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Teachers' Attitudes Toward the Inclusion of Students with Disabilities in the General Education Classroom in a Rural School District

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TEACHERS' ATTITUDES TOWARD THE INCLUSION OF STUDENTS WITH DISABILITIES IN THE GENERAL EDUCATION CLASSROOM IN A RURAL SCHOOL DISTRICT

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

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DEDICATION

This dissertation is dedicated to my husband, Rodney Pelt. Thank you for your military service to this country, which has allowed me to pursue my goals. For that, I am forever thankful.

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ABSTRACT

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According to the research, inclusion in the general education setting is valuable to the academic and social development of students with disabilities. Teachers play a significant role in the success of students with disabilities in this setting (Coombs-Richardson & Mead, 2001; Fuchs, 2010; Test et al., 2009). Research shows that teachers display positive and negative attitudes toward inclusion based on the severity of the disability category (Cook, 2001; Ernest & Rogers, 2009). The purpose of this study was to examine teachers' attitudes toward the inclusion of students with disabilities in the general education classroom in a rural school district. An ANOVA was run to analyze teachers' attitudes based on disability category and to determine if grade level taught by teachers acts as a moderator to their attitudes. Results revealed that students' disability categories had a significant impact on teachers' attitudes and that grade level

taught acts as a moderator to teachers' attitudes toward inclusion. Limitations were discussed, and recommendations for practice, policy, and research were provided.

Keywords: Teachers' Attitudes, Inclusion, Students with Disabilities, Elementary, Secondary, Special Education, General Education

CHAPTER ONE

A significant number of laws have led to greater inclusion of students with disabilities in the last 45 years, but the fight for inclusion began with the Civil Rights Movement of the 1950s and 1960s. In the 1954 case of *Brown v. Board of Education*, the Supreme Court ruled that Black students in segregated schools were not afforded the same educational opportunities and that separate is not equal; segregation was ruled unconstitutional. This ruling laid the groundwork for many special education mandates that have led to the inclusion of students with disabilities.

Background

In 1975, the federal government passed P.L. 94-142, the *Education for All Handicapped Children Act* (EHA) (O'Laughlin & Lindle, 2015; Yell et al., 1998). One primary purpose of EHA was to ensure that all students with disabilities have access to a free and appropriate public education (FAPE); in other words, students will have access to educational programs and services that meet their individual needs. It mandates that students with disabilities should be educated in the least restrictive environment (LRE), which in part means students with disabilities should be educated with age-appropriate, typically developing peers to the greatest extent appropriate (Hyatt & Filler, 2011; McLeskey et al., 2012; Thomas & Rapport, 1998; USDOE, n.d.). With the 1990 passing of the *Individuals with Disabilities Education Act* (IDEA) and the passing of the *No Child Left Behind Act,* students with disabilities were included in statewide accountability systems (Stockall & Smith, 2013; Yell et al., 2012). In 2015, the federal government passed the *Every Student Succeeds Act* (*ESSA*). With this act came higher expectations for students with disabilities. *ESSA* mandates that all students are to be educated at a

high standard, so they leave high school either college or career ready (Brown et al., 2016; Darling-Hammond et al., 2016; USDOE, n.d.); this mandate includes students with disabilities.

ESSA mandates that all students have access to the general education curriculum and are included in the statewide assessments; it also allows states flexibility in assessing students and reduces the number of statewide assessments needed. *ESSA* requires schools to eliminate barriers to the general education curriculum for students with disabilities with the use of Universal Design for Learning (UDL) strategies (Ryndak et al., 2013). Because of federal mandates, more students with disabilities are educated in the general education classroom (Goodman et al., 2011; USDOE, 2018). Although research shows that teachers' attitudes toward inclusion impact the success of students with disabilities in the general education classroom (Ernest & Rogers, 2009), little research exists on how specific disabilities impact teachers' attitudes. In addition, there are limited studies that focused on the attitudes of teachers in rural settings (e.g., Alfaro et al., 2015; Ross-Hill, 2009).

Statement of the Problem

According to Reynolds and Birch (1977), "The history of special education shows a quite steady trend which can be summed up in two words: progressive inclusion" (p. 12). Through the strengthening of federal mandates, LRE is not only access to the general education curriculum but holding schools accountable for ensuring that students with disabilities make adequate yearly progress toward the general education curriculum (McLeskey et al., 2012). According to Test et al. (2009), access to the general education curriculum is a predictor of postsecondary success for students with disabilities; however, many students with disabilities are not provided access. In fall 2016, 63.1% of all students with disabilities ages 6-21 were educated in general education for at least 80% of the day. Additionally, 18.3% of students were educated in general education

between 79% and 40% of the day, with 13.4% being educated in general education less than 40% of the day. The number of students educated in more restrictive settings outside of the school was 5.1% (USDOE, 2018). These numbers seem to contradict the expectations of federal mandates. The United States Department of Education (USDOE) mandates that states develop annual performance reports (APR) and state performance plans (SPP) to report on their current implementation of IDEA. Indicator 1 monitors the percentage of students with Individualized Education Programs (IEP) who graduate with a regular diploma. In 2016, 69.9% of students with disabilities graduated from high school, up from 56% in 2007. The graduation rate for students with disabilities ranged from a low of 30.2% to a high of 93.8% of all states in 2016 (USDOE, 2018). This rate of graduation is a large disparity between states.

States also must report how they will improve the graduation rate of their students with disabilities (Elbaum et al., 2014). This mandate is significant since students who fail to earn a regular diploma are more likely to earn lower wages, have higher rates of incarceration, and have fewer postsecondary education opportunities (Christle et al., 2007; Sitlington & Neubert, 2004; Test et al., 2009). In order for students with disabilities to earn a regular diploma, they must be successful in meeting the general curriculum standards (Christenson & Thurlow, 2004; Goodman et al., 2011; Sitlington & Neubert, 2004). When teachers focus on student disabilities, they may be more likely to focus on student weaknesses rather than strengths, which may lead to missed educational opportunities (Jorgensen et al., 2007). These missed opportunities occur when teachers have preconceived expectations of students based on their disability (Jackson et al., 2009).

The study of teachers' attitudes toward inclusion is not a new phenomenon (Berry, 2010; Scruggs & Mastropieri, 1996), and research shows that teacher attitudes play an essential role in

the success of students with disabilities in the general education classroom (Coombs-Richardson & Mead, 2001; Fuchs, 2010). When teachers have negative attitudes toward including students with disabilities in general education, they are more likely to have low expectations, which can result in poor student performance (Ernest & Rogers, 2009). Research shows that teachers' attitudes toward inclusion are influenced by the severity of students' disabilities (Cook, 2001; Ernest & Rogers, 2009). In addition, research shows that teachers in lower grade levels tend to have more positive attitudes toward inclusion when compared to teachers in higher grade levels (Bender et al., 1995; Berry, 2010; Çelik & Kraska, 2017). Because the attitudes of teachers can play a role in the quality of an inclusion program, there is a need for further research. Additional research is needed on how the severity of students' disabilities affect teachers' attitudes (Cook, 2001; Van Reusen et al., 2000; Sideridis & Chandler, 1997), as well as how teachers' attitudes vary by grade level (Hernandez et al., 2016; Ross-Hill, 2009).

Purpose

The purpose of this study was to examine the attitudes of teachers toward inclusion of students with disabilities in rural schools. The primary purpose of this study was to examine the relationship between students with specific disabilities in general education classes and teachers' attitudes toward inclusion. This study investigated ways in which students' disability categories (i.e., autism, emotional disturbance, intellectual disability, other health impairment, specific learning disabilities, speech or language impairment, etc.) may be associated with teachers' attitudes toward inclusion. This study also investigated differences in teachers' attitudes by grade level (i.e., elementary and secondary). Teacher type (i.e., general education teacher or special education teacher) was to be analyzed as a moderator to teachers' attitudes; due to the small sample size, this analysis was rejected.

Research Questions

The following research questions are addressed in this study:

1. Is there a relationship between students' disability categories and teachers' attitudes toward inclusion?
2. Does the relationship between disability categories and teachers' attitudes toward inclusion vary as a function of grade level that educators teach (elementary versus secondary)?

Definition of Terms

Attitude. One's attitude is defined as an emotional response, belief, and behavior toward an object (Chhabra et al., 2010). According to Allport (1929),

> An attitude is a disposition to act which is built up by the integration of numerous specific responses of a similar type, but which exists as a general neutral "set," and when activated by a specific stimulus results in behavior that is more obviously a function of the disposition than of the activating stimulus (p. 221).

For this paper, positive attitudes are those that encourage the inclusion of students with disabilities in general education classes. Negative attitudes are those that are associated with low achievement expectations and reduced acceptance of students with disabilities in general education classes (Beattie et al., 1997; Subban & Sharma, 2005).

Disability Categories. Students in the high incidence disabilities categories make up the most children with disabilities in the U.S. These disability categories usually include students with autism (AUT), emotional disturbance (ED), intellectual disability (ID), other health impairment (OHI), specific learning disability (SLD), speech or language impairment (SLI) (Gage, Lierheimer, & Goran, 2012; McLeskey et al., 2012). In addition to including the high

incidence disability categories, there will be an “other disabilities” (OTH) category comprised of the low incidence disabilities of deaf-blindness (DB), deafness (D), hearing impairment (HI), multiple disabilities (MD), orthopedic impairment (OI), traumatic brain injury (TBI) and visual impairment (VI) (USDOE, 2018). For this paper, disability categories will be defined as students with AUT, ED, ID, OHI, SLD, SLI, and OTH.

Elementary. This group includes teachers who teach students in grades 1 – 5 (Korkmaz, 2008).

Inclusion. Inclusion is defined as any instructional time students with disabilities spend in general education classes and educated with their typically developing peers (Fuchs, 2010; Ruijs et al., 2010).

Secondary. This group includes teachers who teach students in grades 6 – 12 (Wexler et al., 2015).

CHAPTER TWO – REVIEW OF LITERATURE

The purpose of this chapter is to review the literature around factors that impact the attitudes of teachers toward including students with specific disabilities in general education classrooms. First, I discuss the importance of inclusion, the state of inclusion, and the influence of teachers' attitudes in the success of inclusion. Next, a theoretical model of factors associated with inclusion is presented, followed by a review of recent literature. Finally, the limitations of the reviewed literature and implications for research, practice, and policy are discussed.

Definition of Inclusion

According to Merriam-Webster (2019), inclusion is "the act or practice of including students with disabilities in regular school classes." However, in education, there is no consensus on the definition and how inclusion should be implemented. This lack of definition may be because there is no legal mandate on how to determine the LRE; therefore, where students with disabilities are educated is left to discretion members of the IEP team. With no legal guidance, inclusion looks different from person to person, school to school, district to district, and state to state (Fuchs & Fuchs, 1994; Sauer & Jorgensen, 2016; Yell, 1995). According to Yell (1995), "[I]t most often is considered a movement to merge special or regular education and to include children with disabilities fully into the 'mainstream' of education" (p. 389). This full inclusion viewpoint focuses mainly on the physical placement of students (Shyman, 2015); however, the general education classroom may not be appropriate in all circumstances and the continuum of placements still exists (Fuchs, 2010; Hyatt & Filler, 2011). Access to the general education curriculum may look different for

different students. Although there is no federal definition of inclusion, many states define it as students who earn at least 80% of their credits in the general education classroom (Goodman et al., 2011; Rojewski et al., 2015). This lack of uniformity in the definition of inclusion may affect the differences in postsecondary success for students with disabilities (Chiang et al., 2012; Mazzotti et al., 2016; Rojewski et al., 2015; Test et al., 2009).

Importance of Inclusion

According to Test et al. (2009), students with disabilities lag in the areas of postsecondary education, employment, and independent living when compared to their typically developing peers; having access to the general education curriculum is a moderate predictor of postsecondary success for students with disabilities (Chiang et al., 2012; Mazzotti et al., 2016; Rojewski et al., 2015; Test et al., 2009). Research shows that when students with disabilities are educated in the general education classroom, they generally perform better on reading and writing assessments when compared students who are educated in pull-out or special education classes (Manset & Semmel, 1997; Rea et al., 2002; Rojewski et al., 2015). In addition to the academic setting, inclusion can take place in non-academic settings such as physical education, electives, lunch, or library (Kurth et al., 2019), which may help in the development of social skills for students with disabilities by allowing them to interact with typically developing peers (Matthews, 2003; Palley, 2009). Still, teachers' beliefs and attitudes toward inclusion are crucial to facilitating student social development.

Teachers' beliefs and attitudes are crucial components of inclusion programming (Coombs-Richardson & Mead, 2001; Fuchs, 2010). For inclusion to be successful, teachers must embrace the concept and accept the policies put in place. If access to general education can

increase postsecondary opportunities for students with disabilities, then the attitudes of teachers toward inclusion play a vital role in students' success.

Current State of Inclusion

According to the *40th Report to Congress on the Implementation of the Individuals with Disabilities Act* (USDOE, 2018), the USDOE calculates the percentage of time students spend in general education by taking the number of hours the student spends inside the general education classroom and dividing by the total number of hours in the school day. This number is then multiplied by 100. In Fall 2016, 63.1% of public-school students with disabilities ages 6-21 spent at least 80% of their school day in the general education setting, with 18.3% educated in the general education setting between 40% and 79% of the school day. Overall, 13.4% of students with disabilities spend less than 40% of their day in general education, and 5.1% were educated in even more restrictive environments such as private placement, homebound, or hospital settings (USDOE, 2018). Students with multiple-disabilities (MD) and students with ID spend the least amount of time in the general education setting. Nearly 50% of these students spend less than 40% of the school day in the general education setting, with more than 25% of students with MD educated in the most restrictive settings outside of the school (USDOE, 2018).

IDEA calls for greater inclusion, as well as more successful postsecondary outcomes for students with disabilities. ESSA calls for students to leave high school college and career ready (USDOE, n.d.). To increase the rate of inclusion, teachers should carefully examine the mandates of ESSA and IDEA. Furthermore, teachers must also determine if students are receiving FAPE while being educated in the most appropriate setting with peers without disabilities, to the greatest extent appropriate.

With only 63% of students with disabilities being educated in the general education setting at least 80% of the day, these statistics are problematic and do not appear to meet the policy mandates set forth by the USDOE. To monitor the implementation of IDEA, the USDOE requires states to report on progress in their special education programs through the State Performance Plan and Annual Performance Report. For IDEA part B, there are 20 areas, or indicators, in which states report data on the implementation of components of IDEA. Indicator 5 focuses on LRE and the amount of time students spend in the general education setting. It has three areas of focus:

- Percentage of students who spend at least 80% of the day in the general education setting;
- Percentage of students who spend less than 40% in the general education setting; and,
- Percentage of students who are in other, more restrictive settings.

The goal of Indicator 5 is to increase the rate of inclusion of students in general education and decrease the number of students in more restrictive environments (USDOE, n.d.).

Importance of Teachers' Attitudes

Although consensus on a definition has not been reached, many researchers define attitude as one's evaluation, which ranges from positive to negative, toward a psychological object (Ajzen, 2001; Eagly & Chaiken, 2007; Petty et al., 1997). According to Eagly and Chaiken (2007), attitudes begin in the mind of the individual and cannot exist until an individual encounters the object. Initial negative responses are likely to bring negative responses with the next encounter with the object. Many researchers conclude that attitudes consist of three components: cognitive, emotional, and behavioral. The cognitive component affects the beliefs teachers hold about students with disabilities, while the emotional component deals with teachers' feelings regarding students with disabilities and inclusion. The behavioral component

refers to teachers' actions based on their beliefs and feelings (Hutzler et al., 2019). In this review, positive attitudes are defined as those that encourage the inclusion of students with disabilities into regular classrooms. Negative attitudes are defined as those that are associated with low achievement expectations and reduced acceptance of students with disabilities in general education classes (Beattie et al., 1997; Subban & Sharma, 2005). Next is an examination of those roles and how they may affect student success.

The attitudes of teachers play a role in the achievement of students with disabilities (Ernest & Rogers, 2009; Goyena, 2008; Rizzo & Vispoel, 1992). In order to teach students with diverse learning needs, teachers must be dedicated and capable. Because the student-teacher relationship is an integral part of learning, teacher attitudes are a vital factor in the success of students with disabilities in inclusive settings (Ernest & Rogers, 2009). Research shows that when teachers have insufficient preservice preparation, plus a lack of knowledge of inclusive practices, there is a feeling of inadequacy regarding teaching students in inclusive classrooms (Hernandez et al., 2016). Thus, in order to successfully implement inclusive practices, perspectives of teachers on inclusion should be examined and addressed.

Although many teachers understand the benefits of inclusion, inclusive education is not always carried out effectively (Cook et al., 2007). Research shows that there are teachers who do not provide the necessary accommodations and modifications that students with disabilities need in order to be successful (Cook et al., 2007). However, teachers with greater knowledge of inclusion usually have more positive attitudes and have beliefs that they can effectively teach students with disabilities (Buell et al., 1999). When teachers hold negative attitudes toward inclusion, this is most likely to lead to low expectations by teachers and poor performance for students with disabilities (Cameron & Cook, 2013). In turn, low expectations may result in

reduced learning opportunities for students and opportunities for consideration of additional learning opportunities, creating a situation in which students lack confidence in their abilities (Cameron & Cook, 2013). Furthermore, teachers with low expectations are less likely to spend a substantial amount of time on instruction, leading to lower student achievement (Brownell & Pajares, 1999). Many factors determine whether teachers' attitudes are positive or negative, and these attitudes may affect whether students with disabilities are successful in the general education classroom.

Theory

Historically, students with disabilities have been marginalized and educated in segregated settings away from their typically developing peers. They have been left out of accountability systems and left without access to the general education curriculum (Artiles et al., 2006; Sauer & Jorgensen, 2016; USDOE, 2018). For many years, special education has been scrutinized for this unjust treatment of students with disabilities and for inequities in the educational opportunities they receive (Artiles et al., 2006; Christensen & Dorn, 1997; Pantić & Florian, 2015). In part, educational inequities may be due to teachers' negative attitudes on inclusion (Polat, 2011). For example, the practice of predicting student potential based on current achievement may have damaging effects on students and may reproduce inequalities (Florian & Spratt, 2013). Students with disabilities and challenges in the classroom, which may be due to inequalities, may require more extensive supports when compared to typically developing peers (Harris & Alexander, 1998). Therefore, when teachers construct preconceived attitudes toward the inclusion of students with disabilities, there is an impact on student success.

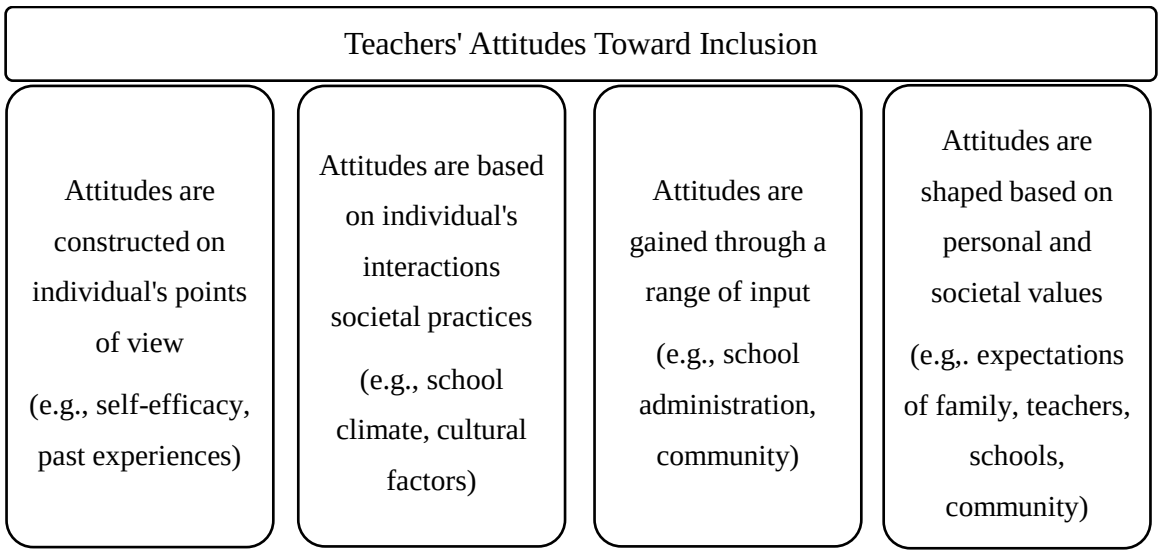
Teachers' attitudes are derived from a social constructivist theory, which states that reality is subjective and based on individuals' interactions with society (Anderson & Barrera,

1995; Paul et al., 2005). Based on Vygotsky's social constructivist theory, this research describes how teachers' knowledge of disabilities is the result of social interactions and how those interactions are interpreted (Qi et al., 2017). According to Cambridge-Johnson, Hunter-Johnson, and Newton (2014), Vygotsky developed his social constructivist view of teaching and learning around the notion that knowledge is constructed through interactions within a person's environment. According to Devries (2000), Vygotsky believes that social factors play an essential role in constructing one's attitude.

Based on the social constructivist theory, teachers' attitudes toward inclusion are often based on factors that are formulated by past experiences. These attitudes can be a reflection on the individual teacher, the school climate, or the overall societal culture regarding students with disabilities (Carrington, 1999). Figure 1 depicts social constructivism as a theoretical framework on how teachers develop attitudes toward inclusion. It is through societal influences that teachers develop attitudes toward inclusion, and these attitudes are based on several factors.

Figure 1

Social-Constructivist Theory on Teachers' Attitudes Toward Inclusion



Factors That Affect Teachers' Attitudes

Disability and experience. The disability of students was a common factor in the literature. According to the research, the more severe the disability, the less willing teachers were to include students (Cook, 2001; Logan & Wimer, 2013). In most cases, teachers held positive attitudes toward teaching students with milder disabilities with more negative attitudes toward students with more severe disabilities because of concerns regarding inappropriate behaviors (Pierson & Howell, 2013). However, research shows that when teachers have experience in working with individuals with disabilities, they are more likely to have positive attitudes in teaching students with disabilities (Burke & Sutherland, 2004).

Knowledge and preparation. Teachers' knowledge of their students' disabilities, along with preparation in inclusive practices, were determining factors in teachers' views of inclusion (Cook, 2001; Fuchs, 2010; McHatton & McCray, 2007). Many teachers expressed concerns regarding their lack of knowledge of characteristics of specific disabilities (Alfaro et al., 2015). According to research, teachers with the least amount of knowledge and preparation in teaching students with disabilities were more likely to hold negative attitudes; however, those with high levels of knowledge and preparation usually reported positive attitudes toward inclusion (Schultz & Simpson, 2013). For example, Fuchs (2010) found that teachers believed they did not have the preservice preparation needed to educate students with disabilities in the general education classroom. When teachers received adequate preparation, they were more confident in their abilities to educate students with disabilities (Brownell & Parjares, 1999; Fuchs, 2010). Although research shows that most teachers are open to professional development, many teachers had limited preparation and were not adequately equipped to teach students with disabilities (Cook, 2001; Kahn & Lewis, 2014). In a 2006 study by Carter and Hughes, findings indicate that

teachers believe there is a need to increase their knowledge and understanding of disability-related issues, so they are better prepared to meet the needs of students who require significant supports. When teachers have a lack of knowledge and preparation in inclusive pedagogy, there can be a negative impact on student academic success (Fuchs, 2010).

Academics. According to Scott and colleagues (2007), many teachers are concerned with the academic challenges presented by students with disabilities. For example, teachers expressed concerns about whether students with disabilities can pass high-stakes state exams (McCarthy et al., 2016). Some teachers believe that including students with disabilities in the general education classroom will affect the academic performance of their typically developing peers. These teachers stated that it is difficult to differentiate instruction for diverse learners (Fuchs, 2010; Lalvani, 2013). Curriculum and instruction emerged as a relevant factor for teachers. For example, Dymond and colleagues (2007) found that several teachers believe that the general education curriculum would be too challenging for students with disabilities. Teachers believe the curriculum is not appropriate for the cognitive ability of students with disabilities. These concerns regarding students' cognitive ability and teacher self-efficacy led teachers to question whether students with disabilities can be successful when accessing the general education curriculum.

Resources and supports. Teachers' perceptions of resources and supports they receive from school personnel also impacted their attitudes toward inclusion. In several studies, teachers stated that resources and supports were essential factors in successful inclusion (Cambridge-Johnson et al., 2014; Ernest & Rogers, 2009; Scruggs & Mastropieri, 1996). A few teachers believed they lack time to address the needs of students with disabilities. Teachers also believed that there was limited support from parents, administrators, and specialists (Carter & Hughes,

2006). A lack of resources and support often leads to teacher frustrations in inclusive classrooms (Fuchs, 2010).

Peer interaction. Research shows that numerous teachers acknowledge the benefits of inclusion for both students with disabilities and typically developing peers; however, some teachers expressed concern over how the inclusion of students with disabilities would affect the social and academic progress of their peers in the classroom (Lalvani, 2013). For example, some teachers believed that students with disabilities would be teased or bullied by their peers and would be better served in special education classes. Many teachers questioned whether the needs of diverse learners could be met in general education classes (McHatton & McCray, 2007). Thus, some teachers argued for separate settings stating that teaching students in special education classes would allow students with disabilities to work at their pace and their academic level (Lalvani, 2013).

Demographics. Demographics, such as experience teaching, education level, age, gender, and marital status, were included in many studies; however, their associations with teacher attitudes toward inclusion were inconsistent. For example, some research has found that female teachers had more positive attitudes toward attending professional development to improve their knowledge (Ernest & Rogers, 2009; Giffing et al., 2010); however, other studies show that male teachers were more positive (Ernest & Rogers 2009) or that there were no differences (Hastings & Logan, 2013). When age was compared to teachers' attitudes, younger teachers had more positive attitudes toward inclusion and felt more supported than their older colleagues (Giffing et al., 2010; Hernandez et al., 2016). However, some teachers had mixed beliefs regarding the segregation of students with disabilities. Generally, younger teachers had more positive attitudes toward inclusion and were more willing to participate in professional development (Giffing et

al., 2010; Hernandez et al., 2016). At times, more experienced teachers displayed positive attitudes; however, they were often less willing to participate in professional development (Giffing et al., 2010). When comparing attitudes of teachers with varying education levels, teachers with less education usually had more favorable attitudes, which may suggest that teachers' attitudes may be related to age (Hernandez et al., 2016).

Teacher type. General education and special education displayed both similarities and differences in their attitudes toward including students with disabilities in general education. When examining views of general education teachers, results were mixed. Although many teachers were positive toward the inclusion of students with disabilities, special education teachers were generally more supportive of including students in disabilities in general education (Hernandez et al., 2016). Additionally, special education teachers reported that they were selective in choosing a general education teacher for inclusion. Many special education teachers believed that general education teachers resented having students with disabilities in their classes. Both the general and special education teachers listed the following barriers to successful inclusion:

- Support/training;
- Classes with inappropriate ratios of special education students;
- Inability to meet the academic needs of students;
- Behavior management;
- Planning time to make curriculum modifications; and,
- Common planning time with the instructional team (Heflin & Bullock, 1999).

Also, many general education teachers had a lack of self-efficacy, which contributed to their concerns regarding the inclusion of students with disabilities (Buell et al., 1999). Like teacher types, there are differences in factors that exist between grade levels.

Grade level. In examining grade levels and associations with teachers' attitudes toward inclusion, studies involving participants of both elementary and secondary grade levels mentioned student disability as a relevant factor in determining teachers' attitudes (Goyena, 2008; Ross-Hill, 2009). Larrivee & Cook (1979) found that as students increase in grade level, the attitudes of teachers become increasingly negative. In much of the research, elementary teachers generally had more positive attitudes toward including students with disabilities in general education (Savage & Winke, 1989). This difference in attitudes may be due to many secondary teachers having less contact with students with disabilities (Ernest & Rogers, 2009; Savage & Wienke, 1989).

Furthermore, day-to-day demands on secondary teachers may play a role in attitudes toward inclusion. For example, secondary teachers teach several groups of students during the day; whereas, elementary teachers usually have the same group of students for the entire day. This arrangement limits the amount of time secondary teachers spend with any one group of students and limits the amount of time secondary teachers have for differentiated instruction. Furthermore, research shows that secondary teachers had concerns regarding instruction, high-stakes testing, and curriculum modifications (Pierson & Howell, 2013). Although demands may differ, elementary and secondary teachers should develop positive attitudes toward including students with disabilities in general education (Ernest & Rogers, 2009). Although much of the research shows that elementary teachers tend to have more positive attitudes toward inclusion, this is not always the case (Logan & Wimer, 2013).

Discussion

Teachers play an essential role in the success of students with disabilities in the general education classroom (Ernest & Rogers, 2009; Goyena, 2008; Rizzo & Vispoel, 1992). According to the literature, many factors influence teachers' attitudes toward inclusion. Teachers tend to be more supportive of teaching students with milder disabilities, such as SLD, and less supportive of teaching students with behavioral disabilities (Giffing et al., 2010), such as AUT or ED. These findings are consistent with previous literature that suggests that teachers have more favorable attitudes toward students who have disabilities that are milder (Smith, 2000). This reluctance of teachers to include students with disabilities may be attributed to a lack of experience in working with students with specific disabilities. For example, teachers have more positive attitudes toward working with students with disabilities when they have previous experience (Ernest & Rogers, 2009). Through knowledge and training, teachers may improve their attitude toward working with students with disabilities.

Many teachers did not have knowledge about the characteristics of specific disabilities or the knowledge of inclusion that would allow them to successfully teach students with disabilities in general education (Schultz & Simpson, 2013). Also, some teachers questioned how inclusion would affect the academic success of students with disabilities and their typically developing peers (Dymond et al., 2007; Lalvani, 2013). This questioning may be due to a lack of understanding of classroom accommodations and curriculum modifications that allow students to access the general education curriculum (Heflin & Bullock, 1999). These findings are consistent with previous research suggesting that teachers with education in disabilities and inclusion are more confident in their abilities and have more positive attitudes toward inclusion (Lowrey, Hollingshead, et al., 2017; Olson & Ruppar, 2017). These results are also consistent with findings of previous research in which teachers have found curriculum content challenging for

students with disabilities (Berry, 2008). Providing teachers with a greater knowledge of characteristics of disabilities and pedagogy of inclusion through professional development and education allows teachers to assist students in navigating the general education curriculum (Florian, 2012; Vaughn & Schumm, 1995). Although teachers may face academic challenges, research indicates that inclusion has benefits for students with disabilities.

Research shows that teachers have expressed concerns regarding the interaction of students within diverse classrooms (Smith & Tyler, 2011). Teachers were concerned that including students with disabilities would change the pacing of instruction and affect the rate of learning of typically developing peers (Lalvani, 2013). Furthermore, teachers voiced concerns that students with disabilities would be bullied and rejected by their peers (McHatton & McCray, 2007). These findings are consistent with previous research showing mixed attitudes toward the social impact inclusion has on students with disabilities and their typically developing peers (Cameron & Cook, 2013; Ellis, 2016).

Teachers believe there is a lack of resources and supports for educating students with disabilities in general education (Carter & Hughes, 2006). When resources and supports are put in place, inclusion may be more successful, which may lead to less segregation of students with disabilities; however, findings from the literature showed that several teachers favor segregating students with disabilities (Giffing et al., 2010). These findings are in line with previous research that shows that some teachers believe some students with disabilities should be segregated (Connor & Ferri, 2007; Smith, 2006). McCarthy and colleagues (2016) found that low expectations, categorical placement decisions, and biases against students with ED were a few of the culprits creating student segregation.

Limitations

Limitations exist within the research literature. To begin, many of the studies used to determine factors that impact teacher attitudes use a qualitative methodology (e.g., Fuch, 2010: Lalvani, 2013; McHatton & McCray, 2007). Although qualitative studies provide valuable information, it is difficult to generalize results due to small sample sizes. Additionally, there were not enough studies that focused on teachers' attitudes toward teaching students with specific disabilities (e.g., Burke & Sutherland, 2004; Giffing et al., 2010), or on teachers' attitudes at specific grade levels (e.g., Goyena, 2008; Ross-Hill, 2009). There were limited studies that focused on the attitudes of teachers in rural settings as well (e.g., Alfaro et al., 2015; Ross-Hill, 2009). These limitations have created gaps in research on teachers' attitudes toward inclusion.

Implications

Based on the results of this review, several recommendations are offered to more accurately gauge and address teachers' attitudes and factors that impact attitudes toward the inclusion of students with disabilities in the general education classroom. First, research that targets a specific population of teachers may provide more insight into teachers' attitudes toward inclusion. For example, research that compares attitudes of elementary school teachers and secondary teachers may reveal different factors that impact attitudes of teachers at different grade levels (e.g., Buell et al., 1999; Carter & Hughes, 2006) and their concerns should be addressed based on the specific needs of students and teachers. The same holds for the needs of general education versus the needs of special education teachers (e.g., Giffing et al., 2010; Smith, 2006). When research is purposeful and specific regarding the target population, policymakers can identify problem areas related to the attitudes of a specific population of teachers. In turn,

research may lead to the development of policies that increase inclusion and assist with closing the achievement gaps for students with disabilities.

While teachers' attitudes play a role in the success of students with disabilities in general education classes (Ernest & Rogers, 2009), additional research is needed to learn more about teachers' attitudes toward the inclusion of students with specific disability categories in general education classes. Research shows that teachers have more favorable attitudes for including students with milder disabilities (Giffing et al., 2010), but there is little research on teachers' attitudes toward students with specific disabilities. Because knowledge of characteristics of disabilities is a factor for many teachers (Brownell & Parjares, 1999), there is the need for more research to determine how specific disabilities affect teachers' attitudes, particularly students with more challenging disabilities. There is also a need to examine the attitudes of special education teachers and general education teachers by grade levels. Through research that focuses on teachers' attitudes toward including specific disabilities, professional development can be implemented to address factors that create negative attitudes.

Summary

In summary, many factors shape teachers' attitudes toward including students with disabilities in the general education classroom; through this review of the literature, several barriers have been identified. Schools are encouraged to carefully examine their practices for opportunities to make them more inclusive places of learning for all students. Providing teachers with a greater knowledge of inclusion through professional development and educational opportunities allows teachers to assist students in navigating the general education curriculum. The next chapter describes the methodology used to determine whether there is a relationship between students' disability categories and teachers' attitudes toward inclusion. Chapter three

also examines whether grade level acts as a moderator in the relationship between disability categories and teachers' attitudes toward inclusion of students in rural schools.

CHAPTER THREE – METHODOLOGY

This study used a quantitative research design with data collected from teachers via a self-report questionnaire in a rural school district. The Teacher Integration Attitudes Questionnaire (TIAQ) (See Appendix A) (Sideridis & Chandler, 1997) was used to measure teachers' attitudes toward including students with disabilities in general education. The questionnaire includes teachers' demographic information, teachers' beliefs toward educating students with specific disabilities, and teachers' overall beliefs toward inclusion. Therefore, the purpose of this study was to examine teachers' attitudes toward inclusion in rural schools. First, the study examines the relationship between students' disability categories and the attitudes of teachers toward inclusion. The second purpose was to determine whether grade level acts as a moderator to teachers' attitudes toward inclusion.

Research Design

This quantitative study employed mixed analysis of variance (ANOVA; Mitchell & Jolley, 2013) to measure the relation between students' disability categories and teachers' attitudes toward inclusion, as well as to determine if the grade level taught by educators acts as a moderator to teachers' attitudes. Therefore, this research will measure teachers' attitudes toward inclusion for the six high incidence disability categories: autism (AUT), emotional disturbance (ED), other health impairment (OHI), specific learning disability (SLD), and speech or language impairment (SLI). In addition to including the high incidence disability categories, there will be an "other disabilities" (OTH) category to include the low incidence disabilities of deaf-blindness (DB), deafness (D), hearing impairment (HI), multiple disabilities (MD), orthopedic impairment

(OI), traumatic brain injury (TBI) and visual impairment (VI). There were two grade levels that educators taught represented in the study: elementary and secondary. An online survey was used to collect data on teachers' beliefs on inclusion and demographic data on grade level taught.

Independent Variables

This study employs two independent variables: (a) specific student disability categories (AUT, ED, ID, OHI, SLD, SLI, and OTH) and (b) grade levels taught by teachers (elementary or secondary). Attitudes toward individual disability categories were measured on a four-point Likert scale (i.e., interval scale), while grade level was measured using a categorical scale (elementary or secondary). Demographic data were used to assist in determining whether grade level acts as a moderator to teachers' attitudes toward inclusion. Because this study tested whether grade level is a moderator in the relation between disability categories and teachers' attitudes, an interaction term between grade level and disability type was created**.**

Dependent Variable

The dependent variables are the attitudes of teachers toward including students with disabilities in the general education classroom. Attitudes can range from negative to positive, with 1 being the most negative and 4 being most positive. Additional information on teacher attitude measures is provided later in this section.

Research Questions

The following questions were explored in the research:

1. Is there a relationship between students' disability categories and teachers' attitudes toward inclusion?

2. Does the relationship between disability categories and teachers' attitudes toward inclusion vary as a function of grade level that educators teach (elementary versus secondary)?

Participants

Participants for this study were general and special education teachers in a rural school district in the Mid-Atlantic region of the United States. This district has seven schools and approximately 4,000 students in grades 1 – 12. Teachers were both elementary (grades 1 – 5) and secondary (grades 6 – 12), with teachers of both core subjects and electives. At the elementary level, core subject teachers include classroom teachers of students in grades 1 – 5. Grade level was elementary and secondary rather than single grade levels since many elective and secondary core subject teachers educate students in multiple grades. Elementary elective teachers will include those who teach art, music, and physical education. At the secondary level, core subject teachers consist of those who teach English, math, science, and social studies. Secondary elective teachers consist of those who teach career and technical education (CTE), fine arts, foreign language, junior reserve officer training corps (JROTC), and health and physical education (HPE).

Approximately 275 teachers in the district qualified for inclusion in the study. There were 136 teachers who participated in this study, which provided adequate power (Cohen et al., 2003). The district was chosen due to proximity to the researcher and ease of access to teachers, making this a convenience sample. Table 1 displays demographic data on the student population by school. Table 2 displays student population by racial and ethnic groups, while Table 3 displays demographic data on teachers by school.

Table 1

School District Student Population Demographics by School

School	Level	Population	Population Grades 1-5	Students with Disabilities	Economically Disadvantaged
		N	*N*	%	%
Elementary A	Elementary	343	299	3.5	49.0
Elementary B	Elementary	398	333	8.5	42.0
Elementary C	Elementary	512	370	11.1	33.8
Elementary D	Elementary	270	233	9.3	44.1
Elementary E	Elementary	528	442	10.4	42.6
Middle	Secondary	998	N/A	17.1	44.4
High	Secondary	1,330	N/A	15.5	46.6

Table 2

School District Student Racial and Ethnic Groups by School

School	White	Black	Multiple Races	Hispanic	Other
	%	%	%	%	%
Elementary A	62.1	30.1	5.7	.9	1.2
Elementary B	79.2	11.8	5.9	3.1	N/A
Elementary C	43.6	34.5	4.2	17.7	N/A
Elementary D	64.1	26.7	6.8	2.5	N/A
Elementary E	45.2	37.0	8.4	8.6	.8
Middle	55.3	31.1	4.8	8.5	.3
High	53.5	34.8	4.7	6.1	.9

**Note.* Other racial and ethnic groups consist of Asian, American Indian, and Native Hawaiian

Table 3

Number of Teachers and Teacher Educational Obtainment Level by School

	Teacher Type		Teacher Educational Obtainment		
	General Education	Special Education	Bachelor	Master	Doctoral
School	*N*	*N*	%	%	%
Elementary A	20	5	56	44	N/A
Elementary B	19	3	58	42	N/A
Elementary C	26	5	46	54	N/A
Elementary D	15	3	52	45	N/A
Elementary E	28	5	48	52	N/A
Middle	56	11	54	46	N/A
High	68	12	54	44	1

Note. Teacher Educational Obtainment of <100 represent teachers who have other types of degrees or certifications

During the 2017-2018 school year, the district had a graduation rate of 45.71% for students with disabilities, which is below the state target of 56%. When examining LRE placement, 54.8% of students with disabilities participated in general education at least 80% of the day, 15.47% were in general education between 40% and 79% of the day, while 5.66% of the students were in more restrictive environments such as separate schools, residential, or home-based placements. In each of these areas of LRE, the district fell short on meeting state goals.

Instrumentation

The Teacher's Integrated Attitudes Questionnaire (TIAQ) (Sideridis & Chandler, 1997) was used to assess teacher attitudes toward inclusion. This survey was initially developed by Thurstone and Chave (Throop & Ward, 2010) to measure attitudes and was modified by Sideridis and Chandler. Permission was obtained from the authors to use the TIAQ in this study. The survey consists of twelve items and was modified to ask teachers about grade level taught. Grade level taught was used to determine if the relation between disability and attitudes differs among elementary versus secondary teachers. Items 1 – 8 measure teachers' attitudes toward including students with specific disabilities in general education classes. Items 1, 5, 6, and 10 measure teachers' perceptions of their skills in working with students in the general education classroom with disabilities and who have challenging behaviors. Items 2, 3, and 5 measure teachers' beliefs on the benefits of inclusion for those with disabilities and their typically developing peers, while items 4, 5, 7, and 8 measure teachers' perception of how students with disabilities are accepted by their peers, and the willingness of teachers to accommodate students in their classrooms. Items 9 through 12 measure teachers' general attitudes toward inclusion and the perception of support they receive in the form of funds, materials, and personnel.

In addition to collecting data on teachers' attitudes, demographic data were collected. A demographic information section was added to include gender, years teaching, and teacher type. Teacher type (i.e., general education teacher or special education teacher) was to be considered as a moderator to teachers' attitudes; due to the small sample size, the use of this analysis was rejected. Descriptive statistics were reported on teacher type, as well as gender, and teaching experience. Disability categories were updated to reflect IDEA disability categories as of fall 2016. (USDOE, 2018). The TIAQ used a four-point Likert scale that ranges from 1 (strongly disagree) to 4 (strongly agree). The survey was validated using physical education teachers in a 1997 study by Sideridis and Chandler that assessed teachers' attitudes toward the inclusion of students with disabilities; test reliability was also established. Sideridis and Chandler computed internal consistency using Cronbach's alpha. The Cronbach's alpha was .77 for both the derivation and the replication samples (Sideridis & Chandler, 1997). In a 1995 study in which the TIAQ was used, Sideridis and Chandler determined that the Cronbach alpha was .92 for both samples used in the study. This alpha coefficient suggested that the scale is reliable in making evaluations on teachers' attitudes toward inclusion.

For this study, the TIAQ instrument was adapted from its original five disability categories to include all 13 disability categories under IDEA (USDOE, 2018). For items 1 – 8, participants were asked questions regarding their beliefs and attitudes in teaching students with disabilities in general education classes. For each item, participants responded to their beliefs for each disability category as a separate item. The disabilities of DB, D, HI, OI, MD, TBI, and VI were listed together as OTH. Items 9 – 12 asked participants on their overall beliefs regarding inclusion and included no disability categories. The instrument used a Likert scale with measures of 1 being strongly disagree to 4 being strongly agree. Once the instrument was developed,

permission was obtained for email distribution. After data were collected, the mean score of teachers' attitudes toward the inclusion of students in each disability category was computed. Cronbach's alpha value was computed to determine internal consistency of the instrument (Mitchell & Jolley, 2013). The Cronbach's alpha was .89; therefore, the instrument was reliable.

Procedure

Permission was obtained to distribute the survey from the Institutional Review Board (IRB) and the school district assistant superintendent. The TIAQ was sent through email to all elementary and secondary schools using REDCap, a secure web-based software application used to create online surveys and store data. Included in the email was a cover letter for participants. In the letter, the study was introduced, and the participants' assistance was requested. Participants were informed of the anonymity of individual responses.

Furthermore, participants were informed that findings from the research were to be shared with the district to evaluate the needs of the district for professional development on the inclusion of students with disabilities. Participants were informed that the survey should take approximately ten minutes. Additionally, participants were informed of their right to skip answers they wish not to answer and their right not to participate. The confidentiality of individual results was also explained. A thank you letter was emailed to the district superintendent at the conclusion of the study.

Data Collection

The survey targeted all elementary and secondary teachers to include those who teach general education, special education, core subjects, and electives in a rural school district in the Mid-Atlantic region of the United States. In order to increase the rate of participation, the survey was available for a three-week window, with reminder emails sent after weeks one and two. In

order to limit the amount of missing data, participants were able to save the survey to complete at a later time.

Frequency Distribution and Assumptions

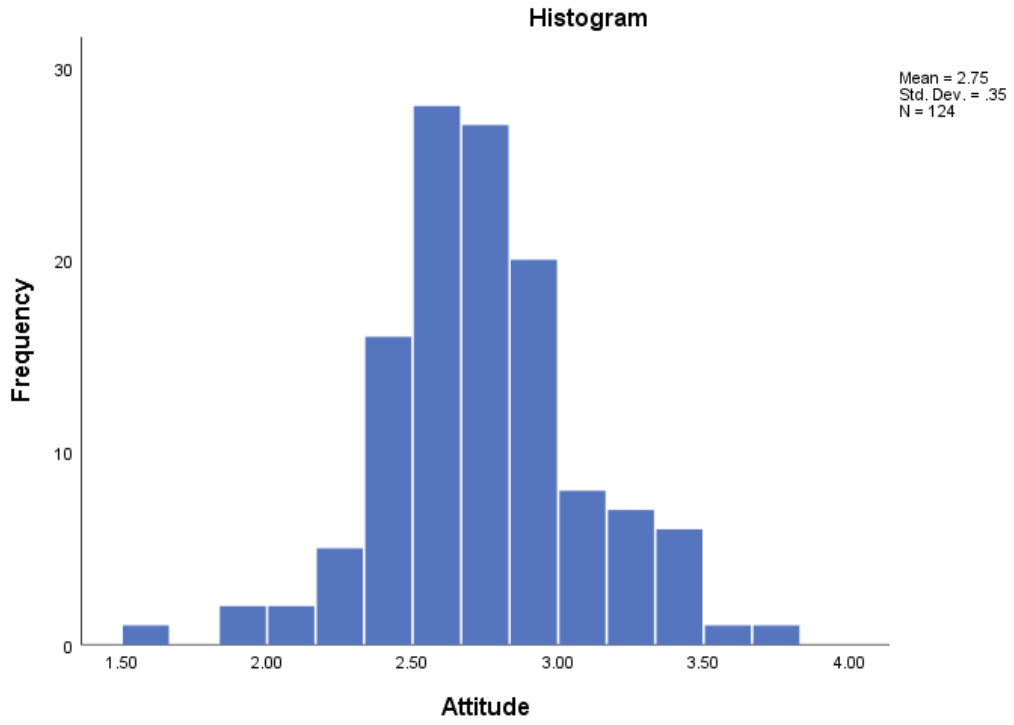
Once data were collected, assumptions had to be met to confirm that conducting a mixed ANOVA was an appropriate analysis. In order for assumptions to be met, the population should have the same variance, the populations should be normally distributed, and each variable should be sampled independently of the other variable (Lane et al., n.d.).

The Levene's Test of Homogeneity of Variance (Field, 2013) was conducted to determine if there was variance of the population. An insignificant *p*-value suggests that variance is homogeneous. For teachers' attitudes toward inclusion, Levene's test was significant, which suggests that variances were unequal for teachers at the elementary and secondary grade levels, $F(1, 122) = .04$, $p = .84$ (Field, 2013). Because of the homogeneity of variance assumption was not met with the Levene's test, a more robust test was necessary. A Shapiro-Wilk Test of Normality was conducted to determine if the population was normally distributed. With a *p*-value of .12, it can be assumed that the population is distributed equally.

Additionally, a histogram was conducted to determine the frequency distribution of the data. The histogram below (Figure 2) displays a normal distribution curve with the largest frequency of data points distributed near the mean. Furthermore, in order to meet assumptions, all values must be sampled independently of each other. All participants provided one response per item and variable; therefore, this assumption was also met.

Figure 2

Frequency Distribution of Teachers' Responses



Additional assumptions were assessed through a test of skewness and kurtosis (Cohen et al., 2003). A test of skewness and kurtosis was run to determine if the distribution of the data points deviate from the normal. Skewness between -1 and 1 is considered an acceptable range; while kurtosis is normal at three; therefore, tests of skewness and kurtosis show normal distribution at zero (Lane et al., n.d.). According to the data presented in Table 4, there is a slight skew across disability category data. For kurtosis, the distributions are slightly pointed, or leptokurtic, across all disability categories, except students with ED. The category of ID is most leptokurtic across disability categories. The disability category of ED has a slightly flattened, or platykurtic distribution. However, these distributions should not affect the outcome of the analyses.

Table 4

Test of Skewness and Kurtosis

	AUT	ED	ID	OHI	SLD	SLI	OTH
Skewness	-.29	-.14	-.33	-.35	.15	.20	-.42
Kurtosis	.91	-.16	2.05	.90	.27	.55	1.62

Data Analyses

During the analysis phase, *IBM Statistical Package for the Social Science (SPSS) Statistics* software was used to complete statistical analyses. *Microsoft Excel* was used to create a spreadsheet to store the data to be imported into SPSS. Once data were imported into SPSS, it was checked for missing data using Little's Test of Missing Completely at Random (Little, 1988). Once data were collected, proportions and mechanics of data were analyzed, and a decision was made to exclude missing data from computations using a pairwise method. Once data were cleaned, descriptive statistics were run. A codebook was developed to assign scores to responses (See Appendix B), A mixed ANOVA was run to analyze the data, and an analysis of the marginal means plot was conducted to compare the overall attitudes of elementary teachers to those of secondary teachers.

RQ1. *Is there a relationship between students' disability categories and teachers' attitudes toward inclusion?* A mixed ANOVA, an analysis to examine differences between two or means (Lane et al., n.d.), was used to determine if there is a relationship between students' disability categories and teachers' attitudes toward inclusion. This analysis was used because it allows inferences to be made by analyzing the variance between the means of variables. A mixed ANOVA allows for comparing variables that contain more than one factor. These variables are within and between-group variables (Lane et al., n.d.). In the current study, a single variable of disability category was created of the seven within factors (i.e., AUT, ED, ID, OHI, SLD, SLI, OTH). Single item scoring was used to determine teachers' attitudes toward the inclusion of

students in each disability category. Scoring ranged from 1 for strongly disagree to 4 for strongly agree. Scores for survey item 8 were reverse coded in *SPSS*: 4 for strongly disagree and 1 for strongly agree. This change was made due to item 8 being worded negatively. For item 8, a response of strongly disagree would be considered positive and not negative. The mean score for each disability category was computed. Descriptive statistics were analyzed to determine the frequency of teacher responses to questions regarding students' disability categories. Standard deviation and mean were reported.

RQ2: *Does the relationship between disability categories and teachers' attitudes toward inclusion vary as a function of grade level that educators teach (elementary versus secondary)?* A mixed ANOVA was used to determine if educators' grade level taught acts as a moderator to attitudes toward inclusion based on students' disability categories. Disability category (see above) acted as the within-group variable, while the grade levels taught by teachers (i.e., elementary or secondary) acted as the within-group variables. Coding was used to determine teachers' grade levels, 0 for elementary, and 1 for secondary. Inferential statistics were analyzed to determine the frequency of teacher responses by grade level (elementary or secondary) and to determine the frequency of questions regarding students' disability categories. Standard deviations and means were reported.

CHAPTER FOUR – RESULTS

Chapter four displays results from the analyses. This chapter is divided into three sections: (a) demographic data, (b) descriptive statistics, and (c) inferential statistics, which address the current study's research questions. The first section includes demographic data on grade level taught, years, teaching, and gender. In the second section, means, standard deviations, frequencies, and percentages on the predictor variables are calculated. The third section describes results from the mixed ANOVA used to analyze teachers' attitudes toward the inclusion of students with disabilities based on specific disability categories and grade levels taught by teachers.

Demographic Data

A link to the *TIAQ* was sent through email to teachers in the seven elementary and secondary schools in the districts. There were 147 participants who opened the study. Of those participants, seven did not give consent. Four gave consent but did not answer questions on the survey. After excluding nonparticipants, 136 teachers remained who completed the survey partially or in full for a participation rate of 49.45% of eligible teachers. Of the 136 participants, 124 were included in the study after a pairwise deletion of missing data (91.18%); 65 were elementary teachers, while 59 were secondary teachers. Table 5 displays participant characteristics; frequencies and percentages were calculated to determine demographic data.

Table 5

Participant Demographic Data

Characteristic	Frequency (*f*)	Percentage (%)
Gender		
Female	89	86
Male	14	14
Grade Level Taught		
Elementary	72	53
Secondary	64	47
Teacher Type		
General Education	77	75
Special Education	26	25
Years Teaching Experience		
Less Than Five	17	17
Five to 10	22	21
11 – 20	34	33
21 – 30	23	22
Over 30	7	7

Note. Teachers were allowed to skip items. Frequency totals may differ.

The data in Table 5 reveals that the majority of the participants in this study were female (86%) elementary (53%) general education (75%) with between 11 and 20 years of teaching experience (33%). A Little's Test (Little, 1988) was run to determine if data were missing completely at random. Results indicate sufficient evidence to conclude that data were missing completely at random ($p < .50$). Pairwise deletion was used to handle missing data. Appendix C displays a missing data correlation matrix. Descriptive statistics were run to determine frequencies, means, and standard deviations of participant responses.

Descriptive Statistics

Appendix D displays frequencies, means, and standard deviations to responses of teachers' attitudes toward inclusion of students with specific disabilities per item. Teachers were asked questions to determine their attitudes toward teaching students with specific disabilities and questions to determine their overall attitudes toward inclusion. Table 6 depicts

Table 6

Teachers' Attitudes Descriptive Statistics

Item	AUT	ED	ID	OHI	SLD	SLI	OTH
	f *%* *M* *SD*	*f* *%* *M* *SD*	*f* *%* *M* *SD*	*f* *%* *M* *SD*	*f* *%* *M* *SD*	*f* *%* *M* *SD*	*f* *%* *M* *SD*
1. I have the knowledge to cope with the instructional needs of students with disabilities.	124 92.2 2.56 .83	124 91.2 2.37 .88	124 91.2 2.79 .77	124 91.2 2.97 .72	124 91.2 3.01 .72	124 91.2 2.67 .78	120 88.2 2.36 .78
2. Students with disabilities will benefit from the interaction supplied by placement in the general education classroom.	110 80.9 2.83 .75	110 80.9 2.62 .81	109 80.1 2.86 .66	111 81.6 3.11 .62	111 81.6 3.14 .60	111 81.6 3.13 .59	106 77.9 2.91 .61
3. Students without disabilities will benefit from the inclusion of students with disabilities in the general education classroom.	106 77.9 2.89 .69	106 77.9 2.46 .87	106 77.9 2.88 .67	105 77.9 3.04 .65	106 77.9 3.09 .59	106 77.9 3.09 .56	105 77.2 2.90 .65
4. Students with disabilities are socially accepted in the general education classroom by their peers without disabilities.	103 75.7 2.58 .66	103 75.7 2.23 .69	103 75.7 2.60 .66	100 73.5 2.90 .61	103 75.7 2.94 .59	103 75.7 2.80 .65	101 74.3 2.68 .65
6. I can manage the behavior of children with disabilities.	104 76.5 2.67 .76	105 77.2 2.48 .80	105 77.2 2.86 .70	104 76.5 3.03 .65	106 77.9 3.08 .62	105 77.2 3.08 .65	102 75.0 2.86 .65
7. I like having children with disabilities in my classroom.	99 72.8 2.92 .62	100 73.5 2.54 .81	101 74.3 2.90 .67	101 74.3 3.12 .53	102 75.0 3.14 .49	100 73.5 3.14 .49	99 72.8 2.91 .67
8. Children with disabilities encounter considerable humiliation in the general education classroom from their peers without disabilities.	102 75.0 2.31 .73	101 74.3 2.45 .78	101 74.3 2.37 .73	101 74.3 2.17 .72	100 73.5 2.20 .72	101 74.3 2.27 .72	99 72.8 2.26 .71
M and *SD* of Teachers' Attitudes Per Disability Category	2.70 .50	2.48 .52	2.77 .45	2.91 .44	2.96 .39	2.89 .39	2.68 .47

descriptive statistics of teachers' attitudes toward inclusion by item and by student disability categories. Teachers' attitudes toward inclusion range from 1 (strongly disagree) to 4 (strongly agree); therefore, the higher the mean, the more positive the teachers' attitudes. Attitudes range from 1 (most negative) to 4 (most positive). According to the data, for questions 1 – 8, teachers' have the most positive attitudes toward teaching students with OHI, SLD, and SLI, while students with ED are in the disability category with the most negative attitudes toward inclusion. The last item in Table 6 displays the means and standard deviation for teachers' overall attitudes toward the inclusion of students per disability category. To determine the mean, SPSS was used to isolate questions per disability and participant. Once the mean of each disability per participant was determined, descriptives were run to determine the total mean per disability category for all participants.

According to the data displayed in Table 7, overall, teachers did not believe that they received the support they needed in order to educate students with disabilities in general education classes. Teachers did not feel as if they do not have adequate instructional materials (M = 2.20, SD = .82), nor did they feel as if they have adequate services from support personnel (M = 2.21, SD = .90). However, teachers held the most negative attitudes regarding having the budget needed to obtain resources for teaching students with disabilities (M = 1.79, SD =.74). Teachers' willingness to attend workshops to broaden their knowledge about educating students with disabilities was most positive of all variables (M = 3.29, SD = .64). When examining the means of descriptive statistics (Table 8), it appears that teachers tend to have the most positive attitudes toward students with SLD (M = 2.96) and slightly less positive attitudes toward students with ED (M = 2.48).

Table 4

Teachers' Overall Attitudes Toward Inclusion

Item	*N*	*%*	*M*	*SD*
9. Adequate instructional materials are available to me for teaching students with disabilities.	100	73.5	2.20	.82
10. Adequate support services, such as reading teachers, speech therapists, instructional specialists, school psychologists, educational diagnosticians, are readily available to me.	101	74.3	2.21	.90
11. I have a sufficient budget to obtain resource materials for planning and working with students with disabilities.	100	73.5	1.79	.74
12. I am willing to attend additional workshops to broaden my knowledge about the education of students with disabilities.	101	74.3	3.29	.64

Table 5

Descriptive Statistics of Teachers' Attitudes Toward Inclusion by Disability Categories

Variables	*n*	*M*	*SD*
AUT	124	2.70	.50
ED	124	2.48	.52
ID	124	2.77	.45
OHI	124	2.91	.44
SLD	124	2.96	.39
SLI	124	2.89	.39
OTH	123	2.68	.47

A bivariate correlation analysis was conducted to examine the associations between students' disability categories and teachers' attitudes toward inclusion (Field, 2013). Teachers' attitudes were significantly correlated across all disability categories. Attitudes were most significantly correlated with the disability category of AUT ($r = .84$, $p < .01$), and OTH ($r = .70$, $p < .01$) being least significantly correlated. Data from this analysis appears in Table 9.

Table 9

Correlation Matrix of Disability Categories and Teachers' Attitudes

Variable	Attitude	AUT	ED	ID	OHI	SLD	SLI	OTH
Attitude	-							
AUT	.84*	-						
ED	.79*	.73*	-					
ID	.77*	.71*	.70*	-				
OHI	.78*	.49*	.43*	.42*	-			
SLD	.83*	.62*	.50*	.58*	.75*	-		
SLI	.77*	56*	.36*	.44*	.71*	.80*	-	
OTH	.70*	.42*	.49*	.35*	.66*	.44*	.52*	-

**Note N* =123 and p < .01 for each variable

Inferential Statistics

Inferential statistics are those that allow inferences to be made about the population based on the results of the mixed ANOVA.

RQ1. Is there a relationship between students' disability categories and teachers' attitudes toward inclusion?

A mixed ANOVA was conducted to determine whether teachers' attitudes toward inclusion differ, on average, based on students' disability categories (Table 10). There was a significant main effect of students' disability categories, $F(6, 726) = 37.68$, $p < .001$, Partial $\eta\ 2 = .24$ which is a small effect, according to Cohen's (2003) guidelines. However, this main effect is qualified by a significant interaction effect, which is discussed next.

RQ2: *Does the relation between disability categories and teachers' attitudes toward inclusion vary as a function of grade level?*

In order to determine if grade level acts as a moderator in the relation between disability categories and teachers' attitudes toward inclusion, a mixed ANOVA was run. Results show that there was not a significant main effect of the grade level teachers taught, $F(1, 121) = 1.99$, $p = .16$, Partial $\eta\ 2 = .02$. However, there was sufficient evidence to conclude that grade level was a

significant moderator in the relation between students' disability categories and teachers' attitudes, $F(6, 726) = 3.30$, $p = .003$, Partial $\eta 2 = .03$.

Table 6

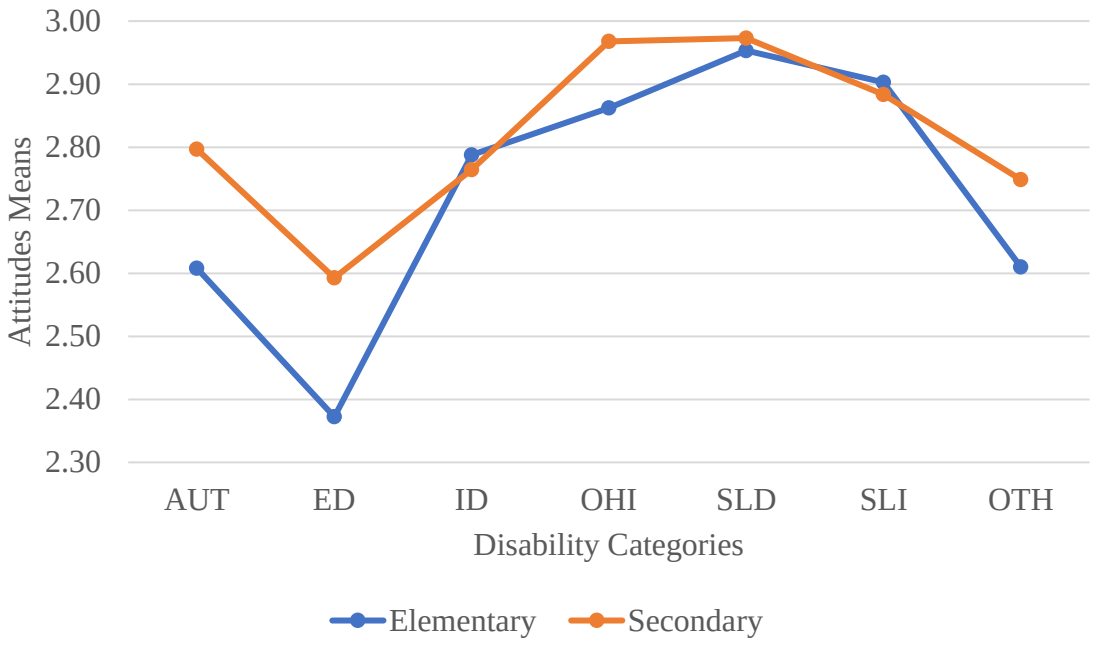
Mixed ANOVA Effect of Variables on Teachers' Attitudes

Variables	*F*	*p*	*η 2*
Disability Category	37.68	.000	.237
Grade Level	1.99	.160	.016
Category*Grade	3.30	.003	.027

That is, although there was no main effect between grade level and teachers' attitudes, there was a significant interaction between disability category and grade level. An analysis of the marginal means plot suggests that grade level illustrates this interaction (see Figure 3): overall, the marginal means plot suggests that secondary teachers have more positive attitudes toward the inclusion of students with disabilities.

Figure 3

Estimated Marginal Means Teachers' Attitudes Toward Disability Categories by Grade Level



An independent samples *t*-Test was conducted to investigate which disability categories differ significantly for elementary versus secondary teachers. On average, secondary teachers have more positive attitudes toward the disability categories of AUT, ED, OHI, and OTH. For the disability category of AUT, there was a significant difference, $t = -2.13$, $p = .04$, between the attitudes of secondary teachers ($M = 2.80$, $SD = .44$) and elementary teachers.($M = 2.60$, $SD = .54$). For the disability category of ED, there was a significant difference, $t = -2.37$, $p = .02$, between secondary teachers ($M = 2.59$, $SD = .53$) and elementary teachers ($M = 2.37$, $SD = .50$). For the disability category of OHI, there was not a significant difference, $t = -1.33$, $p = .19$, between secondary teachers ($M = 2.97$, $SD = .37$) and elementary teachers ($M = 2.86$, $SD = .50$). For the disability category of OTH, there was not a significant difference, $t = -1.67$, $p = .10$, between secondary teachers ($M = 2.75$, $SD = .41$) and elementary teachers ($M = 2.61$, $SD = .50$).

Although the current study included both general and special education teachers, special education teachers comprised only 25% of participants; therefore, an analysis was not conducted to determine if teacher type acts as a moderator to teachers' attitudes. The small sample size makes it difficult to generalize results of the current study to special education teachers. Similar to special education teachers, male teachers were not highly represented in the study (14%). With a small sample size, generalization to the population is not feasible.

Summary

In summary, results from this study suggest that there is a relationship between students' disability categories and teachers' attitudes toward inclusion. Although there was no significant main effect of grade level taught on teachers' attitudes, grade level did act as a moderator in the relation between disability category and teachers' attitudes. Overall, secondary teachers have more positive attitudes toward the inclusion of students with disabilities, in particular, students

with the disability categories of AUT, ED, OHI, and OTH when compared to their elementary counterparts. Most teachers believe that they do not have the resources and financial support needed to be successful in teaching students with disabilities in the general education classroom. However, teachers hold positive attitudes regarding their willingness to participate in professional development to improve their knowledge of working with students with disabilities in the general education classroom. Results suggest that negative attitudes toward the inclusion of students with disabilities may also be due to teacher perceptions of a lack of resources, support, and knowledge.

CHAPTER FIVE – DISCUSSION

This study aimed to examine teachers' attitudes toward the inclusion of students with disabilities in the general education classroom in a rural school district. Research indicates that when teachers have preconceived expectations of students based on their disability category, there may be missed educational opportunities for students with disabilities (Jackson et al., 2009; Jorgensen et al., 2007). Recent research has shown that inclusion is a predictor of the postsecondary success of students with disabilities in the areas of independent living, employment, and education (Christle et al., 2007; Sitlington & Neubert, 2004; Test et al., 2009). Several factors may impact teachers' attitudes toward inclusion, including the students' disability category and the grade level taught by teachers (Cook, 2001; Goyena, 2008; Logan & Wimer, 2013; Ross-Hill, 2009). The following is a summary of the results and a discussion of the findings of the current study, along with their implications, limitations, and recommendations for future research and practice.

Research Question One: Teachers' Attitudes Toward Inclusion

Question one asked if there is a relationship between students' disability categories and teachers' attitudes toward inclusion. Teachers were asked to respond to eight items on a survey about their beliefs and attitudes toward including students with disabilities by disability category as well as four items on their overall attitudes toward inclusion. Findings suggest that there is a relationship between students' disability categories and teachers' attitudes toward inclusion. Teachers had the most positive attitudes toward the inclusion of students with SLD, with the least positive attitudes toward the inclusion of students with ED. These results are consistent

with literature that shows that the more severe the disability, the less willing teachers are to include students (Cook, 2001; Logan & Wimer, 2013) and that teachers hold positive attitudes toward teaching students with milder (Giffing et al., 2010). However, the general association in this study is qualified by an interaction that will be discussed in the Discussion section.

In the current study, teachers held the most negative attitudes toward including students with ED for all items related to the disability category. According to results of the survey, teachers stated that they did not have the knowledge to cope with students with ED. Teachers did not believe that students with ED would benefit from inclusion in general education classes, nor did they believe that typically developing peers would benefit from the inclusion of students with ED. Teachers believed that students with ED were not socially accepted by peers and that students in this disability category had behaviors that were difficult to manage in general education. Teachers ranked students with ED as least desirable to include in general education and believed that students with ED would be ridiculed most by their peers when compared to students in other disability categories.

At the same time, teachers held the most positive attitudes toward including students with SLD in nearly every item related to disability category. Results of the survey show that teachers believed they have the most knowledge on educating students with SLD and that students with SLD would benefit the most from inclusion; however, students with SLI and OHI had similar mean scores to students with SLD in these two areas. When it comes to the benefit of inclusion on typically developing peers, teachers had positive attitudes toward the inclusion of both students with SLD and OHI. According to teachers, students with SLD would be the most socially accepted by their peers. They indicated that both students with SLD and SLI are most desired to be included in general education classes and have behaviors that are most manageable.

However, teachers believed that students with OHI receive the least amount of ridicule from their peers when compared to students in other disability categories.

When interpreting the results of this study, it is important to keep in mind that this study was conducted in one rural school district where there are few students with low incidence disabilities. Teachers in rural districts may have less experience with students with low incidence or more significant disabilities and have more experience with high incidence disabilities such as SLD. The experience level of teachers with students in working would students in varying disability categories could help explain why teachers in rural districts may have more positive attitudes toward students with SLD.

Research Question Two: Grade Level Taught as a Moderator To Teachers' Attitudes

Research question two asked if teachers' attitudes toward inclusion vary as a function of grade level taught. A mixed ANOVA was conducted to determine whether teachers' attitudes toward inclusion differ, on average, based on students' disability categories and grade levels taught by teachers. Although there was not a significant effect of students' disability categories on teachers' attitudes toward inclusion, the grade level taught did act as a moderator to teachers' attitudes. These results are in line with most research where teachers at the elementary and secondary grade levels mentioned student disability as a relevant factor in their attitudes toward inclusion (Goyena, 2008; Ross-Hill, 2009). Although some researchers report that there are instances in which secondary teachers have positive attitudes (Logan & Wimer, 2013), most research suggests that as students increase in grade level, the attitudes of teachers become increasingly negative (Larrivee & Cook, 1979). In much of the literature, elementary teachers generally had more positive attitudes toward including students with disabilities in general education (Savage & Winke, 1989); surprisingly, this was not the case in the current study.

An examination of the marginal means plot (Figure 3) shows that in the current study, overall, high school teachers had more positive attitudes toward including students with disabilities. There was a substantial increase in the mean of secondary teachers over elementary teachers for the disability categories of AUT, ED, OHI, and OTH. There were no substantial differences in the means of elementary and secondary teachers for the disability categories of ID, SLD, and SLI. Secondary teachers may have more positive attitudes toward students with more challenging disabilities due to less interaction with students in these disability categories (Ernest & Rogers, 2009; Savage & Wienke, 1989). Secondary teachers may have more positive attitudes if students with challenging disabilities are educated in segregated or settings outside of the school setting. An increase in segregation sometimes happens as students move up in grades, and the curriculum is deemed too challenging (Dymond et al., 2007). Additionally, teachers in rural districts may not have had experience with students across all disability categories, which means that negative attitudes have not been constructed. This may have been the case of secondary teachers in the current study.

Limitations

There are limitations to the research. The study takes place in a single rural school district in the Mid-Atlantic region of the United States. Using a single rural school district makes it difficult to generalize the results to suburban or urban school districts and other regions of the country. However, the TIAQ instrument can be generalizable to other districts. Using the TIAQ, districts can use the results to create targeted professional development opportunities based on the findings specific to their districts. Another limitation is that there are five elementary schools situated in separate towns throughout the district, with many schools varying by race, ethnicity, socio-economic status, and percentage of students with disabilities. These factors may create

variability in teachers' attitudes within the group of elementary schools. Because these assumptions were not tested, interpreting attitudes of teachers between elementary schools is a limitation. Furthermore, participants may answer questions based on what they perceive to be the correct answer rather than providing answers that reflect their true beliefs, which may create a false reflection of what is occurring in the classroom.

Implications

Results from the current study suggest that teachers believe that they do not have the support and resources needed to educate students with disabilities in general education classes adequately. However, they are open to increasing their knowledge of pedagogy in teaching students with disabilities. These results provide valuable information for creating positive inclusionary environments for students with disabilities. Implications for practice, policy, and research are outlined in the following section.

Implications for Practice

Although research shows that access to the general education curriculum is a predictor to postsecondary success (Chiang et al., 2012; Mazzotti et al., 2016; Rojewski et al., 2015; Test et al., 2009), students with the most significant disabilities continue to be educated in separate settings than their typically developing peers (Kleinert, 2015; USDOE, 2018). Research shows that teachers tend to have more negative attitudes toward teaching students with more significant disabilities (Cook, 2001; Logan & Wimer, 2013), which may be due to teachers having a lack of knowledge of the characteristics of students with the most severe disabilities (Alfaro et al., 2015). Based on the current study, teachers show the most negative attitudes toward students with ED. It is recommended that school districts collaborate with their local teacher preparation programs on the challenges that teachers face in the classroom when including students with

significant behavioral challenges. It is suggested that preservice teachers participate in co-teaching student teaching placements. This placement would allow preservice teachers to gain practical experience, and research shows that teachers with experience generally have more positive attitudes toward including students with disabilities (Brownell & Parjares, 1999; Fuchs, 2010; Schultz & Simpson, 2013).

According to the literature, teachers believe that they do not have the knowledge to be successful in teaching students with disabilities in general education (Alfaro et al., 2015). Many teachers believe that their teacher preparation programs did not adequately prepare them for teaching students with disabilities in the general education classroom (Brownell & Parjares, 1999; Fuchs, 2010). Teachers in this study also indicated that they felt ill-prepared to teach students with disabilities in general education classrooms. Teachers stated that they do not have resource materials, nor do they have sufficient funding to obtain resource materials for planning and working with students with disabilities. Additionally, teachers felt as if they are not supported by school special education personnel such as reading teachers, speech therapists, instructional specialists, school psychologists, and educational diagnosticians. These results are in line with the literature; when teachers believe they have adequate resources, they have more positive attitudes toward inclusion. In several studies, resources and supports were essential factors in teachers' attitudes (Cambridge-Johnson et al., 2014; Ernest & Rogers, 2009; Scruggs & Mastropieri, 1996). It is suggested that school districts use financial resources to hire special education personnel who can support teachers in their efforts to teach students with disabilities and create an environment that allows teachers to access these human resources easily.

In addition to access to support personnel, regularly scheduled professional development opportunities would be beneficial to in-service teachers. Professional development would

provide school districts with opportunities to target the needs and concerns of teachers. One factor in the attitudes toward inclusion is the grade level taught by teachers. Research shows that the needs of elementary teachers may not be the same as those of secondary teachers (Ernest & Rogers, 2009; Savage & Wienke, 1989). In the current study, teachers indicated that they were willing to participate in professional development to become more knowledgeable about current practices for educating students with disabilities in general education. According to the current study, it would be more beneficial for both elementary and secondary teachers to participate in professional development that increases their knowledge of students with AUT, ED, ID, and disabilities in the OTH category. These disability categories were the four lowest disability categories at both the elementary and secondary grade levels.

Implications for Policy

Current statistics show that the percentage of students with disabilities who are educated in the general education setting for at least 80% of the day varies significantly from state to state (Kleinert, 2015; USDOE, 2018). This variance in placement for students with disabilities may be due to the vague language surrounding LRE (Alquraini, 2013; Ryndak et al., 2014). The federal government should strengthen the definition of LRE. A strengthening of the language around the definition of LRE may lessen the gap between states when it comes to educating students with disabilities in general education classes.

It is recommended that states provide local school districts with guidance on LRE and student placement. States should provide school districts with guidance documents on making placement decisions, allowing IEP team members to table individual biases and make decisions that provide students with the greatest educational opportunities. In the current study, teachers have the most negative attitudes toward working with students with ED. When IEP meetings are

conducted with participants that hold negative attitudes toward including students with ED, students with ED may be educated in more restrictive environments. Therefore, it is recommended that states provide districts with guidance on placement decisions that set the tone for inclusionary practices.

It is also recommended that school districts have clear expectations toward the inclusion of students with disabilities. In the current study, teachers indicated that they were more welcoming of students with milder disabilities such as those with SLD, SLI, and OHI, but were less welcoming of students with disabilities that may be more challenging, such as those with ED. In order for teachers to have positive attitudes toward including students with disabilities, it is essential that they feel supported with resources and through the assistance of specialists in the field.

Implications for Future Research

The current study includes elementary and secondary schools from one rural school district in the Mid-Atlantic of the United States. This study indicates that teachers in this district tend to have the most positive attitudes toward including students with SLD in general education classes, with the most negative attitudes toward including students with ED. For future research, it is recommended that studies include urban and suburban school districts from various regions of the United States. Additionally, with a wide range of inclusive practices from state to state and district to district, a replication of the study in other regions of the country or with urban and suburban school districts is recommended. A replication with different participants may provide insight as to the inclusionary practices among states and school districts with contrasting populations of students. In addition, because students' disability categories affect teachers'

attitudes toward inclusion, it is recommended that research is conducted on the characteristics of specific disabilities and how they impact teachers' attitudes.

In a 1981 study by Gilliam and Coleman, IEP team members were ranked by level of input based on pre-meeting importance, post-meeting contribution, and post-meeting influence. Special education teachers ranked first in all three categories. Because special education teachers, as case managers, write IEPs, monitor student progress, and provide insight for placement decisions, there is the need for additional research to examine the attitudes of special education teachers on the inclusion of students with disabilities in the general education classroom. In the current study, only 25% (26) of participants were special education teachers. The lack of research on special education teachers using a large sample size can leave a void in the research as it relates to the impact of teacher attitudes. Even still, additional research is needed.

In addition to a replication study, it is suggested that further research be conducted on evidence-based strategies on UDL (Ryndak et al., 2013). As indicated in the current study, teachers generally have negative attitudes toward including students with ED. Research shows that when teachers feel they are adequately prepared, they have more positive attitudes toward including students with disabilities in general education classes (Brownell & Parjares, 1999; Fuchs, 2010).

Conclusion

With the passing of P.L. 94-142, the *Education for All Handicapped Children Act* (EHA) in 1975, there has been a heightened awareness of the educational rights of students with disabilities. Since that time, the number of students with disabilities who are educated in the general education classroom has been on a steady rise. Teachers' attitudes and expectations play

a factor in the success of students in the general education classroom, which in turn may play a factor in the success students have once they exit high school. The current study indicates that although teachers' attitudes toward inclusion vary based on disability category, they are willing to participate in professional development to improve their knowledge of working with students with disabilities. In order to provide an optimal educational experience, teachers should be adequately prepared to teach students with disabilities and receive ongoing support. When teachers in rural districts are prepared and supported, they are more likely to have positive attitudes toward including students with disabilities in the general education classroom with higher rates of graduation and postsecondary success for students with disabilities.

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APPENDIX A

Teacher Integration Attitudes Questionnaire

Please respond to the following questions using the scale:

1 = strongly disagree;
2 = disagree;
3 = agree;
4 = strongly agree.

Choose the response that most appropriately identifies your beliefs. For questions 1 – 8, mark your beliefs based on students' disability categories. For questions 9 – 12, choose the response which most appropriately identifies your overall beliefs regarding inclusion.

Glossary of Disability Category Terms

Disability Category	Students may exhibit the following characteristics:
Autism	• Repetitive activities and stereotyped movements • Resistance to environmental changes or changes in their daily routine • Unusual response to sensory activates
Emotional Disturbance	• Unexplainable inability to learn which is not caused by intellectual, sensory, or health factors • Difficulty building or maintaining satisfactory interpersonal relationships with peers and teachers • Display of inappropriate behavior or feelings under normal circumstances • Persistent mood of unhappiness or depression • Physical symptoms or fears that are associated with personal or school problems
Intellectual Disability	• Intellectual function that is significantly subaverage • Deficits in adaptive behavior (conceptual skills, social skills, and practical skills) • Educational performance is adversely affected

Other Health Impairment	• Limited strength, vitality, or alertness • Heightened alertness to environmental stimuli which results in limited alertness to the educational environment • Due to chronic or acute health conditions (i.e., asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome) • Educational performance is adversely affected
Specific Learning Disability	• Disorder of psychological processes involved in understanding or in using spoken or written language • Difficulty in ability to speak, read, write, spell, or do mathematical calculations
Speech or Language Impairment	• Communication disorder (e.g., Stuttering, impaired articulation, a language impairment, or a voice impairment) • Educational performance is adversely affected
Other Disabilities:	• Deaf-blindness – a combination of hearing and visual impairments, which causes such severe communication and other developmental and educational • Deafness – a severe hearing impairment that affects the ability to process linguistic information, with or without the use of amplification • Hearing impairment – an impairment in hearing, that adversely affects a child's educational performance but does not meet the definition of deafness • Multiple disabilities – concurrent impairments (e.g., intellectual disability-blindness or intellectual disability-orthopedic impairment), which causes such severe educational needs and does not include deaf-blindness • Orthopedic impairment – a severe orthopedic impairment that has an adverse effect on educational performance; includes impairments caused by a congenital anomaly, impairments caused by disease (e.g., poliomyelitis, bone tuberculosis), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns that cause contractures) • Traumatic brain injury – injury to the brain caused by an external physical force that resulted in a total or partial functional disability or psychosocial impairment, or both but

	does not apply to congenital brain injuries or injuries caused by both • Visual impairment – an impairment in vision that adversely affects a child's educational performance, even with correction; the term includes both partial sight and blindness.

Grade Level Taught

_____ Elementary _____ Secondary

1. I have the knowledge to cope with the instructional needs of students with disabilities.

Autism	Strongly Disagree	Disagree	Agree	Strongly Disagree
Emotional Disturbance	Strongly Disagree	Disagree	Agree	Strongly Disagree
Intellectual Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other Health Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Specific Learning Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Speech or Language Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other: DB, D, HI, OI, MD, TBI, VI	Strongly Disagree	Disagree	Agree	Strongly Disagree

2. Students with disabilities will benefit from the interaction supplied by placement in the general education classroom.

Autism	Strongly Disagree	Disagree	Agree	Strongly Disagree
Emotional Disturbance	Strongly Disagree	Disagree	Agree	Strongly Disagree

Intellectual Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other Health Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Specific Learning Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Speech or Language Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other: DB, D, HI, OI, MD, TBI, VI	Strongly Disagree	Disagree	Agree	Strongly Disagree

3. Students without disabilities will benefit from the inclusion of students with disabilities in the general education classroom.

Autism	Strongly Disagree	Disagree	Agree	Strongly Disagree
Emotional Disturbance	Strongly Disagree	Disagree	Agree	Strongly Disagree
Intellectual Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other Health Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Specific Learning Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Speech or Language Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other: DB, D, HI, OI, MD, TBI, VI	Strongly Disagree	Disagree	Agree	Strongly Disagree

4. Students with disabilities are socially accepted in the general education classroom by their peers without disabilities.

Autism	Strongly Disagree	Disagree	Agree	Strongly Disagree
Emotional Disturbance	Strongly Disagree	Disagree	Agree	Strongly Disagree
Intellectual Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other Health Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Specific Learning Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Speech or Language Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other: DB, D, HI, OI, MD, TBI, VI	Strongly Disagree	Disagree	Agree	Strongly Disagree

5. I can remediate students with disabilities.

Autism	Strongly Disagree	Disagree	Agree	Strongly Disagree
Emotional Disturbance	Strongly Disagree	Disagree	Agree	Strongly Disagree
Intellectual Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other Health Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Specific Learning Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree

Speech or Language Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other: DB, D, HI, OI, MD, TBI, VI	Strongly Disagree	Disagree	Agree	Strongly Disagree

6. I can manage the behavior of children with disabilities.

Autism	Strongly Disagree	Disagree	Agree	Strongly Disagree
Emotional Disturbance	Strongly Disagree	Disagree	Agree	Strongly Disagree
Intellectual Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other Health Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Specific Learning Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Speech or Language Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other: DB, D, HI, OI, MD, TBI, VI	Strongly Disagree	Disagree	Agree	Strongly Disagree

7. I like having children with disabilities in my classroom.

Autism	Strongly Disagree	Disagree	Agree	Strongly Disagree
Emotional Disturbance	Strongly Disagree	Disagree	Agree	Strongly Disagree

Intellectual Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other Health Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Specific Learning Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Speech or Language Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other: DB, D, HI, OI, MD, TBI, VI	Strongly Disagree	Disagree	Agree	Strongly Disagree

8. Children with disabilities encounter considerable humiliation in the general education classroom from their peers without disabilities.

Autism	Strongly Disagree	Disagree	Agree	Strongly Disagree
Emotional Disturbance	Strongly Disagree	Disagree	Agree	Strongly Disagree
Intellectual Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other Health Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Specific Learning Disability	Strongly Disagree	Disagree	Agree	Strongly Disagree
Speech or Language Impairment	Strongly Disagree	Disagree	Agree	Strongly Disagree
Other: DB, D, HI, OI, MD, TBI, VI	Strongly Disagree	Disagree	Agree	Strongly Disagree

9. Adequate instructional materials are available to me for teaching students with disabilities.

Strongly Disagree Disagree Agree Strongly Disagree

10. Adequate support services, such as reading teachers, speech therapists, instructional specialists, school psychologists, educational diagnosticians, are readily available to me.

Strongly Disagree Disagree Agree Strongly Disagree

11. I have a sufficient budget to obtain resource materials for planning and working with students with disabilities.

Strongly Disagree Disagree Agree Strongly Disagree

12. I am willing to attend additional workshops to broaden my knowledge about the education of students with disabilities.

Strongly Disagree Disagree Agree Strongly Disagree

Demographic Information

Gender

_____ Male _____Female

Teacher Type

_____General Education Teacher

_____Special Education Teacher

Years of Teaching Experience

_____ Less than 5 _____ 5 – 10

_____ 11 – 20 _____ 21 – 30

_____ Over 30

APPENDIX B

Codebook for Teachers' Attitudes Toward Inclusion Data Analysis

Variable 1.	Gender – 0 = Female, 1 = Male
Variable 2.	Grade – grade level taught by educator; 0 = Elementary, 1 = Secondary
Variable 3.	Disability –1 = Autism, 2 = Emotional Disturbance, 3 = Intellectual Disability, 4 = Other Health Impairment, 5 = Specific Learning Disability, 6 = Speech or Language Impairment, 7 = Other Disabilities
Variable 4.	Attitude – 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree

APPENDIX C

Correlation Matrix of Missing Completely at Random Data

Item 1

	AUT	ED	ID	OHI	SLD	SLI	OTH
AUT1	1						
ED1	0.603	1					
ID1	0.609	0.550	1				
OHI1	0.494	0.430	0.531	1			
SLD1	0.554	0.435	0.595	0.741	1		
SLI1	0.528	0.310	0.343	0.399	0.513	1	
OTH1	0.397	0.507	0.399	0.459	0.390	0.594	1
AUT2	0.428	0.349	0.247	0.273	0.257	0.206	0.202
ED2	0.374	0.461	0.315	0.240	0.325	0.214	0.230
ID2	0.273	0.162	0.270	0.235	0.236	0.081	0.093
OHI2	0.337	0.189	0.311	0.423	0.432	0.243	0.262
SLD2	0.323	0.162	0.338	0.422	0.430	0.236	0.232
SLI2	0.208	0.119	0.238	0.319	0.329	0.096	0.119
OTH2	0.237	0.234	0.159	0.299	0.324	0.212	0.300
AUT3	0.421	0.407	0.339	0.244	0.248	0.225	0.152
ED3	0.323	0.415	0.401	0.224	0.305	0.238	0.161
ID3	0.324	0.225	0.346	0.213	0.238	0.063	0.013
OHI3	0.407	0.322	0.379	0.424	0.443	0.215	0.236
SLD3	0.340	0.271	0.359	0.373	0.429	0.215	0.213
SLI3	0.299	0.195	0.292	0.302	0.293	0.119	0.113
OTH3	0.220	0.377	0.185	0.269	0.293	0.176	0.296
AUT4	0.063	0.178	0.098	0.092	0.106	0.032	0.097
ED4	0.059	0.103	0.221	0.063	0.064	0.038	0.069
ID4	0.081	0.070	0.203	0.073	0.085	0.028	0.084
OHI4	0.127	0.062	0.074	0.375	0.363	0.109	0.150
SLD4	0.163	0.056	0.139	0.315	0.298	0.079	0.146
SLI4	0.128	-0.127	0.150	0.326	0.322	0.156	0.133
OTH4	-0.035	0.074	-0.018	0.139	0.103	0.019	0.204
AUT5	0.476	0.447	0.386	0.260	0.313	0.328	0.392

	AUT	ED	ID	OHI	SLD	SLI	OTH
ED5	0.375	0.599	0.402	0.363	0.385	0.252	0.430
ID5	0.413	0.446	0.588	0.367	0.444	0.380	0.456
OHI5	0.379	0.313	0.383	0.552	0.575	0.328	0.415
SLD5	0.417	0.347	0.407	0.538	0.576	0.293	0.388
SLI5	0.359	0.196	0.312	0.450	0.475	0.387	0.395
OTH5	0.226	0.366	0.239	0.286	0.325	0.322	0.494
AUT6	0.553	0.578	0.362	0.391	0.395	0.318	0.425
ED6	0.431	0.655	0.333	0.317	0.313	0.264	0.428
ID6	0.427	0.503	0.484	0.387	0.418	0.359	0.414
OHI6	0.386	0.281	0.290	0.566	0.513	0.273	0.389
SLD6	0.431	0.319	0.340	0.524	0.580	0.261	0.396
SLI6	0.425	0.264	0.342	0.588	0.619	0.340	0.435
OTH6	0.284	0.385	0.220	0.426	0.418	0.326	0.461
AUT7	0.367	0.401	0.306	0.222	0.222	0.145	0.168
ED7	0.416	0.521	0.418	0.309	0.314	0.230	0.370
ID7	0.362	0.403	0.446	0.283	0.323	0.230	0.299
OHI7	0.365	0.255	0.307	0.476	0.519	0.203	0.265
SLD7	0.252	0.196	0.212	0.381	0.401	0.061	0.164
SLI7	0.201	0.149	0.185	0.388	0.381	0.054	0.161
OTH7	0.267	0.309	0.238	0.408	0.386	0.279	0.419
AUT8	0.001	-0.122	-0.158	0.037	0.056	0.021	0.004
ED8	-0.025	-0.063	-0.186	0.070	0.002	-0.069	0.043
ID8	0.075	-0.038	-0.102	0.056	0.005	0.012	0.058
OHI8	-0.015	-0.079	-0.157	-0.113	-0.138	0.013	-0.024
SLD8	-0.110	-0.021	-0.237	-0.132	-0.159	-0.057	-0.025
SLI8	-0.036	0.017	-0.194	-0.076	-0.105	-0.041	-0.011
OTH8	0.174	0.020	-0.019	0.058	0.048	-0.032	0.013

Item 2

	AUT	ED	ID	OHI	SLD	SLI	OTH
AUT2	1						
ED2	0.780	1					
ID2	0.676	0.641	1				
OHI2	0.566	0.480	0.506	1			
SLD2	0.481	0.448	0.610	0.843	1		
SLI2	0.420	0.369	0.541	0.804	0.858	1	
OTH2	0.606	0.574	0.504	0.669	0.627	0.634	1
AUT3	0.676	0.593	0.420	0.464	0.378	0.379	0.499

	AUT	ED	ID	OHI	SLD	SLI	OTH
ED3	0.384	0.617	0.290	0.164	0.156	0.092	0.386
ID3	0.336	0.361	0.560	0.323	0.417	0.395	0.302
OHI3	0.427	0.403	0.328	0.675	0.598	0.605	0.522
SLD3	0.358	0.365	0.403	0.591	0.656	0.638	0.449
SLI3	0.402	0.324	0.401	0.599	0.639	0.676	0.447
OTH3	0.521	0.495	0.357	0.436	0.388	0.389	0.710
AUT4	0.468	0.351	0.273	0.244	0.206	0.223	0.238
ED4	0.308	0.352	0.228	0.109	0.072	0.078	0.306
ID4	0.282	0.210	0.214	0.216	0.127	0.218	0.315
OHI4	0.246	0.174	0.161	0.530	0.415	0.470	0.333
SLD4	0.155	0.146	0.231	0.421	0.518	0.550	0.294
SLI4	0.164	0.085	0.183	0.395	0.368	0.418	0.368
OTH4	0.324	0.218	0.160	0.277	0.206	0.277	0.471
AUT5	0.390	0.311	0.161	0.181	0.201	0.162	0.213
ED5	0.285	0.316	0.104	0.246	0.274	0.258	0.321
ID5	0.287	0.304	0.302	0.177	0.247	0.181	0.212
OHI5	0.126	0.082	0.069	0.417	0.422	0.407	0.221
SLD5	0.173	0.128	0.122	0.447	0.458	0.437	0.226
SLI5	0.026	0.038	-0.014	0.330	0.366	0.351	0.122
OTH5	0.189	0.134	0.054	0.111	0.157	0.110	0.253
AUT6	0.485	0.363	0.189	0.362	0.306	0.259	0.361
ED6	0.336	0.413	0.176	0.264	0.261	0.233	0.368
ID6	0.368	0.323	0.268	0.302	0.319	0.272	0.226
OHI6	0.209	0.112	0.101	0.530	0.440	0.395	0.328
SLD6	0.184	0.191	0.197	0.458	0.487	0.442	0.282
SLI6	0.207	0.177	0.164	0.516	0.447	0.428	0.313
OTH6	0.311	0.218	0.108	0.380	0.273	0.221	0.348
AUT7	0.533	0.438	0.373	0.264	0.243	0.243	0.260
ED7	0.442	0.586	0.328	0.293	0.308	0.240	0.416
ID7	0.401	0.437	0.406	0.221	0.301	0.227	0.233
OHI7	0.223	0.190	0.194	0.473	0.381	0.450	0.245
SLD7	0.198	0.153	0.251	0.444	0.440	0.517	0.240
SLI7	0.170	0.098	0.203	0.427	0.373	0.449	0.216
OTH7	0.486	0.357	0.311	0.507	0.426	0.403	0.573
AUT8	-0.149	-0.085	-0.098	-0.019	-0.018	-0.063	-0.030
ED8	-0.137	-0.126	-0.032	0.040	0.076	0.013	-0.007
ID8	-0.041	-0.019	-0.101	0.059	0.035	-0.033	0.002
OHI8	0.057	0.073	-0.025	-0.169	-0.207	-0.253	-0.036
SLD8	0.049	0.056	-0.076	-0.131	-0.193	-0.216	-0.008

	AUT	ED	ID	OHI	SLD	SLI	OTH
SLI8	0.143	0.135	0.029	-0.055	-0.075	-0.167	0.027
OTH8	0.034	0.097	0.050	0.037	0.019	-0.052	-0.043

Item 3

	AUT	ED	ID	OHI	SLD	SLI	OTH
AUT3	1						
ED3	0.636	1					
ID3	0.643	0.551	1				
OHI3	0.604	0.391	0.581	1			
SLD3	0.534	0.337	0.626	0.884	1		
SLI3	0.565	0.260	0.637	0.831	0.887	1	
OTH3	0.655	0.536	0.448	0.669	0.615	0.596	1
AUT4	0.316	0.136	0.154	0.197	0.201	0.265	0.227
ED4	0.381	0.479	0.249	0.199	0.184	0.119	0.323
ID4	0.362	0.213	0.289	0.242	0.150	0.237	0.303
OHI4	0.184	-0.062	0.163	0.482	0.433	0.459	0.256
SLD4	0.172	-0.041	0.277	0.436	0.484	0.484	0.220
SLI4	0.119	0.069	0.191	0.390	0.354	0.402	0.213
OTH4	0.286	0.044	0.025	0.288	0.235	0.330	0.503
AUT5	0.433	0.301	0.178	0.215	0.241	0.234	0.330
ED5	0.406	0.341	0.203	0.357	0.364	0.267	0.457
ID5	0.382	0.372	0.335	0.264	0.325	0.244	0.296
OHI5	0.083	-0.050	0.086	0.474	0.507	0.454	0.237
SLD5	0.154	-0.024	0.161	0.529	0.538	0.485	0.268
SLI5	-0.034	-0.081	-0.036	0.374	0.415	0.359	0.109
OTH5	0.153	0.079	-0.066	0.163	0.265	0.200	0.408
AUT6	0.573	0.323	0.251	0.343	0.286	0.280	0.410
ED6	0.463	0.427	0.229	0.302	0.290	0.178	0.428
ID6	0.478	0.288	0.293	0.288	0.311	0.305	0.251
OHI6	0.179	-0.024	0.097	0.458	0.369	0.338	0.268
SLD6	0.178	0.031	0.186	0.420	0.444	0.415	0.250
SLI6	0.191	0.004	0.110	0.451	0.405	0.376	0.279
OTH6	0.277	0.059	-0.056	0.278	0.220	0.206	0.376
AUT7	0.596	0.379	0.346	0.247	0.251	0.356	0.374
ED7	0.560	0.620	0.342	0.384	0.352	0.307	0.511
ID7	0.560	0.447	0.489	0.251	0.285	0.276	0.294
OHI7	0.274	0.111	0.258	0.559	0.559	0.492	0.298
SLD7	0.274	0.029	0.347	0.447	0.462	0.565	0.267

	AUT	ED	ID	OHI	SLD	SLI	OTH
SLI7	0.187	-0.002	0.227	0.362	0.392	0.490	0.237
OTH7	0.413	0.188	0.136	0.433	0.389	0.442	0.597
AUT8	-0.191	-0.079	-0.126	-0.041	-0.089	-0.144	-0.067
ED8	-0.192	-0.257	-0.095	-0.055	-0.097	-0.104	-0.080
ID8	-0.084	-0.084	-0.158	-0.027	-0.081	-0.136	-0.121
OHI8	0.014	0.106	-0.135	-0.237	-0.308	-0.302	-0.075
SLD8	-0.019	0.016	-0.212	-0.220	-0.294	-0.288	-0.004
SLI8	0.054	0.010	-0.116	-0.187	-0.243	-0.233	-0.036
OTH8	-0.027	0.014	-0.013	0.008	-0.054	-0.135	-0.126

Item 4

	AUT	ED	ID	OHI	SLD	SLI	OTH
AUT4	1						
ED4	0.472	1					
ID4	0.532	0.528	1				
OHI4	0.415	0.150	0.443	1			
SLD4	0.412	0.130	0.416	0.810	1		
SLI4	0.393	0.306	0.518	0.761	0.763	1	
OTH4	0.425	0.347	0.580	0.636	0.572	0.600	1
AUT5	0.374	0.265	0.274	0.028	0.071	0.024	0.246
ED5	0.315	0.286	0.243	0.098	0.174	0.048	0.231
ID5	0.340	0.393	0.376	0.038	0.090	0.135	0.172
OHI5	0.119	-0.064	0.041	0.428	0.392	0.342	0.262
SLD5	0.121	-0.038	0.068	0.428	0.420	0.317	0.262
SLI5	0.033	-0.069	-0.060	0.335	0.341	0.330	0.205
OTH5	0.181	0.153	0.048	0.127	0.127	0.118	0.429
AUT6	0.270	0.163	0.283	0.214	0.200	0.088	0.288
ED6	0.214	0.217	0.141	0.099	0.164	0.006	0.164
ID6	0.311	0.233	0.319	0.196	0.214	0.105	0.234
OHI6	0.108	-0.021	0.153	0.472	0.343	0.304	0.271
SLD6	0.123	-0.054	0.071	0.448	0.445	0.295	0.238
SLI6	0.085	-0.025	0.128	0.533	0.403	0.374	0.306
OTH6	0.214	0.066	0.217	0.355	0.165	0.179	0.421
AUT7	0.340	0.187	0.296	0.009	0.072	0.009	0.196
ED7	0.182	0.353	0.172	-0.066	-0.006	-0.042	0.125
ID7	0.337	0.353	0.388	0.002	0.088	0.023	0.102
OHI7	0.052	0.056	0.162	0.453	0.337	0.330	0.196
SLD7	0.111	-0.069	0.168	0.418	0.405	0.308	0.201

	AUT	ED	ID	OHI	SLD	SLI	OTH
SLI7	0.115	-0.047	0.137	0.431	0.336	0.347	0.200
OTH7	0.098	0.068	0.214	0.229	0.090	0.143	0.382
AUT8	-0.419	-0.242	-0.348	-0.163	-0.145	-0.117	-0.214
ED8	-0.291	-0.398	-0.371	-0.057	-0.007	-0.133	-0.189
ID8	-0.360	-0.288	-0.440	-0.148	-0.114	-0.158	-0.229
OHI8	-0.244	-0.035	-0.187	-0.390	-0.361	-0.254	-0.197
SLD8	-0.216	-0.132	-0.246	-0.335	-0.381	-0.349	-0.154
SLI8	-0.089	-0.103	-0.190	-0.275	-0.275	-0.317	-0.179
OTH8	-0.252	-0.166	-0.309	-0.206	-0.135	-0.215	-0.320

Item 5

	AUT	ED	ID	OHI	SLD	SLI	OTH
AUT5	1						
ED5	0.743	1					
ID5	0.717	0.691	1				
OHI5	0.562	0.582	0.495	1			
SLD5	0.554	0.576	0.532	0.962	1		
SLI5	0.450	0.395	0.394	0.822	0.785	1	
OTH5	0.703	0.625	0.545	0.595	0.562	0.560	1
AUT6	0.680	0.573	0.491	0.394	0.428	0.217	0.430
ED6	0.509	0.718	0.474	0.318	0.333	0.177	0.361
ID6	0.646	0.612	0.670	0.465	0.498	0.331	0.408
OHI6	0.377	0.395	0.261	0.684	0.668	0.548	0.370
SLD6	0.419	0.441	0.350	0.713	0.747	0.624	0.429
SLI6	0.399	0.426	0.354	0.736	0.721	0.646	0.419
OTH6	0.546	0.489	0.390	0.535	0.497	0.372	0.625
AUT7	0.513	0.440	0.422	0.147	0.200	0.070	0.262
ED7	0.510	0.623	0.530	0.247	0.267	0.148	0.290
ID7	0.503	0.491	0.654	0.185	0.233	0.106	0.203
OHI7	0.224	0.303	0.279	0.548	0.558	0.508	0.201
SLD7	0.144	0.264	0.200	0.461	0.494	0.396	0.109
SLI7	0.117	0.237	0.173	0.428	0.428	0.397	0.122
OTH7	0.382	0.443	0.386	0.428	0.428	0.323	0.482
AUT8	-0.223	-0.126	-0.248	-0.010	-0.018	0.061	0.039
ED8	-0.250	-0.123	-0.281	-0.004	-0.013	0.013	-0.030
ID8	-0.172	-0.080	-0.264	-0.018	-0.026	0.068	0.014
OHI8	-0.084	-0.129	-0.135	-0.287	-0.272	-0.217	-0.015
SLD8	-0.086	-0.072	-0.199	-0.223	-0.231	-0.176	0.046

SLI8	-0.003	0.003	-0.101	-0.186	-0.195	-0.161	0.015
OTH8	-0.067	-0.059	-0.133	-0.029	-0.013	0.006	-0.052

Item 6

	AUT	ED	ID	OHI	SLD	SLI	OTH
AUT6	1						
ED6	0.744	1					
ID6	0.733	0.657	1				
OHI6	0.618	0.462	0.548	1			
SLD6	0.527	0.421	0.581	0.788	1		
SLI6	0.528	0.377	0.538	0.861	0.880	1	
OTH6	0.676	0.493	0.590	0.722	0.626	0.686	1
AUT7	0.613	0.455	0.575	0.216	0.257	0.220	0.335
ED7	0.482	0.617	0.554	0.181	0.231	0.232	0.265
ID7	0.523	0.411	0.666	0.222	0.303	0.296	0.277
OHI7	0.342	0.234	0.388	0.598	0.593	0.689	0.395
SLD7	0.252	0.153	0.343	0.457	0.571	0.589	0.248
SLI7	0.224	0.176	0.374	0.473	0.542	0.612	0.284
OTH7	0.473	0.354	0.403	0.438	0.383	0.483	0.581
AUT8	-0.141	-0.027	-0.254	0.091	-0.011	0.039	-0.054
ED8	-0.086	-0.013	-0.195	0.114	0.009	0.077	-0.027
ID8	-0.040	0.035	-0.191	0.106	0.002	0.052	-0.030
OHI8	-0.048	-0.004	-0.150	-0.163	-0.228	-0.195	-0.074
SLD8	-0.011	0.056	-0.141	-0.056	-0.197	-0.136	0.001
SLI8	0.044	0.086	-0.025	-0.039	-0.158	-0.082	0.021
OTH8	0.027	0.074	-0.113	0.073	-0.008	0.027	-0.068

Item 7

	AUT	ED	ID	OHI	SLD	SLI	OTH
AUT7	1						
ED7	0.578	1					
ID7	0.712	0.621	1				
OHI7	0.397	0.314	0.424	1			
SLD7	0.472	0.264	0.468	0.814	1		
SLI7	0.472	0.263	0.408	0.827	0.917	1	
OTH7	0.548	0.544	0.457	0.538	0.500	0.513	1
AUT8	-0.219	-0.086	-0.250	-0.095	-0.120	-0.100	-0.026
ED8	-0.179	-0.134	-0.222	-0.104	-0.034	-0.038	0.021
ID8	-0.134	-0.045	-0.251	-0.064	-0.117	-0.098	-0.012
OHI8	0.009	0.017	-0.109	-0.313	-0.322	-0.303	-0.051
SLD8	-0.008	0.024	-0.144	-0.297	-0.307	-0.259	-0.003
SLI8	0.072	0.056	-0.006	-0.239	-0.221	-0.199	0.051
OTH8	-0.066	0.037	-0.120	-0.085	-0.166	-0.175	-0.077

Item 8

	AUT	ED	ID	OHI	SLD	SLI	OTH
AUT8	1						
ED8	0.818	1					
ID8	0.881	0.833	1				
OHI8	0.774	0.611	0.753	1			
SLD8	0.816	0.698	0.790	0.914	1		
SLI8	0.700	0.729	0.762	0.856	0.887	1	
OTH8	0.822	0.797	0.866	0.781	0.767	0.821	1

Items 9 – 12

	9	10	11	12
9	1			
10	0.454	1		
11	0.620	0.443	1	
12	0.125	0.029	-0.007	1

APPENDIX D

Descriptive Statistics

Question	N	Mean	Std. Deviation	Missing Count	Missing Percent
AUT1	124	2.5645	0.82877	12	8.8
ED1	124	2.3710	0.87854	12	8.8
ID1	124	2.7903	0.76800	12	8.8
OHI1	124	2.9677	0.72061	12	8.8
SLD1	124	3.0081	0.71563	12	8.8
SLI1	124	2.6694	0.78317	12	8.8
OTH1	120	2.3583	0.77564	16	11.8
AUT2	110	2.8273	0.75248	26	19.1
ED2	110	2.6182	0.81254	26	19.1
ID2	109	2.8624	0.65923	27	19.9
OHI2	111	3.1081	0.62306	25	18.4
SLD2	111	3.1351	0.59523	25	18.4
SLI2	111	3.1261	0.58956	25	18.4
OTH2	106	2.9057	0.60989	30	22.1
AUT3	106	2.8868	0.69448	30	22.1
ED3	106	2.4623	0.87477	30	22.1
ID3	106	2.8774	0.67192	30	22.1
OHI3	105	3.0381	0.64932	31	22.8
SLD3	106	3.0943	0.59407	30	22.1
SLI3	106	3.0943	0.56109	30	22.1
OTH3	105	2.8952	0.63434	31	22.8
AUT4	103	2.5825	0.66457	33	24.3
ED4	103	2.2330	0.68890	33	24.3
ID4	103	2.6019	0.66184	33	24.3
OHI4	100	2.9000	0.61134	36	26.5
SLD4	103	2.9417	0.59120	33	24.3
SLI4	103	2.7961	0.64715	33	24.3
OTH4	101	2.6832	0.64700	35	25.7
AUT5	100	2.7800	0.71887	36	26.5
ED5	101	2.6733	0.73633	35	25.7
ID5	103	2.7379	0.68544	33	24.3

Question	N	Mean	Std. Deviation	Missing Count	Missing Percent
OHI5	103	3.0583	0.62348	33	24.3
SLD5	103	3.0680	0.61456	33	24.3
SLI5	103	2.9515	0.64745	33	24.3
OTH5	100	2.7500	0.65713	36	26.5
AUT6	104	2.6731	0.75611	32	23.5
ED6	105	2.4762	0.79778	31	22.8
ID6	105	2.8571	0.69929	31	22.8
OHI6	104	3.0288	0.64547	32	23.5
SLD6	106	3.0849	0.61903	30	22.1
SLI6	105	3.0762	0.64592	31	22.8
OTH6	102	2.8627	0.64546	34	25.0
AUT7	99	2.9192	0.61738	37	27.2
ED7	100	2.5400	0.80929	36	26.5
ID7	101	2.9010	0.67089	35	25.7
OHI7	101	3.1188	0.53455	35	25.7
SLD7	102	3.1373	0.48826	34	25.0
SLI7	100	3.1400	0.49278	36	26.5
OTH7	99	2.9091	0.67144	37	27.2
AUT8	102	2.3137	0.73093	34	25.0
ED8	101	2.4455	0.78071	35	25.7
ID8	101	2.3663	0.73106	35	25.7
OHI8	101	2.1683	0.72207	35	25.7
SLD8	100	2.2000	0.72474	36	26.5
SLI8	101	2.2673	0.71960	35	25.7
OTH8	99	2.2626	0.70834	37	27.2
Question9	100	2.2000	0.81650	36	26.5
Question10	101	2.2079	0.89796	35	25.7
Question11	100	1.7900	0.74257	36	26.5
Question12	101	3.2871	0.63776	35	25.7
GradeLevel	136			0	0.0
Gender	103			33	24.3
TeacherType	103			33	24.3
Experience	103			33	24.3

APPENDIX E

Permission to Use Questionnaire

Απ: Use of Questionnaire [EXTERNAL]

Sideridis, Georgios <Georgios.Sideridis@childrens.harvard.edu> Tue, Sep 24, 2019 at 12:42 AM
To: Robin Pelt <peltrm@mymail.vcu.edu>

of course,

best,

George

Georgios D. Sideridis, Ph.D.

Assistant Professor

Harvard Medical School

Survey Methodologist, BCH

21 Autumn Street

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Tel: 8572183733

President

International Academy for Research in Learning Disabilities 2018-2021

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Από: Robin Pelt <peltrm@mymail.vcu.edu>
Στάλθηκε: Δευτέρα, 23 Σεπτεμβρίου 2019 8:33 μμ
Προς: Sideridis, Georgios
Θέμα: Use of Questionnaire [EXTERNAL]

Good Evening Dr. Sideridis,

I would like to know if I have permission to use your Teacher Integration Attitudes Questionnaire (Sideridis & Chandler, 1997) for my research. Thank you for your consideration.

Respectfully,

--
Robin Pelt, Doctoral Candidate
Virginia Commonwealth University
Special Education and Disability Policy

APPENDIX F

Vita

Robin Pelt was born in Portsmouth, VA. In 1991, Robin completed her undergraduate work at Virginia State University (VSU), where she received her Bachelor of Science degree in Accounting. Robin began her career in education in 1995 in Chesapeake Public Schools. In addition to Chesapeake Public Schools, Robin has also worked in Petersburg Public Schools, Chesterfield County Public Schools, and Dinwiddie County Public Schools. In 2003, Robin went on to earn her Master of Education degree in Special Education from VSU. In 2016, Robin went on to earn a second Master of Education degree in Curriculum and Instruction from Virginia Commonwealth University (VCU).

In 2016, Robin began her working towards her Doctor of Philosophy degree in Special Education and Disability Leadership at VCU. During this time, Robin completed a policy internship with the Virginia Department of Education, where she participated in the development of the *K-12 Inclusive Practices Guide*. Robin has presented conferences, to include the 2018 American Association on Intellectual and Developmental Disabilities (AAIDD) Conference. In 2019, Robin was the recipient of two scholarships, the Elaine West Johnson Scholarship in Special Education, along with the Jean E. Lokerson and M. Elise Blankenship Scholarship. Robin has professional memberships in the AAIDD, the American Educational Research Association, the Council for Exceptional Children, and the National Education Association. Robin is also a member of Alpha Kappa Alpha Sorority, Inc.