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School Principal Attitudes Toward the Inclusion of Students with Disabilities

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This is to certify that the doctoral dissertation by

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Walden University
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Abstract

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by

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MS, Walden University, 2006

BA, University of Maryland, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Inclusion is a philosophy and practice of educating students with and without disabilities in the same learning environment. Previous researchers have indicated that principals play a key role in implementing successful and effective inclusive programs. However, there remains a gap in the literature regarding the attitudes of principals and assistant principals toward including students with disabilities at both elementary and secondary school levels. Therefore, the purpose of this nonexperimental, quantitative study, based on transformational leadership theory, was to examine the attitudes of principals toward the inclusion of students with disabilities in general education classrooms. An electronic version of The Principals' Attitudes Toward Inclusive Education Scale was used to collect data from principals in a southeastern school district (n = 73). The predictor variables were age; gender; years of administrative; teaching; special education experience; and having a friend or relative with a disability. The criterion variable was principal attitudes toward inclusion. Data were analyzed using descriptive statistics and multiple linear regression. Results indicated that overall principals had positive attitudes toward inclusion. Having relatives and/ or friends with disabilities and special education experience were significant predictors of favorable attitudes toward inclusion. This study contributes to positive social change by illuminating which variables are related to principals' positive attitudes toward inclusion programs. This information will assist principals, assistant principals, and school administration preparatory programs with understanding how special education training and experience with individuals with disabilities affect their attitudes toward the inclusion of students with disabilities.

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Dedication

God, thank you for always keeping your promises. Thank you for being so faithful to me throughout this process. I give You all of the glory. I dedicate this study to my husband, Anthony, for being my biggest supporter and encourager! I love you so much! I also dedicate this endeavor to my three children, Anthony II, Alysha, and Andrew who inspire me every day and allow me to see my true purpose in life! I love you guys! Thanks Mom for being my personal prayer warrior. Thanks Dad for always telling me how proud you are. Thanks Tabitha for being the best sister ever. Grandma you are my hero. Mother Boobie Dear, thanks for being more than a mother in-law, but my friend. I love you lady! To Ms. Pat for the laughs and encouragement along the way, "Bless your heart"…you are my sistermotherfriend. To my Soror, Dr. Adeyemi, thanks for your words of wisdom and encouragement. Big Sis Zeta, Lauran, Nikki, Tamara, Natasha and Theresa…thanks for helping me to have a little fun every now and then throughout this process with your friendship.

This study is dedicated to all of my family and friends who encouraged and prayed for me throughout this process. Thank you. I dedicate this research to all of the teachers and educators who have impacted my educational journey. Your commitment to changing generations through learning is inspirational.

Lastly, I dedicate this study to all of my students who taught me the true meaning of *special* education; all children are exceptional and special. Here's to lifelong learning!

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Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Introduction

Special education has undergone many changes since 1965 when Congress added Title VI to the Elementary and Secondary Education Act and created the Bureau of Education for the Handicapped (currently named the Office of Special Education Programs). Special education continues to evolve in the 21st Century with debates over the Reauthorization of the Elementary and Secondary School Act (United States Department of Education, 2010), which ensures access to education to all children regardless of their socioeconomic status and ability (Polat, 2011; Taylor, 2011). Prior to the 1970s, students with disabilities were educated outside of the general education classroom (Horrocks, White, & Roberts, 2008; Polat, 2011). Furthermore, prior to 1975, approximately 4 million students with special disabilities were denied educational support solely based upon their exceptional needs (Frost & Kersten, 2011). However, students with and without disabilities are now educated together in general education classrooms. This type of arrangement, originally called *mainstreaming*, is now referred to as *inclusion* (Horrocks et al., 2008).

Inclusion is an educational setting where students with disabilities learn in the general education classroom with their non-disabled peers (Ainscow & Sandhill, 2010; Waldron, McLeskey, & Redd, 2011). Common disabilities that students may be diagnosed with, in and out of the school setting, include: learning disabilities, physical and health disabilities, emotional and behavioral disorders, speech and language

disorders, hearing and visual impairments, and autism spectrum disorders (Waldron et al., 2011).

Inclusion has some changes and challenges for the professionals who are responsible for implementing the practices in the general education classroom. In order for inclusion to be effective, school personnel who are responsible for the successful implementation of inclusion must be open to the demands of working with a diverse group of students (Villa & Thousand, 2005). School administrators play a vital role in the process of fostering positive climates in schools that include students with disabilities in general education classrooms (Ball & Green, 2014; DuFour & Mattos, 2013). It is imperative that school administrators identify and require a standard that reflects the belief that all children can learn and that all children have the fundamental right to be educated with their peers in a least restrictive environment (Fullan, 2003; Muijs et al., 2010). In this study, I examined school principal attitudes toward the inclusion of students with disabilities. Using the transformational theory, I analyzed data principals and assistant principals in a Southeastern U.S. school district. This study has implications for positive social change for students with disabilities by examining the attitudes of the principals and assistant principals who have the authority to place them in general education classrooms.

As a result of the diversity of students in general education classrooms, attitudes toward inclusionary practices have been examined in the literature. There has been substantial empirical attention given to teachers' attitudes about inclusion practices. In fact, a review of the literature on teacher attitudes toward inclusion was done over twelve

years ago by Avramidis and Norwich (2002). Avramidis and Norwich (2002) identified three types of factors shown in the literature to influence teachers' attitudes toward inclusion. The first type pertained to *child factors,* such as the type and severity of disability (Avramidis & Norwich, 2002). The second type concerned *teacher factors* (Avramidis & Norwich, 2002). Teacher factors included such aspects as demographics (e.g., gender, age), teachers' personal beliefs or experiences regarding developmental disabilities, knowledge about disabilities and instructional practices for children with disabilities, and training and/or prior teaching experience with students with disabilities. The third type pertained to *educational environment* factors. Avramidis and Norwich (2002) found that the most influential educational environment factor that lead to teachers' positive attitudes toward inclusion related to teacher support, which included *human support* from parents, other teachers, disability specialists, and principals as well as *physical support* such as instructional resources, such as appropriate teaching materials and resources and technology in the classroom (Avramidis & Norwich, 2002, p. 140). Avramidis and Norwich (2002) found that *child factors* emerged as being more influential than teacher or educational environment factors in influencing teachers' attitudes toward inclusion. Specifically, teachers were more likely to embrace inclusion if their students had mild as opposed to more severe disabilities (Avramidis & Norwich, 2012).

Fewer researchers have focused on principals' and assistant principals' attitudes toward inclusion, with only four being published within the past five years (e.g., Ball & Green, 2014; Farris, 2011). Two of the recent studies were conducted outside of the

United States (e.g., Fazal, 2012; Irvine, Lupart, Loreman, and McGhie-Rihemond , 2010). The findings from the majority of these studies showed that, contrary to research on teachers and their attitudes toward inclusion, *principal factors* were more influential than were child or educational environment factors with regard to attitudes toward inclusion. Specifically, principals were more likely, to be accepting of inclusion practices if they had training and knowledge of developmental disabilities (Praisner, 2012; Fazal, 2012) or held positive beliefs about inclusion practices (Horrocks et al., 2008). For example, Praisner (2003), in a study conducted with principals in Pennsylvania, found that principals were more likely to be accepting of inclusion if they had knowledge of developmental disabilities and instructional practices for students with disabilities. Horrocks et al. (2008) conducted a study to examine principals' attitudes toward inclusion of students with autism. Horrocks et al. (2008) found that principals who held personal beliefs that children with autism should be included in the general education classroom tended to have more positive views toward inclusion in general.

The two most recent studies were conducted with school personnel in Karachi (e.g., Fazal, 2012) and Canada (e.g., Irvine et al., 2010). Farris (2011) noted that it is significant to explore the attitudes of school leaders in different geographic regions because of the difference in interpretation and implementation of federal laws to service students with disabilities. Despite the differences in federal laws, the research conducted by Fazal (2012) had similar findings to studies conducted in the United States (e.g., Horrocks et al., 2008; Praisner, 2012).

Fazal (2012), in a study with 15 elementary school principals in Karachi, found that awareness of developmental disabilities and educational interventions for children with developmental disabilities was associated with more positive attitudes toward inclusion. In contrast, results from Irvine et al.'s (2010) study with 16 Canadian principals, showed the *educational environment* factors were most influential in determining principal attitudes toward inclusion. In Irvine et al.'s (2010) study, principals had more positive attitudes toward inclusion when the teachers and parents were involved in the process of creating an inclusive environment.

There remains a dearth of literature on principal attitudes toward inclusive educational practices. This study uniquely contributes to the literature on attitudes toward inclusion in a Southeastern U.S. school district. Additionally, this study uniquely contributes to the literature by examining the attitudes of both principals and assistant principals in public elementary and secondary schools toward the inclusion of students with disabilities in general education classrooms. Both principals and assistant principals have the authority to determine student placement; therefore, it is important to understand the attitudes of school leaders who have the authority to create inclusive programs.

In this chapter, I discuss the background, purpose, nature, and significance of the study. I present the problem statement, research questions, and hypotheses, as well as the scope, limitations, and delimitations. I introduce the theoretical foundation, in addition to some of the relevant literature to this study. Chapter 2 includes a more detailed discussion of the literature.

Background of the Study

Prior to the 1965, students with disabilities were not educated with their nondisabled peers (Frost & Kersten, 2011). Government resources were very limited with regard to educating students with disabilities, and families often had a difficult time obtaining adequate services and resources for their children with disabilities (Frost & Kersten). Parents and advocacy groups started to organize to obtain government support and equal rights for individuals with disabilities (Polat, 2011). In the 1970s, many federal acts were established that focused on educational rights for individuals with disabilities. Each piece of legislation created a new direction for the manner in which individuals with disabilities are educated (Galano, 2012; Polat, 2011).

As a result of parental involvement and political pressures, the US government eventually passed legislation that required education for children with disabilities in general education classrooms with necessary supports. That legislation included bills and acts such as: (a) Section 504 of the Vocational Rehabilitation Act of 1973; (b) the Education for All Handicapped Children Act: Public Law 94-142 of 1975; (c) Public Law 99-457 of 1986; (d) the American Disabilities Act of 1990; (e) the Individuals with Disabilities Education Act of 1990; (f) the No Child Left Behind Act of 2001; and (g) the Individuals with Disabilities Education Improvement Act of 2004. The result of this legislation was that children with disabilities were able to receive the same educational services and benefits as their nondisabled peers (Taylor, 2011). The result of the body of legislation targeted toward people with disabilities has resulted in the inclusion movement (Taylor, 2011).

Inclusion is the process of inclusively educating students with disabilities in general education classrooms with their nondisabled peers (Waldron, McLeskey, & Redd, 2011). Past research on attitudes toward inclusion has focused primarily on teachers' attitudes. Both general and special education teachers are responsible for teaching students with disabilities. Although special educators receive specialized training to teach students with various disabilities, many general education teachers have not received the same type of specialized instruction via educational programs or professional development (Smith & Leonard, 2005). Research has shown that general and special education teachers have different attitudes toward teaching students with disabilities (Jung, 2007). Some research has revealed that the differences are based on preparedness and confidence levels for providing instruction (Jung, 2007).

Past researchers have revealed that one essential predictor of successful inclusion is the attitude of the general education teacher (Wilkins & Nietfeld, 2004). Researchers have shown that the success of inclusion resides in the positive attitudes that general education teachers have toward the students who may have limitations in their cognitive development and abilities (Elhoweris & Alsheikh, 2006; Wilkins & Nietfeld). Teacher's positive attitudes toward inclusion have been attributed to openness to change, collaboration, and ongoing professional development (Jung, 2007). For example, special education courses have been added to many college curricula for general education teachers in order to increase their awareness of the pedagogical practices that are appropriate for individuals with disabilities (Burke & Sutherland, 2004; Jung, 2007; Aydin & Kuzu, 2013). Burke and Sutherland (2004) found that preservice teachers were

more open to inclusion after taking courses that incorporated strategies for working with diverse student populations.

Inclusion is a multifaceted initiative that requires the support of many people. In spite of the increased number of inclusive classrooms, there seems to remain an undertone in some schools that the inclusion model is not fully accepted by everyone (Horrocks, White, & Roberts, 2008). In most schools, principals are responsible for the school vision and the school climate toward inclusive practices (Clifford, 2012). The Interstate School Leaders Licensure Consortium's (ISLLC) Standards for School Leaders has stated that school administrators are school leaders who promote the success of all students by collaborating with families and community members (DiPaola & Walther-Thomas, 2003). Furthermore, the ISLLC has posited that school administrators can promote the success of all students by advocating and establishing a school culture that is conducive to learning for all students. Placing students with disabilities in general education classrooms may not result in expected outcomes if the attitudes and expectations of students with disabilities are negative (McCleskey & Waldron, 2006). So, effective administrators must examine their belief systems to determine how their attitudes and behaviors may impact the viability and promotion of more accepting and inclusive classrooms (Tochterman, Cooner, & Lehmann, 2005).

The principal's role as the instructional leader has been identified as an essential predictor for successful inclusive programs (Frost & Kersten, 2011; Kugelmass & Ainscow, 2004). Avissar, Reiter, and Leyser (2003) suggested that several demographic variables are related to principal's attitudes toward students with disabilities. Those

variables included: age, gender, special education experience, teaching experience, and exposure to individuals with disabilities. Avissar et al. will be discussed in further detail in Chapter 2. This study was designed to determine the attitudes of principals and assistant principals in a southeast school district and the relationship between their attitudes and the aforementioned variables.

Problem Statement

Researchers have shown that school leaders' attitudes are crucial in improving the inclusive academic environment and outcomes of students with disabilities (Avissar, Reiter, & Leyser, 2003; Horrocks, White, & Roberts, 2008; Irvine, Lupart, Loreman, & McGhie-Richmond, 2010). Principals' positive attitudes toward inclusion are essential in the organization and implementation of inclusive programs and practices in their schools. Avissar et al. (2003) identify principals as change agents who have the ability to promote permanent fundamental change to the "structural framework of the school system" for children with disabilities (p. 356).

Prior to 2003, approximately 30 studies were conducted on the perceptions of teachers, administrators, and other school personnel on the inclusion of students with disabilities. The results for principals' attitudes toward inclusion were inconsistent. Most of the recent studies on inclusion focus on the attitudes of general and special educators (Cook, 2004; Elhoweris & Alsheikh, 2004; Weisel & Dror, 2006). In addition, over the last decade, much of the research on principals' attitudes toward inclusion has been conducted in school systems outside of the United States (Avissar, Reiter, & Leyser,

2003; Dupoux, Wolman, & Estrada, 2005; Fazal, 2012; Graham & Spandagou, 2011; Sharma & Chow, 2008).

Findings from some of the studies have revealed that some principals have negative attitudes toward inclusion. Particularly, Sharma and Chow (2008) found that 43% of the principals in their study had negative attitudes toward the inclusion of students with disabilities in the general education classroom. An additional 5% percent of the principals strongly opposed including students with disabilities because they perceived that inclusion would negatively affect the general education students (Sharma & Chow). Also, studies that have focused on school administrators have primarily focused on the principals without including the perspectives of assistant principals who are often equally or in some school districts, more involved in the schools' special education programs (Horrocks et. al, 2008; Praisner, 2003). Lastly, current studies have been limited to focusing on only one school level, primarily elementary schools. However, inclusive programs are implemented in middle and high schools (secondary schools), as well. Therefore, the focus of this study was to determine the attitudes of principals and assistant principals toward inclusion in K-12 public schools in a southeastern school district.

Purpose of the Study

The purpose of this nonexperimental quantitative study, using a survey research design, was to examine the attitudes of elementary and secondary principals toward the inclusion of students with disabilities in general education classrooms. Several school districts in a southeastern region were currently implementing inclusion pilot programs. I

conducted this study in order to gain insight on the attitudes of the principals and assistant principals in one of the districts that is currently implementing an inclusion program for students with learning disabilities and physical disabilities.

Nature of the Study

I used a survey research design, for this nonexperimental quantitative study, to examine the attitudes of elementary and secondary administrators toward the inclusion of students with disabilities in general education classrooms. The Principal's Attitudes Toward Inclusion Scale (PATIE; Bailey, 2004) is the survey that was used to collect data in this study on elementary and secondary principals' and assistant principals' attitudes toward the inclusion of students with disabilities in general education classrooms.

Survey research is effective in investigating a variety of current issues and concerns in the field of education (Rea & Parker, 2005). Survey research has proven to be an efficient way to collect descriptive and behavioral data from a small sample of participants to represent a larger population (Rea & Parker). Descriptive data about school principals' attitudes toward inclusion at the elementary, middle and high school levels were collected. This design was also used to collect information about the principals' and assistant principals' attitudes to determine if a relationship exists between their attitudes toward inclusion and the following demographic factors: personal background, academic training, school enrollment and professional experience. Data analyses, including descriptive statistics and multiple linear regression, were conducted via SPSS 20.0. Additional details regarding methodology will be discussed in Chapter 3.

Research Questions and Hypotheses

The following research questions and hypotheses were examined in this study:

1. To what extent do demographic variables such as age, gender, having a relative with a disability, and having a friend or colleague with a disability predict principal attitudes about inclusion as measured by the PATIE scale?

   $H_0$1: Demographic variables such as age, gender, having a relative with a disability, and having a friend or colleague with a disability are not statistically significant predictors of principal attitudes about inclusion, as measured by the PATIE scale.

   $H_1$1: Demographic variables such as age, gender, having a relative with a disability, and having a friend or colleague with a disability are statistically significant predictors of principal attitudes about inclusion, principal attitudes about inclusion as measured by the PATIE scale.

2. To what extent are professional type of principalship (elementary or secondary school), years of teaching experience, years of experience as an administrator, and having special education experience predictors of principal attitudes about inclusion as measured by the PATIE scale.

   $H_0$2: Professional experience variables such as type of principalship (elementary or secondary school), years of teaching experience, years of experience as an administrator, and having special education experience are not statistically significant predictors of principal attitudes about inclusion, as measured by the PATIE scale.

$H_1$2: Professional experience variables such as type of principalship (elementary or secondary school), years of teaching experience, years of experience as an administrator, and having special education experience are statistically significant predictors of principal attitudes about inclusion, as measured by the PATIE scale.

The predictor variables in this study included the following categorical variables: (a) school enrollment, (b) gender, and (c) experience with a relative or friend with a disability (yes or no) and continuous variables: (d) age, (e) years of professional training, (f) years of teaching experience, and (g) years of special education experience. The criterion variable was the attitudes of the principals as measured by the Principals Attitudes Toward Inclusion Education (PATIE) scale.

Theoretical Framework

This study was grounded in the transformational leadership theory, which purports that leaders' attitudes affect their employees' attitudes (Balyer, 2012). According to the transformational leadership theory, the attitude, strength, and vision of a leader permeates through an organization and motivate other members to establish and set common goals that lead to successful outcomes (Tucker & Russell, 2004). I used this theory as the framework for this study because school principals set the tone for inclusive programs and their attitudes toward students with disabilities have the ability to affect how their staff members respond to these students as well.

Transformational leadership theory was introduced by Burns (1978), who theorized that leaders have the ability to motivate followers to a higher level of morals

and values. Bass expanded upon transformational theory by stating that transformational leadership inspires followers to trust the vision and goals of the leader (Bass, 1985; Bass & Riggio, 2008). Bass identified four components of transformational leadership: (a) intellectual stimulation, (b) individualized consideration, (c) inspirational motivation, and (d) idealized influence (Tucker & Russell, 2004). Each of these four components is essential for successful administrators.

First, intellectual stimulation is characterized by how leaders motivate followers to be creative, explorative, and open to new ways of learning (Bass & Riggio, 2008). Change is often met with resistance in most organizations; however, transformational leaders have the ability to encourage others to see the possibilities and positive potential created by change within an organization. Secondly, individualized consideration is represented by the one on one support offered to each follower as needed (Tucker & Russell, 2004). In some organizations, the leader is not easily accessible and the lines of communication are poor throughout the organization. However, transformational leaders not only communicate, but listen to the needs, suggestions, and ideas of other members within an organization. They are open to making modifications and adjustments and ensure that the entire organization has a clear understanding of the vision. Next, transformational leaders offer inspirational motivation having a transferable passion for the organization's mission (Bass & Riggio, 2008). The leader articulates the vision clearly and concisely to the members and his/ passion permeates entire membership. The authenticity of the leader's passion to reach the organizational

goals is shared by the followers. Finally, the last component of transformational leadership is idealized influence. The leader is highly respected and trusted within the organization. The followers respect and emulate their leader's values and ideals (Bass & Riggio, 2008).

Each one of the components relate to principals' leadership within their school buildings. First, principals as transformational leaders provide intellectual stimulation to staff member who provide direct services to students regardless of their differences or abilities. Secondly, *individualized consideration* refers to the principal's ability to meet the needs of every faculty member and student by recognizing each person's unique abilities. This is critical in inclusion because every student needs to feel like they belong to overall learning community.

Next, inspirational motivation from transformational leaders allows students to feel inspired and confident enough to reach their goals in the inclusive environment (Tucker & Russell, 2004). Balyer (2012) evaluated teachers' perceptions on transformational leadership and found that principals, especially those with an extensive educational background, were highly influential on their staff and motivated them to reach high standards with their students. Furthermore, the study finding purports that principals influence their students' and teachers' performance and that transformational leadership is substantial for schools to move forward (Balyer, 2012).

Currently, schools are held to high standards of student achievement for all students, including students who receive specialized instruction. All students are required to receive highly qualified instruction in their least restrictive environment

(Erwin & Soodak, 2010). The placement decision in most schools must be approved by the principal or assistant principal (Vazquez, 2010). Therefore, it was beneficial to examine the attitudes of principals because their beliefs toward inclusion can potentially affect how students are placed, as well as how students with disabilities are treated by staff members. The transformational leadership theory will be discussed further in the literature review in Chapter 2.

Definition of Terms

Assistant principal: The school level administrator who serves as an instructional leader and chair of the child study team that identifies and places students with special needs (Gous, Eloff, & Moen, 2013).

Attitudes: An individual's disposition that influences how he or she will positively or negatively respond to an object, person, institution, or any aspect of one's life (Morin, Rivard, Crocker, Boursier, & Caron, 2013).

General Education or *Regular Education:* The set of integrated learning experiences structured across subject areas to provide the skills and knowledge needed for all students to function in society (Berry, 2010).

Inclusion: The exclusive placement of special education students in the general educational setting with appropriate support provided in the classroom to allow students to achieve the same level of success as their nondisabled peers (Waldron, McLeskey, & Redd, 2008).

Principals: The lead building level administrators who are responsible for staffing, financial management, and instruction; individuals who are certified in

curriculum and instruction or educational administration whose role is to lead, mediate, and collaborate with teachers, parents, and community stakeholders to ensure student success (Gous, Eloff, & Moen, 2013).

Special Education: Classes or instruction that is offered at no cost to parents or guardians, to meet the unique needs of a child with learning, physical, or emotional disabilities (Berry, 2010).

Students with Disabilities; students with exceptionality: students with special needs: Students who have been adequately assessed and diagnosed with a disabling condition that requires accommodations and modifications to the general curriculum and related services such as physical therapy, speech pathology, social work, psychological services, or occupational therapy (Praisner, 2003).

Assumptions

This study was based on several assumptions. First, I assumed that administrators would read the surveys and respond with integrity. I assumed that principals and assistant principals would respond accurately to the surveys regarding their attitudes toward inclusion. Secondly, I assumed that all principals and assistant principals would respond to the survey. It was assumed that the participating school principals' survey responses would not be affected or biased by the wording of the survey. Lastly, it was assumed that the results of this study can be used in future research and pilot programs to examine the role(s) of school leadership in establishing inclusive schools at both the elementary and secondary school level.

Limitations

This study was limited by several factors. First, I included one public school district in the southeastern region of the United States. Therefore, the results may not be fairly generalized to principals and assistant principals in other school districts located in other geographic regions. The collected data was limited by the number of principals who read and complete the emailed survey. There were a total of 93 potential participants. I emailed all of the principals and assistant principals and only 73 of them completed the survey. The majority of the principals and assistant principals were women. Therefore, the generalizability of the results is limited primarily to female school principals in this school district. According to Frost and Kersten (2011), respondents tend to give more honest responses when given online surveys because of the anonymity.

Scope and Delimitations

The following delimitations identified the boundaries of this study. First, the scope of the study included elementary and secondary administrators from one school district in the southeastern region of the United States. Secondly, although some schools in the district had administrative teams with administrative aides and lead teachers, this study only included feedback from principals and assistant principals. I selected this population because my review of the literature revealed inconsistent findings with principals' attitudes toward inclusion of students with disabilities in general education programs. Finally, only one urban school district within the southeastern region participated in this study. The selected district started the process of implementing full inclusion programs at the elementary and secondary levels last year.

Significance of the Study

This study is significant in the implementation of social change for students with disabilities. Specifically, this study adds to the current literature on the attitudes of principals toward inclusion of students with disabilities in the general education classroom by including data on both principals and assistant principals. This study was conducted in a southeastern school district that is in the process of establishing inclusion classrooms at both the elementary and secondary levels. The geographic region was significant because each district has different methods for implementing inclusive programs (Farris, 2011). This study is important because Federal legislation requires that all students have access to a free and appropriate education (Villa & Thousand, 2005).

Furthermore, school principals are held accountable for meeting federal mandates and helping all students to achieve academic success in their classes and on standardized tests. Principals are primarily responsible for implementing staff development and restructuring classes to align with federal mandates. Therefore, it is important that an adequate evaluation of the attitudes and perceptions of school principals who are responsible for the success of inclusion programs be given in schools required by federal laws to foster inclusive environments for all students. Moreover, teachers are more productive and their attitudes tend to be more favorable toward inclusive students when principals and other administrative personnel support the vision of inclusive practices (Karten, 2005).

Results of this study will be shared with administrators and other stakeholders such as lead teachers, district specialists, and the school board to demonstrate the need for an ongoing dialogue and assessment of the attitudes needed in a framework designed to educate all students in an inclusive educational setting. Elementary and secondary administrators have an opportunity to understand the importance of their role in establishing an environment that is conducive to successful inclusive practices. The need for ongoing professional development and initiatives to ensure that schools continue to meet the needs of students with exceptionalities and the mandates of special education laws was established. An education system where all students, including those with disabilities obtain high school diplomas and have enough knowledge, skills, and/ or experiences to lead successful and productive lives would be beneficial. Therefore, it is critical that students with disabilities receive optimal access to quality academics from school personnel who are not only equipped to instruct them, but who believe in their ability to achieve the same level of success as their non-disabled peers.

Summary

This chapter included an overview of the proposed study. The statement of the problem established the gap in the literature, which included the lack of research on the current state of administrators' attitudes toward inclusion in two distinct school districts. Administrators are the instructional leaders of schools and thus responsible for setting the tone for instructional delivery (Boscardin, 2005). Since the 1970s, legislation has been passed to ensure equal access to quality education to individuals with disabilities. So, inclusion requires leadership that fosters an inclusive climate in general education

classrooms for students with disabilities. Therefore, this study was conducted to add to the body of knowledge on principals' attitudes toward inclusion in K -12 classrooms.

In Chapter 2, I present a review of the literature on the history of special education and the legislation that has been passed to enact changes in the education system. The literature review also contains information on successful inclusion practices. The literature review also includes research on inclusion theory and administrators' roles and attitudes toward inclusion.

A description of the research design and methodology used in this study is presented in Chapter 3. Specifically, I present a detailed description of the sampling method, criteria for selecting participants, and instrumentation. The method of data collection and analysis is also discussed. In this chapter, I discuss the measures taken for ethical protection of the participants and the overall context of the study. In Chapter 4, I present the results of the study. Lastly, in Chapter 5, I discuss results, recommendations for future research, and implications for positive social change.

Chapter 2: Literature Review

Introduction

In this chapter, I present a review of literature relevant to principals' attitudes toward including students with disabilities in the general education setting. I conducted a search of empirical and peer reviewed literature, digitally, through educational, psychological, and sociological databases such as Academic Search Premier, EBSCOhost, Education Research Complete, Education Resources Information Center (ERIC), ProQuest, PsycINFO, PsycARTICLES, Sage and SocIndex. The primary search terms that I used to locate relevant literature included: *inclusion, mainstreaming, attitudes, disabilities, special education, administrators, principals,* and *assistant principals*. Printed versions of articles, books, and reports were also obtained to add to the literature search.

In this chapter, I will highlight the historical and legal foundations of inclusion in K -12 classrooms. A review of the literature on attitudes toward inclusion will also be presented in this chapter. In the first section of this chapter, I review the inception of inclusion through public laws and federal legislation. In the next section, I review the theoretical framework of leadership and the influence of principals' and assistant principals' attitudes toward inclusion of students with learning disabilities. In the last section, I examine studies that have identified significant trends in inclusion practices, especially from the perspective of administrators who are responsible for the leadership in schools with inclusion programs.

The History of Inclusion

In the early 1950s, students with disabilities were primarily institutionalized and separated from their nondisabled peers; however, this type of placement trend became unconstitutional (Avramidis & Norwich, 2002). The Association for Retarded Citizens (ARC) was organized in 1950 as the National Association of Parents and Friends of Mentally Retarded Children. The purpose of ARC was to address the exclusion of students with low IQ's from classroom and school-wide activities, increase the community resources available to individuals with disabilities, and to improve the conditions of public places for individuals with physical disabilities (Parette & Wojcik, 2004). The ARC principles were deemed necessary to provide equal access to individuals with disabilities as afforded to anyone without any type of disability.

The principles of inclusion originated from the Civil Rights movement, which denounced racial segregation. In *Brown v. Board of Education* (1954), the Supreme Court initiated a movement for equal rights in education and ended racial segregation in public schools. Although the case focused on racial segregation, it led to a discussion on equality for other groups of people like individuals with disabilities (Villa & Thousand, 2005). The Community Mental Health Act (1963) became the first federal law enacted to assist individuals with disabilities. This act authorized assistance for funding to researchers for studies on topics that affected individuals with mental retardation. In 1965, Congress created a Bureau of Education for the handicapped, which is currently named the Office of Special Education Programs (Bartlett, Etscheidt, & Weisenstein, 2007).

During the 1950s and 1960s, individuals with disabilities primarily lived in state institutions where they only received the bare minimum of basic needs. Institutionalized individuals were not assessed, evaluated, or educated (Bartlett, Etscheidt, & Weisenstein, 2007). However, at the beginning of the 1970s, landmark court decisions initiated some advancement for individuals with disabilities. The case of the *Pennsylvania Association for Retarded Children (PARC) v. Pennsylvania* (1971) enforced the placement of a student labeled as mentally retarded in a general education classroom (Frost & Kersten, 2011; Yell, Shrine, & Katsiyannis, 2006). This case set a precedent for students with disabilities to have a right to a free and appropriate education (FAPE) with their nondisabled peers (Yell et al., 2006).

In another court case, *Mills v. Board of Education* (1972), the court upheld that students with disabilities had the right to due process and the right to a free and public education just as their nondisabled peers. The plaintiffs in this case were seven African-American school-aged children in the District of Columbia who were denied access to a free and public education (Mead, 2008). Additionally, the school district failed to provide a free alternative education for students who were labeled as mentally retarded, emotionally disturbed, physically handicapped, or hyperactive (Mead, 2008). According to Yell et al. (2006), the *Mills* case resulted in procedural rights afforded by the 14th amendment and equal access to a free education for students with disabilities. As a result of these types of court cases and the need for equality in education, mainstreaming was introduced in school systems and defined as the placement of students with disabilities in general education classrooms with supplemental supports (Frost & Kersten, 2011).

Legal Foundation of Inclusion

Federal laws hold all schools accountable for how students with disabilities access a free and appropriate education. Inclusion expanded mainstreaming by integrating students with disabilities with their nondisabled peers and expecting the same outcomes for all students (Ainscow & Sandhill, 2010). The term inclusion is used to describe the assignment of students with special needs to regular education classrooms with the expectation that all students can learn the same curriculum (Stainback & Stainback, 1992).

Various policies were enacted to protect the rights of individuals with disabilities as well as to enforce fair and equal treatment of individuals with disabilities in inclusive classroom settings (Bartlett, Etscheidt, & Weisenstein, 2007). Section 504 of the Rehabilitation Act of 1973 is a Civil Rights statute that ended discrimination against students with disabilities in public schools (Karten, 2005). Section 504 was implemented to prevent the discrimination of individuals with disabilities in federally funded programs and activities and to ensure that children with disab0ilities have an equal access to education (Rehabilitation Act, 1973). An individual can qualify for the provisions of Section 504 if there is a substantial mental or physical impairment that limits, to a considerable degree, one or more major life activities, such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, or working (Rehabilitation Act, 1973).

As of 2015, students who benefit from a 504 Plan are entitled to documented accommodations to their educational program to allow them an equal opportunity at achievement with the general curriculum (Dobson, 2013). Their eligibility is determined by a multidisciplinary team that includes a school administrator, general education teacher, special education teacher, school psychologist, therapists, parents, and if age appropriate the student. The team devises a 504 Plan, which is a legal document that includes instructional accommodations and modifications based on the student's individual needs. Unlike subsequent laws, the 504 only requires that a physical or mental impairment affect one of the body systems or that a disability be considered a mental or psychological disorder (Dobson, 2013).

Federal Laws

PL 94-142

The Education for all Handicapped Children Act (EHA) of 1975 (PL 94-142) provided protection against any infringement of the educational rights of students with disabilities (EHA, 1972). The law legislated grants to states specifically for the education of children with disabilities. The EHA (1975) was renamed the Individuals with Disabilities Act (IDEA) in 1990.

IDEA

IDEA (1990) has been the most poignant and groundbreaking policy to address the issues and concerns of people living with disabilities (Karten, 2005). IDEA ensures that persons with disabilities receive equal access to a free and appropriate public education regardless of the extent or type of disability (Yell, Shrine, & Katsiyanni,

2006). IDEA states that all students with disabilities must have equal access to the same curriculum as their nondisabled peers with adequate support (Lasky & Karge, 2006). In addition, IDEA requires that students with disabilities have academic access at their local schools to the general education curriculum and standardized assessments (Lasky & Karge). IDEA (1990) was revised and is now called the Individuals with Disabilities Improvement Act (IDEIA) of 2004.

NCLB

The No Child Left Behind (NCLB) Act of 2001 was passed to improve the academic achievement of all students in the United States (Yell, Shriner, & Katsiyanni, 2006). This policy set a high standard and quality for instruction and instructional delivery. Student achievement is a high expectation and a school's success is measured by each student's performance (Yell et al., 2006). The NCLB Act (2001) increased the level of accountability at the local level. Schools are required to be more accountable for student achievement, including students with disabilities. When academic achievement falls below the standard set by NCLB (2002), school districts and individual schools are held accountable and monitored closely to ensure that students with special needs are appropriately placed and not under served.

IDEIA

IDEIA (2004) stated that students with disabilities should be included in the general education classroom whenever possible except for when supplementary aids fail to allow the same level of success as nondisabled peers (Yell et al., 2006). Inclusion encompasses the assimilation of students with disabilities without discrimination based

on the specific disabling condition (Ramirez, 2006). The major provisions of IDEIA ensure that children with disabilities from ages 5-21: (a) receive a free and appropriate education (FAPE); (b) have an Individualized Education Plan (IEP) devised to meet their specific needs; (c) are educated in their least restrictive environment (LRE); (d) have access to attend and participate in all school activities; and (e) have rights to confidentiality, due process, and nondiscriminatory assessments (IDEA, 2004).

Each one of these federal laws has established the legal framework and premise for inclusion of all individuals with disabilities in our society. More specifically, a legal framework was established for schools to educate students with disabilities. However, the interpretation of the laws in different states, school districts, and schools is often subjective. Principals and assistant principals are responsible for managing how special education laws and principles. The purpose of inclusion is to allow students with disabilities to have the same privileges, opportunities, and access to all that our educational system has to offer as their nondisabled peers in their least restrictive environment (LRE).

The Role of Principals in Special Education

Student Placement (LRE)

According to Russell and Bray (2013), principals and assistant principals are responsible for student placement. Principals and assistant principals with favorable attitudes toward inclusion tend to place students with disabilities in less restrictive environments like general education classrooms (Russell & Bray, 2013). An LRE refers to the actual classroom setting and learning placement for students who receive

special education services without segregation from their non-disabled peers (Praisner, 2003). According to Etscheidt (2006), the LRE provision was first included in the Individuals with Disabilities Act in 1990 and specifically requires that public agencies ensure:

> to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the general education environment occurs only when the nature or severity of the disability is such that the child cannot achieve academically in general education classes with the use of supplementary aides and services. (IDEA, 1990, p. 167)

The law defines LRE as the setting where students with disabilities have the potential for the greatest level of achievement with support and supplementary aides from special education services. The LRE includes placements along a continuum from the least to most the restrictive (e.g., general education classroom, resource room, separate special education school site), depending on each student's individual needs and academic goals (Friend, 2005).

IDEIA (2004) states that the general education classroom should be the first placement option for all students regardless of their abilities (Yell et al., 2006). Some schools currently operate with a partial inclusion model which means students with disabilities attend some classes with their nondisabled peers and receive additional services in other settings with a certified special educator (Wiazowski, 2012). The only

exception to the LRE provision is when students with disabilities are not able to receive an appropriate education in the regular classroom or are disruptive to the academic program of their nondisabled peers; then, they are placed in a more restrictive environment like a self-contained setting or an alternative school (Wiazowski, 2012). However, with effective leadership from principals and assistant principals who have positive attitudes toward inclusion, students with disabilities have an opportunity to thrive in general education classrooms (Irvine, Lupart, Loreman, & McGhie-Richmond, 2010).

Instructional Leadership and Collaboration

Principals as transformational leaders oversee the access to quality instruction and the climate of equality within their schools (Irvine et al., 2010). Principals and assistant principals work with general and special education teachers to collaborate on the most effective and successful ways to educate students with disabilities. Haager and Klingner (2005) identified collaboration as a key ingredient in maintaining an inclusive community. Collaboration must take place between the staff, administration, parents, and the community for successful inclusion of students with disabilities (Carpenter & Dyal, 2007). All stakeholders including general and special education teachers, administrators, family and friends, instructional aides, therapists, school counselors, school social workers, and school psychologists must collaborate to make inclusion work (Billingsley, 2005).

Smith and Leonard (2005) interviewed nine teachers and three principals in four schools to better understand the practitioner perspective of collaboration for inclusion.

They found conflicting views toward school inclusion among the principals, general, and special educators. Successful collaboration not only involves collaboration between the special and general education teachers but with the principal as well (Smith & Leonard). The study found the necessity for ongoing professional development and implementation of consistent practices by administrators to oversee the strategies to make inclusion work. In this study, the general educators viewed the special educators as primarily responsible for educating the students with disabilities in their classrooms. Inclusive education requires knowledge of the characteristics and effective intervention of various childhood disorders and a support system to instruct students that require heterogeneous groupings in the major subject areas.

Carpenter and Dyal (2007) conducted a study to explore instructional strategies that increase student achievement in secondary inclusion classrooms. Carpenter and Dyal identified several key components for successful inclusion. First, effective teacher planning time is needed in order for general and special educators to have an opportunity to prepare for instruction that challenges all students and simultaneously offers required accommodations and modifications for students with Individualized Education Plans (IEPs). Secondly, the researchers admonished principals to take a clear leadership role in implementing the changes that are associated with the consultative model.

Katz and Sugden (2013) examined how one rural high school successfully implemented inclusive that was facilitated by the school principal. The researchers conducted a mixed-methods study by using surveys, interviews, and observations at the

school for one year. The findings indicated that collaboration was one of the key components that made inclusion work in this case study. The teachers who were interviewed stated that collaboration increased their confidence and made them feel more prepared to provide (differentiated) instruction to both nondisabled and disabled students. The teachers also reported that the administrative support and focus on collaboration with the special education staff created a culture of acceptance and belonging.

Principals are responsible for clearly identifying the expected roles of each staff member in the inclusion process (Aydin, Sarier, & Uysal, 2013). Furthermore, principals are needed to provide access to resources for instructional support, planning time, and service delivery. Principals' and assistant principals' attitudes toward inclusion influence how they provide the necessary leadership and support for inclusion.

Theoretical Foundation

The theoretical foundation for this study is the notion that principals, as organizational leaders, set the tone for inclusion within their schools by motivating and inspiring the teachers and other professionals who work within an inclusive setting. Transformational leadership theory states that a leader has the ability to identify the changes that need to be implemented within an organization (Beauchamp, Barling, & Morton, 2011). Transformational leaders influence and inspire their followers to commit to organizational changes (Beauchamp et al., 2011). The transformational leadership theory was initially developed by James Macgregor Burns in 1978 and later, expanded upon by Bernard Bass in 1985. Transformational leadership is measured by

the amount of influence that a leader has on the employees within an organization (Bass & Riggio, 2008).

Bass identified four primary components of transformational leadership: 1) intellectual stimulation; 2) individualized stimulation; 3) inspirational motivation; and 4) idealized influence (Bass & Riggio, 2008). First, intellectual stimulation is characterized by how leaders motivate followers to be creative, explorative, and open to new ways of learning. Secondly, individualized stimulation consists of the one on one support that transformational leaders provide to each follower as needed. The next tenant is inspirational motivation, which refers to how leaders motivate and inspire their organizations. Inspirational motivation is characterized by the leader's optimism and positive energy. The authenticity of the leader's passion to reach the organizational goals is shared by the followers. The last component of transformational leadership is idealized influence, which refers to the leader's high moral standards and efficient use of power within an organization (Afshari, Bakar, Luan, & Siraj, 2012). The leader is highly respected and trusted within the organization. The followers respect and emulate the leader's values and ideals (Bass & Riggio, 2008).

Change is often met with resistance in most organizations; however, transformational leaders have the ability to encourage their followers to see the possibilities and positive potential created by change within an organization. In some organizations, the leader is not easily accessible and the lines of communication are poor throughout the organization, especially when changes are made. However, transformational leaders not only communicate, but listen to the needs, suggestions, and

ideas of other members within an organization. They are open to making modifications and adjustments and ensure that the entire organization has a clear understanding of the vision.

According to Bass and Riggio (2008), transformational leaders elicit higher levels of performance, achievement, and satisfaction from others, which are important characteristics of a successful inclusion program (Costley, 2013)). Therefore, the transformational theory is the theoretical foundation for this study. Principals are the key organizational leaders in schools and research has shown that the effects of intellectual stimulation, individualized consideration, inspirational motivation, and idealized influence produce successful inclusive school environments (Beauchamp, Barling, & Morton, 2011; Navickaite, 2013).

Two studies have examined how school principals incorporate elements of transformational leadership in their roles as school leaders. Balyer (2012) identified transformational leadership as the framework in which school principals shaped their own attitudes and motivated teachers and staff members in their schools. Not only did principals identify the individual needs of staff members and students, but they moved their schools forward as a collective unit (Balyer). This concept is especially critical in an inclusive program where teachers need to feel effective and students need a sense of belonging.

In another study, Aydin, Sarier, and Uysal (2013) studied the leadership style of school principals in Turkey. They found that transformational leadership resulted in higher job satisfaction and commitment from the teachers in each one of the

participating schools. In comparison to other leadership styles with less involvement and influence from the principal, transformational leaders were able to gain more support and teamwork from teachers who were influenced by the attitude and vision of the principal.

Principals' Attitudes toward Inclusion

Several researchers have examined the roles and attitudes of principals toward the inclusion of students with disabilities. Avissar, Reiter, and Leyser (2003) examined the role, vision and inclusive practices of Israeli principals. The researchers developed the Questionnaire for Principals to identify the perceptions and inclusive practices of principals. The following variables were examined to determine an influence on attitudes toward inclusion: age, educational background, and special education training. The results indicated that younger principals had more favorable views toward inclusion, whereas older and more experienced principals reported negative attitudes toward inclusion. Furthermore, the results indicated that principals viewed inclusion as a social success for students with disabilities, but not an academic success. Lastly, the results indicated that students with more severe disabilities were viewed as less appropriate for general education classrooms and less capable of being successful in an inclusive setting.

One of the seminal studies on principals' attitudes toward inclusion was Praisner's (2003) study, which examined how elementary principals perceived and placed students with mild to moderate disabilities. Praisner (2003) surveyed 408 elementary school principals (K-6) in the Commonwealth of Pennsylvania to examine

the relationships between attitudes toward inclusion and their placement of students with disabilities. Praisner (2003) developed a scale, The Principals and Inclusion survey, to measure principals' attitudes toward inclusion. Praisner examined the relationship between principal attitudes toward inclusion and the following variables: (a) age; (b) gender; (c) general and special education experience; (d) elementary administrative experience; (e) special education credits; (f) in-service hours; (g) special education certification; (h) crisis plan verbiage; (i) mission statement verbiage; (j) personal experience with individuals with disabilities; (k) special education certification; (l) personal experience with individuals with disabilities outside of the school setting; and (m) the number of relevant content areas in formal training (Praisner, 2003). The results indicated that 1 in 5 principals have favorable attitudes toward inclusion. However, 80% of the principals surveyed were uncertain of their feelings toward inclusion of students with disabilities in the general education classroom. Of the variables included in this study, experiences with individuals with disabilities outside of the school setting and special education training were associated with more positive attitudes toward inclusion. Older principals were more likely to place students with disabilities in resource classrooms, instead of in general education classrooms. Furthermore, principals with positive attitudes toward inclusion were more likely to place students with various disabilities in less restrictive classrooms. Lastly, one important finding was that principals with positive attitudes toward inclusion were more likely to place students in their least restrictive environment.

In another study, Horrocks, White, and Roberts (2008) examined the relationship between principals' attitudes toward inclusion and placement recommendations for students with autism in Pennsylvania public schools. The independent variables were school level, gender, years as a principal, years with the district, experience with children diagnosed with autism, personal experience with inclusion, and personal experience with autism. Horrocks et al. (2008) found that principals with positive attitudes toward inclusion were more likely to place a child with autism in a general education classroom. The Principal's Perspective Questionnaire developed by Horrocks (2005) was distributed to 1,500 Pennsylvania public school principals. The results indicated that elementary principals had more favorable attitudes toward inclusion of students with autism than their colleagues in middle and high schools. However, principals with previous experience with children with autism did not always tend to have favorable opinions toward inclusion. Furthermore, unlike in Praisner's (2003) study, having relatives, friends or colleagues with disabilities or formal training in special education were not predictors of positive attitudes toward inclusion of students with disabilities, specifically autism. Findings from the Horrocks et al. (2008) study indicated that gender, school level, and formal training were not significantly linked to principals' attitudes toward inclusion.

Sharma and Chow (2008) surveyed 130 primary school principals in Hong Kong to determine their attitudes toward the integration of students with disabilities into regular schools. Bailey's Principal's Attitudes toward Inclusive Education Scale (PATIE) was used in this study. The research indicated that 43% of the principals

opposed the integration of students with disabilities. Five percent of the principals strongly opposed inclusion of students with disabilities. The findings also revealed that principals who had previous experiences working with individuals with disabilities or close relatives living with disabilities have more positive attitudes toward inclusion. Principals who led schools with a smaller school enrollment had more positive attitudes toward inclusion. Interestingly, principals with less teaching experience had more positive attitudes toward inclusion of students with disabilities.

Irvine, Lupart, Loreman, and McGhie-Richmond (2010) conducted a mixed-methods study to examine the attitudes of Canadian school principals' attitudes toward inclusion of students with disabilities. An online version of the Diversity, Differentiated Instruction and Development Survey (DIDDs) for administrators was sent to sixteen principals. Four principals were given an audiotaped, open-ended, semi-structured interview that focused on the inclusive practices in their schools and the specific inclusive experiences of their students. The results indicated that the principals had a positive attitude toward inclusion. One key observation was that the principals who were interviewed identified inclusion more as an ideology and not as an actual placement of the students. The principals believed that all students should be treated equally and have an equal access to the curriculum, but not necessarily together in the general education classroom. This revealed that although the principals had positive attitudes toward inclusion, they were also open to other placement options for students with disabilities.

In a doctoral study, Farris (2011) examined the attitudes of high school principals toward inclusion and their perception of students with disabilities. The purpose of this quantitative study was to investigate the Texas high school principals' views toward the inclusion of students with disabilities in the general education classroom using survey methodology. Farris used the Principal's Inclusion Survey, which was developed by Praisner (2003). The results of this study indicated that principals only favored inclusion of students with less severe disabilities. The participants reported that less inclusive placements for students with mental retardation and more severe cognitive and physical disabilities should be educated in a less inclusive learning environment. Additionally, the results contradicted some older studies by indicating that most principals prefer that students with disabilities only participate in non-academic classes and settings with their nondisabled peers. Principals' perceived inclusion as another placement for the students as opposed to an overall atmosphere of acceptance within the school.

Graham and Spandagou (2011) conducted a qualitative study with thirteen principals in South Wales. Participants were given open-ended interviews that lasted from 60-150 minutes. The researchers found that principals' attitudes toward inclusion were dependent upon their interpretation of the meaning of inclusion. Some of the principals in the study did not have a current understanding of the term and were more interested in finding funding for extra support of the students with disabilities. Some principals were also concerned about minimizing the disruptions that could potentially be caused by students with more severe disabilities. Overall, the findings indicated

inconsistencies in principals' attitudes toward inclusion based on their lack of understanding, competency, and efficiency in guiding their schools in inclusive practices.

Ball and Green (2014) conducted a descriptive study in Tennessee to examine the perceptions of school leaders toward inclusion of students with disabilities. The Principals and Inclusion Survey was administered to 138 principals. The results indicated that the principals had slightly negative attitudes toward the inclusion of students in the general education setting. There was a negative correlation between the training and experience and attitudes of the principals. Ball & Green indicated that the results warranted the need for more pre-service training and experience with special education to increase the quality and practice of inclusion.

In general, each one of these studies indicated that principals have a key role in implementing successful inclusion programs. Furthermore, the studies demonstrate the significance of principals' attitudes in relation to how students with disabilities are placed in classrooms. Additionally, study researchers confirmed that principals' attitudes influence how their staff member, especially teachers, perceive inclusion. Balyer (2012) stated that effective transformational leadership motivates teachers to go above and beyond what they are expected to do in their classrooms. Strong principals have the ability to motivate and support both general and special education teachers in the inclusive classroom.

A lack of administrative support is identified as one of the seven barriers to effective inclusive practices (Worell, 2008). Each school's administrative team should

demonstrate leadership and offer motivation that empowers faculty, staff, and all students to create a culture of acceptance and achievement. In most school districts, the building level administrators are the personnel responsible for the daily supervision of the special education department and placement decisions (Horrocks, White, & Roberts, 2008). Jimenez, Graf, and Rose (2007) stated that principals have one of the most important roles in helping schools to develop successful inclusion programs. It is theorized that school leadership establishes and affects school culture and teachers' attitudes and thereby, has an important role in making inclusion a successful process (Villa & Thousand, 2005).

The theoretical premise of this study states that principals set the tone for schools and that principals have a critical role as transformational leaders to motivate, inspire, and model for teachers positive attitudes toward inclusion. Positive attitudes result in successful inclusion programs and improved student achievement (Balyer, 2012). Research reflects the influential role that principals play in the implementation of inclusive schools (Irvine, Lupart, Loreman, & McGhie-Richmond, 2010; Worell, 2008).

Summary

Changes have constantly occurred in the delivery of special education services and inclusion has been one of the most fundamental changes. Federal laws like the Rehabilitation Act of 1973, IDEA, and NCLB were created to ensure that students with disabilities have equal access to education with their nondisabled peers. Inclusion has

been the result of the legislation that has been created to ensure that all students have equal access to a quality education.

Several researchers have explored the attitudes of both general and special education teachers with regard to the implementing inclusion. Collaboration has been one type of instructional delivery explored in inclusive programs to ensure equal access for all students. Administrative support is needed for general and special educators to make inclusion programs successful; examining principals' attitudes could reveal how they feel about supporting inclusion programs (Carter & Hughes, 2005; Lohrman & Bambara, 2006; Smith & Leonard, 2005).

This research is grounded in the theory of transformational leadership, which identifies the influence and important role that school principals play in the implementation of an inclusive and supportive school environment. A review of the literature indicated that school principals' attitudes toward inclusion influence the success of education students with disabilities in general education classrooms. However, the findings were inconsistent regarding the factors that influence principals and assistant principals to have positive attitudes toward inclusion. Therefore, a closer examination of the factors that predict principals' and assistant principals' attitudes toward inclusion would extend the current literature.

In Chapter 3 of this dissertation, I present a description of the research design and methodology used in this study. The chapter contains a detailed description of the sampling method, criteria for selecting participants, and the instrumentation. I also

discuss the methods used for data collection and data analysis. The chapter also has a discussion on the measures taken for ethical protection of the participants.

Chapter 3: Research Method

Introduction

The purpose of this quantitative study was to examine school principals' and assistant principals' attitudes toward inclusion of students with disabilities in general education classrooms. Inclusion has become a movement aimed toward ensuring that all students have the ability to receive a quality education in a classroom that does not discriminate or segregate based upon a student's disability (Polat, 2011; Taylor, 2011). In a classroom that is inclusive, all students are educated together in the same classroom with a general education teacher and a special education teacher who collaborate and co-teach to meet the needs of all students (Cesar & Santos, 2006; Florian, 2013). Research has indicated that administrators play an essential role in creating an inclusive school climate that fosters a positive tone for all students, staff members, and parents (Fazal, 2012; Horrocks et al., 2008; Praisner, 2003).

This chapter contains six sections. The first section includes the research design and approach taken in the study. In the second section, I discuss the setting and the sample. The instrumentation procedures used for this study are discussed in the third section. The procedures used for data collection and data analysis are the topics covered in the fourth section. The ethical considerations and the guidelines that I followed to protect the privacy and confidentiality of the participants are discussed in the fifth section. The chapter ends with a chapter summary and an introduction to Chapter 4.

Research Design and Approach

In this quantitative study, I examined principals' and assistant principals' attitudes toward inclusion of students with disabilities in the general education classroom. According to Creswell (2003), "quantitative studies are beneficial to generalize from a sample to a population, so that inferences can be made about concepts like behaviors and attitudes" (p. 155). A quantitative study is objective and guided by the scientific method (Mertens, 2013). In a quantitative study, data are numerical and statistical tests are performed to answer study research questions (Mertens, 2013). Survey research design "encompasses any measurement procedures that involve asking questions of respondents" (Trochim, 2013, para. 2). Survey research is effective in investigating a variety of current issues and concerns in the field of education (Rea & Parker, 2005; Trochim, 2012). Survey research has proven to be an efficient way to collect data from a small sample of participants to represent a larger population (Rea & Parker, 2005, Trochim, 2012). The survey design was used to collect descriptive data about principals' and assistant principals' attitudes toward inclusion at the elementary, middle, and high school levels.

Setting and Sample

The setting for this study was a school district located in the southeastern region of the United States. The district served over 23,000 students attending the 28 elementary schools, eight middle schools, eight high schools, and 10 specialty schools in the district (RCPS, 2012). Ninety-six percent of the schools were fully accredited, and 80% of the schools met Adequate Yearly Progress (AYP) during the last school year (RCPS, 2012). The population of the school districts was comprised of 81% African-

American students, 10% Caucasian students, 6% Hispanic students, and 6% of students from other ethnic backgrounds (RCPS, 2012). Seventy-five percent of the students received free or reduced lunch, and 19.5% of the students receive special education services. The sample included elementary, middle, and high school principals and assistant principals. The majority of the principals in the district were female administrators (70%) who had been in the system for 10 or more years. More than 80% of the principals started in the education field as classroom teachers who earned endorsements in administration and supervision.

In this study, I selected the participants through a nonprobability, convenience sampling process. According to Urdan (2005), convenience sampling is appropriate for accessibility, proximity, and willingness of the selected sample to participate. A power analysis was performed to determine the minimum sample size needed for the study. I used G*Power and the following parameters to determine the sample size for a multiple linear regression analysis: medium effect size (f^2) of .20, power set at .80, an alpha level of .05. Results revealed that the required sample size for adequate power was $N = 65$ (Kelly & Maxwell, 2003). The obtained sample size included 93 administrators, which included the principals and assistant principals from elementary and secondary schools in the targeted southeast region school district.

Research Questions and Hypotheses

This study was guided by the following research questions:

1. To what extent do demographic variables such as age, gender, having a relative with a disability, and having a friend or colleague with a disability predict principal attitudes about inclusion as measures by the PATIE scale?

   $H_0$1: Demographic variables such as age, gender, having a relative with a disability, and having a friend or colleague with a disability are not statistically significant predictors of principal attitudes about inclusion, as measured by the PATIE scale.

   $H_1$1: Demographic variables such as age, gender, having a relative with a disability, and having a friend or colleague with a disability are statistically significant predictors of principal attitudes about inclusion, principal attitudes about inclusion as measured by the PATIE scale.

2. To what extent are professional type of principalship (elementary or secondary school), years of teaching experience, years of experience as an administrator, and having special education experience predictors principal attitudes about inclusion as measured by the PATIE scale.

   $H_0$2: Professional experience variables such as type of principal (elementary or secondary school), years of teaching experience, years of experience as an administrator, and having special education experience are not statistically significant predictors of principal attitudes about inclusion, as measured by the PATIE scale.

   $H_1$2: Professional experience variables such as type of principal (elementary or secondary school), years of teaching experience, years of experience as an

administrator, and having special education experience are statistically significant predictors of principal attitudes about inclusion, as measured by the PATIE scale.

Instrumentation

In this study, I asked participants to complete an online survey (see Appendix A). The Principals' Attitudes Toward Inclusive Education (PATIE) scale, developed by Bailey (2004), was used to measure principals' and assistant principals' attitudes toward inclusion of students with disabilities in general education classrooms. Participants responded to each item on the PATIE using a 5-point Likert type scale that ranges from 1 = *strongly disagree* to 5 = *strongly agree.* The validity of the survey was demonstrated in the categorization of the 30 items (Bailey, 2004). The PATIE total scale was created by first recoding the 17 reverse-scored items (i.e., 1= 5, 2= 4, 3 = 3, 4 = 2, and 5 = 1). The 30 items were then summed and the summed score was divided by 30 to obtain the mean scale score (Bailey, 2004). The PATIE total scale can range from 1.00 to 5.00, and a higher score on the scale suggests more positive attitudes toward inclusion of students with disabilities in the general education classroom (Bailey, 2004).

Principals' and assistant principals' attitudes toward inclusive education were measured by the 30-item interval-coded PATIE scale. Bailey (2004) developed the PATIE to measure principals' attitudes toward inclusion of students with disabilities in general education classrooms. These attitudes pertain to numerous factors surrounding inclusion, focusing on (a) the type and severity of the disability (e.g., "Students with mild disabilities should be included in regular classrooms"); (b) the impact of inclusion on the

students without disabilities (e.g., "Regular students benefit socially from inclusion"); (c) the impact of inclusion on principals, teachers and other school staff (e.g., "Regular teachers are not trained adequately to cope with the students with disabilities"); and (d) the human, financial, and instructional resources for inclusive classrooms (e.g., "There is sufficient funding to permit inclusion").

Variables

Gender was an independent variable. I coded gender as a categorical (nominal) variable where 1 = *male* and 2 = *female*. Age group was an independent variable and coded as a categorical (nominal) variable where 1 = *30 years and below*, 2 = *31 to 50 years*, and 3 = *51 years and above*. Having a relative or friend with a disability was an independent variable and coded as a categorical (nominal) variable where 1 = *no* and 2 = *yes*. Professional type of administrator was an independent variable where 1 = *principal* and 2 = *assistant principal*. Years of administrator experience was an ordinal variable where 1 = *0-5 years*, 2 = *6-10 years*, 3 = *11-20 years*, and 4 = *21 years or more*. Years of regular education teaching experience was an ordinal variable where 1 = *0-5 years*, 2 = *6-10 years*, 3 = *11-20 years*, and 4 = *21 years or more*. Years of special education teaching experience was an ordinal variable where 1 = *0-5 years*, 2 = *6-10 years*, 3 = *11-20 years*, and 4 = *21 years or more*.

These aforementioned variables were all ordinal variables that were treated as continuous variables in the hierarchical multiple linear regression (HMLR) analyses for hypothesis testing. This is done as HMLR statistics are based on linear relationships between the dependent variable and the independent variables (Norman, 2010; Tabachnik

& Fidell, 2013). It is therefore recommended that the skewness of ordinal variables be examined and addressed to ensure that the assumption of normality has been met (Norman, 2010; Tabachnik & Fidell, 2013).

School Enrollment

School enrollment was a categorical (nominal) variable, where 1 = *500 students*, 2 = *501 to 1,000 students*, and 3 = *above 1,000 students*. This variable was used as a covariate, as previous studies (e.g., Bailey, 2004; Sharma & Chow, 2008) have posited that principals at schools with smaller student enrollment tend to have more positive attitudes toward inclusion. This may result as "small school size may increase the interaction between students and principals" (Sharma & Chow, 2008, p. 387). Indeed, in Sharma and Chow's (2008) study, PATIE scores were inversely related to student enrollment at a significant level, $p = -.206$, $p < .05$.

Validity and Reliability

According to Shaughnessy, Zechmeister, and Zechmeister (2006), "assessment validity refers to the meaning of test scores, whereas reliability is the consistency of scores" (p. 25). Assessment validity pertains to the degree to which an instrument measures the construct that it intends to measure (Dros, 2011). Trochim (2006) posited that valid instruments should demonstrate *face validity, construct validity, and convergent* and *discriminant validity*. *Face validity*, "the weakest way" to demonstrate measurement validity, refers to how well "at face value" the instrument measures the intended construct (Trochim, 2006, para. 4).

Construct validity refers to the degree to which the instrument operationally defines the theoretical construct it is intended to measure; construct validity is often determined via factor analyses (Dros, 2011; Trochim, 2006). An instrument has demonstrated (a) *convergent validity* when its results are significantly correlated with the results from an instrument measuring the same theoretical construct, and (b) *discriminate validity* when instrument results are not significantly (or negatively associated with) (Dros, 2011; Trochim, 2006). Trochim (2006) further posited that an instrument should demonstrate (a) *criterion-related predictive validity*, which refers to the degree to which the instrument can predict future behavior, attitudes, or abilities; and (b) *criterion-related concurrent validity*, which refers to the degree to which the instrument can be used to effectively distinguish theoretical differences between two or more different groups.

Bailey (2004) validated the PATIE with a sample of principals in Australia. The face validity was established by three experts in scale development and special education. Bailey (2004) stated that results from factor analyses showed that the PATIE had strong construct validity. Convergent validity of the PATIE was supported by Findler, Vilchinsky, and Werner (2007), who found that the PATIE and the Multidimensional Attitudes Scale toward Persons with Disabilities (MAS) scale were significantly correlated, $r = .29$, $p < .001$. Criterion-related concurrent validity of the PATIE was supported by Sharma and Chow (2008), whose results showed that PATIE scores were higher amongst principals who had ten or fewer years of school administrative experience than principals with more than ten years of experience.

Measurement reliability pertains to the degree to which an instrument effectively measures a theoretical construct across different groups of individuals, different times and in different settings (Dros, 2011; Trochim, 2006). *Inter-item reliability* refers to the psychometric effectiveness of the items on an instrument (e.g., how well the instrument items "go together;" Trochim, 2006, para. 1). Inter-item reliability is determined by calculating the Cronbach's alpha of an instrument. A Cronbach's alpha between .70 and .79 is considered good, between .80 and .89 is considered very good, and .90 or higher is considered excellent (Tavakol & Dennick, 2011; Webb, Shavelson, & Haertel, 2006). Bailey (2004) reported the Cronbach's alpha to be .92 in her study, and the Cronbach's alphas for the PATIE have been in the low to mid .90s in other studies (e.g., Idol, 2006; Sharma & Chow, 2008).

Threats to Validity

Threats to validity encompass threats to *internal* and *external* validity. The *internal validity* of a correlational research study is "the degree to which observed changes in a dependent variable can be attributed to changes in an independent variable" (Pedhazur & Schmelkin, 2013, p. 154). In research studies, the degree to which threats to internal validity influence the study are determined by the type of design and the degree of control that the researcher has with regard to sampling, data collection, and data analyses (Mertens, 2013; Pedhazur & Schmelkin, 2013).

Threats to internal validity include history, statistical regression, instrumentation, and mortality (Mertens, 2013; Pedhazur & Schmelkin, 2013). These internal threats to validity are relevant only to experimental studies and other studies that use pretest and

posttest data, or longitudinal studies (Mertens, 2013). The history effect, for example, is when a historical event occurs between the first and second data collection; it was not a concern in this study as data were collected at only one time (Mertens, 2013). Statistical regression refers to participants who scored very high or low on a pretest having less extreme scores when they take a posttest, and instrumentation refers to any changes in the survey from pretest to posttest (Cook & Campbell, 1979; Pedhazur & Schmelkin, 2013). These threats were not relevant to this study, as pretest and posttest data were not collected (Mertens, 2013; Pedhazur & Schmelkin, 2013). The threat of maturation was not an issues in this study (as it would be in longitudinal studies), as the study participants were adults (Mertens, 2013).

There are, however, threats specific to the internal validity of studies using survey research designs (Mertens, 2013). One threat is selection, which is the result of who is participating in the study (Mertens, 2013; Pedhazur & Schmelkin, 2013). Participants who volunteer to participate in studies often provide different response than those who do not volunteer (Pedhazur & Schmelkin, 2013). It is likely that the assistant principals and principals who participated in this study differ from the population of assistant principals and principals. For example, some participants may have responded to this study and completed the study survey because they had strong attitudes (positive or negative) about inclusion. The lack of using random selection in this study increased the threat of selection and reduced the ability to generalize study results to other samples of assistant principals and principals (Mertens, 2013).

Other threats to internal validity of quantitative studies using survey research designs are reverse causation and covariates (Mertens, 2013; Pedhazur & Schmelkin, 2013). Reverse causation refers to the inability to know which came first, the independent or dependent variable; that is, the dependent variable may actually be the independent variable and vice versa (Mertens, 2013; Pedhazur & Schmelkin, 2013). However, as the independent variables pertained to demographic and work characteristics of the participants, reverse causation was likely not an issue in this study. Covariates are confounding variables that act as independent variables to influence the dependent variables (Mertens, 2013). In this study, I included school enrollment as a covariate in analysis, after it was determined via a Spearman rho correlation analysis to be significantly associated with attitudes toward inclusion. This helped me to reduce the threat of covariates.

Internal and external validity are often inversely related: as the internal validity of a study increases, the external validity decreases (Mertens, 2013; Salkind, 2010). External validity concerns the ability of conclusions of a study to be generalized to other categories of people, settings, and times (Salkind, 2010). In this study, I only surveyed school a principals and assistant principals at public schools. Results from this study therefore cannot be generalized to other assistant principals and principals who, for example, are administrators at private, religious-based, or charter schools. Results furthermore cannot be generalized to teachers or other school staff, nor can these results be used to predict future assistant principal or principal attitudes about inclusion.

Procedure

I obtained permission from the Institutional Review Board (IRB) of Walden University to conduct this study. The Walden IRB approval number for this study is 06-17-14-0019112. A letter of cooperation was sent to the Research and Evaluation Department of the participating school district (see Appendix B). Permission to use The Principals' Attitudes Toward Inclusion Scale (PATIE) was requested from Dr. Jeff Bailey (see Appendix C). After permission was granted (see Appendix D), I posted the survey on Survey Monkey.

The following procedures were used to collect data for the research. Survey Monkey™ was used as the source for participants to access the online survey via www.surveymonkey.com. Survey Monkey is an online tool that facilitates survey research by eliminating paper surveys and allowing participants to asynchronously access the survey within an allotted timeframe. The email addresses of the principals and assistant principals in the participating school district were available on the school district website. I copied the email addresses to solicit principal and assistant principal participation in completing the 15 minute survey. I sent a participation request email to all principals and assistant principals within the school district (see Appendix E). Participants were given one week to complete the survey. I collected demographic information at the end of the survey (see Appendix A). I forwarded a second email (see Appendix F) to all of the principals thanking the participants who had already participated and requesting participation from anyone who was unable to participate during week one. I included a letter of informed consent (see Appendix G) at the beginning of the email link, which had to be accepted before the participants accessed the

survey. At the end of the survey, participants exited the study by submitting their responses. I collected no additional data from the participants. After I completed data collection and analysis, a brief summary of the results was sent to the participating school district.

Data Analysis

I downloaded data from Survey Monkey™ into a Statistical Package for the Social Sciences (SPSS 20.0) software program data file and analyzed it by using SPSS 20.0. I reviewed the data for entry errors and missing data. Mean substitution (i.e., replacing the missing value with the item mean) was used to replace missing data (Tabachnik & Fidell, 2013). The inter-item reliability of the PATIE was calculated via a Cronbach's alpha. The PATIE total scale score was created by summing the 30 items and dividing the sum by 30 (the number of items in the scale). The total PATIE scale score had a score range from 1.00 to 5.00, with a higher score denoting increasingly positive attitudes toward inclusion. Descriptive statistics were computed for some variables, for example, frequencies and percentages were computed for categorically-coded variables (e.g., gender, having a relative with a disability – yes or no). Descriptive statistics such as means, standard deviations, and range of scores were computed for continuously-coded (i.e., ratio or interval) variables.

I conducted a hierarchical multiple linear regression (HMLR) to address each of the research questions. An HMLR allows for the examination of both categorically- and continuously-coded predictor variables on a continuously-coded criterion variable (Tranmer & Elliott, 2008). The covariate of school enrollment was entered in the first

step of the HMLR, resulting in the first model of the regression. All predictor variables were entered on the second step of the regression model, resulting in the second model of the regression. The alpha level was set at $p < .05$ to determine significance (Vogt, 2007). Assumptions for multiple linear regression were tested prior to conducting the statistical analyses. The specific assumptions that were tested include: (a) normality of scores; (b) linearity between the independent and dependent variables; (c) lack of multicollinearity between predictor variables; and (d) homogeneity of variance or equivalent criterion residuals scores across the predictor variables (Muijs, 2010).

Ethical Considerations

It was important that the ethical guidelines with regard to human subjects were followed in this study and ethical procedures were part of the consent process and data collection. Study participants read a consent form and provided their consent to participate in this study. They could not participate if they did not provide consent. In the consent form, participants were informed that they could opt out of the study even after providing consent. They had the option to not answer questions that they did not wish to answer. Furthermore, I provided contact information should any of the participants have any questions about the study.

With regard to the data collection, all of the results were anonymous; participants provided no information that would identify them. Study results were reported at the aggregate and not the individual level. Data were secured in a password protected file on a password protected jump-drive so that no data were stored in a computer's hard drive. The data will be stored for a minimum of seven years.

Summary

The purpose of this chapter was to present the methodology used in this study. The chapter opened with a discussion of the research design and continued with a review of the study setting and sample. I then presented the study research questions and then defined and explained the study variables. In this instrumentation section, I comprehensively reviewed the PATIE instrument, including its validity and reliability discussed. Internal and external validity issues as they pertained to the study were then discussed. I closed the chapter with a review of the ethical procedures used in the study. The presentation of the study methodology helped to set the stage for the discussion of the findings of the study. These findings are presented in the fourth chapter.

Chapter 4: Results

Introduction

In this study, I examined the attitudes of principals and assistant principals toward the inclusion of students with disabilities in general education classrooms. Inclusion is an educational setting where students with and without disabilities learn in the same classroom. The classroom instruction is given by a general education teacher and a special education teacher (Waldron, McLeskey, & Redd, 2011). There are federally mandated requirements for inclusive instruction, and these requirements have posed some challenges for the professionals responsible for implementing inclusive practices in the general education classroom (Waldron et al., 2011). The principal as change agent is an essential component of successful inclusion programs (Kugelmass & Ainscow, 2004).

Despite the acknowledged importance of the principal in advocating, creating, and implementing successful inclusive practices (Farris, 2011; Fazal, 2012; Horrocks et al., 2008), few researchers have examined principals' and assistant principals' perceptions and attitudes toward inclusion. The purpose of this nonexperimental, quantitative study was to examine the attitudes of elementary and secondary principals toward the inclusion of students with disabilities in general education classrooms. Specifically, I examined whether demographic and professional experience factors significantly predicted principal attitudes about inclusion.

The purpose of this chapter is to review and discuss the statistical results conducted for hypothesis testing. In this chapter, I present a review of the data collection processes and procedures and continue with a discussion of the study participants. The

study variables are then described. The results section includes data analyses (e.g., testing of assumptions) as well as results from the hierarchical multiple linear regression (HMLR). I conclude the chapter with a summary of the results.

Analysis, Recruitment and Response Rates

Based on a power analysis via G*Power, for a multiple linear regression analysis, a medium effect size (f^2) of .20, four predictor variables, power set at .80, and an alpha level of .05, the required sample size for this study was $N = 65$ (Kelly & Maxwell, 2003). The actual sample size of the study was $N = 73$. Seventy out of the 73 (95.9%) participants completed 100% of the survey. Three participants did not answer one item on the PATIE scale. Using mean substitution (e.g., replacing the missing variable with the variable mean score; Tabachnik & Fidell, 2013), the mean item score for each respective item was entered for the missing variable.

Descriptive statistics: Study participants. Seventy-three principals and assistant principals participated in this research study. These principals and assistant principals were school leaders at both elementary and secondary schools. Each school represented in this study had enrollments of less than 1,000 students.

I calculated frequencies and percentages for the demographic variables of gender, age, and whether each participant had a relative or friend with a disability (see Table 1). The majority of participants were female ($n = 56$, 76.7%). Of the 73 participants, 42 (57.5%) were between the ages of 31 and 50 years and 31 (42.5%) were 51 years of age or older. The frequencies of participants who had ($n = 35$, 47.9%) and did not have ($n = 38$, 52.1%) a relative or friend with a disability were fairly close.

Table 1

Participant Demographic Information

Variable	Frequency	Percentage
Gender		
Female	56	76.7
Male	17	23.3
Age		
31-50 years	42	57.5
51years or older	31	42.5
Relative or friend with disability		
No	38	52.1
Yes	35	47.9

Participants completed questions on the demographic survey, which pertained to their teaching and administrative experiences. The percentage of principals (n = 36, 49.3%) and assistant principals (n = 37, 50.7%) were almost equal. The mean number of years of teaching experience in the regular education classroom was M = 2.86. The mean number of years of teaching experience in the special education classroom was M = 2.15. The mean number of years of administrative experience (as a principal or assistant principal) was M = 2.11 (see Table 2).

Table 2

Participant Teaching and Administrative Experience

Variable	M	SD	Minimum	Maximum	Skewness[+]
Years of teaching experience in regular education[a]	2.86	1.03	1.00	5.00	0.17
Years of teaching experience in special education[a]	2.15	1.02	1.00	5.00	1.56

Years of administrative experience as school principal[b]	2.11	0.87	1.00	4.00	1.78

Note. [+] = The degree of skewness was computed by dividing the skewness value by the skewness standard error. a = The teaching variables were coded as 1 = *none*, 2 = *0-5 years*, 3 = *6-10 years*, 4 = *11-20 years*, and 5 = *21 years or more*. b = The principal variable was coded where 1 = *0-5 years*, 2 = *6-10 years*, 3 = *11-20 years*, and 4 = *21 years or more*.

Descriptive Statistics

The dependent variable in this study was principal attitudes toward inclusion, as measured by the Principals' Attitudes Toward Inclusive Education Scale (PATIE) (Bailey, 2004). The inter-item reliability of the PATIE scale was computed via the inter-item reliability function in SPSS 22.0 (see Table 3). The Cronbach's alpha for the PATIE scale was $\alpha = .90$, which indicated excellent inter-item reliability (Tavakol & Dennick, 2011).

Table 3

Cronbach's Alpha: Inter-Item Reliability of PATIE Scale

Cronbach's Alpha	N of Items
.90	30

I calculated descriptive statistics for the PATIE scale and presented the results in Table 4. The mean score on the PATIE scale was $M = 3.12$ ($SD = 0.51$). The skewness value was 0.33, which indicated that scores on the PATIE scale were normally distributed. An independent samples *t* test was conducted to determine if principals and assistant principals significantly differed in their attitudes toward inclusion. The results were not significant, $t(71) = 0.11$, $p = .912$, documenting that the principals and assistant

principals did not significantly differ in their attitudes toward inclusion. In fact, the mean PATIE scores were very similar, $M = 3.13$ ($SD = .57$) for the principals ($n = 36$) and $M = 3.11$ ($SD = .46$) for the assistant principals.

Table 4

Principal Attitudes Toward Inclusive Education Scale

Variable	M	SD	Minimum	Maximum	Skewness^{+}	α
Principal Attitudes Toward Inclusion Scale	3.12	0.51	2.07	4.10	0.33	.90

Note. $^{+}$ = The degree of skewness was computed by dividing the skewness value by the skewness standard error.

Results

This study was guided by two research questions, both of which were addressed via hierarchical multiple linear regression (HMLR). It is important to ensure that data meet assumptions for HMLR. The testing of assumptions are therefore presented. The variable of school enrollment was used as a covariate, as previous studies (e.g., Bailey, 2004; Sharma & Chow, 2008) have posited that principals at schools with smaller student enrollment tend to have more positive attitudes toward inclusion. Results from Sharma and Chow's (2008) study showed that PATIE scores were inversely related to student enrollment at a significant level, $p = -.206$, $p < .05$. Results from the Spearman's rho correlation, testing for this covariate, is presented after the testing of assumptions.

Testing of Assumptions for Hierarchical Multiple Linear Regression (HMLR)

There are five major assumptions for HMLR analyses (Tabachnik & Fidell, 2013).

The first assumption is that scale score data for both predictor and criterion variables are normally distributed (Tabachnik & Fidell, 2013). The second and third assumptions for HMLR are that the relationships between the predictor and criterion variables are linear and show homoscedasticity. Homoscedasticity refers to similar variances of criterion variable scores across the range of scores for the predictor variables (Garson, 2012; Tabachnik & Fidell, 2013). The fourth assumption is that there is a lack of multicollinearity between predictor variables (Garson, 2012; Tabachnik & Fidell, 2013). The fifth assumption is that the regression residuals or errors are independent of one another (i.e., there is a lack of autocorrelation) (Garson, 2012; Tabachnik & Fidell, 2013). The results from the testing of assumptions are presented in the following sections.

Normality. The years of regular education and special education teaching experience and years of administrative experience were variables that were ordinal coded, but they were treated as continuous variables in the hierarchical multiple linear regression (HMLR) analyses for hypothesis testing. This is done as HMLR statistics are based on linear relationships between the dependent variable and the independent variables (Norman, 2010; Tabachnik & Fidell, 2013). It is therefore recommended that the skewness of ordinal variables be examined and addressed to ensure that the assumption of normality has been met (Norman, 2010; Tabachnik & Fidell, 2013).

Normality, in the distribution of scores for the variables of years of regular and special education teaching experience and years of administrative experience, was determined by calculating the skewness values (Raykov & Marcoulides, 2011). Skewness values less than 2.00 indicate that data are normally distributed (Raykov &

Marcoulides, 2011). The skewness values for the teaching and administrative experience variables were all less than 2.00, indicating that those variables showed a normal distribution of scores. Results revealed that this assumption was met.

Linearity and homoscedasticity. The assumptions of linearity and homoscedasticity were determined via scatterplots of the standardized predicted values of the criterion variable and the standardized residuals. These two assumptions are met when "residual form a patternless cloud of dots" equally distributed above and below the horizontal 0 for the regression standardized residuals (Garson, 2012, p. 39). The scatterplot for the first HMLR model for Research Question 1 is presented in Figure 1, and the scatterplot for the second HMLR model for Research Question 2 is presented in Figure 2. The residual scores shown in both scatterplots were equally distributed above and below the horizontal 0; this indicated that the data met the assumptions of linearity and homoscedasticity.

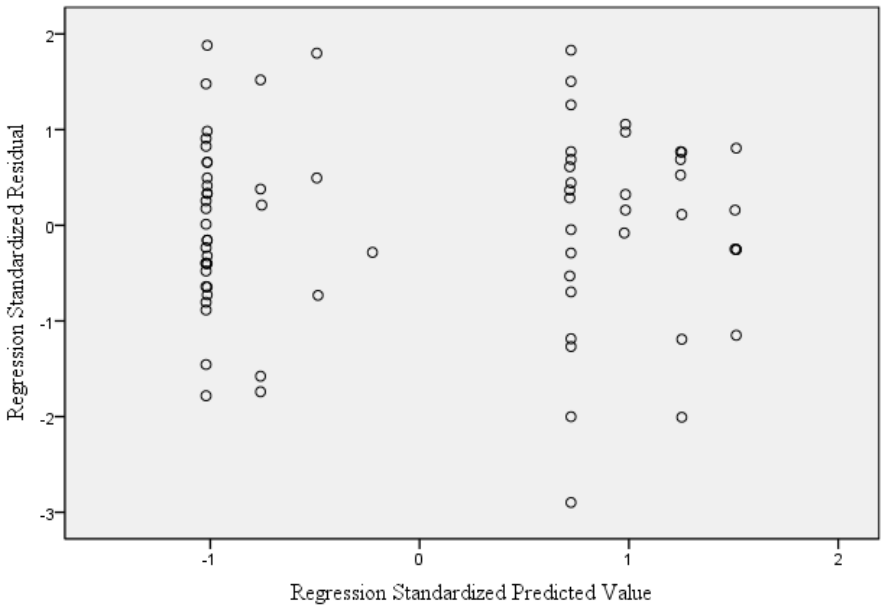

Figure 1. Scatterplot for HMLR for Research Question 1.

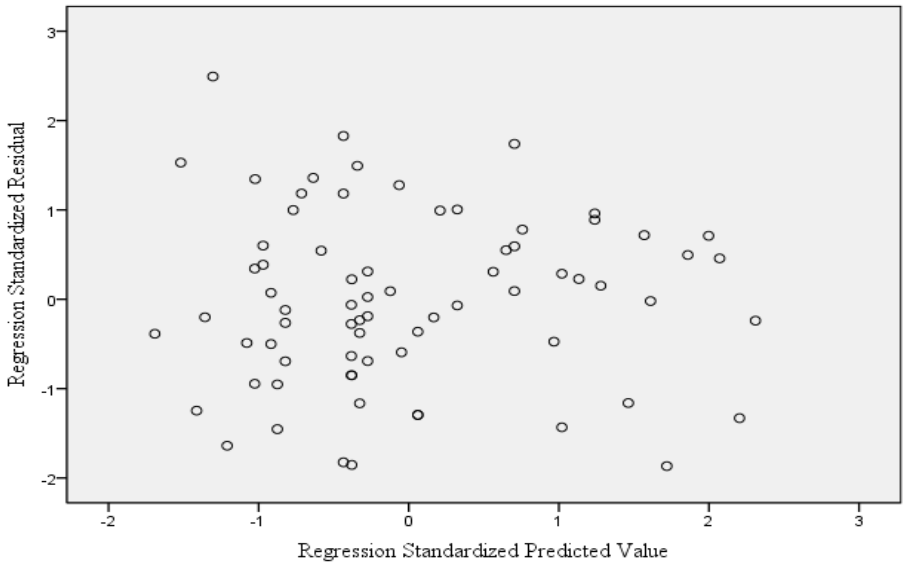

Figure 2. Scatterplot for HMLR for Research Question 2.

Multicollinearity. *Multicollinearity* refers to significant statistical and conceptual overlap between predictor variables. Multicollinearity is most often determined by variance inflation factors (VIFs), and VIFs higher than 4.00 suggest that multicollinearity exists between predictor variables (Tabachnik & Fidell, 2013). VIFs were calculated by selecting this option in the regression tool in SPSS (which automatically produces the VIFs) between predictor variables ranged from 0.94 to 1.22. The assumption of lack of multicollinearity was met.

Independence of errors. One assumption for multiple linear regression is that the residuals or errors are independent of one another (i.e., there is a lack of autocorrelation between residuals), which can be determined by the Durbin-Watson statistic (Tabachnik & Fidell, 2013). If the Durbin-Watson value is between 1.00 and 3.00, the assumption of independence of errors has been met (Tabachnik & Fidell, 2013). The Durbin Watson value for the first HMLR was 1.56 and 1.49 for the second HMLR, which indicated that the independence of errors assumption was met.

Spearman's Rho Correlational Analysis: Testing for Covariates

A Spearman's rho correlation was conducted between current student enrollment (i.e., 500 or fewer students, 501 to 1000 students)[1] and principals' attitudes toward inclusion, as measured by the PATIE (Bailey, 2004). Spearman's rho correlations examine associations between variables that can be categorically and/or continuously coded (Tabachnik & Fidell, 2013). The result from the Spearman's rho correlation is

[1] Current school enrollment was recoded so that 0 = 500 or fewer students and 1 = 501 to 1000 students, as there were no schools that had a student enrollment of 1001 students or higher.

presented in Table 5. Current student enrollment was significantly associated with principals' attitudes toward inclusion, $r(73) = -.336$, $p = .004$. The negative correlation indicated that being a principal at a school where enrollment was 500 or fewer students was significantly associated with positive attitudes toward inclusion. This finding was similar to the result found in the study by Sharma and Chow (2008).

Table 5

Spearman's Rho Correlations

	Principal Attitudes toward Inclusive Education
School Enrollment	-.336**

Note. **$p < .01$

Hypothesis Testing: Hierarchical Multiple Linear Regression

Research Question 1

1. To what extent do demographic variables such as age, gender, having a relative with a disability, and having a friend or colleague with a disability predict principal attitudes about inclusion as measured by the PATIE scale?

   $H_0$1: Demographic variables such as age, gender, having a relative with a disability, and having a friend or colleague with a disability are not statistically significant predictors of principal attitudes about inclusion, as measured by the PATIE scale.

   $H_1$1: Demographic variables such as age, gender, having a relative with a disability, and having a friend or colleague with a disability are

statistically significant predictors of principal attitudes about inclusion, principal attitudes about inclusion as measured by the PATIE scale.

I addressed the first research question via a HMLR analysis. First, I entered the covariate of school enrollment , and it was the only variable in the first step of the regression model. The predictor variables of age, gender, and having a relative/friend with a disability were entered together in the second step of the regression model. Results from the HMLR are presented in Table 6. The first model, with school enrollment as a single predictor of attitudes toward inclusion, was statistically significant, $F(1, 71) = 8.64$, $p = .004$. Based on the R^2 of .108, the effect size for this analysis ($f^2 = .12$) was a small effect size (Cohen, 1988). The results revealed that 10.8% of the variance in principals' attitudes toward inclusion was explained by school enrollment. The findings showed that school size was inversely related to principal attitudes toward inclusion, $\beta = -.329$, $p = .004$. The data showed that principals at smaller schools tended to have more positive attitudes toward inclusion.

I entered the second model, with the variables of age, gender, and having a relative or friend with a disability as predictors of attitudes toward inclusion, was significant, $F(3, 68) = 10.56$, $p < .001$. Based on the R^2_{change} of .283, the effect size for this analysis ($f^2 = .39$) was a medium effect size (Cohen, 1988). This model explained an additional 28.3% of the variance in principal attitudes toward inclusion. The results showed that only one predictor variable, having a relative or friend with a disability, was significantly associated with positive attitudes toward inclusion, $\beta = .547$, $p < .001$. School enrollment was no longer a significant predictor of principal attitudes toward

inclusion, β = -.141, *p* = .170. Age did not significantly predict principal attitudes toward inclusion, β = -.002, *p* = .985, nor did gender, β = .069, *p* = .482.

The second regression model results of the HMLR suggested partial mediational effects of the variable, having a friend/relative with a disability, between school enrollment and attitudes toward inclusion. Partial mediation is suggested when a predictor variable that was significant in the first regression model of an HMLR is no longer significant when a predictor is added in the second regression model of the HMLR (full mediation is met when the standardize beta weight is reduced to β = .000 in the second regression model) (Cohen, Cohen, West, & Aiken, 2013). A Sobel *t* test confirms mediation effects (Cohen et al., 2013). A Sobel test was conducted and was found to be significant, *t* = 2.56, *p* = .010. The significance of the Sobel test confirmed mediation effects: schools with small student enrollment (i.e., < 500 students) led to principals and assistant principals knowing more people with disabilities, which in turn led to positive attitudes toward inclusion.

Although having a relative or friend with a disability was a significant predictor of attitudes toward inclusion among principals, age and gender were not. While the demographic variable of having a friend/relative with a disability significantly predicted attitudes toward inclusion, the demographic construct as a whole did not. Due to the lack of significance between all predictors and attitudes toward inclusion among principals, the null hypothesis was retained and the alternative hypothesis was rejected for Research Question 1.

Table 6

Hierarchical Multiple Linear Regression

	Model 1			Model 2		
	B	SE B	β	B	SE B	β
School Enrollment	-.394	.134	-.329**	-.169	.122	-.141
Age				-.002	.101	-.002
Gender				.083	.117	.069
Relative/Friend with Disability				.554	.106	.547***
$R^{2/}R^2_{change}$	.108			.283		
F for $R^{2/}R^2_{change}$	8.64			10.56		
Significance (p-value) of F	.004			<.001		

Note. *$p < .05$, **$p < .01$, ***$p < 0.001$

Hypothesis Testing: Hierarchical Multiple Linear Regression

Research Question 2

2. To what extent did the professional variables of type of principal (i.e., elementary or secondary school principal), years of regular education and years of special education teaching experience, and years of experience as a school administrator significantly predict principal attitudes about inclusion, as measured by the PATIE scale (Bailey, 2004)

H_0: Professional experience variables such as type of principalship (elementary or secondary school), years of teaching experience, years of experience as an administrator, and having special education experience are not statistically significant predictors of principal attitudes about inclusion, as measured by the PATIE scale.

H_1: Professional experience variables such as type of principalship (elementary or secondary school), years of teaching experience, years of experience as an

administrator, and having special education experience are statistically significant predictors of principal attitudes about inclusion, as measured by the PATIE scale.

The second research question was addressed via a HMLR analysis. School enrollment was entered a covariate in the first regression model. Type of principal, years of experience teaching regular education, years of experience teaching special education, and years of experience in administrative position were the predictor variables entered together in the second regression model. Results from the HMLR are presented in Table 7. The first model, with school enrollment as a single predictor of attitudes toward inclusion, was statistically significant, $F(1, 71) = 8.64$, $p = .004$. Based on the R^2 of .108, 10.8% of the variance in principal inclusion attitudes was explained by school enrollment. The second model, with the variables of type of principal, years of experience teaching regular education, years of experience teaching special education, and years of experience in administrative position were entered as predictors in the regression model. The results were statistically significant, $F(4, 67) = 2.49$, $p = .050$. Based on the R^2_{change} of .115, the effect size for this analysis ($f^2 = .13$) was a small effect size (Cohen, 1988). This model explained an additional 11.5% of the variance in principal attitudes toward inclusion. The bivariate results showed that only two variables were significant in this second model. School enrollment remained a significant predictor of principal attitudes toward inclusion, $\beta = -.282$, $p = .014$. Years of experience in special education was significantly associated with principals' attitudes toward inclusion, $\beta = .286$, $p = .025$. Results revealed that as the number of years of special education teaching experience increased, so did principal attitudes toward inclusion.

Type of principalship did not significantly predict principal attitudes toward inclusion, β = -.026, p = .819. Neither years of experience in the regular educational classroom, β = -.026, p = .841 nor years of experience as a school administrator, β = -.160, p = .184, significantly predicted principals' attitudes toward inclusion.

Although years of special education experience was a significant predictor of attitudes toward inclusion among principals, the other predictor variables of principal type, years of experience in regular education, and years of administrative experience did not significantly predict attitudes toward inclusion. As these predictor variables were not significant, the null hypothesis was retained and the alternative hypothesis was rejected for research question 2.

Table 7

Hierarchical Linear Multiple Regression

	Model 1			Model 2		
	B	SE B	β	B	SE B	β
School Enrollment	-.394	.134	-.329**	-.338	.134	-.282*
Principal Type				-.026	.114	-.026
Years of Experience: Regular Education				-.013	.063	-.026
Years of Experience: Special Education				.142	.062	.286*
Years of Experience: Administrative				-.093	.070	-.160
$R^{2/}R^2_{change}$	.108			.115		
F for $R^{2/}R^2_{change}$	8.64			2.49		
Significance (p-value) of F	.004			.050		

Note. *p < .05, **p < .01, ***p < 0.001

Summary

The purpose of this study was to examine whether certain demographic and professional factors significantly predicted principals' attitudes toward inclusion.

Preliminary analyses showed that the data met the assumptions of hierarchical multiple linear regression (HMLR). In testing for covariates, I found that school enrollment was significantly associated with principal attitudes toward inclusion. Being a principal of a school with 500 or fewer students was related to higher levels of positive attitudes among principals. School enrollment was included as a covariate in analyses, hence the need to conduct HMLRs.

Results from the first HMLR showed that having a relative or friend with a disability was significantly predictive of higher levels of positive inclusion attitudes among principals. In contrast, principal age and gender were not significantly predictive of positive attitudes among principals. While school enrollment did significantly predict positive attitudes among principals when entered by itself in the first regression model, it was no longer significant in the second model. A Sobel test confirmed mediation effects: being a principal or an assistant principal at schools with small student enrollment numbers (i.e., < 500 students) led to the increased likelihood of knowing someone with a disability, which in turn led to positive attitudes toward inclusion among principals and assistant principals. As the HMLR results were only significant for the one predictor variable of having a relative or friend with a disability, the null hypothesis was retained and the alternative hypothesis rejected for the first research question.

Results from the second HMLR showed that only one predictor variable, years of special education teaching experience, significantly predicted positive attitudes among principals and assistant principals. Being a principal or assistant principal was not predictive of attitudes among principals. Neither years of teaching in the regular

education classroom nor years of experience as a school administrator significantly predicted positive attitudes among principals. School enrollment was a significant predictor of positive inclusion attitudes among principals in both models. The interpretation of the findings, recommendations for future research, and implications for positive social change are discussed in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The focus of this study was the attitudes of elementary and secondary school principals and assistant principals toward the inclusion of students with disabilities in general education classrooms. I discuss a summary of the study findings and present an interpretation of results, including comparisons to previous literature in this chapter. All studies have limitations, and the limitations of this study are discussed in this chapter. Lastly, I offer recommendations for future research, implications for social change, and a conclusion to my dissertation.

Summary of Findings

The purpose of this quantitative study, which used a survey research design, was to examine if specific demographic and professional variables significantly predicted principals' and assistant principals attitudes toward inclusion in a southeastern school district. In the first research question, I examined whether attitudes toward inclusion were significantly predicted by the demographic independent variables of (a) age, (b) gender, and (c) having a friend/relative with a disability. In the second research question, I examined if attitudes toward inclusion were significantly predicted by the professional independent variables of (a) being an elementary or secondary school administrator; (b) years of regular education teaching experience, (c) years of special education teaching experience, and (d) years of administrative experience.

Seventy-three school leaders (36 principals and 37 assistant principals) participated in this study by completing a survey that contained questions on the

aforementioned demographic and professional variables, as well as Bailey's (2004) Principals' Attitudes Toward Inclusive Education (PATIE) scale, which was used as the dependent variable measure. A preliminary analysis, via an independent samples *t* test, showed that principals and assistant principals did not have significantly different attitudes toward inclusion as measured by the PATIE (Bailey, 2004). The principals' and assistant principals' mean scores suggested that both groups had neither extremely positive nor extremely negative attitudes toward inclusion.

I conducted two separate hierarchical multiple linear regression (HMLR) analyses to address the two research questions. Assumptions were met for both HMLRs. For the first HMLR, the demographic variables were entered as predictors of attitudes toward inclusion. The professional variables were entered as predictors of attitudes toward inclusion in the second HMLR. Both HMLRs had school enrollment entered as a covariate at the first step of the regression model as school enrollment was significantly associated with attitudes toward inclusion.

Results from the HMLR that I conducted for the first research question showed that the only significant demographic predictor of positive attitudes toward inclusion was having a friend or relative with a disability. School enrollment was a significant predictor of attitudes toward inclusion in the first HLMR model, but had less significance in the second model of the HMLR. I found that having a friend/relative with a disability mediated between school enrollment and attitudes toward inclusion. That is, administrators at schools with small student enrollment numbers (i.e., < 500 students) led to principals and assistant principals knowing more of the students, including students

with disabilities. In turn, principals and assistant principals at smaller schools had more positive attitudes toward inclusion. This was an interesting and intriguing finding, and it is discussed with regard to implications for social change later in this chapter.

Results from the HMLR that I conducted for the second research question showed that only one professional predictor, number of years of special education teaching experience, was significantly associated with positive attitudes toward inclusion. The covariate of school enrollment was also a significant predictor of attitudes toward inclusion in the first and second HMLR models. There was no evidence of mediation effects as seen in the HMLR conducted for the first research question. Although the HMLR models for both research questions were significant and one demographic and one professional variable were significant predictors of attitudes toward inclusion, the null hypotheses for the two research questions were retained as not all predictors emerged as significantly associated with attitudes toward inclusion.

Interpretation of the Findings

I posed the study's research questions in response to prior studies that examined demographic and professional predictors of attitudes toward inclusion in school principals (Avissar et al., 2003; Farris, 2011; Graham & Spandagou, 2009; Horrocks et al., 2008; Praisner, 2003; Sharma & Chow, 2008). I placed an emphasis on demographic and professional variables and their effects on inclusion attitudes as results in the previous studies were equivocal. The results of this study helped to confirm some findings – both significant and not significant – that have been found in previous studies.

Two independent variables were found to be significantly associated with the dependent variable of attitudes toward inclusion: the professional variable of number of years of special education teaching experience and the demographic variable of having a friend or relative with a disability. I found that the number of years of special education teaching experience was the one statistically significant professional variable predictor of attitudes toward inclusion. This has been one of the most consistent findings in the body of literature on principals' attitudes toward inclusion. This finding was found in the quantitative studies conducted by Praisner (2003), Avissar er al. (2003), Sharma and Chow (2008), and Horrocks et al. (2008). It also supports the qualitative findings from Graham and Spandagou (2009). The consistency in findings highly suggests that special education teaching experience has a profound impact in creating more favorable attitudes toward inclusion among school principals.

The significance of the demographic independent variable of having a friend or relative with a disability on attitudes toward inclusion in this study confirmed the results from Bailey's (2004) validation study of the PATIE scale, the quantitative studies by Praisner (2003) and Sharma and Chow (2008), as well as earlier studies that addressed the same topic (e.g., Hodge & Jansma, 2000; Nolan, Duncan, & Hatton, 2000). Horrocks et al. (2008) did not find a significant effect of personal experiences with individuals with disabilities on inclusion attitudes at the $p < .05$ level; however, the results were close to significant, with $p = .078$ and may likely have been significant given a larger sample size. This consistency in findings across studies suggests that having personal connections

with individuals with disabilities are related to more favorable attitudes toward inclusion (Praisner, 2003).

While not used as an independent variable, the covariate of school enrollment was shown to be significantly associated with attitudes toward inclusion. Few studies have examined the influence of school enrollment on attitudes toward inclusion, but the few that have (e.g., Farris, 2011; Sharma & Chow, 2008) also found significant associations. The results in this study uncovered an unexpected mediation effect of having relationships with individuals with disabilities between school enrollment and attitudes toward inclusion. This finding suggested that, in schools with small enrollment numbers, principals have more opportunities to create relationships with teachers, staff, parents, and students -- indeed, perhaps to the point that these individuals are seen as friends. This was not a planned examination, and yet it contributed new knowledge to the body of literature on inclusion.

Some of the factors were not statistically significant and did not predict favorable attitudes toward the inclusion of students with disabilities. The current results indicated no relationship between attitudes toward inclusion and the following variables: age, gender, years of general education teaching, administrative experience, and the type of principal. Like Horrocks et al. (2008) and Praisner (2003), I found that gender was not a significant predictor of attitudes toward inclusion. The influence of gender on inclusion attitudes remains unclear, however, as the majority of participants in other studies (e.g., Avissar et al., 2003; Horrocks et al., 2008) were male. Interestingly, in this study, the principals and assistant principals were predominantly female (76.7%).

Like Sharma and Chow (2008), I found that age was *not* a significant predictor of attitudes toward inclusion (Horrocks et al. [2008] did not include age as a predictor). However, Avissar et al. (2003) and Praisner (2003) found that younger principals had more favorable attitudes toward the inclusion of students with disabilities into the general education classes. Avissar et al.'s (2003) and Praisner's (2003) findings with regard to age and attitudes toward inclusion were consistent with results seen in teachers as reported in the review of literature by Avramidis and Norwich (2002). These studies are over ten years old. The lack of significance with regard to age and attitudes toward inclusion seen in this study as well as in the more recent study by Sharma and Chow (2008) suggests that age may play less of a role in shaping attitudes toward inclusion among the newer generation of principals. This lack of age effects may furthermore be a reflection of the changes in education and training that include more of a focus on children with disabilities and inclusion practices received by this new generation (Cooner, 2014).

The transformational leadership theory was the theoretical basis of this study. Transformational leaders are described as "effective leaders who create change, take care of their followers and help others to meet their needs and achieve their potential" (Aydin et al., 2013, p. 806). Principals and assistant principals can serve as the transformational leaders within their individual schools. Principals are considered to have the most influential role in the implementation of inclusion programs (Polat, 2011; Taylor, 2011). In this southeastern school district, the 73 principals who participated in this study had neutral attitudes toward the inclusion of students with disabilities. However, these

attitudes concerned the inclusion of students with mild disabilities, in contrast to students with moderate to severe disabilities. The results indicated that the school enrollment significantly predicts positive attitudes toward inclusion. Generally, a smaller population of students indicates an even smaller number of staff members. Balyer (2012) found that transformational leadership is the framework in which school principals motivate their schools. It is possible that the principals were able to motivate a smaller group of instructional and support staff. Successful inclusion requires the collaboration of the administrators, teachers, and other support staff (Aydin et al., 2013). Transformational leaders gain more support and effort from teachers who are responsible for implementing inclusive programs.

Limitations of the Study

As with any study, this study had both strengths and weaknesses. While the sample size was small – having only 73 participants – and thus was a limitation, the study was strengthened by the inclusion of both principals and assistant principals. This study focused solely on principals and assistant principals in a southeastern public school district. Convenience sampling may have limited the results by limiting the results to only one school district. This likely affected the generalizability of the results to school districts in other geographic areas. Additionally, it is possible that the sample is not fully representative of the overall population. However, results in this study helped to clarify that special education teaching experience and having friends or relatives with a disability are important predictors of positive attitudes toward inclusion.

I relied on the integrity of the participants' survey responses; it is possible that the participants did not respond truthfully to the survey questions. However, the use of an online survey may have helped to increase the honesty of participant responses, as research has shown that participants tend to be more honest answering online surveys as compared to answering surveys while the researcher is present (Millar & Dillman, 2011). The small percentage (23.3%) of male participants and the bracketing of age into two groups (i.e., 31-50 years, 51 years or older) may have obscured any significance that actually may exist with regard to these variables and inclusion attitudes. Lastly, the school enrollment of the schools represented in the study were all less than 1,000 students. There were no schools represented with 1,000 or more students, which may limit generalizability to schools with larger student enrollments.

Recommendations

I have numerous recommendations for future research work based on this study. I found an unexpected mediation effect of having a friend or relative with a disability between school enrollment and attitudes toward inclusion. Studies where researchers confirm or disconfirm this mediation effect are needed. Gender effects on inclusion attitudes need more empirical examination, especially as the limited percentages of female principals in prior studies (e.g., Avissar et al., 2003; Horrocks et al., 2008) have precluded this type of analysis. Future considerations could include research in more diverse school districts to determine the factors that influence positive attitudes toward the inclusion of students with disabilities.

This and other empirical work (Farris, 2011; Horrocks et al., 2008; Praisner, 2003; Sharma & Chow, 2008) have consistently documented that special education teaching experience is significantly associated with positive attitudes toward inclusion. This finding can be used to inform and develop professional development trainings for principals on instituting inclusive school programs. A pre- and posttest design could be used to determine the effect of professional development training that focuses on developmental disabilities and special education inclusion practices on principals' attitudes toward the inclusion of students with disabilities.

In contrast to the current study and previous studies on attitudes toward inclusion among principals and teachers, a focus for future research would be to include other stakeholders like students and parents. It would be interesting to see how students (and their parents) with and without disabilities feel about learning in inclusive classrooms and their suggestions for what could make inclusion programs successful. This information could add to current literature including my study, to strengthen inclusion classrooms with input from every team member involved in educating students with disabilities.

Implications

Principals play a key role in setting the tone and vision for inclusive schools (Pazey & Cole, 2013; Polat, 2011). Principals as transformational leaders have the ability to influence and motivate their teachers and support staff members to also have positive attitudes toward working with all students, especially students with special needs (Ainscow & Sandhill, 2010). They have the ability to make informed placement decisions

and to cultivate inclusive school environments that service all students equally in a non-discriminatory setting (Ainscow & Sandhill, 2010; Pazey & Cole, 2013).

The findings from this study revealed that principals who have a relative or friend with a disability and/ or special education experience had more favorable attitudes toward inclusion. The social implication of these findings is both simple and profound: both of these factors are related to the importance of having direct experiences concerning disabilities. These results suggest that social change can occur through simple acts, such as opening one's social group to include individuals with disabilities, increasing one's knowledge about developmental disabilities and inclusion by reading material, watching videos, or taking coursework and/or training in developmental disabilities, special education instruction, and inclusion practices.

Results from this study can be utilized in higher education programs that prepare principals and assistant principals for school leadership to effect social change. Administrative and supervision programs for school administrators should focus on providing diversity and sensitivity trainings. One example of a graduate certificate program is the Maternal and Child Health Leadership in Neurodevelopmental Disabilities (Division of Maternal & Child Health, 2014). In this program, graduate students "receive training in cultural and linguistic competence" concerning developmental disabilities via course work, leadership trainings, community projects, and working one-on-one with families of children with disabilities (Division of Maternal & Child Health, 2014, para. 1). In addition, educational programs where professors encourage student principals (and

teachers) to share and discuss their personal experiences with friends and relatives with disabilities would likely be both cost effective and easy to implement.

This study also has implications for positive social change for students with disabilities and the school leaders responsible for managing their learning environment. Students with disabilities have the right to access a free and appropriate education in their least restrictive environment, as required by law. Principals as the instructional, cultural, and visionary leaders of schools set the tone for acceptance at the school level. Positive social change is necessary for all students with special needs regardless of the severity of their disabilities.

Conclusion

Principals have the central role of fostering an inviting and inclusive learning setting for all students. They are also responsible for influencing the tone for the instructional and support staff members who collaborate to make inclusion successful for all students. Principals are also ultimately responsible for placement decisions of students with disabilities. Ongoing training and professional development is necessary to ensure that 21st Century school leadership fosters acceptance of the diversity and integration that legally and morally encompasses highly qualified inclusive learning institutions for all students.

References

Achilles, G. M., McLaughlin, M. J., & Croninger, R. G. (2007). Sociocultural correlates of disciplinary exclusion among students with emotional, behavioral, and learning disabilities in the SEELS national dataset. *Journal of Emotional and Behavioral Disorders, 15*(1), 33-45. doi: 10.1177/10634266070150010401

Afshari, M., Bakar, K., Luan, W. S., & Siraj, S. (2012). Factors affecting the transformational leadership role of principals in implementing ICT in schools. *Turkish Online Journal of Educational Technology, 11*(4), 164-176. ED524156

Aguilar, C. M., Morocco, C. C., Parker, C. E., & Zigmond, N. (2006). Middletown high school: Equal opportunity for academic achievement. *Learning Disabilities Research & Practice, 21*(3), 159-171. doi: 10.1111/j.1540-5826.2006.00215.x

Ainscow, M. (2007). Taking an inclusive turn. *Journal of Research in Special Educational Needs, 7*(1), 3-7. doi: 10.1111/j.1471-3802.2007.00075.x

Ainscow, M., & Cesar, M. (2006). Inclusive education ten years after Salamanca: Setting the agenda. *European Journal of Psychology of Education, 21*(3), 231-238.

Ainscow, M., & Sandhill, A. (2010). Developing inclusive education systems: the role of organizational cultures and leadership. *International Journal of Inclusive Education, 14*(4), 401-416.

Avissar, G., Reiter, S. & Leyser, Y. (2003). Principals' views and practices regarding inclusion: the case of Israeli elementary school principals. *European Journal of Special Needs Education, 18*(3), 355-369.
doi**:** 10.1080/0885625032000120233

Avramidis, E., & Norwich, B. (2002). Teachers' attitudes toward integration/inclusion: A review of the literature. *European Journal of Special Needs Education, 17,* 129-147. doi: 10.1080/08856250210129056

Aydin, A., & Kuzu, S. (2013). Teacher candidate's attitudes toward inclusion education and comparison of self-compassion levels. *US- China Review B, 3*(6), 470-479.

Aydin, A., Sarier, Y., & Uysal, S. (2013). The effect of school principals' leadership styles on teachers' organizational commitment and job satisfaction. *Educational Sciences: Theory & Practice, 13*(2), 806-811.

Bailey, J. (2004). The validation of a scale to measure school principals' attitudes toward the inclusion of students with disabilities in regular schools. *Australian Psychologist, 39*(1), 76-87. doi: 10.1080/00050060410001660371

Bailey, J., & du Plessis, D. (1997). Understanding principals' attitudes toward inclusive schooling. *Journal of Educational Administration, 35*(5), 428-438.

Ball, K., & Green, R. L. (2014). An investigation of the attitudes of school leaders toward the inclusion of students with disabilities in the general education setting *National Forum of Applied Educational Research Journal, 27* (1/2), 57–76.

Balyer, A. (2012). Transformational leadership behaviors of school principals: a qualitative research based on teachers' perceptions. *International Online Journal of Educational Sciences*, *4*(3), 581-591.

Bartlett, L. D., Etscheidt, S., & Weisenstein, G. R. (2007). *Special education law and practice in public schools.* Upper Saddle River, NJ: Pearson Education.

Bass, B. M. (1985). *Leadership and Performance*. New York City: Free Press.

Bass, B. M., & Riggio, R. E. (2008). *Transformational Leadership*. Mahwah, New Jersey: Psychology Press.

Beauchamp, M., Barling, R. J., & Morton, K. L. (2011). Transformational teaching and adolescent self-determined motivation, self-efficacy, and intentions to engage in leisure time physical. *Applied Psychology: Health and well-being*, *3*(2), 127-150. doi: 10.1111/j.1758-0854.2011.01048.x

Berry, R. (2010). Preservice and early career teachers' attitudes toward inclusion, instructional accommodations, and fairness: Three profiles. *Teacher Educator*, *45*(2), 75-95. doi: 10.1080/08878731003623677

Boling, E. (2007). "Yeah, but I still don't want to deal with it". Changes in a teacher candidate's conceptions of inclusion. *Teaching Education, 18*(3), 217-231. doi:10.1080/10476210701533118

Boscardin, M. L. (2005). The administrative role in transforming secondary schools to support inclusive evidence-based practices. American Secondary Education, 33(3), 21–32. Retrieved from http://www.jstor.org/stable/41064552

Buckingham, A., & Saunders, P. (2009). *The survey methods workbook*. Malden, MA: Polity Press.

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2012-13 Edition*, Teacher Assistants. Retrieved on February 24, 2013 from http://www.bls.gov/ooh/education-training-and-library/teacher-assistants.htm

Burke, K., & Sutherland, C. (2004). Attitudes toward inclusion: Knowledge vs.

experience. *Education, 125*(2), 163–72.

Burns, J. M. (1978). *Leadership*. New York City: Harper Collins.

Cairns, B., & McClatchey, K. (2013). Comparing children's attitudes toward disability. *British Journal of Special Education, 40*(3), 124-129. doi: 10.1111/1467-8578.12033

Campbell, J., Gilmore, L., & Cuskelly, M. (2003). Changing student teacher's attitudes toward disability and inclusion. *Journal of Intellectual & Developmental Disability, 28*(4), 369-379. doi: 10.1080/13668250310001616407

Carpenter, L. B., & Dyal, A. (2007). Secondary inclusion: Strategies for implementing the consultative teacher model. *Secondary Inclusion, 127*(3), 345-350. EJ790099

Carter, E. W., & Hughes, C. (2005). Increasing social interaction among adolescents with intellectual disabilities and their general education peers: Effective interventions. *Research and Practice for Persons with Severe Disabilities, 30,* 179-193. doi: http://dx.doi.org/10.2511/rpsd.30.4.179

Cesar, M., & Santos, N. (2006). From exclusion to inclusion: Collaborative work contributions to more inclusive settings. *European Journal of Psychology of Education, 21*(3), 333-346. doi: 10.1007/BF03173420

Clifford, M. (2012). Measuring school climate for gauging principal performance: A review of the validity and reliability of publicly accessible measures. A quality school leadership issue brief. *American Institutes for Research*. ED531401

Cohen, J. E. (1988). *Statistical power analysis of the behavioral sciences*. Hillsdale, N.J.: Laurence Erlbaum Associates, Inc.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Florence, KY: Routledge.

Cook, B. (2004). Inclusive teachers' attitudes toward their students with disabilities: A replication and extension. *The Elementary School Journal,* 307-320. Retrieved from http://www.jstor.org/stable/3202944

Cook, T. D. and Campbell, D. T. (1979). *Quasi experimentation: Design and analytical issues for field settings.* Chicago, Rand McNally.

Cooner, T. S. (2014). *Researching inquiry-based blended learning in social work education* (Doctoral dissertation, University of Birmingham)

Costley, K. (2013). *Ongoing professional development: The prerequisite for continuation of successful inclusion meeting the needs of special students in public schools.* Retrieved from http://www.eric.ed.gov

Creswell, J. W. (2003). Research design: qualitative and quantitative approaches; Sage Publications: California.

DeSimone, J. R., & Parmar, R. S. (2006). Middle school mathematics teachers' beliefs about inclusion of students with learning disabilities. *Learning Disabilities Research and Practice, 21*(2), 98-110. doi: 10.1111/j.1540-5826.2006.00210.x

DiPaola, M., Tschannen-Moran, M., &Walther-Thomas, C. (2004). School principals and special education: Creating the context for academic success. *Focus on Exceptional Children, 37*(1), 1-10. EJ758028

DiPaola, M., & Walther-Thomas, C. (2003). Principals and special education: The

critical role of school leaders (Doc. No. IB-7). Gainsville, FL: Center on Personnel Studies in Special Education, University of Florida.

Division of Maternal and Child Health (2014). Leadership education in neurodevelopmental and related disabilities. Retrieved from http://mchb.hrsa.gov/training/documents/fs/factsheet-LEND.pdf

Dobson, B. A. (2013). Section 504--The 1973 Law Still Makes a Difference. *Odyssey: New Directions In Deaf Education, 14,* 63-65.

Dros, E.A. (2011). Validity and reliability in social science research. *Education Research and Perspectives, 38*(1), 1-19.

Dupoux, E., Wolman, C., & Estrada, E. (2005). Teachers' attitudes toward integration of students with disabilities in Haiti and the United States. *International Journal Disability, Development, and Education, 52*(1), 43-58. doi:10.1080/10349120500071894

Elhoweris, H., & Alsheikh, N. (2004). Teachers' attitude toward inclusion. *International Journal of Special Education, 21*(1), 115-118. ED490698

Erwin, E. & Soodak, L. (2010). Inclusive education. *PBS Parents: Inclusive Communities*. Retrieved from http://www.pbs.org/parents/inclusivecommunities/inclusive_education.html

Etscheidt, S. (2006). Least restrictive and natural environments for young children with disabilities: A legal analysis of issues. *Topics in Early Childhood Special Education, 26*(3), 167-178. doi:10.1177/02711214060260030401

Farris, T. K. (2011). *Texas high school principals' attitudes toward the inclusion of*

students with disabilities in the general education classroom. (Order No. 3486477, University of North Texas). *ProQuest Dissertations and Theses,* 96. Retrieved from http://search.proquest.com/docview/909922813?accountid=14872. (909922813).

Fazal, R. (2012). Readiness for Inclusion in Pakistani Schools: Perceptions of School Administrators. *International Journal of Social Science & Education, 2*(4), 825-832.

Findler, L., Vilchinsky, N., & Werner, S. (2007). The Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS) Construction and Validation. *Rehabilitation Counseling Bulletin, 50*(3), 166-176. doi: 10.1177/00343552070500030401

Florian, L. (2013). Special education in the era of inclusion: The end of special education or a new beginning? *Special Education, 7*(2).

Forster, J., Liberman, N., & Kuschel, S. (2008). The effect of global versus local processing styles on assimilation versus contrast in social judgment. *Journal of Personality and Psychology, 94*(4), 579-599. doi:10.1037/0022-3514.94.4.579

Friend, M. (2005). Special education: contemporary perspectives for school professionals. Boston, MA: Allyn & Bacon.

Frost, L., & Kersten, T. (2011). *The role of the elementary principal in the instructional leadership of special education* . Retrieved from http://cnx.org/content/m37402/1.2/

Fullan, M. (2003). *The moral imperative of school leadership.* Ontario: Corwin Publishing.

Galano, J. A. (2012). Urban elementary school principals' attitudes toward the inclusive environment. Seton Hall University Dissertations and Theses (ETDs). Paper 1808.

Gajria, M., Jitendra, A. K., Sood, S., & Sacks, G. (2007). Improving comprehension of expository text in students with LD: A research synthesis. *Journal of Learning Disabilities, 40*(3), 210-225. doi: 10.1177/00222194070400030301

Gartin, B. C., & Murdick, N. L. (2005). IDEA 2004: the IEP. *Remedial & Special Education, 26*(6), 327-331. doi:10.1177/07419325050260060301

Garson, G. D. (2012). Testing statistical assumptions. North Carolina A & T: Statistical Associates Publishing.

Golder, G., Norwich, B. & Bayliss, P. (2005). Preparing teachers to teach pupils with special educational needs in more inclusive schools: Evaluating a PGCE development. *British Journal of Special Education, 32*(2), 92-99. doi: 10.1111/j.0952-3383.2005.00377.x

Gous, J., Eloff, I, & Moen, M. (2013). How inclusion is understood by principals of independent schools. *International Journal of Inclusive Education, 18*(5), 535-552. doi:10.1080/13603116.2013.802024

Graham, L. & Spandagou, I. (2011). From vision to reality: views of primary school principals on inclusive education in New South Wales, Australia. *Disability & Society, 26*(2), 223-237. doi:10.1080/09687599.2011.544062

Haager, D.S. & Klingner, J. K. (2005). Differentiating instruction in inclusive classrooms: The special educator's guide. Boston: Allyn & Bacon.

Hannah, S. T., Lester, P. B., & Vogelgesang, G. R. (2005). Moral leadership: explicating the moral component of authentic leadership. In J. W. Gardner, B. J. Avolio & F. Walumbwa (Eds.), Authentic *leadership theory and practice: origins, effects and development; monographs in leadership and management, 3*, 43-81.

Hernandez, S. (2013). Collaboration in special education: Its history, evolution, and critical factors necessary for implementation. *US-China Education Review B, 3*(6), 480-498. ED544122

Hodge, S. R., & Jansma, P. (2000). Physical education majors' attitudes toward teaching students with disabilities. *Teacher Education and Special Education, 23*(3), 211-224. doi:10.1177/088840640002300304

Horrocks, J. L., White, G., & Roberts, L. (2008). Principals' attitudes regarding inclusion of children with autism in Pennsylvania public schools. Journal of Autism Developmental Disorders, 38, 1462-1473. doi:10.1007/s10803-007-0522-x

Idol, L. (2006). Toward inclusion of special education students in general education: A program evaluation of eight schools. *Remedial and Special Education, 27*(2), 77-94. doi: 10.1177/07419325060270020601

Individuals with Disabilities Education Improvement Act, 20 U.S.C. Sec 1400 et seq. (2004).

Irvine, A., Lupart, J., Loreman, T., & McGhie-Richmond, D. (2010). Educational leadership to create authentic inclusive schools: the experiences of principals in a Canadian rural school district. *Exceptionality Education International, 20*(2), 70-88. EJ931240

Jaccard, J., & Becker, M. (2002). Statistics for the behavioral sciences (4th ed.). Belmont, CA: Wadsworth Publishing.

Jimenez, T. C., Graf, V. L., & Rose, E. (2007). Gaining access to general education: the promise of universal design for learning. *Issues in Teacher Education, 16*(2), 41-54. EJ796250

Jung, W. (2007). Preservice teacher training for successful inclusion. *Education, 128*(1), 106-113. EJ790161

Jussim, L. & Harber, K. D. (2005). Teacher expectations and self-fulfilling prophecies: Knowns and unknowns, resolved and unresolved controversies. *Personality and Social Psychology Review, 9*(2), 131-155. doi:10.1207/s15327957pspr0902_3

Karten, T. J. (2005). *Inclusion strategies that work! research-based methods for the classroom.* Thousand Oaks, CA; Corwin Press.

Katz, J. & Sugden, R. (2013). The three-block model of universal design for learning implementation in a high school. *Canadian Journal of Educational Administration and Policy*, 141. EJ1008728

Kelly, K., & Maxwell, S. E. (2003). Sample size for multiple regression: Obtaining regression coefficients that are accurate, not simply significant. *Psychological Methods, 8*(3), 305-321. doi: 10.103/7/1082-989X.8.3.305

Kluth, P. (2003). You're going to love this kid! Teaching students with autism in the inclusive classroom. Baltimore, MD: Paul H. Brooks Publishing Co.

Kugelmass, J. & Ainscow, M. (2004). Leadership for inclusion: a comparison of

international practices. *Journal of Research in Special Educational Needs, 4*(3), 133-141. doi:10.1111/j.1471-3802.2004.00028.x

Kuyini, A. B. & Desai, I. (2007). Principals' and teachers attitudes and knowledge of inclusive education as predictors of effective teaching practices in Ghana. *Journal of Research in Special Education Needs, 7*(2), 104-113. doi:10.1111/j.1471-3802.2007.00086.x

Lasky, B., & Karge, B. D. (2006). Meeting the needs of students with disabilities: Experiences and confidence of principals. *National Association of Secondary School Principals, 90*(1), 19-36. doi:10.1177/0192636505283950

Leo, E., & Barton, L. (2006). Inclusion, diversity and leadership: Perspectives, possibilities and contradictions. *Educational Management Administration and Leadership, 34*(2), 167-180. doi:0.1177/1741143206062489

Lohrman, S. & Bambara, L. M. (2006). Elementary education teachers' beliefs about essential supports needed to successfully include students with developmental disabilities who engage in challenging behaviors. *Research and Practice for Persons with Severe Disabilities, 31*(2), 157-173.

Mead, J. F. (2008). How legislation and litigation shape school choice. *East Lansing, MI: Great Lakes Center for Education Research & Practice. Retrieved November 13, 2014.*

McLeskey, J. & Waldron, N. L. (2006). Comprehensive school reform and inclusive schools. *Theory into Practice, 45*(3), 269-278. doi:10.1207/s15430421tip4503_9

McDonnell, J., Thorson, N., Disher, S., Mathot-Buckner, C., Mendel, J., & Ray, L.

(2003). The achievement of students with developmental disabilities and their peers without disabilities in inclusive settings: An exploratory study. *Education and Treatment of Children, 26*(3), 224-236.

Mead, J. (2008). Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania. In C. Russo (Ed.), Encyclopedia of education law. Thousand Oaks, CA; Sage Publications, Inc.,

Mertens, D. M. (2013). *Research and evaluation in education and psychology*. Thousand Oaks, CA: Sage.

Millar, M. & Dillman, D. (2011). Improving responses to wed and mixed-mode surveys. *Public Opinion Quarterly, 75*(2), 249–269.

Morin, D., Rivard, M., Crocker, A. G., Boursier, C. P., & Caron, J. (2013). Public attitudes toward disability: a multidimensional perspective. *Journal of Intellectual Disability Research, 57*(3), 279-292.

Muijs, D. (2010). *Doing quantitative research in education with SPSS*. Thousand Oaks, CA: Sage Publications.

Mullick, J., Deppeler, J., & Sharma, U. (2012). Readiness for Inclusion in Pakistani Schools: Perceptions of School Administrators. *International Journal of Whole Schooling, 8*(1), 1-20.

Navickaite, J. (2013). The expression of a principal's transformational leadership during the organizational change process: A case study of Lithuanian general education school. *Problems of Education in the 21st Century, 51*, 70-82.

Nes, K., & Stromstad, M. (2006). Strengthened adapted education for all – no more

special education? *International Journal of Inclusive Education, 10*(4-5), 363-378.

Nilholm, C. (2006). Special education, inclusion & democracy. *European Journal of Special Needs Education, 21*(4), 431-445. doi:10.1080/08856250600957905

No Child Left Behind Act of 2001, (2002) Pub. L. No. 107-110 Stat. 1425.

Nolan, J., Duncan, C., & Hatton, V. (2000). *Comparison of pre-service physical educations' attitudes toward individuals with disabilities before and after adapted physical course work.* Washington, D.C.: U.S. Dept. of Education.

Norman, G. (2010). Likert scales, levels of measurement and the "laws" of statistics. *Advances in Health Sciences Education, 15*(5), 625-632.

O'Neill, P. T. (2001). Special education and high stakes testing. An analysis of current law and policy. *Journal of Law and Education, 30*(2), 185-222.

Parette, P. & Wojcik, B. W. (2004). Creating a technology toolkits for students with mental retardation: A systematic approach. *Journal of Special Education Technology, 19*(4), 23-32.

Pazey, B. L., & Cole, H. (2013). The role of special education training in the development of socially just leaders: Building an equity consciousness in educational leadership programs. *Educational Administration Quarterly, 49*, 243-271. doi:10.1177/0013161X12463934

Pedhazur, E. J., & Schmelkin, L. P. (2013). *Measurement, design, and analysis: An integrated approach*. Washington, DC: Psychology Press.

Pepper, K. (2010). Effective principals skillfully balance leadership styles to facilitate

student success: A focus for the reauthorization of ESEA. *Planning and Changing*, *41*(1/2), 42-56.

Polat, F. (2011). Inclusion in education: A step toward social justice. *International Journal of Educational Development*, *31*(1), 50-58. doi:10.1016/j.ijedudev.2010.06.009

Praisner, C. (2003). Attitudes of elementary school principals toward the inclusion of studies with disabilities. *Exceptional Children Journal, 69*(2), 135-146.

Ramirez, R. C. (2006). *Elementary principals' attitudes toward the inclusion of students with disabilities in the general education setting.* (Order No. 3216381, Baylor University). *ProQuest Dissertations and Theses,* 1-114 p. Retrieved from http://search.proquest.com/docview/305355438?accountid=14872. (305355438).

Raykov, T. & Marcoulides, G. A. (2011). *Introduction to psychometric theory*, *79*(2), 298-299. doi: 10.1111/j. 1751-5823.2011.00149_24.x

RCPS (2012). Retrieved March 17, 2013 from http://web.richmond.k12.va.us/AboutRPS.aspx

Rea, L., & Parker, R. (2005). Designing and conducting survey research: A comprehensive guide (3rd ed.). San Francisco, CA: Jossey-Bass.

Rea, P., McLaughlin, V. L., & Walther-Thomas, C. (2002). Outcomes for students with learning disabilities in inclusive and pullout programs. *Council for Exceptional Children, 68*(2), 203-222.

Rehabilitation Act of 1973, 29, U.S.C. (1973).

Reschly, A. L., & Christenson, S. L. (2006). Prediction of dropout among students with

mild disabilities: A case for inclusion of student engagement variables. *Remedial and Special Education, 27*(5), 276-292.

Rice, J. K. (2010). Principal effectiveness and leadership in an era of accountability: What research says. Brief 8. *National Center for Analysis of Longitudinal Data in Education Research*, 1-5.

Riggio, R.E. (2009). Are you a transformational leader? Psychology Today. Retrieved online at http://blogs.psychologytoday.com/blog/cutting-edge-leadership/200903/are-you-transformational-leader

Rosnow, R. L., & Rosenthal, R. (2008). Beginning behavioral research: A conceptual primer 6th ed. Upper Saddle, NJ: Pearson/Prentice Hall.

Russell, J. L., & Bray, L. E. (2013). Crafting coherence from complex policy messages: Educators' perceptions of special education and standards-based accountability policies. *Education Policy Analysis Archives, 21*(12).

Salend, S. J. (2006). Explaining your inclusive program to families. *Teaching Exceptional Children, 38*(4), 6-11.

Salkind, N. J. (2010). *Encyclopedia of research design*. Thousand Oaks, CA: Sage.

Sapon-Shevin, M. (2003). Inclusion: a matter of social justice. *Educational Leadership, 61*(2), 25-29.

Sari, H. (2007). The influence of an in-service teacher training (INSET) programme on attitudes toward inclusion by regular classroom teachers who teach deaf students in primary schools in Turkey. *Deafness and Education International, 9*(3), 131-146.

Seo, Y., Abbott. R. D. & Hawkins, J. D. (2008). Outcome status of students with learning disabilities at ages 21 and 24. *Journal of Learning Disabilities, 41*(4), 300-314.

Sharma, U. & Chow, W. (2008). The attitudes of Hong Kong primary school principals toward integrated education. *Asia Pacific Education Review 9*(3), 380-391.

Shaughnessy, J., Zechmeister, E., & Zechmeister, J. (2006). Research methods in psychology. Columbus, Ohio: McGraw-Hill Education Publishing.

Simon, M. K. (2006). Dissertation & scholarly research: A practical guide to start and complete your dissertation, thesis, or formal research paper. Dubuque, IA: Kendall/Hunt.

Simpson, R. L., de Boer-Ott, S. R., & Smith-Myles, B. (2003). Inclusion of learners with autism spectrum disorders in general education settings. *Topics in Language Disorders, 23*(2), 116-133.

Smith, R. & Leonard, P. (2005). Collaboration for inclusion: Practitioner perspectives. *Equity and Excellence in Education, 38,* 269-279. doi:10.1080/10665680500299650

Stainback, S. & Stainback, W. (1992). Curriculum considerations in inclusive classrooms: Facilitating learning for all students. Baltimore: Paul H. Brookes Publishing.

Tabachnik, B.G., & Fidell, L.S. (2013). *Using multivariate statistics* (6th ed.). Boston, MA: Allyn & Bacon.

Tavakol, M. & Dennick, R. (2011). Making sense of Cronbach's alpha. *International*

Journal of Medical Education, 2, 53-55. doi: 10.5116/ijme.4dfb.8dfd

Taylor, K. R. (2011). Inclusion and the law: Two laws--IDEA and Section 504--Support Inclusion in Schools. *Education Digest: Essential Readings Condensed for Quick Review, 76*(9), 48-51.

Timor, T. & Burton, N. (2006). School culture and climate in the context of inclusion of students with learning disabilities in mainstream secondary schools in Tel-Aviv, Israel. *International Journal of Inclusive Education, 10*(6), 495-510. doi:10.1080/13603110500224721

Tochterman, S., Cooner, D., and Lehman, J. P. (2005). Stages of preservice development for teachers of students with emotional disabilities. *The Teacher Educator, 41*(2), 75-94. doi:10.1080/08878730509555374

Tomasik, M. (2007). Effective inclusion activities for high school students with multiple disabilities. *Journal of Visual Impairment & Blindness, 10*, 657-659.

Tranmer, M. & Elliot, M. 2008. *Multiple Linear Regression*. Cathie Marsh Centre for Census and Survey Research http://www.ccsr.ac.uk/publications/teaching/mlr.pdf

Trochim, W. M. (2006). The research methods knowledge base. Retrieved from http://www.socialresearchmethods.net/kb/

Tucker, B. A., & Russell, R. F. (2004). The influence of the transformational leader. *Journal of Leadership and Organizational Studies, 3*(22), 1-5.

United States Department of Education (2010). A blueprint for reform: the reauthorization of the elementary and secondary education act. Retrieved from

http://www2.ed.gov/policy/elsec/leg/blueprint/index.html

Urdan, T. C. (2005). Statistics in plain English (2nd ed.). Mahwah, NJ: Erlbaum.

Vazquez, M. F. (2010). *Inclusionary practices: Impact of administrators' beliefs on placement decisions.* (Order No. 3415053, University of Central Florida). *ProQuest Dissertations and Theses, ,* 118. Retrieved from http://search.proquest.com/docview/733910400?accountid=14872. (733910400).

Villa, R. A. & Thousand, J. S. (2005). *Creating an inclusive school* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Vogt, W. (2007). *Quantitative research methods for professionals*. Boston, MA: Pearson.

Waldron, N. L., McLeskey, J., & Redd, L. (2011). Setting the direction: the role of the principal in developing an effective, inclusive school. *Journal of Special Education Leadership, 24*(2), 51-60.

Webb, N. M., Shavelson, R. J., & Haertel, E. H. (2006). Reliability coefficient and generalizability theory. *Handbook of Statistics*, *26*. doi: 10.1016/S0169-7161(06)26004-8.

Weisel, A., & Dror, O. (2006). School climate, sense of efficacy and Israeli teachers' attitudes toward inclusion of students with special needs. *Education, Citizenship, & Social Justice, 1*(2), 157-174.

West-Burnham, J. (2005). *The emotionally intelligent school*. Nottingham: NCSL, New Visions.

Wiazowski, J. (2012). On the dirt road to inclusion. *International Journal of Special Education, 27*(2), 148-156. EJ982869

Wilkins, T., & Nietfeld, J. L. (2004). The effect of a school-wide inclusion training program upon teachers' attitudes about inclusion. *Journal of Research in Special Educational Needs, 4*(3), 115-121. doi: 10.1111/J.1471-3802.2004.00026.x

Worell, J. L. (2008). How secondary schools can avoid the seven deadly "sins" of inclusion. *American Secondary Education, 36*(2), 43-56. Retrieved from http://www.jstor.org/stable/41406108

Wright, P, & Wright, P. D. (2004). *Wrightslaw: Special education law.* Hartsfield, VA: Harbor House Law Press. (Original work published 1999)

Wu-Tein, W. (2007). Inclusive education in Taiwan. *Chinese Education and Society, 40*(4), 76-96. doi:10.2753/CED1061-1932400406

Xu, Y. & Filler, J. (2008). Facilitating family involvement and support for inclusive education. *The School Community Journal, 18*(2), 53-70.

Yell, M. L., Shrine, J. G., & Katsiyannis, A. (2006). Individuals with disabilities education improvement act of 2004, and IDEA regulation of 2006: implications for educators, administrators, and teacher trainers. *Focus on Exceptional Children, 39*(1), 1-25.

Appendix A: Principal's Attitudes Toward Inclusive Education (PATIE) Survey

When considering the practice of Inclusion, to what extent do you agree with the statements below? Please indicate how you feel about the following items by placing a circle around the appropriate response. Please select the response that best fits your choice with 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA).

	SD	D	N	A	SA
1. Regular teachers are not trained adequately to cope with the students with disabilities	1	2	3	4	5
2. Students with physical disabilities create too many movement problems to permit inclusion	1	2	3	4	5
3. Including students with special needs creates few additional problems for teachers' class management	1	2	3	4	5
4. Students who cannot read formal print size should not be included in regular classrooms	1	2	3	4	5
5. Because special schools are better resourced to cater to special needs students, these students should stay in special schools	1	2	3	4	5
6. Students who are continually aggressive toward their fellow students should not be included in regular classrooms	1	2	3	4	5
7. Lack of access to other professionals (e.g. occupational and speech therapists) makes inclusion difficult	1	2	3	4	5
8. Regular students benefit academically from inclusion	1	2	3	4	5

9. Students with mild disabilities should be included in regular classrooms	1	2	3	4	5
10. Students with special needs will take up too much of the teacher aides' time	1	2	3	4	5
11. Regardless of whether the parents of regular student object to inclusion, the practice of inclusion should be supported	1	2	3	4	5
12. Special needs students belong in special schools where all their needs can be met	1	2	3	4	5
13. Teacher aides are trained adequately to cope with students with special needs	1	2	3	4	5
14. Students with disabilities will disrupt other students' learning so we should resist inclusion	1	2	3	4	5
15. Students with disabilities benefit academically from inclusion	1	2	3	4	5
16. Regular students will be disadvantaged by having special needs children in their classroom	1	2	3	4	5
17. Students who are continually aggressive toward school staff should not be included in regular classrooms	1	2	3	4	5
18. Special needs students whose achievement levels in basic skills are significantly lower than their age classmates should not be included in regular classrooms	1	2	3	4	5
19. Students who have to communicate in a special way (e.g. communication boards/ signing) should not be included in regular classrooms	1	2	3	4	5
20. Regular school principals are trained adequately to cope with the students					

with disabilities	1	2	3	4	5
21. Including students with special needs is unfair to regular teachers who already have a heavy work load	1	2	3	4	5
22. The policy of inclusion is fine in theory but does not work in practice	1	2	3	4	5
23. Schools have sufficient teaching resources to cope with inclusion	1	2	3	4	5
24. Students with severe disabilities should be included in regular classrooms	1	2	3	4	5
25. Students with moderate disabilities should be included in regular classrooms	1	2	3	4	5
26. Students with disabilities benefit socially from inclusion	1	2	3	4	5
27. Regular students benefit socially from inclusion	1	2	3	4	5
28. Students with special needs will take up too much of the teacher's time	1	2	3	4	5
29. Students with severe speech difficulties should not be included in regular classrooms	1	2	3	4	5
30. There is sufficient funding to permit inclusion	1	2	3	4	5

Demographic Data

Please check the response that best describes you.

1. Gender ___1. Male ___2. Female

2. Job Category ___1. Principal ___2. Assistant Principal

3. School Level ___1. Elementary ___2. Secondary

4. Years of Experience as an Administrator

   ___1. 0 – 5 years

   ___2. 6 – 10 years

   ___3. 11 – 20 years

   ___4. 21 years or more

5. Special Education Teaching Experience

   ___1. None

   ___2. 0 – 5 years

   ___3. 6 – 10 years

   ___4. 11 – 20 years

   ___5. 21 years or more

6. Regular Education Teaching Experience

   ___1. None

   ___2. 0 – 5 years

   ___3. 6 – 10 years

   ___4. 11 – 20 years

   ___5. 21 years or more

7. Age

   ___1. 30 years and below

   ___2. 31 -50 years

   ___3. 51 years and above

8. Current Student Enrollment

___1. Below 500

___2. 501 – 1000

___3. Above 1000

9. Have a relative, friend or colleague with a disability

___Yes ___No

Appendix B: Letter of Cooperation

Director of Research and Evaluation
Southeast Region Public Schools

Taleshia L. Chandler

Dear Dr.:

My name is Taleshia Chandler and I am a doctoral student at Walden University. I am conducting a study on the attitudes of principals toward the inclusion of students with disabilities. I am requesting permission to solicit participation from the elementary and secondary principals and assistant principals in your school district to participate in my survey research study.

The survey should only take about 10-15 minutes to complete. The survey will be available via Survey Monkey and principals who are willing to participate can access the survey online.

Please let me know if you have any additional questions or concerns. Thank you in advance for helping me to complete my doctoral study.

Sincerely,

Taleshia Chandler

Appendix C: Request to Use PATIE

To: Dr. Jeff Bailey

From: Taleshia L. Chandler

Date: March 16, 2010

Re: Survey Request

I am a doctoral student at Walden University. I'm requesting permission to use the *School Principals' Attitudes toward Inclusion Scale (PATIE)* as a part of my study. This survey will be very useful in my research. As I am requesting your permission to use this survey, I am also requesting any additional information pertaining to the administration of this instrument.

Thanking you in advance for your support and contributions.

Taleshia L. Chandler

Appendix D: Permission to use the PATIE

Subject : **RE: Permission to use PATIE for Dissertation**

Date : Tue, Jun 29, 2010 12:45 PM CDT

From : **Jeff Bailey**

To : Taleshia Chandler

You have my permission to use the instrument Taleshia. All the psychometrics for PATIE are in the journal article.

Bailey, J.G. (2004). The validation of a scale to measure school principals' attitudes toward the inclusion of students with disabilities in regular schools. Australian Psychologist, 39, 76-87.

These articles have some information but the main one is the 2004 paper.

Bailey, J.G., & du Plessis, D.A. (1998). An investigation of school principals' attitudes toward inclusion. Australasian Journal of Special Education, 22(1), 12-26.

Bailey, J.G., & du Plessis, D.A. (1997). Understanding principals' attitudes toward inclusive schooling. Journal of Educational Administration, 35(5), 428-438.

Good luck with your research.
Jeff

Jeff Bailey, Ed. D.

Appendix E: Email Sent to Principals Requesting Participation

Subject: Dissertation Study

Dear Principal:

My name is Taleshia Chandler. I am currently a doctoral student at Walden University. I am conducting a study for my dissertation to determine the attitudes of principals toward the inclusion of students with disabilities in general education classrooms. The benefits of this study will provide information to school leaders on the academic and social merit of educating all students together in an inclusive environment.

Please take a few minutes to complete this quick online survey. This survey should only take no more than 15 minutes to complete. No information in this survey would identify you, your school, or school district. The results of this study will remain confidential and only used for this study. There is no harm or risk associated with participating in this study.

Again, thank you for taking time out of your busy schedule to help me with my doctoral study. Your participation in this study is voluntary and you can stop participation at any time without any additional obligation. Below is the link to my online survey:

Feel free to contact me or my dissertation chair, Dr. Arcella Trimble, at Walden University in the School of Psychology, if you have any additional questions.

The survey should take no longer than 15 minutes. All of your information is confidential and will only be used for this study. Thanks for your time.

Taleshia Chandler

Appendix F: Follow-up Email

Dear Principal:

My name is Taleshia Chandler and I am a doctoral student at Walden University. I recently sent a request for your participation in my study, which was designed to explore the attitudes of principals toward the inclusion of students with disabilities. Your participation is voluntary and if you've completed the survey, I would like to thank you for helping me with my doctoral research. If you would like to participate, please follow the link to my online survey below (or cut & paste):

http://surveymonkey.com

The survey should take no longer than 10 – 15 minutes. All of your information is confidential and will only be used for this study. Thanks for your time.

Taleshia Chandler

Appendix G: Informed Consent

Informed Consent

Research Subject Information and Consent Form

Study Title: The Attitudes of Principals toward the Inclusion of Students with Disabilities

Name of Researcher: Taleshia L. Chandler

School Affiliation: Walden University

Purpose of the Study:

The purpose of this research study is to identify the attitudes of principals and assistant principals in a public school district toward the inclusion of students with disabilities in the general education classroom setting.

Description of the Study and Your Involvement:

This study is designed to examine the attitudes of principals and assistant principals in a public school system toward the inclusion of students with disabilities in the general education classroom. Demographic information will be collected to explore the correlation, if any, between academic experience, professional training, and attitudes toward inclusion. You will be asked to complete the Principals' Attitudes toward Inclusive Education (PATIE) online survey. Some sample questions from the PATIE include the following questions where *1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA)*:

1. Special needs students belong in special schools where all their needs can be met 1 2 3 4 5
2. Students who are continually aggressive

toward their fellow students should not be included in regular classrooms	1	2	3	4	5

If you decide to participate in this research study, it will require approximately 15 minutes or less of your time to complete the survey.

Risks and Discomforts:

Some of the questions may cause you to reflect on your personal views about inclusion of students with disabilities in the general education setting. There are no other risks or discomforts associated with this study.

Benefits of the Study:

The data from this study can be used to develop training and staff development materials to facilitate and/ or improve the implementation of inclusive education.

Costs: $0

Payment for Participation: $0

Confidentiality:

Potentially identifiable information about you will not be printed in this study. This information is being collected only for research purposes and will not be shared with anyone except the researcher. The results of this study may be presented at meetings or published in papers, but your name, school, or district name will not ever be used in these presentations or papers. Additionally, in order to protect your privacy, all of the data collection is anonymous. The data will not be used for any purpose other than research. In order to protect the data from being shared with others, it will be stored

on my password protected computer and permanently deleted seven years from the data collection date.

Voluntary Participation and Withdrawal:

You do not have to participate in this study. If you choose to participate, you may stop at any time without any penalty. You may also choose not to answer particular questions that are asked in the study. Print a copy of this consent form for your records. In the future, you may have questions about your participation in this study. If you have any questions, complaints, or concerns about the research, you may contact:

Taleshia Chandler, Student Researcher	xxx-xxx-xxxx
Dr. Arcella Trimble, Dissertation Chair	xxx-xxx-xxxx
Walden Representative	xxx-xxx-xxxx

Walden University's approval number for this study is **06-17-14-0019112** and it expires on June 16, 2015.

Consent/ Permission:

I have been given the chance to read this consent form. I understand the information about this study. Questions that I wanted to ask about the study have been answered. My submission of this survey says that I am willing to participate in this study.

Curriculum Vitae

TALESHIA L. CHANDLER

EDUCATIONAL PSYCHOLOGY – DIRECTOR / INSTRUCTIONAL SPECIALIST

Energetic, resourceful, and results-driven education professional with exemplary qualifications and experience to lead and support psychology education programs in higher education, public schools, and hospitals. Excel at preparing and delivering individual and group presentations, developing and managing programs, training and advisement, and building positive relationships with administration and students. Use excellent leadership abilities and facilitation skills to implement and uphold organizational philosophy, objectives, principles, and culture.

SKILLS AND CAPABILITIES

- Education Psychology/Leadership
- Human Learning and Education
- Student and Community Relations

PROFESSIONAL EXPERIENCE

Online Facilitator / Psychology Instructor, *University of Phoenix*, Phoenix, AZ
2008 – Present

Held accountable for demonstrating a high degree of enthusiasm, strong communication and relationship building skills, and leadership abilities while planning, developing, and participating in a broad range of activities involving online learning, teaching, and

instruction, psychology syllabi creation and implementation, and student mentoring and development. Generate energy and enthusiasm to the mission, core values, and strategies of the university.

- Build rapport and maintain productive relationships at all levels within the school and administration and help ensure that decisions, recommendations, and actions are consistently in the best interest of the organization.
- Plan and execute course instruction based on approved syllabus/course outline, ensure course content/learning objectives are met/exceeded, and achieve student retention rate in accordance with university guidelines.
- Facilitate an environment that inspires students and offers the opportunity to fulfill their learning and growth potential while helping to select and develop programs and activities that promote active involvement.
- Develop and promote collaborative partnerships with stakeholders as well as oversee the execution and delivery of online learning. Facilitate the attainment of positive results and outcomes for both students and the school.
- Remain current and up-to-date in subject areas as well as regularly attend trainings and professional development activities in order to gain new ideas and insight and incorporate this knowledge into online teaching strategies.
- Effectively utilize training development tools and technology, contribute to the on-going development of the online learning infrastructure, and manage administration tasks including maintaining and submitting reports.

Additional Experience:

- **Behavioral Specialist,** *The Academy,* Richmond, VA (2013 - present)
- **Special Education Teacher**, *Baltimore City Public Schools*, Baltimore, MD (2004 – 2008)
- **Family Counselor**, *The Progressive Life Center*, Baltimore, MD (2000 – 2004)
- **School Teacher**, *Baltimore City Public Schools*, Baltimore, MD (1995 – 2000)

EDUCATION

Master of Science in Psychology, *Walden University*, Minneapolis, MN (2006)

Bachelor of Arts in Psychology, *University of Maryland*, Baltimore County, Catonsville, MD (1995)

Credentials and Certification:

- NTU Psychotherapy Certification (2001) and Maryland State Human Service Counseling Certification (2002)
- Advance Professional Teaching Certificate with Special Education Endorsement (K-12) – Maryland
- Postgraduate Professional License – Special Education (K-12) – Commonwealth of Virginia