preparation, and collaboration between co-teachers. While the current debate about the

effectiveness of inclusion continues, the literature on student achievement is still producing mixed results.

Alignment with Theory of Planned Behavior

The study results indicated that teachers' perspectives significantly differed on overall perspectives of inclusive education. The theory of planned behavior (TPB) (Ajzen, 1991) provided a framework for developing a deeper understanding of these perspectives. In the TPB model, attitudes/feelings toward behavior, subjective norms, and perceived behavioral control influenced one's behavior.

The results from the affective subscale of the MATIES (Mahat, 2008) indicated that general education teachers' perspectives differed from those of special education teachers. Special education teachers' feelings were significantly more positive toward inclusion than that of their general education counterparts. This result is consistent with the literature (Bruster, 2014; Carter & Hughes, 2006; Cook et al., 1999; Zagona et al., 2017). The results indicated that this was the most significant effect in the study. This indicated that teachers who feel positive about inclusive education are generally more supportive of inclusion and more willing to fully participate in making inclusion successful. This seems to be the case especially when inclusion advances differentiated instruction to different strategies and assignments for students with disabilities to access the general education curriculum.

Social norms established by school administrators, mentors, and experienced teachers influenced the actions of subordinates with regard to inclusive education (MacFarlane & Woolfson, 2012). This affects what teachers think about inclusion. A special education teacher who does not personally support full inclusion and has no classroom, reported to administrators throughout the county, and school who support full inclusion would find it necessary to work

from the restraints of full inclusion to meet some of the needs of their students. On the contrary, in an environment that supports the full continuum of services, special education teachers work in a variety of settings to meet the needs of students. The results of this study did not support this tenet of TPB considering special education and general education teachers did not significantly differ on their thoughts about inclusive education as measured by the cognitive subscale of the MATIES (Mahat, 2008). This is consistent with the literature in that special education and general education teachers do not differ on their perspectives of inclusive education (Wiggins, 2012). The MANOVA results indicated that a difference existed in teachers' attitudes toward inclusion; therefore, it is important that all TPB assertions be examined to fully comprehend the impact of this theory on teachers' perspectives of inclusive education.

Perceived control is the confidence in one's ability to complete a certain behavior (Able et al., 2015; Armitage & Christian, 2003; Dupoux et al., 2005). The results of the study indicated that special education teachers were statistically more positive than their general education counterparts. Special education teachers are more likely to plan for alternative instruction, focus on the inclusion of students with disabilities and support the learning of all students. The effect size for this statistic was small ($\eta_2 = .034$), but this difference supported the literature in that teachers felt inadequate to meet the needs of students with disabilities (Cook et al. 1999; Liasidou & Antoniou, 2013) and special education teachers felt their general education counterparts do not possess the knowledge necessary to support inclusive education (Able et al., 2015; Chhabra et al., 2010). This also indicated the importance of pre-service training and in-service professional development supported by the literature (Avramidis et al., 2000a; Moreno et al., 2015; Tiwari et al., 2015; Yadav et al., 2015). Teachers should be granted the support

necessary to feel prepared to meet the needs of students with disabilities who may appear in their classroom. The lack of adequate teacher preparation and professional development only exacerbates the problems of full inclusion (Anastasiou et al., 2015; Dorn et al., 1996; Fuchs & Fuchs, 1994, 1995, 1998; Kauffman & Hallahan, 1997). When considering the range of student needs, the skills necessary for both special education and general education teachers is stark. To understand that the full inclusion movement encourages teaching the same content synchronously to advanced students and those who may be nonverbal needing assistance with basic life needs, it is understandable why teachers may feel unprepared and limited as to what the general education classroom can accommodate (Fuchs & Fuchs, 1995; Kauffman & Badar, 2013; Kavale, 2002; Zigmond et al, 2009).

Overall, the theory of planned development supported the rejection of Hypothesis One, Hypothesis Two, and Hypothesis Four. This demonstrated that continual study of the varying aspects of attitudes and behavior would be beneficial. This theory does not explain the failure to reject null Hypothesis Three. Because the MATIES (Mahat, 2008) is a relatively new survey, more research regarding the intersections of the theory of planned behavior and inclusive education is critical.

Contributions to the Literature

The current study contributes to the literature in a few ways. First, it provides a brief analysis of special education teachers' perspectives toward inclusive education. The results suggested that special education teachers' perspectives differ from general education teachers' perspectives regarding inclusive education. The theory of planned development provided a framework for why attitudes exist toward inclusive education and an opportunity for researchers to fully investigate the attitudes driving these differences. The TPB demonstrated that while

special and general education teachers differ on their feelings toward inclusive education and their response to inclusive education, their thoughts toward inclusive education are similar. This provided insight as to why special education teachers feel that inclusion is their responsibility (Zigmond et al., 2009).

Utilizing the TPB (Ajzen, 1991) in conjunction with the MATIES (Mahat, 2008), posited a different perspectives analysis than in previous studies. The TPB is considered "the dominant model of attitude-behavior relations" (Armitage & Christian, 2003, p. 192); however, it has not been employed in previous research. Previous research on perspectives of inclusive education utilized the Opinions Relative to Integration of Students with Disabilities (ORI) questionnaire (Antonak & Larrivee, 1995) or its older iteration: the Opinions Relative to Mainstreaming Scale (ORM) (Larrivee & Cook, 1979). The MATIES was more appropriate for this study because it was based on the TPB. It also presented the concept of inclusive education using the modern vernacular of the educational system.

This study proposed some important questions as to the difference between special and general education teachers' feelings toward inclusion. However, a simple difference is not sufficient. It is important for educational professionals to understand what determines successful inclusive education. The current research is unclear on whether the impact of inclusive education on student academic achievement is positive or negative (Dessemontet et al., 2012; Imaniah & Fitria, 2018; Waldron & McLeskey, 1998); however, the numbers of students participating in an inclusive environment continues to expand (39th Annual Report to Congress on Special Education, 2017). It is important for educators to realize the catalysts for current policy in their school districts.

Implications

The study findings provided a groundwork for continual research in the perceptions of special education teachers about inclusive education. It provides in-depth insight about special education teachers' attitudes toward inclusive education. The results demonstrated that special education teachers feel and behave more positively toward the inclusion of students with disabilities in the general education classroom than do general education teachers. Special education teachers may be more willing than their general education counterparts to create alternative assignments and design specialized instruction necessary for special education. This study, however, does not provide an in-depth analysis as to the cause. Employing qualitative or mixed methodologies could provide greater insight.

This study supported employing the TPB (Ajzen, 1991) to understand teacher perspectives of inclusion. This theory provided a deeper analysis of perspectives. Continuing to examine the TPB and the relationship between inclusive education could address the methods by which attitudes are developed and, subsequently, how those attitudes facilitate inclusive education. The distribution was negatively skewed; therefore, it is important to understand the potential causes such as similarities between groups with regard to responses to the assessment.

This study involved middle school teachers who were not included in previous research. This addition provided for unique insight into the perspectives of inclusive education during transition years between elementary school high (Heiman, 2001; Horricks et al., 2008; Ross-Hill, 2009; Sandhu, 2017).

Limitations

Several limitations were considered. The researcher ensured study validity. The sample, a convenience cluster sample, was composed of general education and special education teachers

located in eight school districts in North Carolina. The limited sample scope impacted

generalization of results even though the researcher pursued teacher participation from additional

North Carolina school districts and those from other states.

Negative distribution skewness was another limitation impacting the study. In order to

complete analysis, Log_{10} transformation was necessary to reduce Type 1 error. Transformations

standardize raw data; therefore, validity could be influenced as a result of this method.

Another limitation was the response rate of special education teachers. Of the 120 total

participants, 45 self-identified as special education teachers. The remaining 75 self-identified as

general education teachers. While comparison is possible, a greater response rate from special

education teachers creating better balance between groups would support the generalizability of

findings for special education teachers' perspectives of inclusion. Group balance was also a

factor for gender. The number of female participants comprised 87% of the sample. This

indicated that the overall significance of the study is more related to female educators'

perspectives than male educators' perspectives. This also limited generalizability.

Due to the quantitative methodology employed in this study, the type of information

potentially gained from the participants left many important questions regarding inclusive

education unanswered. The survey did not include type and severity of disability; therefore, the

study did not account for this variable. Smith (2000) stated that the severity of a student's

disability influenced teacher perceptions of inclusive education. Severity of disabilities, if

included as a variable, could have affected teacher perspectives of inclusion (Chhabra et al.,

2010; Dorn et al., 1996; Kirby, 2017; MacFarlane & Woolfson, 2013).

 Co-teacher relationship was not included in this study. Mulholland and O'Connor

(2016) stated that "Teacher collaboration is a powerful tool for the implementation of effective

inclusive practices" (p. 1079). The development of a collaborative relationship between general education teachers and special education teachers is required for inclusive education to be successful (Blecker & Boakes, 2010). Analysis of these relationships, along with teacher perspectives of inclusive education, could be beneficial to further special education research.

Including teachers' perceived efficacy in inclusion would have strengthened this study. Dupoux et al. (2005) indicated that teacher effectiveness was an important factor influencing the developing perspective of inclusive education. Ross-Hill (2009) stated that teachers have expressed fears about their "inability to accommodate students with special needs in their classrooms" (p.197). Addressing teacher perspectives of inclusion and teacher-efficacy simultaneously could help to advance the TPB and better understand teachers' thoughts about how their pedagogy catalyzes the implementation of policy.

Designing a mixed methods study would allow the researcher to discuss perceptions with participants allowing for rigorous qualitative methods to facilitate a more intimate comprehension of teacher perspective. A more intimate comprehension would lead to more in-depth conclusions. Mixed methods could facilitate the connection of surveys to classroom observations or involvement of small group phenomenological research (Gall et al., 2007). The popularity of mixed methods research is increasing in special education to address these concerns (Nwoko, Crowe, Malau-Aduli, & Malau-Aduli, 2019; Weiss, Markowetz, & Kiel, 2018; Young, McNamara, & Coughlan, 2017; Zagona et al., 2017).

Recommendations for Future Research

There are areas of concerns future research on inclusive education and teacher perspectives could address. Since teachers' instruction in the inclusive setting is often impacted by the type of disability, applied or mixed study research incorporating those challenging

behaviors (i.e., autism, specific learning disability, emotional disturbance) in an inclusive setting would aid understanding of inclusive education implementation and the effectiveness of the TPB in explaining the methods and reasons for teacher modification of instructional practices for students with disabilities. A study utilizing the MATIES survey and classroom observation documenting inclusive practices would potentially determine how teacher perspectives of their own behavior is executed when implementing inclusive education (Chhabra et al., 2010; Dorn et al., 1996; Kirby, 2017; MacFarlane & Woolfson, 2013).

A larger, more ethnically and geographically diverse sample size would provide for greater generalizability. The recruitment of special education teachers was difficult. Involving more special education teachers and alternate ways to recruit them could increase sample sizes providing better insight into inclusive education. Greater male participation should also be explored. Changes to the sample population would facilitate the generalizability of findings for areas outside of North Carolina, rural and urban. Generalizability of a study is critical (Gall et al., 2007; Warner, 2013). By expanding the sample to include more special education and male teachers, this study's findings would better support the research regarding perspectives of special education teachers. This would determine greater if these differences between males and females as well as general education versus special education impact perspectives of inclusion as seen in the literature (Dupoux et al, 2005).

Because of the collaborative nature of inclusive education, examination of self- and co-teacher efficacy is pertinent to a better understanding of the influence the co-teacher relationship exerts on education. It is also important to examine how this relationship impacts the practice of inclusion. Measurements of teacher self-efficiency and perspectives of inclusive education would provide the necessary data (Able et al., 2015; Zagona et al., 2017). Exploring the

perceived self-efficiency of co-teachers in an inclusive classroom could also be beneficial (Da Fonte & Barton-Arwood, 2017).

The impact of inclusive education should be examined in conjunction with teacher perspectives. By virtue of an added student data analysis, researchers could examine the direct correlation between teachers' overall perspectives as well as the different aspects of attitude outlined in the TPB. This evaluation of teacher perspectives in conjunction with the impact of inclusive education could illuminate the effectiveness of an inclusive environment for students with disabilities (Dessermontet et al., 2012; Waldron & McLeskey, 1998).

Summary

The purpose of this study was to determine the existence of a significant difference between special and general education teachers' perspectives of inclusive education. The literature indicated that both groups harbor both positive and negative opinions; however, the volume of research focusing on special education teachers and their perspectives was limited to dissertations completed within the last five years (Bruster, 2014; Wiggins, 2012). Teachers directly influence successful program implementation such as inclusive education (Cameron & Cook, 2013; Smith, 2000). Understanding teachers' attitudes is important to ensuring that teachers are developing their attitudes through positive experiences.

Eight school districts throughout North Carolina permitted this study to be conducted in their district. These districts are geographically representative of the state with two districts located in the mountain region, three in the piedmont region, and three in the coastal region. Principals distributed a recruitment email containing a survey link that could be completed online and anonymously.

All participants completed the MATIES survey through SurveyMonkey, an online survey platform. Mahat (2008) designed the MATIES to allow examination of the multiple dimensions of attitudes toward inclusive education based on the TPB. The MATIES included three subscales: cognitive, affective, and behavioral. Each subscale was composed of six items with an ordinal scale for the attitude of interest (Mahat, 2008). The cognitive subscale measured teachers' thoughts about inclusion. The affective subscale measured teachers' feelings toward inclusion. The behavioral subscale measured teachers' actions in response to inclusion.

The MANOVA facilitated assessment of the differences between special education and general education teachers' overall perspectives of inclusive education. The findings suggested there were significant differences in perspectives of inclusion when comparing the two teacher groups; however, the MANOVA did not specify the areas of attitude that impacted these perspectives.

The second tier of the analysis involved an ANOVA where each subscale facilitated the assessment of the difference between perspectives on inclusion. Differences between special education and general education teachers' perspectives on inclusion were not significant with regard to the cognitive scale suggesting that teachers' thoughts about inclusion do not differ significantly. Differences between special education and general education teachers' perspectives on inclusion were significant for the affective scale and the behavioral scale suggesting that special education teachers feel more positive about inclusion that their general education counterparts. They also feel better prepared to behaviorally respond to the requirements of inclusion. These findings support the literature in that general education teachers do not feel prepared or capable of meeting the diverse needs of students with disabilities

in an inclusive classroom (Able et al., 2015; Chhabbra et al., 2010; Cook et al., 2007; Ross-Hill, 2009).

The mean differences between groups facilitated the demographic analysis. The results indicated that female perspectives of inclusion are slightly more positive than their male colleagues. As teacher educational background increased, positive perspectives also increased. Years of teaching experience did not influence a significant mean difference for any of the subscales. Lastly, there existed a slight difference with regard to the affective scale between elementary school and middle school. The findings indicated that demographics slightly influence perspectives on inclusion, but the effect was not as significant as described in the literature.

With any research there are threats to validity; however, the researcher enacted necessary precautions to mitigate bias and ensure validity. The limitations of the study included the number of participants, lack of geographic and ethnic diversity, the ratio of males to females, and the ratio of special education teachers to general education teachers. There were many conclusions and recommendations for future research with regard to expanding the understanding of teachers' attitudes toward inclusion.

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APPENDIX A: Email Granting Permission to Use the MATIES

13-25.2018   Mail - bsca.licutt@liberty.edu

RE: MATIES Request

Marian Mahat <marian.mahat@unimelb.edu.au>

Mon 7/16/2018 4:25 AM

Inbox

To:Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>;

Ø 2 attachments (331 KB)

Mahat 2008.pdf; MATIES - Questionnaire and Scoring.pdf;

Dear Bryanan,

Thank you for your email. And my apologies for the late response.

Please find attached a copy of the scale and journal paper on its development (information about its psychometric properties discussed within).

There are no specific stipulation regarding use of the tool. All I ask is that it is appropriately referenced in any publication arising from its use.

Mahat, M. (2008). The development of a psychometrically-sound instrument to measure teachers' multidimensional attitudes toward inclusive education. International Journal of Special Education, 23(1), 82-92

Best wishes for your research project. I look forward to receive a copy of the results.

Best regards,
Marian

Dr Marian Mahat | Senior Research Fellow / Research Manager

Research Manager, Innovative Learning Environments and Teacher Change Project (ILETC)
Senior Research Fellow, Learning Environments Applied Research Network (LEaRN)
Honorary Fellow, Melbourne Graduate School of Education

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ⓘⒹ	http://orcid.org/0000-0001-6401-7432	(in)	LinkedIn
(scpus)	52884314600	8ᵍ	Google Scholar
◎	K-9422-2016	🐦	@MarianMahat

New publications

Byers, T., **Mahat, M.**, Liu, K. & Knock, A. & Imms, W. (2018). Systematic Review of the Effects of Learning Environments on Student Learning Outcomes. Melbourne: University of Melbourne, LEaRN. Retrieved from: http://www.iletc.com.au/publications/reports

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APPENDIX B: Demographic Questionnaire

Demographic Questionnaire

PART 1

1. Please Indicate which category you place yourself.
   a. Special Education Teacher
   b. Regular Education Teacher (Math, ELA, Science, Social Studies)
   c. Other

2. What school district do you currently work for?
   a. Chatham County Schools
   b. Guildford County Schools
   c. Randolph County Schools
   d. Other

PART 2

1. What is your gender?
   a. Male
   b. Female

2. How many years have you been teaching?
   a. 0-5 years
   b. 5-10 years
   c. 10-20 years
   d. 20+ years

3. What is the highest level of school you have completed or the highest degree you have received?
   a. Associate Degree
   b. Bachelor Degree
   c. Master Degree
   d. Graduate Degree

4. What level of education do you teach?
   a. Elementary
   b. Middle School
   c. Secondary
   d. K-8 School

APPENDIX C: IRB Approval from Alleghany County Schools

[External] Re: Request to Conduct Research

Chad Beasley <chad.beasley@alleghany.k12.nc.us>
Wed 10/30/2019 8:08 AM

To: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>
Cc: jhefner@alexander.k12.nc.us <jhefner@alexander.k12.nc.us>; freeman.michael@anson.k12.nc.us <freeman.michael@anson.k12.nc.us>; phyllis.yates@ashe.k12.nc.us <phyllis.yates@ashe.k12.nc.us>; bryantaylor@averyschools.net <bryantaylor@averyschools.net>

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Yes, I approve.

On Wed, Oct 30, 2019 at 6:32 AM Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu> wrote:
To Whom it May Concern,

I am emailing you in reference to Board Policy: 5230. I am interested in completing data collection for my dissertation study "A Comparison of Regular and Special Education Teacher Perspectives of Inclusive Education" within your school district.

I am attaching the following documents for you to review:
1- IRB Approval Letter from Liberty University
2- Title Page and Abstract
3- Demographic Survey
4- Multidimensional Attitudes Towards Inclusive Education Scale.
5- Recruitment Email

I would appreciate your review on my student and your permission to gather data within your school system.

Thank You for your time and response,
Bryanan Callicutt

--
Chad Beasley
Superintendent
Alleghany County Schools
336-372-4345

APPENDIX D: IRB Approval from Alexander County Schools

[External] approval

Robyn Helton <rhelton@alexander.k12.nc.us>
Sun 11/3/2019 5:25 PM
To: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Good Evening,
My name is Robyn Helton, I am the Executive Director of Exceptional Children in Alexander County, NC. Our Superintendent and Associate Superintendent have approved your request to survey our teachers. I will let the administrators know to expect a survey. If you have more questions please feel to contact me.
Will you be seeking to survey ALL of our teachers?
Thank you,
--
Robyn Helton, Ed.D.
Executive Director of Exceptional Children
And Federal Programs
Alexander County Schools

Representatives of Alexander County Schools communicate via this domain. Consequently, any communication via this domain (whether by a school system employee or the general public) may be subject to monitoring and disclosure to third parties.

APPENDIX E: IRB Approval from Brunswick County Schools

BRUNSWICK COUNTY SCHOOLS

35 Referendum Drive   Bolivia, North Carolina 28422   Phone: 910-253-2900   Fax: 910-253-2983

October 4, 2019
Bryanan Callicutt
Doctoral Candidate
Liberty University

Ms. Callicutt,

Thank you for your application seeking approval to conduct research in Brunswick County Schools. I wish to advise that your application has been approved. This approval means that you can approach Principals and/or staff members of the schools in Brunswick County nominated in your application and invite them to participate in your research project. In conjunction with this approval letter, we suggest the following guidelines be adhered to:

- You need to obtain consent from the relevant Principals before your research project can commence.
- Principals have the right to decline participation if they consider that the research will cause undue disruption to educational programs in their schools.
- Principals have the right to monitor any research activities conducted in their facilities and can withdraw their support at any time.
- We ask that any part of the study involving students, staff members, and/or parents be conducted between September 2019 and April 2020.

At the conclusion of your study, we ask that you provide a summary of your research results and any published paper resulting from this study to this District Office and to participating Principals.

Please note that this letter constitutes approval to invite Principals to participate in the research project as outlined in your research application. This approval does not imply official departmental endorsement of any aspect of a research project or support for the general and /or commercial use of an intervention or curriculum program, software program or other enterprise being developed or evaluated as part of your research.

A Community of Learners

APPENDIX F: IRB Approval from Chatham County Schools

Administration

Derrick D. Jordan, Ed.D.
Superintendent

Janice A. Frazier
Assistant Superintendent

Amanda J. Hartness, Ed.D.
Assistant Superintendent

Chris D. Blice
Chief Operations Officer

Keith A. Medlin
Chief Information/Technology Officer

Tony M. Messer
Chief Finance Officer

CHATHAM
COUNTY SCHOOLS

Board of Education

Gary Leonard
Chair

Jane Allen Wilson
Vice-Chair

David Hamm

Melissa Hlavac

Del Turner

October 3, 2019

Dear Ms. Callicutt,

Our office has approved your doctoral research study of "A Comparison of Perspectives of Special and Regular Education teachers on Inclusive Education."

If at any point, Chatham County Schools determines the project or its activities are obstructing our mission of teaching and learning, we will be given the flexibility to withdraw from the research study.

Please share any specific findings with my office at the conclusion of your research.

We wish you the best of luck in your research endeavors and thank you for thinking of Chatham County Schools.
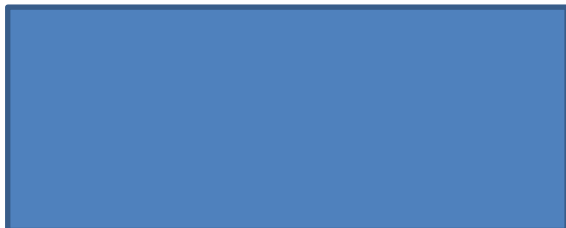
APPENDIX G: IRB Approval from Currituck County Schools

[External] Re: Request to Conduct Research

Mark Stefanik <mstefanik@currituck.k12.nc.us>
Fri 11/22/2019 4:59 PM
To: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Ms. Callicutt,

This email serves as an official letter of consent for you to conduct your research in the Currituck County
School District. If you are still in need of participants for your study, please contact me when you are
prepared to begin your research. Thank you for considering us!

Mark

On Thu, Oct 31, 2019 at 9:28 AM Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu> wrote:
  To Whom it May Concern,

  I am emailing you in reference to Board Policy: 5230. I am interested in completing data
  collection for my dissertation study "A Comparison of Regular and Special Education Teacher
  Perspectives of Inclusive Education" within your school district.

  I am attaching the following documents for you to review:
  1- IRB Approval Letter from Liberty University
  2- Title Page and Abstract
  3- Demographic Survey
  4- Multidimensional Attitudes Towards Inclusive Education Scale.
  5- Recruitment Email

  I would appreciate your review on my study and your permission to gather data within your
  school system.

  Thank You for your time and response,
  Bryanan Callicut

--
Mark J. Stefanik
Superintendent
Currituck County School District
252-232-2223

APPENDIX H: IRB Approval from Jackson County Schools

Re: [External] Research Request

Kim Elliott <kelliott@jcpsmail.org>
Thu 10/3/2019 7:35 PM
To: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>

I grant approval for Jackson County public school teachers to participate in in this study if they so choose.

Thank you. Dr. Kimberly Elliott
Get Outlook for iOS

From: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>
Sent: Thursday, October 3, 2019 7:19:36 PM
To: Kim Elliott <kelliott@jcpsmail.org>
Subject: Re: [External] Research Request

Thank you. Just want to remind you that a email clearly stating approval has to be received or a letter of approval to be submitted to the IRB review board.

From: Kim Elliott <kelliott@jcpsmail.org>
Sent: Monday, September 23, 2019 2:16 PM
To: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>
Subject: Re: [External] Research Request

I will be in touch once I review how many teachers will be affected.

Get Outlook for iOS

From: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>
Sent: Monday, September 23, 2019 1:43:55 PM
To: Kim Elliott <kelliott@jcpsmail.org>
Subject: Re: [External] Research Request

I'm sorry that was a typo. I meant to let me know your review of my study.
If you are willing to have me conduct my research in JCPS, I will need a response stating that you allow me to complete the study within JCPS with your signature and office.

Thank You
Bryanan

From: Kim Elliott <kelliott@jcpsmail.org>
Sent: Monday, September 23, 2019 1:30 PM
To: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>
Subject: Re: [External] Research Request

I am a bit confused by your last paragraph about your student. Please clarify.
The policy to which you refer involves research for the good of JCPS.

Thank you.
Get Outlook for iOS

APPENDIX I: IRB Approval from Martin County Schools

Re: [External] Re: Research Request

Chris Mansfield <cmansfield@martin.k12.nc.us>
Fri 10/4/2019 9:38 AM
To: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>

Good morning, Ms. Callicutt,

After a review by myself and my Director of Exceptional Children, you are authorized to begin collecting data for you research study
in Martin County. Good luck. We would like a copy of your findings at the completion of your work.

Thank you. Please contact me if you have any further questions

On Thu, Oct 3, 2019 at 7:20 PM Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu> wrote:

Dr. Mansfield,

I just want to remind you that a email clearly stating approval has to be received or a letter of approval to be submitted to the IRB review board.

Thank You
Bryanan Callicutt

From: Chris Mansfield <cmansfield@martin.k12.nc.us>
Sent: Monday, September 23, 2019 1:17 PM
To: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>
Subject: [External] Re: Research Request

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Bryanan,

It looks good to me but I'd like to have my EC Director review it prior to sending you the approval letter.
You should hear back from me within a few days.

Thanks

On Mon, Sep 23, 2019 at 12:29 PM Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu> wrote:

Dr. Mansfield,

I am emailing you in reference to Board Policy: 5230. I am interested in completing data collection for my dissertation study "A Comparison of Regular and Special Education Teacher Perspectives of Inclusive Education" within the Martin County School District.

I am attaching the following documents for you to review:
1- IRB Approval Letter from Liberty University
2- Title Page and Abstract

APPENDIX J: IRB Approval from Montgomery County Schools

[External] Survey

Dee Dee Terry <deedee.terry@montgomery.k12.nc.us>
Fri 10/11/2019 8:35 AM

To: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>
Cc: Chuck Dulin <chuck.dulin@montgomery.k12.nc.us>

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Good morning Ms. Callicut,
Our Superintendent emailed us regarding your research for Liberty University's IRB Board. Dr. Dulin, EC Director, and I will be assisting you with this information. Dr. Dulin will be out of the opffice until 10/21/2019. Upon his return, we will get you the information that you need. If you have any questions please feel free to email me or call me. Thank you!

Dee Dee Terry
Assistant EC Director
Montgomery County Schools
Office: 910-576-6511 Ext. 239
Cell: 704-438-0749
Fax: 910-576-2044

APPENDIX K: IRB Approval from Mount Airy City Schools

[External] Re: Research Request

Morrison, Kim <kmorrison@mtairy.k12.nc.us>
Tue 9/24/2019 1:17 PM
To: Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu>

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

I will be glad to give my approval for you to conduct research in our district.

Kim

On Mon, Sep 23, 2019 at 12:42 PM Callicutt, Bryanan Stefanie <bscallicutt@liberty.edu> wrote:
> Dr. Morrison,
>
> I am emailing you in reference to Board Policy: 5230. I am interested in completing data collection for my dissertation study "A Comparison of Regular and Special Education Teacher Perspectives of Inclusive Education" within the Mount Airy City School District.
>
> I am attaching the following documents for you to review:
> 1- IRB Approval Letter from Liberty University
> 2- Title Page and Abstract
> 3- Demographic Survey
> 4- Multidimensional Attitudes Towards Inclusive Education Scale.
>
> I would appreciate your review on my student and your permission to gather data within your school system.
>
> Thank You for your time and response,
> Bryanan Callicutt

--

Kim Morrison, PhD |
Superintendent
Mount Airy City Schools | PO Drawer 710 |
351 Riverside Drive
Mount Airy, NC 27030
Office: 336-786-8355
www.mtairy.k12.nc.us
@MACSchools on
Facebook
 and Twitter
@kkimor on Twitter

APPENDIX L: IRB Approval from Liberty University

LIBERTY UNIVERSITY
INSTITUTIONAL REVIEW BOARD

September 18, 2019

Bryanan Callicutt
IRB **Conditional Approval** 3923.091819: A Comparison of Perspectives of Special and Regular
Education Teachers on Inclusive Education

Dear Bryanan Callicutt,

We are pleased to inform you that your study has been **conditionally** approved by the Liberty
University IRB. Conditional approval means that your complete approval is pending our receipt
of certain items, which are listed below:

-Documented approval from each research site you are enrolling in your study. Acceptable forms
of documentation include a letter on official letterhead or a time-and-date stamped email from a
person with the authority to grant permission.

Please keep in mind that you are not permitted to begin recruiting participants or collecting data
until you have submitted the above item(s) and have been granted complete approval by the
Liberty University Institutional Review Board.

Thank you for your cooperation with the IRB, and we wish you well as you continue working
toward complete approval.

Sincerely,

LIBERTY
UNIVERSITY.
Liberty University | Training Champions for Christ since 1971