SECONDARY SCHOOL PRINCIPALS’ PERCEPTION OF INCLUSION FOR STUDENTS WITH AUTISM: A CAUSAL-COMPARATIVE STUDY

by

Jason Brent Conaway
Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

Liberty University
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ABSTRACT

A person’s perceptions define their reality, and behavior is based on what one believes to be real; therefore, perception is the path to belief, and one usually acts upon belief (Colaianni, 2015). According to Hallinger and Murphy (2012), “Today, we view instructional leadership as an influence process through which leaders identify direction for the school, motivate staff and coordinate school and classroom-based strategies aimed at improvements in teaching and learning” (p. 7). The purpose of this quantitative, causal-comparative study was to contribute to a body of research surrounding the perceptions of secondary school principals toward the inclusion of students with Autism Spectrum Disorder in the general education environment. To fulfill this purpose, the researcher examined the following research questions: What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of special education credits they took in their administrative training programs, what is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of years as an administrator, and what is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of students with IEPs in their building that are in regular education classes for at least 50% of their day? One hundred and thirty-five secondary school principals across the state of West Virginia completed the Principal’s Perception of Autism Inclusion Survey (PPAIS). Data was collected and analyzed using comparative data by means of a Wilcoxon Two-Sample Z-test. This study is significant in determining what variables affect the perception of secondary school administrators regarding the inclusion of students with autism in a general education environment.

Keywords: Autism Spectrum Disorder (ASD), inclusion, perception, secondary school based administrator, least restrictive environment, and IEP.
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Dedication

This dissertation is dedicated to my wife Amy and my kids Nathan and Emily. Without their patience, support, and encouragement I would not have been able to finish. My family has sacrificed many hours, days, and weeks so that I could achieve my dream. I am forever grateful for your continuous support, for always encouraging me, and for always being my number one fans in any goal that I set out to achieve.
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When I first began this journey, I was told that it takes a village to write a dissertation. I would like to start by acknowledging the village that helped me along my path to complete this daunting task.

To my father the late Larry Conaway, and my mother Pamela Conaway for always valuing education and instilling in me the love of learning. They would challenge me each day to be the best that I could be and always pursue my dreams. Without their encouragement and dedication to me I would not be where I am today. Although my father will not be able to see me complete this task, I know that he is watching and cheering from heaven.

To my father-in-law, the late, Dr. James Varner who always encouraged me to be better today than I was yesterday. He always had faith in me even when I didn’t have faith in myself. He always said that when I graduated he would be the person in the front row cheering the loudest. However, he passed before he was able to see me complete this task. Even though he is not on earth today I know that he is looking down on me from heaven.

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CHAPTER ONE: INTRODUCTION

Introduction

Education’s rapidly increasing population of students diagnosed with autism is not being met with an equal increase of administrative experience or coursework. A 2010 survey of New Jersey school leaders found that 98% serve students with autism on their campuses (Neumann & Buchanan, 2014). Of the 331 respondents, 56% of administrators had no prior teaching experience with students who have autism. More than 50% had no specific mention of autism in their college coursework, and most of the remaining responses suggested that autism was only briefly mentioned in their studies (Neumann & Buchanan, 2014). Research shows that placement decisions are made based on beliefs and experiences; therefore, it can be determined students with disabilities, including autism, are not always given equal opportunity to be placed in regular education classrooms due to the administrators’ lack of knowledge about these students’ needs (Praisner, 2003). Placement of students with disabilities in regular education classroom requires that administrators may need to overcome perceptual and knowledge barriers that can impact the success of the inclusion of students with disabilities within schools (Avissar, Reiter, & Leyser, 2003).

A person’s perceptions define their reality, and behavior is based on what one believes to be real; therefore, perception is the path to belief, and one usually acts upon belief. When refusal to allow any flexibility in perceptions occurs, minds close to what is possible and, sometimes, to even what is best (Colaianni, 2015). However, without individual perceptions, all have the same views and ideas of the world and no one would have an individual experience. Perceptions matter in that they explain how one sees things differently, and how one may develop opinions for what is perceived as best.
Perception is very important in understanding leadership behavior because every person perceives the world differently and approaches problems in different ways (Kashyap, 2016). The primary responsibility of an administrator is to facilitate effective teaching and learning with the overall goal of improving student achievement (Moffitt, 2007). According to Hallinger and Murphy (2012), “Today, we view instructional leadership as an influence process through which leaders identify direction for the school, motivate staff and coordinate school and classroom-based strategies aimed at improvements in teaching and learning” (p. 7). Behavioral theorists suggest that leadership is shown by a person’s acts more than by traits. Social cognitive theorist Albert Bandura proposes that people are driven not by inner forces, but by external factors. This model suggests that human functioning can be explained by a triadic interaction of behavior, personal beliefs, and environmental factors (Bandura, 1986). Psychologist Richard Gregory (1970) argues that perception is a constructive process which relies on top-down processing. Stimulus information from our environment is frequently ambiguous, so to interpret it we require higher cognitive information either from past experiences or stored knowledge to make inferences about what we perceive (McLeod, 2008). They propose that appropriate behavior distinguishes leaders from non-leaders. Patterns of actions used by different individuals determine leadership potentials, and patterns of action are influenced by perceptions.

Several factors can influence a person’s perception: “past experiences, a variety of cognitive biases, escalation of commitment and sunk outcomes, individual differences this can include age and socioeconomic status, and belief in personal relevance” (Dietrich, 2010, p. 2). It stands to reason that when something positive results from a decision, people are more likely to decide in a similar way, given a similar situation. On the other hand, people tend to avoid the repetition of past mistakes (Sagi & Friedland, 2007). There are several cognitive biases
influence decision-making and a person’s perception in addition to past experiences. For example, cognitive biases influence people by causing them to over rely on what they expect to see based on previous knowledge, and they may dismiss information from observations about which they may be uncertain (Dietrich, 2010). A person’s cognitive biases shape their perceptions and consequently shape the outcomes of decisions that they may make.

**Background**

Perceptions may be defined as environmental data which is processed by individuals to give it meaning (Kashyap, 2016). In social psychology, the term “person perception refers to the different mental processes that people use to form impressions of other people” (Akdag, 2015, p. 454). This term includes how they form these impressions and the different conclusions they make about other people based upon their impressions. Person perception can be a very subjective process that can be influenced by the characteristics of the person being observed, the context of the situation, and people’s own personal characteristics. Perception is the process through which the information from outside the environment is selected, received, organized and interpreted to make it meaningful to you. This input of meaningful information results in decisions and actions (Kashyap, 2016).

According to Joseph Reitz (1987), perception includes all those processes by which an individual receives information about their environment, this includes seeing, hearing, feeling, tasting and smelling. The study of these perpetual processes shows that their functioning is affected by three classes of variables—the objects or events being perceived, the environment in which perception occurs and the individual doing the perceiving (Reitz, 1987). In simple words, one says that perception is the act of seeing what is there to be seen. However, what is seen is influenced by the perceiver, the object and its environment (Kashyap, 2016). Perception is a
subjective process; therefore, different people may perceive the same environment differently based on what aspects of the situation they choose to selectively absorb, how they organize this information and the manner in which they interpret it to obtain a grasp of the situation (Chandan, 2014).

Substantial attention has been given to teachers’ perceptions about inclusion practices. In fact, a review of the literature on teachers’ perceptions toward inclusion was instituted over 14 years ago by Avramidis and Norwich (2002). An analysis of this review showed evidence of positive attitudes, but no evidence of acceptance of a total inclusion or zero reject approach to special education provision. Teachers’ attitudes were found to be strongly influenced by the nature and severity of the disabling condition presented to them, and less teacher-related variables. Even though there has been much attention given to teachers’ perceptions of inclusive practices, few researchers have focused on principals’ perceptions toward inclusion, with only a small number of studies being published in the past six years (Ball & Green, 2014; Farris, 2011). Two of the most recent were conducted outside the United States (e.g., Fazal, 2012; Irvine, Lupart, Loreman, and McGhie-Richmond, 2010). Findings from many of these studies showed that, contrary to research on teachers and their perceptions toward inclusion, principal factors are more influential than were child or educational environmental factors regarding perceptions toward inclusion (Chandler, 2015). Specifically, principals were more likely to be accepting of inclusion practices if they had training and knowledge of developmental disabilities (Praisner, 2012) or held positive beliefs about inclusion practices (Harrocks, White, & Roberts, 2008). McKelvey (2008) conducted a study to examine secondary principals’ perceptions toward inclusion of students with autism and found that the principals who had background training through their graduate training courses on inclusion and autism practices demonstrated a greater
likelihood to include students with autism within the general education classroom. They also tended to have a more positive view toward inclusion in general.

Research shows that placement decisions are made based on beliefs and experiences; therefore, it can be determined students with disabilities are not always given equal opportunity to be placed in regular education classrooms due to the administrator’s lack of knowledge about these students’ needs (Praisner, 2003). However, the knowledge level principals may have regarding special education does not change the standards the principals are held to regarding the law (Jones, 2006). To assure that students with disabilities are placed in more regular education classrooms it is, at times, necessary to overcome perceptual and knowledge barriers that can impact the success of the inclusion of students with disabilities within schools (Avissar, Reiter, & Leyser, 2003). As the instructional leader of the school, the principal must assure that every student is achieving on grade level. Students with disabilities do not learn like typical children which is the reason why they receive special education services (Jones, 2006). With the high expectations set for principals to have every child on grade level, graduate education administration courses are becoming ever more important to prepare principals with the special education knowledge that they will need (Jones, 2006).

Praisner (2003) surveyed 408 elementary school principals and found that 1 in 5 principals’ attitudes towards inclusion were positive, though most were uncertain. Related research determined that the principals who possessed positive attitudes toward students with disabilities were more likely to include these students in a general education environment (Marpole, 2011). Administrative support may be one of the most influential factors in the effectiveness of any program implementation. Certainly, the principal’s role and perception toward inclusive practices are key to the success or failure of inclusion in the individual school.
With the growing number of students with disabilities in today’s schools, principals are faced with deciding which students with disabilities will benefit from inclusion and how the inclusion process should be implemented (Ngwokabuenui, 2013). Principals’ perceptions of inclusion and their overall visions of success for all students have been key factors in the shape of implementation plans.

Livingston, Reed, and Good (2001) noted in their study of principals’ perceptions in two Midwestern suburban districts that most principals had not needed time to accept inclusion but had been supportive from the beginning of implementation. Other principals surveyed in this study noted that their perceptions improved with experience in inclusion. In another study of Alabama principals, Dyal, Flynt, and Bennett-Walker (1996) summarized their findings by stating “principals did not favor full inclusion, noting this perception possibly came because of principals feeling more at home with the existing service delivery models, namely, special education pullout programs” (p. 35). This study also stated that over time principals’ perception changed as they became more comfortable with school personnel and the other options available for students with disabilities.

The school principal plays a critical role in shaping an educational climate that provides opportunities for interaction between nondisabled and disabled students (Dyal, et al., 1996). While the teachers’ perceptions are important, it is the perceptions of inclusion that are held by the building administration and their leadership towards the inclusion plan that will determine its ultimate success or failure (Reynolds, 2008). The leadership provided by the building principal should help direct and improve the special education services that are delivered in the classroom, as well as meet mandated district, state, and federal guidelines (Bays & Crockett, 2007).

Inclusion has become the preferred practice for educating students with disabilities, so it has become necessary for principals to become strong instructional leaders and advocates for change (McGrew,
While children with disabilities are now welcomed into many classrooms across the country, many administrators may still have a negative perception of how to educate students with disabilities due to factors ranging from heavy workloads to inadequate time, the result is the same: there are many seemingly insurmountable challenges in special education, and not much is being done to change administrators’ perceptions. With the growing number of students with disabilities and increasing number of students with IEPs in schools today, administrators are exposed to more students with disabilities than ever before, thus causing them to make placement decisions that they may not be prepared to make (Shorr, 2006).

**Problem Statement**

Research has shown that the perceptions of school leaders are critical in improving the inclusive environment and outcomes for students with disabilities within this environment (Avissar, Reiter, & Leyser, 2003; Horrocks, White, & Roberts, 2008; Irvine, Lupart, Loreman, & McGhie-Richmond, 2010). Perceptions can be defined as a belief theory, hypothesis, feeling, appearance, opinion, observation, insight, awareness, or sensitivity. It may or may not constitute reality, and initial perceptions often change with the passing of time, changing circumstances, or the receipt of additional information (Myatt, 2012). In the scientific community Berelson and Steiner (2010), define perception as the complex process by which people select and organize sensory stimulation into a meaningful and rational picture of the world. We react to specific situations based on what we see, or only what we want to see in any given situation. Similarly, how we react depends on what we hear, not necessarily on what was said (Otara, 2011). Through research, it has been determined that a principal’s perceptions can either promote or discourage the inclusion process within their selective schools (Chandler, 2015).

The Individuals with Disability Act (IDEA) of 1975 to the most recent reauthorization of IDEA in 2004 mandates that schools provide services to students with disabilities in the least
restrictive environment possible, with potential placements ranging from a separate school/alternative environment to full participation in the regular education classroom (Patterson, Marshall, & Bowling, 2000). School principals find themselves having to become familiar with special education law and policies to avoid possible losses in funding and lawsuits (Ramirez, 2006). Iovannone, Dunlap, Huber and Kincaid (2003) stated that due to IDEA and related legislation, litigation regarding the education of students with ASD is the most common type of litigation concerning students with disabilities. Principals are making daily decisions related to special education and are taking on leadership roles in a special education service, placement, and delivery in secondary schools (Ramirez, 2006).

Praisner (2003) found that school principals have different experiences and perceptions of appropriate educational placements depending upon a student’s disability. Principals often based their placement decisions on their beliefs and experiences. Therefore, students with certain disabilities may not be granted an equal opportunity to be included in regular education classes (Workman, 2016). Specifically, school principals were least likely to recommend students with emotional disturbance and ASD to be placed in an inclusion classroom (Praisner, 2003). According to Horrocks, White, & Roberts (2008), preparation programs for principals only provided them with a small part of the knowledge base considered necessary by special education experts to implement inclusion programs. If secondary school administrators do not fully understand the behaviors of students with ASD, appropriate modifications and accommodations for these students cannot be provided (Wood, Evans, & Spandagou, 2014).

Research has shown that elementary principals’ perceptions can impact educational placement for students with disabilities including those with ASD (Praisner, 2003). However, little research has been completed on what factors may impact secondary school principals’
perceptions of students with ASD. Alfred Adler developed a theory emphasizing that a person’s attitude toward the environment has significant influence on his or her behavior (Borkowski, 2005). Adler suggested “that a person’s thoughts, feelings, and behaviors were transactions with one’s physical and social surroundings and that the direction of influence flow both ways, our perceptions are influenced by the social world and our social world is influenced by our perceptions” (Borkowski, 2005, p. 118). These interactions may at times cause conflict between a person’s perceptions and the way they respond to a situation.

Research has been conducted on how the perceptions of elementary school principals affect the placement decisions of student with autism within a general education environment. However, there is very little research that identifies how the perceptions of secondary school principals can impact these placement decisions. This study will include identifying and measuring the perceptions of secondary school administrators toward inclusion of students with autism in a general education classroom in West Virginia and examining what variables impact secondary school principals’ perceptions of inclusion and autism. Therefore, the intent of this research is to strengthen the body of knowledge related to secondary school principals’ perceptions of including students with autism in the regular education classroom and what variables may impact their perception. The problem is that there is very little research that discusses what variables may impact secondary school principal’s perceptions toward the inclusion of students with autism.

**Purpose Statement**

The purpose of this quantitative research study will be to contribute to a body of research surrounding the perceptions of secondary school principals toward the inclusion of students with ASD in the general education environment. While inclusion continues to be widely practiced in
today’s schools, administrators have limited awareness of what variables may impact their perception (Mastropieri, Scruggs, Graetz, Norland, McDuffie, 2005). Although there has been some research and discussion regarding the importance of principals’ perceptions toward the inclusion of students with autism in the general education environment, there is very little that identifies the current state of those perceptions and what variables may impact their perception in West Virginia. More students with disabilities are introduced into a general education setting; for example, 6.6 million students received special education services in 2015, and the number of students diagnosed with ASD within that 6.6 million increased 165% since 2005 (National Center for Education statistics, 2016). Clearly the need to determine what variables will impact a principal’s perception of inclusion for students with autism should be examined (Goley, 2013).

A quantitative research study was being conducted using a causal-comparative design to fulfill this purpose. A causal-comparative design was used because the researcher is trying to determine the cause of differences that exist between or among groups of individuals. The causal-comparative design included descriptive analysis to determine the relationship between the independent variables and the dependent variable. The dependent variable, secondary school administrators’ perceptions toward inclusion of students with autism, was considered in relation to the independent variables of prior graduate training, number of years as an administrator, and number of students with IEPs who attended regular education classes for at least 50% of their day. The relationship was examined, and the independent variables were measured. The population being studied is school-based administrators at the secondary level in West Virginia. The purpose of this study is to determine if one or more of the variables influence secondary school administrators’ perceptions toward inclusion practices of students with ASD.
Significance of the Study

This study is significant in determining what variables affect the perception of secondary school administrators regarding the inclusion of students with autism in a general education environment. Specifically, this study adds to the current literature on the perceptions of principals toward inclusion of students with autism in a general education classroom by including data on both principals and assistant principals. This study was conducted in West Virginia school systems that practice an inclusion model for students with autism and is important because federal legislation requires that all students have access to a free and appropriate education within the least restrictive environment (Villa & Thousand, 2005).

Furthermore, school principals are held accountable for meeting federal mandates helping all students to achieve academic success in their classes. Principals are primarily responsible for implementing staff development and restructuring classes to align with federal mandates. Therefore, it is important that an adequate evaluation be conducted on perceptions of school principals because they are responsible for the success of inclusion programs required by federal law (Chandler, 2015). Moreover, teachers are more productive, and their attitudes tend to be more favorable toward inclusive students when administrative personnel support the vision of inclusive practices (Karten, 2005).

Very little research has been completed on how the perceptions of secondary school administrators impact the inclusion of students at these levels. This study is significant in understanding the experiences of school administrators as they serve the growing population of students with autism and will provide guidance for future research and practice in school and instructional leadership courses. Cruzeiro & Morgan (2006) concluded an administrator’s support is vital for the success of inclusive practices. It is necessary to determine what variables
impact a secondary administrator’s perception of the inclusion model and identify the relationships between that perception and inclusion practices of students with autism.

**Research Questions**

The research questions focus on determining if a relationship exists among West Virginia secondary school-based administrators’ perceptions regarding the inclusion of students with autism looking at their formal graduate educational training, number of years as an administrator, the number of students with IEPs who attended regular education classes for at least 50% of their day, and if their perceptions of inclusion are affected by these variables.

The following research questions guided this quantitative study:

**RQ 1:** What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of special education courses they took in their administrative training programs?

**RQ 2:** What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of years as an administrator?

**RQ 3:** What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of students with IEPs in their building that are in regular education classes for at least 50 percent of their day?

**Definitions**

1. *Autism Spectrum Disorder (ASD)*- refers to a group of pervasive neurodevelopmental disorders that involve moderately to severely disrupted functioning regarding social skills and socialization, expressive and receptive communication, and repetitive or stereotyped behaviors and interests (Pennington, Cullinan, & Southern, 2014)
2. *Inclusion*- a term which expresses commitment to educate each child to the maximum extent appropriate in the school and classroom he or she would otherwise attend (Gordon, 2006).

3. *Perception*- the process of recognizing and interpreting sensory stimuli or recognition and interpretation of sensory information. Perception also includes how we respond to the information (Williams, 2013).

4. *Secondary school-based administrator*- the professional person in the school building whose responsibility it is to provide the structure of the school and to oversee that instruction is taking place. This can include head principals and assistant principals in secondary grades ranging from six through twelfth (U.S. Department of Education, 2012).


6. *IEP*- Individualized Education Program, a written document that is developed for each public-school child who is eligible for special education services. The IEP is created through a team effort and reviewed at least once a year (Baumel, 2016).

**Summary**

One of the many expectations set by school systems for administrators is to provide an appropriate educational setting for all students (Church, 2010). With the incidence rate of autism increasing and these students being placed in the least restrictive environment, the general education classroom is the starting point (McKelvey, 2008). The behavioral and academic needs of these students require knowledge based on the part of the school-based administrator. The
focus of this research study will be on the perceptions of secondary level (middle school and high school) administrators and students with autism as related to inclusion. Studies and research have been undertaken to identify and define teachers’ perceptions of students with autism, the legislation that surrounds these students, and the resulting inclusion models (Rogers, 2007). In addition, research has been conducted over the years on the elementary school principals’ perceptions of inclusion (Hesselbart, 2005; Praisner, 2003), but little research has been done on secondary school administrators’ perceptions toward the inclusion of students with autism in the recent history.

Chapter One presents an overview of the research problem: the background of the problem, problem statement, purpose of the study, significance of the study, research questions, hypotheses, and key definitions. Chapter One also reviews the assumptions of the study, limitations throughout the research, and delimitations. Chapter Two will focus on a review of the current literature regarding theoretical framework surrounding the study, perceptions that guide leadership behavior, benefits of inclusion, administrator perceptions of inclusion. It will also examine how years as an administrator affect the perception of inclusion and how the number of students with IEPs affect the principal’s perception of inclusion. Administrators’ training in autism, historical and current research about autism, and the diagnosis and characteristics of students with autism will also be explored.
CHAPTER TWO: REVIEW OF LITERATURE

Introduction

Research has shown that the perceptions of school leaders are critical in improving the inclusive environment and outcomes for students with disabilities (Avissar, Reiter, & Leyser, 2003; Horrocks, White, & Roberts, 2008; Irvine, Lupart, Loreman, & McGhie-Richmond, 2010). The purpose of this quantitative research study was to contribute to a body of research surrounding the perceptions of secondary school principals toward the inclusion of students with ASD in the general education environment. While inclusion continues to be widely practiced in today’s schools, administrators have limited awareness of what variables may impact their perceptions (Mastropieri, Scruggs, Graetz, Norland, McDuffie, 2005). Although there has been some research and discussion regarding the importance of principals’ perceptions toward the inclusion of students with autism in the general education environment, there is very little that categorizes the current state of those perceptions or identifies variables that may impact perception in West Virginia.

This study is significant in determining those variables that may affect the perceptions of secondary school administrators regarding the inclusion of students with autism within a general education environment. Specifically, this study will add to the current literature on the perceptions of principals toward inclusion of students with autism in a general education classroom by including data on both principals and assistant principals. Chapter 2 will contain previous research on this topic as well as provide context for the new results, adding to the body of research regarding principals’ perceptions of students with autism and inclusion within a general education environment.
People often form impressions of others very quickly and with minimal information. They also frequently base their impressions on the roles and social norms they expect from others. In social psychology, the term “person perception refers to the different mental processes that people use to form impressions of others” (Akdag, 2015, p. 454). This term includes how they form these impressions, and the different conclusions they make about other people based upon their impressions (Akdag, 2015). The creation of a person’s perceptions can be a very subjective process, influenced by the characteristics of the person being observed, the context of the situation, and observer’s own personal characteristics (Bargh, Chen, & Burrows, 1996).

In education, the perceptions of the administrator shape the climate and effectiveness of the working environment. Most of the time school administrators believe they are effective and efficient leaders based on their own perceptions; however, their teachers may have a very different view (Otara, 2011). It is important to understand that perception is often portrayed through communication in any school. Therefore, leadership perception is an important tool that guides leadership behavior. For example, Daane, Bienne-Smith and Latham (2001), found that administrators have positive attitudes about inclusion in elementary settings; however, the administrators indicated that there continues to be a need for pullout services for some students with disabilities. MacFarlane and Woolfson (2013) noted that teachers’ perceptions of inclusion are related to school principals’ expectations about inclusive education. By modeling a positive collaborative approach that advocates for the success of all students, school principals can influence the success of inclusion programs in individual schools (DiPaola & Walther-Thomas, 2003).

Principals’ attitudes toward inclusion are based upon their experience and/or lack of experience with disabled students (Workman, 2016). Through a survey of 408 elementary
school principals, Praisner (2003) determined that the more positive experience that the elementary school principal has had, the more positive the principal’s attitude is toward inclusion. 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 the personal beliefs that children with autism should be included in the general education classroom tended to have more positive views toward inclusion in general.

Research has shown experience with individuals with disabilities is related to positive perceptions toward including these students within the regular education environment (Workman, 2016). “To favor inclusion, a principal should have previous and noteworthy experience with disabled students insofar as such an experience is associated with more positive attitudes toward these children, thus predisposing administrators to adopt the philosophy, principles, and practices of inclusion schooling” (Schmidt & Venet, 2012, p. 224). Principals must make frequent decisions related to special education delivery in public schools (Salisbury, 2006). Just as many children, youth, and adults have opinions and attitudes toward specific things in life based upon experiences, so do principals. Their attitudes toward inclusion, according to research, are based upon their experience and/or lack of experience with students with disabilities.

**Theoretical Framework**

Albert Bandura proposed a social learning theory that has become one of the most influential theories in relation to learning and development. According to Bandura:

Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others, one
forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action (Weller, 2012, p. 51-52).

According to Bandura’s theory, people learn new behavior from observational learning of the social factors within their environment. If people observe positive, desired outcomes in the observed behavior, then they are more likely to model, imitate, and adopt the behavior themselves (Weller, 2012). Therefore, children, even those who have been diagnosed with an ASD, will learn from other nondisabled students in an inclusive educational setting. In addition to students learning from each other, principals and teachers can learn from one another regarding the acceptance of students with autism within the inclusive setting. The theoretical framework for placement of students with ASD in an inclusion classroom was built on three concepts that have been most prevalent in the research: the perceptions of school-based administrators on the inclusion model for special education students, the inclusion model and legislation leading to inclusion, and the unique characteristics and needs of students with ASD.

Praisner (2003) and Hesselbart (2005) have conducted research and determined that there is an impact on the principal’s perception concerning the inclusion of students with ASD; therefore, those principals who have a negative attitude about students with ASD will place fewer of these students within inclusion classrooms. However, this research is limited to elementary schools. Praisner (2003) and Hesselbart (2005) also determined that principals who supported inclusion had background knowledge and training in the field of special education. Praisner (2003) and Hesselbart (2005) have concluded that principals generally accept practices for special education students. O’Dell and Schaefer (2005) expanded on the research of Praisner and Hesselbart, examining the perceptions of teachers as well as principals regarding the placement of special education students.
One conclusion that can be drawn about the research on inclusion is that it is a federal mandate that will work for all children (McKelvey, 2008). Inclusion practices of students with autism has been in place for all special education students, again not differentiating between categories since IDEA allocated the formation of inclusion practices to the school-based administrators (McKelvey, 2008). In short, inclusion is a mandate and not an option.

Allen (2008) claims that there is no single, coherent inclusion discourse that could be said to have dominated the evolution of inclusion practices in our schools. This theory can explain some of the confusion and inconsistency that characterize many inclusion practices (Allen, 2008). Historically, inclusionary placement was for students who had a Specific Learning Disability and was usually only in English and mathematics classes. However, today the inclusion setting looks much different, and it is available in all academic classes. The inclusion classroom of today will have two content certified teachers working together and helping all students within the classroom, phasing out the classroom within a classroom practice. However, two dominant but contradictory perspectives can be identified within inclusion literature about least restrictive placements for student with autism (Allen 2008; Cigman 2007).

The first perspective might be designated as a rights-based perspective that argues for an end to all educational practices that will segregate any student from the regular education classroom and calls for the inclusion of all children within a mainstream school (CSIE, 2008). The rights of all children must be exercised regarding a wide academic curriculum, making the need for the whole school to change a priority. This change must accommodate those children who have historically not been in a mainstream classroom but might benefit from this type of setting.
The second predominant perspective of educating students with autism within an inclusion classroom can be defined as a needs-based perspective (Ravet, 2011). The needs-based perspective draws attention to the lack of research evidence in support of mainstreaming and the dangers of exclusion that can arise from it (Ravet, 2011). It also states the need for a range of education placements to meet the distinctive needs of varying groups of learners, providing additional support needs are prioritized within this perspective (Lindsay, 2007). By providing students with individualized, solid, and research-based classroom accommodations, students with autism will benefit more from a setting that will provide them with the least restrictive environment which will meet their educational needs. The setting can be an inclusion setting, a smaller pullout classroom, or a self-contained environment.

These two perspectives present very different interpretations of what inclusion means and how it should be enacted. It should be stressed that the principle of inclusion is not being disputed within this review of literature. This literature is not to suggest that the principle of inclusion can be taken for granted as an irrefutable good, but must make note that it is only one of many options available for the least restrictive placement for students with autism (Ravet, 2011). Rather, the focus of this literature review is on what variables impact the principal’s perception of students with ASD and their placement within a general education environment.

**Perceptions Guide Leadership Behavior**

Perception is the process through which individuals interpret data from outside the environment and deduce it so that is meaningful to them. It can be defined as a process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment (Kashyap, 2016). People organize and interpret their sensory input, or what they see and hear, and call it reality according to their perceptions. Perceptions give meaning to a
person’s environment and make sense of the world around them and are important because behaviors are based on the perceptions of what people judge as reality (Erickson, 2013). Individual perceptions can vary greatly. These differences can be due to various life experiences, educational levels, and many personal factors such as attitudes, interests, and motives (Erickson, 2013). Therefore, by definition, a person’s individual perceptions are neither right nor wrong; it is just how they view reality (Kennedy, 2008).

Alfred Adler, a Viennese physician who lived between 1870 and 1937, developed the theory of individual psychology which emphasized that a person’s perception toward the environment had a significant influence on his or her behavior. Adler suggested that a person’s thoughts, feelings, and behaviors were transactions with one’s physical and social surroundings and that the direction of influence flowed both ways, our attitudes are influenced by the social world and our social world is influenced by our attitudes (Borkowski, 2005). These interactions, however, may cause a conflict between a person’s attitude and behavior. This conflict is referred to as cognitive dissonance: Cognitive dissonance refers to any inconsistency between two or more of one’s attitudes or between one’s behavior and attitudes (Borkowski, 2005).

Dissonance can occur when new learning or ideas are presented that conflict with what is already known. For example, imagine that the principal of the school attends a workshop discussing the importance of inclusion for students with autism. During this workshop, the principal hears ideas that contradict, or come into conflict with, their beliefs about this topic. This principle already has certain knowledge about student with autism and inclusion that they bring to the workshop, and because they are especially committed to their own knowledge and belief system, is more likely that the principal will resist the new knowledge. According to cognitive dissonance theory, the more important the issue and the larger the gap between the
beliefs, the greater the dissonance among people (Kennedy, 2008). Cognitive dissonance requires a lot of self-persuasion, and even repression since one must repress at least one of the conflicting beliefs. It is important to try to minimize the effects cognitive dissonance has on us, or at least realize when it is happening to make better informed decisions (Plumridge, 2016).

According to the cognitive dissonance theory a person’s perceptions define their reality, and behavior is based on what one believes to be real; therefore, perception is the path to belief, and one usually acts upon belief. When one refuses to allow any flexibility in our perceptions, one closes the mind to what is possible and, sometimes, even what is best for those in proximity (Colaianni, 2015). However, without individual perceptions, we would all have the same views and ideas of the world and nobody would have an individual experience. Perceptions matter in that they explain how we all see things differently, and how we all may develop opinions for what is perceived as best.

Perception is very important in understanding human behavior because every person perceives the world and approaches life problems differently. People behave based on their perception, so behavior can be predicted circumstances by understanding a person’s present perceptions of the environment (Kashyap, 2016). Perceptions are very important for a principal who wants to avoid making errors in dealing with people and events in a school setting. This problem is made more complicated by the fact that different people perceive the same situation differently; therefore, in order to work effectively with those around them the principal must understand their perceptions properly (Kashyap, 2016).

The influence of leaders is largely dependent on how they are perceived by others (Ensari & Murphy, 2003). The extent to which a principal is perceived as a leader can increase employee acceptance of the choices made regarding policies, the overall school climate, and
leadership decisions. Positive perceptions help leaders accentuate their important characteristics to manage their public impression (Ensari & Murphy, 2003). Perceptual processes are also important influences on the measure of leadership behavior. Effective leadership behaviors are imperative in contributing to student achievement and the overall culture of the school (Moffitt, 2007). For students to have high-quality learning each year, schools must be highly functioning, which means they must be led by effective principals. It has been noted in the literature that the greatest impact on school success can be determined by the leadership behaviors of the principal (Akdag, 2015).

Leadership is sometimes used as if it were an attribute of personality, sometimes as if it were a characteristic of a certain position, and sometimes has an attribute of behavior (Bohn, 2002). According to Hallinger and Murphy (2012), “Today, we view instructional leadership as an influence process through which leaders identify direction for the school, motivate staff and coordinate school and classroom-based strategies aimed at improvements in teaching and learning” (p. 7). A successful principal must have a clear vision and goal for the direction their school needs to go, be able to convey that vision, and have the abilities necessary to assist in the school in achieving their goals (Lyons, 2010). Knowing what their perception is and having vision that extends to the external environment is especially important during times that are characterized by rapid change. With many of the rapid changes that are taking place in today’s school systems effective administrators must examine their belief systems to determine how their perceptions and behaviors may impact the promotion of more accepting inclusive classrooms.
Administrators Perception of Inclusion

School leaders regularly embrace a plethora of school reforms designed to improve the learning environments in today’s schools (Goley, 2013). Included in the list of school reform, administrators have been challenged with the “inclusion issue,” attempting to find the best placement for students with disabilities using the limited availability of resources (Goley, 2013, p. 79). For a school to be an inclusive setting, the school administrator must maintain a clear vision, foster understanding of inclusion among their staff, and provide enrichment opportunities for teachers and staff to implement inclusive practices (Friend & Bursuck, 2006). School leaders play a critical role in the successful implementation of inclusion by conveying a message of acceptance to their staff and providing support for the best inclusive practices to make the programs successful (Goley, 2013).

The perceptions of the building principal regarding their knowledge and attitudes of inclusion has been examined over time. The success or failure of an inclusive classroom depends on the perspectives and beliefs of the school-based administrator (McKelvey, 2008). When examining the administrator’s perspective of inclusion one variable that must be discussed is adequate and effective staffing. For an effective inclusion program to work within any school it is imperative that staff are trained on best practices of what it takes to make this type of classroom work. It is also apparent that positive attitudes by administration and teachers on inclusion result in positive outcomes for the program (Field, 2015).

One of the main jobs of the principal is to serve as the instructional leader of their school; therefore, they must establish school climate, determine performance expectations, and set priorities for effective teaching and for student learning in their schools (Campbell & Barger, 2010). A performance expectation set by school systems for administrators is to provide an
appropriate educational setting for all students (Murry, 2012). However, a lack of special education preparation for school principals challenges their ability to serve all students (Howser, 2015).

Special education consistently requires most of a building level principal’s time (Garrison-Wade, Sobel, & Fulmer, 2007). Consequently, administrators report being ill prepared for the job and cite difficulties with role clarification and job specialization (Garrison-Wade, 2007). For example, principals are now faced with deciding which students with disabilities will benefit from inclusion and how the inclusion process should be implemented (Ngwokabuenui, 2013). An educational shift toward a more inclusive setting for students with disabilities, inclusion has brought about some changes and challenges for professionals who are responsible for implementing these practices in the general education classroom (Chandler, 2015). For the successful implementation of inclusion to be effective, responsible school personnel must be open to the demands of working with a diverse group of students (Villa & Thousand, 2005).

Santoli, Sachs, Romey, and McClurg (2008) conducted research among educators regarding their perception toward inclusion. They found that even though almost all teachers interviewed (98.2%) were willing to make necessary accommodations for students with disabilities, the majority (76.8%) felt that students with disabilities should not be educated in general classrooms no matter what the degree of the disability. Many principals feel the same way (Kimbrough & Mellen, 2012). The principal may support an inclusion model within their school and feel that it is a critical part of the educational process and a valid option for placement of student with disabilities; however, they may not be fully knowledgeable of the practices and procedures affecting the general education curriculum with accommodations (Smith, 2011).
Praisner (2003) conducted research on the attitudes of elementary principals in Pennsylvania, and her research concluded that the attitudes toward inclusion varied based on the severity of the disability. The more severely and profoundly disabled the students, the more administrators’ perceptions were viewed as neutral; however, while discussing the mildly disabled students, the principals seem to be more receptive to an inclusive model (McKelvey, 2008). Praisner (2003) also found that students in certain disability categories such as autism, intellectually disabled, and multi-handicaps were more likely to be placed in more restrictive environments than the students who are diagnosed with a learning disability. Praisner (2003) went on to say that principals would be more receptive to inclusion if the participation was not mandatory based on law and the principal had more of a voice in the program.

Hesselbart (2005) concluded that only 6% of the principals had a negative attitude toward inclusion, 48% had a positive attitude toward inclusion, and 46% were uncertain. In addition, Hesselbart (2005) concluded that the principals did not believe that inclusion should be a board policy, meaning that the principals desired to have input into the model for the school. In a case study of three elementary principals, DeClue (1990) found that the attitude of the principals toward special education was a key factor influencing their behavior and acceptance of inclusive programs in their schools. Their leadership behavior, their day-to-day interactions with students who have disabilities, and their programs delivered a clear message that students with disabilities are valued and important within their school (Inglesby, 2014).

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. Farris used the Principal’s Inclusion
Survey, which was developed by Praisner (2003). The results of this study indicated that principals only preferred inclusion of students with less severe disabilities. The participants reported less inclusive placements for students with mental retardation and more severe cognitive and physical disabilities (Chandler, 2015). 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 (Chandler, 2015).

Graham and Spandagou (2011) conducted a qualitative study with thirteen principals in South Wales, finding that principals’ perceptions toward inclusion were dependent upon their interpretation of the meaning of inclusion. Some of the principles in this study did not understand the current meaning of the term inclusion, and more were interested in the monetary aspect and finding funding for support students with disabilities. Other principals interviewed in this study were more concerned with minimizing the amount of distractions caused by students with more severe disabilities. Overall, the findings indicated inconsistencies in principles’ attitudes toward inclusion based on their competency and understanding in leading their school regarding inclusive practices.

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). MacFarlane and Woolfson (2013) noted that teachers’ perceptions of inclusion are related to school principals’ expectations about inclusive education. By modeling a positive collaborative approach that advocates for the success of all students, school principals
can influence the success of inclusion programs in individual schools (DiPaola & Walther-Thomas, 2003).

Years as an Administrator and Perceptions of Inclusion

Roles and demands on school administrators have changed in the last several decades. Increased job complexity, demanding standards, and greater amounts of accountability due to the No Child Left Behind (NCLB) mandate in 2001 resulted in increased numbers of administrators leaving the profession nationwide (DiPaola & Walther-Thomas, 2003). No Child Left Behind brought many new challenges to school administrators all over the nation which included a higher standard of overall accountability, mandatory standardized student testing for students with disabilities, highly qualified teacher requirement, and pressures on schools to meet adequate yearly progress goals (Bradley, 2013). These requirements have caused the role of the school administrator to change drastically in the last 15 years. This change has caused principals to examine their decisions on educational placement and inclusive practices for many students with disabilities in their schools.

Inclusion for special education students came to the forefront of education during the 1980s (Livingston, Reed, & Good, 2001). In just 35 years, the expectations of principles concerning placement decisions have change from placements in “self-contained classrooms, to resource rooms, to mainstreamed strategies, to full inclusion” (Livingston et al., 2001, para. 2). Expectations for principals in creating a shared vision for all students includes involving advocacy groups, facilitating individualized education plans, aiding with curriculum for students with disabilities, ensuring appropriate learning opportunities for students with disabilities, and working with transition services (Livingston et al., 2001). Due to this change in administrators’ responsibilities, educating students with disabilities has presented a special challenge, and
change has come slowly in administrative ranks (Livingston et al., 2001). The drive toward educating student with disabilities in a more inclusive setting have many of today’s principals facing the assumption of a new role they may not be familiar with (Livingston et al., 2001). As an administrator becomes more familiar with their job many times their negative perceptions if inclusion will improve with actual administrative experience (Villa, Thousand, Meyers, & Nevin, 1996).

Inexperienced principals are more willing to comply with internal perceptions and are not always willing to change what has been done in the past regarding educational placement decision for students with disabilities (Bradley, 2013). They will at times relapse to a managerial leadership style due to their own insecurities and lack of identity within their school’s community (Fink & Brayman, 2006). Due to challenges brought on by rapid change, many administrators spend much of their time engaging in expanding their managerial responsibilities rather than focusing on their educational and curriculum leadership (Bradley, 2013). Krasnoff (2015) concluded that these principals were more likely to be less effective than their predecessors. This is not to say that all principals are destined for failure. Charming and charismatic leaders often achieve considerable short-term change within their new school communities (Krasnoff, 2015). Fink and Brayman (2006) report that many of these leaders move on to easier, higher paying positions, and their true legacies as change agents are often replaced by disappointment and pessimism by those principals left behind.

As the instructional leader, the principal has direct influence over the programs and resources implemented in the school (Vazquez, 2010). In a study conducted by Geter (1998) of 550 Georgia principals’ attitudes toward inclusion, the results showed no significant difference between high school and elementary principals attitudes toward inclusion of students with
disabilities in a general education classroom. The study also found no significant difference between high school and elementary principal’s attitudes toward inclusion of students with disabilities into general education classroom regarding principals’ gender and training in special education (Geter, 1998). Another study by Inzano (1999) investigated the attitudes of school principals in the state of New Jersey toward inclusive education. The results of the survey found that neither years of experience as a principal nor location of the school had an effect in principals’ attitudes toward inclusion. The study also found that principals were in favor of including students with disabilities in the general education classroom.

Until the 1970s, the principal’s job was quite clear, although narrowly defined: principals serve as “building managers and student disciplinarians” (DiPaola & Walther-Thomas, 2003, p. 7). In recent years, with the (NCLB) legislation, the role of the principal shifted toward being the instructional leader within their school with the responsibility of education for all students, even those with disabilities (Pettiegrew, 2013). Although principals do not need to be experts on students with disabilities, they must have fundamental knowledge that will enable them to perform essential leadership tasks regarding special education and placement decisions (DiPaola & Walther-Thomas, 2003). In many schools, new administrators are assigned the responsibility of overseeing special education as one of their primary tasks. Many new building administrators find themselves suddenly thrust into situations in which they must be the final arbitrator on matters related to issues that they may not be familiar with such as IEPs, 504 decisions, due process hearings, IDEA compliance, and making LRE placement decisions (DiPaola & Walther-Thomas, 2003). Effective principals know their own professional strengths, interests, and weaknesses. Over time effective administrators will strive to build their working knowledge of
areas where they may have a weakness, with special education knowledge being reported as the greatest weakness for new administrators (Pettiegrew, 2013).

New principals report being unprepared to begin their responsibilities as school leaders (Pettiegrew, 2013). This lack of preparedness can impact the whole educational process in a school, but even more so when it comes to the responsibility of overseeing special education placement and following the numerous compliance requirements and laws for students with disabilities (Parker, 2016). With the increasing number of students being placed in inclusive classrooms, it can become overwhelming for new administrators unfamiliar with their staff as well as current laws and policies. However, as new administrators become more comfortable with their job, staff, and the everyday flow of the school they will begin to branch out to look at other options for placement of students with disabilities. Most principals report on the job experience provides most of the training to learn about effective leadership and placement decisions that need to be made regarding special education (Parker, 2016). However, principals report that they feel they need to be better equipped and need more on-the-job training to make effective decisions about students with disabilities (Pazey & Cole, 2013).

**Number of Students with IEPs and Principals’ Perception of Inclusion**

Under the Individuals with Disabilities Education Act (IDEA), states must set forth policies and procedures demonstrating they have established adequate educational opportunities for all students with disabilities (McElhinny & Pellegrin, 2014). Each state across the country must have regulations based on federal law that require public schools to establish an IEP for any student who has met the requirements. An IEP is a product of collaboration between a student’s parents and educators to identify the needs of a student with a disability or giftedness, identify the special education services the student requires, and determine how to meet those needs (U. S.
Department of Education, 2007). The IEP is a tool that ensures a student’s requirements are being met. It evaluates the student’s progress and monitors whether a student is being provided a free appropriate public education. The IEP team is comprised of a school administrator or designee, at least one regular education teacher, a special education teacher, the parent/guardian of the child, and may include other specialized services, depending on need.

In the past 10 years, the idea of inclusion has moved to the forefront of being the most prominent placement for students with disabilities (McElhinny & Pellegrin, 2014). With more state and federal regulations recommending administrators place these students within a general education classroom, many administrators are taking a second look at placement decisions (Field, 2015). With the NCLB federal mandate administrators are ensuring that schools are providing an equal opportunity for all students, no matter their needs. As stated previously in this literature review, positive perceptions by administration and teachers on inclusion result in positive outcomes for inclusive programs (McKelvey, 2008). Ball and Green (2014) conducted a study that investigated the attitudes of school leaders toward the inclusion of students with disabilities within a general education setting. The results of this study fell under six specific headings: limited training and experiences for school leaders in relation to special education and inclusive practices, school leaders who have a negative attitude toward inclusion, inclusive placements are supported by school leaders; however, differences exist with different disabilities, and lastly the number of students with IEPs in the regular education classroom should be an indicator for appropriate placements occurring and positive principal perceptions on inclusion (Ball & Green, 2014). Components of the study showed many foundational skills and steps are required for inclusion to be effective. Many attitudes and misconceptions discovered through
this study were due to lack of professional development/training and negative previous personal experiences with inclusion (Ball & Green, 2014).

Students with IEPs have several professionals committed and focused to ensuring that they are provided an appropriate education with proper classroom accommodations to enable their success. The building principal plays a key role in collecting data from various experts while at the same time providing open lines of communication which will allow all services to come together. It is the responsibility of the teacher to implement services and accommodations within the classroom; however, the building principal must support the teachers by coordinating resources and schedules to ensure those requirements can be met. Often the principal serves as the middleman between teachers, parents, ancillary staff to coordinate and implement IEPs (Hozien, 2016). This task can be difficult with a large number of students with disabilities within their building, but principals are more comfortable overseeing IEPs and making sure they are implemented correctly and meeting the needs of their students. (DeWitt, 2012).

Wakeman, Browder, Flowers, and Ahlgrim-Delzell (2006) surveyed 362 secondary school principals in relation to their special education knowledge and sorted them into two domains, fundamental and current issues. The domains were further sorted in relation to variables that were associated with that knowledge. A factor analysis was conducted in order to interpret the results, which supported a five-factor structure. These five factors included daily routine, current issues, evaluation, legislation, and fundamental knowledge. The highest ranked items were related to daily routine and the lowest ranked items related to evaluation. In this study, the variables that had statistical significance include the percentage of students with disabilities in the principal’s school, having an education certification, and having appropriate personal experience with an individual who has a disability. Principals were asked to indicate
their beliefs about special education issues given the current diversity of schools and varying accountability levels. Principals overwhelmingly agreed that all students are the responsibility of the principal. However, most principles do not agree with the statement that all students’ assessment scores should count in the school’s accountability scores. The principal’s response to the statement could be interpreted that, although a principal perceives that their job is to educate all students they may not want to be held accountable for educational placement decisions for all students.

Between 2004 and 2011 the number of 6 to 21 years old students with disabilities receiving academic services for more than 80% of the typical school-day in the general education classroom had increased from 51% to 61% (The National Center for Education Statistics, 2013). In a research study on inclusion completed by Barnett and Monda-Amaya (1998) on 115 randomly selected school principals, the results indicated that at the high school level, most students with disabilities who are being served in the general education environment included those children who have been diagnosed with a learning disability and a behavior disorder. The data did not yield a clear definition of inclusion at this level indicating that the amount of time students with disabilities spent in the regular education classroom varied significantly depending on the school. Even though, the principals indicated that inclusion could work in their schools, the majority felt that not all students should be included within this environment. Lastly, the results showed the principals did not feel as though their schools are adequately equipped to support inclusion programs.

Schumacher, Deshler, Bulgren, Davis, Lenz, and Grossen (2002) undertook a large study that evaluated several aspects of inclusive practices at nine high schools. The researchers used both qualitative and quantitative methods including interviews, surveys, and standardized test
administration to evaluate a variety of outcomes from students. The results of this study indicated that all administrators stated that an inclusive program may benefit students with disabilities, and eight of the nine schools had a policy that related to inclusion. Only two of the nine schools had specific support for students with disabilities enrolled in general education classes. The schools with these supports were the only ones that had a majority of students with disabilities in general education classrooms.

**Administrator Training in Autism**

The prevalence rate of autism is increasing; however, administrator training on students with ASD is not corresponding to that increase (Maddox & Marvin, 2012). The concern is in relation to the lack of professional development and leadership training program classes on students with ASD that these professionals are receiving. Personnel preparation remains one of the weakest elements of effective programming for children with autism spectrum disorder (Maddox & Marvin, 2012). The social fabric of today’s schools has changed with the increasing number of students being diagnosed with an ASD. As a result of the increasing number of students being diagnosed with an ASD that have unique educational and social needs, it has been suggested that the principals need specialized training to ensure that all students have equal access to an education based on academic excellence and high expectations (Herrity & Glasman, 1999). Historically, there have been limited opportunities for aspiring and current administrators to receive specialized training on students with an ASD. Research suggests that principals do not possess the critical knowledge base of the law, practices, and procedures to effectively implement inclusion programs (Smith, 2011). Hof (1994) has reported that principals have limited knowledge or no academic background regarding the educational, social, and emotional needs of students with disabilities.
Thus, many school administrators may lack the necessary preparation to develop academic programs and provide knowledge-based decisions on the least restrictive environment placement for student with autism. For changes to occur within a school setting it is required that corresponding changes in the university-based administrator programs must occur (Herrity & Glasman, 1999). The state of West Virginia requires that all administrators take a minimum of three semester hours of coursework in the identification and education of children with disabilities (West Virginian Department of Education, 2016). Many times, they are only receiving the minimum requirement regarding special education with the rest of the hours being in curriculum and instructional strategies (Lashley & Boscardin, 2003). Historically, the preparation programs for licensure of administrators have been dominated by assumptions, practices, and knowledge traditions of the disciplines of special education; this results in preparation that is too narrow to meet today’s needs of the ever-changing population of students with disabilities (Lashley & Boscardin, 2003).

An examination of preparation programs for educational administrators determined that the three highest rated focuses of these programs were developing grant proposals, planning information systems for program management, and creating strategies for facilitating collaboration (Lashley & Boscardin, 2003). Too often, principals are responsible for an extensive range of special education programs in areas in which they have had little training and/or experience (Smith, 2011). Limited training and background knowledge is not the only problem principals are facing today. The role of the principal has been significantly changed so that they are not only responsible for in-service trainings that promote collaboration and best instructional practices between regular and special education teachers, but he or she must
undertake additional duties such as hire personnel and complete paperwork regarding special education initiatives (Smith, 2011).

Most administrators have received specific training in their educational leadership courses to address day-to-day operations as well as oversee educational programs within their schools. However, many administrators lack sufficient training necessary to supervise programs for diverse student populations, particularly students with ASD (Pazey, Gevarter, Hamrick, & Rojeski, 2014). Due to the lack of specialized training provided to administrators, school systems are increasingly being confronted with lawsuits that far surpass the expected numbers (Thompson, 2011). These lawsuits are attributed to inadequate training administrators have received on the specifics of special education and special education law, as well as insignificant exposure to students with disabilities particularly students with an ASD (Pazey & Cole, 2013). Upon the completion of administrators’ graduate training programs, many feel they have adequately been prepared to carry out the responsibilities of their job until they are faced with accusations of not providing appropriate services and are confronted with a lawsuit.

Presently one of the areas of greatest controversy in school systems is the development of intense educational services for all students, particularly those with an ASD (Jacobson, 2000). As stated before, many administrators have extensive training and practice in overseeing and delivering the best educational practices for nondisabled students. However, the diversity of needs students with ASDs have can be challenging, especially without knowledge about the disorder. Educating students with autism requires an understanding of the unique social, cognitive, sensory, and behavioral deficits that characterize the development of this disability (Mesibov & Shea, 1996). Administrators help students, staff, and community understand how a student with ASD learn. However, without a true understanding from a background in
specialized training or a prior interaction and experience with these students, it may be difficult for school administrators to encourage and support the students in their educational journey (Weller, 2012).

One of the main focuses of a school administrator is to ensure students with disabilities receive a free and appropriate education designed to meet their individual needs. In order for this to occur administrators must have knowledge of students needs in order to allocate the resources necessary to realize positive outcomes (Hughes, Combes, & Metha, 2012). As more children with ASDs are served in the public-school system administrators’ knowledge of the students will impact what types of instruction, resources, and related services are made available for developing academic and functional skills (Hughes, et al., 2012). Therefore, it becomes necessary for school administrators to have knowledge and training about students with autism to ensure that they are receiving a free and appropriate education within the least restrictive environment.

As more children with ASD enter into the public-school system, school personnel need to be prepared with the knowledge and skills to meet the complex needs of these learners. It is essential that they engineer components for effective instruction as well as implement interventions with fidelity and precision. According to Simpson, McKee, Teeter, and Beytien (2007), “Indeed there is a general consensus that only by qualified professionals using effective methods in an approved fashion will optimal student outcomes be achieved” (p. 203). Although all personnel within a school system hold responsibility for achieving positive student outcomes, the school administrator plays a vital role in this process (Hughes, 2010). Administrators also play a critical role in creating a positive school culture that is accepting of all students. The attitude that the principle has about students with disabilities, and especially students with an
ASD, can impact the overall function of the school as well as impact these students as learners (Pazey, et al., 2014). Principals are essential in to the implementation of the Individuals with Disabilities Education Act Least Restrictive Environment policies within their schools (Harrocks, White, & Roberts, 2008). Principals can either choose to facilitate or constrain the placement of students with ASD within inclusion classrooms. As schools become more inclusive, there is a strong need for principals who are able to clearly define and articulate a plan which incorporates and values acceptance of the students within the general education environment (Harrocks, White, & Roberts, 2008).

**Benefits of Inclusion for Students with Autism**

The concept of full inclusion is that students with special needs can and should be educated in the same setting as their normally developing peers with appropriate support services, rather than being placed in a special education classroom or school (Mesibov & Shea, 1996). Inclusion has become a major educational and psychological topic of discussion, with everyone having opinions on the issue. Recently, one of the topics of these conversations is the placement of students with autism. The general education environment has become the classroom of choice for many students with ASD. Most children diagnosed with ASD have problems in social areas such as picking up on cues from their environment and those around them, establishing and maintaining typical social relationships, and exhibiting difficulty with expressive and receptive speech (Friedlander, 2010). Many children with ASD also have problems with sensory integration and can have difficulty regulating input into the central nervous system, resulting in sensitivity to touch, sound, taste, or smell (Friedlander, 2010). The social deficits that a child with ASD has can have the greatest impact because children in schools learn to thrive and grow in their environment by watching, copying, and collaborating with
others within the classroom. However, those who have autism often fail to make social connections, and their isolation within this environment can cause them to remain inexperienced in a world of comparably savvy children and can make adolescence an unnavigable maze (Friedlander, 2010).

Thirty years ago, students with autism were excluded from typical educational settings and were labeled as not educable or trainable; many were even sent to institutions and stayed for a lifetime (Ferraioli & Harris, 2010). The continued increase of students identified with ASD has placed significant stressors on public schools and the educators that serve them (Ryan, Hughes, Katsiyannis, McDaniel, & Sprinkle, 2011). There are many points of contention between parents and school districts, such as eligibility practices and services provided, educational placement within the least restrictive environment, and instructional methodologies (Ryan et al., 2011). We now know that many people with autism will benefit more from a regular education environment than previously thought if provided with the appropriate educational environment and classroom accommodations early in their educational career. An increasing number of students with autism are being placed in regular education classrooms with the intent of enhancing social skills as well as academic development (Chanberlain, Kasari, & Rotheram-Fuller, 2007). While social and academic gains are the primary focus for including students with ASD in a general education environment, reduction of challenging and inappropriate behaviors may also be a focus (Mesibov & Shea, 1996).

The placement of these students within the general education environment is not only beneficial to the students with ASD, but it is also beneficial to the typical developing students as well. Ferraioli and Harris (2010) reported that typical children who are exposed to students with autism and other students with disabilities in the general educational environment reported
having a positive attitude toward these peers. According to advocates, the benefits of full inclusion of children with ASD greatly outweigh the negatives in that the students will learn behavior modeling from normal developing peers as well as from their teachers (Mesibov & Shea, 1996). Children benefit from positive relationships with their teachers, but children with autism may pose particular challenges to the general education teacher in building these relationships. This can be due to their difficulty with social interactions, particularly in understanding the nuances of collective behavior which may give the impression that these students are uninterested in the reciprocity of classroom learning (Robertson, Chamberlain, & Kasari, 2003).

The teacher/child relationship can affect the child’s social status within the classroom; therefore, it can be determined that children who have a close, warm, and communicative relationship with teachers are considered more socially acceptable by their peers (Simpson, Boer-Ott, Myles, 2003). In order to improve the inclusionary practices of both regular education and special education teachers, educators need to consider that children with autism are generally rigid in their thinking and behaviors, and that once they understand a specific concept, these children tend to access related information within the confines of that concept. It would be beneficial for the staff to have an understanding of child development and to be able to adapt their knowledge and skill to suit individual students and situations (Guldberg, 2010). It is important to note that children with ASD will develop in a different way to their typically developing peers, and, while some aspects of development will follow the same pathway stages, others will follow a completely different order or may be omitted altogether (Frith, 2003).

To understand how a child with autism functions in a social environment, the teacher must establish an effective method for describing and reinforcing the social opportunities offered
by that environment (Chanberlain, Kasari, & Rotheram-Fuller, 2007). It is up to the teacher to
determine what peer relationships are available for a student with autism in the regular education
classroom and how these relationships will influence the child’s status within the classroom. As
stated, the relationship between a teacher and a student with autism can impact their social status
within a classroom and the school; it will also impact their understanding of these students as
learners. Just as it is important for a teacher to understand how a student with autism learns and
functions within a school environment, it is equally as important for the school administrator to
understand how these students learn.

**History of Autism and Special Education**

One might think of autism as a new problem because it has become so much more
prevalent in recent years. However, autism has been acknowledged for more than seventy
years—and our thinking about the condition has changed dramatically during that time (Sole-
Smith, 2014). In 1943 American child psychiatrist Leo Kanner, M. D. describes eleven children
who are highly intelligent but display “a powerful desire for aloneness” and an “obsessive
insistence on persistent sameness” in his landmark paper *Autistic Disturbances of Affective
Contact* (Sole-Smith, 2014, para. 3). Kanner first coined the term “autistic” from *autos*, the
Greek word for self, “representing the extreme aloneness seen in children with autism” (Sewell,

In 1944 a German scientist named Hans Asperger describes a milder form of autism
recently known as Asperger’s syndrome (Sole-Smith, 2014). In the case Asperger described, he
reported that all the subjects were male, highly intelligent, but had trouble with social interaction
and demonstrated specific obsessive interests. Infantile autism is listed in the 1980 *Diagnostic
and Statistical Manual of Mental Disorders* (DSM), separating autism from childhood
schizophrenia. The DSM replaces infantile autism with a more expansive definition of autism disorder in 1987. Finally, in 2013, the DSM-5 folds all subcategories of autistic-like conditions into one umbrella diagnosis of autism spectrum disorder (Sole-Smith, 2014).

The history of special education is demonstrative of not only how far education has come, but also what lies ahead in terms of our national special education legislation, policy, and advocacy. While the foundations of these laws and regulations rest primarily on our nation’s education history, the strides made in special education advocacy and policy were primarily established through the passing of P.L. 94-142, more commonly known as the Education for All Handicapped Children Act (EHA). Before the enactment of P.L. 94-142 in 1975, children with disabilities had limited educational opportunities (Itkonen, 2007; Mattingly, 2001; Moody, 2012).

Prior to EHA, many handicapped children were educated within the confines of state mental institutions. Students in these institutions were given the basic needs of life in order to simply exist. Unfortunately, students with ASD were not given educational benefits, and, most of all, they had no hope for any semblance of an independent life (U.S. Department of Education, 2010). According to the U.S. Department of Education’s report in 1967, more than 175,000 children with disabilities were housed in state mental institutions because education within the public educational system was not allowed. The passing of EAH provided local and state support as well as protection to the children and youth with disabilities, as well as to their families. This law ensured federal funding for equal access to education for children with physical and/or mental disabilities. EAH requirements also provided parents and families the necessary support systems to guarantee their children received appropriate and adequate services, along with the resources needed to dispute decisions made on behalf of the child. Even though
federal law had been passed requiring schools to permit children with disabilities to obtain a free and public education, the treatment of the children in the schools did not change directly due to the law. It did not occur until outraged parents made a splash in the public sphere with a series of three lawsuits (Raiti, 2014).

Since the passing of EAH in 1975, many changes have occurred within the special education realm. The original law was renamed to Individuals with Disabilities Education Act (IDEA) in 1997. It was during this reauthorization that autism spectrum disorder appeared as a separate category. Prior to 1997, autism was not listed as part of the educational guidelines that PL 94-142 covered (Thacker-King, 2015). The Individuals with Disabilities Education Act of 1997 requires every state to have policies and procedures in effect to ensure a free appropriate public education (FAPE) for all students with disabilities (U. S. Department of Education, 2001). The IDEA amendments provided children and youth with disabilities access to a higher quality of education related services, ensuring that students with disabilities received access to the most appropriate education within the least restrictive environment (Thacker-King, 2015).

In 2004, the Individuals with Disabilities Education Act of 1997 was reauthorized and once again renamed as the Individuals with Disabilities Education Improvement Act (IDEIA, 2004). This reauthorization included children who can be identified as early as their third birthday and greatly affected diagnosis as well as services provided to students with autism, allowing services to be provided at an earlier age. According to IDEIA, parents must be included in every step of the identification, testing, and placement process under the umbrella of special education (Thacker-King, 2015). For example, parents are notified when students begin the Response to Intervention (RTI) process prior to IDEIA testing (IDEA- the Individuals with Disabilities Education Act, 2012).
Diagnosis and Characteristics of Students with Autism

ASD is a heterogeneous condition with no single pathognomonic feature (Yates & Couteur, 2008). Diagnosis can be challenging as affected individuals display variation in the degree of behavioral severity, language and intellectual abilities across the three developmental domains, but their behavioral profiles can also change with age (Yates & Couteur, 2008). Since first described by Kanner, much has been learned about the diagnosis and treatment of students with autism. Initial reports suggested that the prognosis was extremely poor in children with autism and the children were considered resistant to treatment (Freeman & Cronin, 2002). However, with today’s knowledge of ASDs early diagnosis practices and many supplemental and related services available to these students, the prognosis for children with a spectrum disorder is currently very good. One can now point to the relation between autism and other defined disabilities; for example, some children have trouble learning math or reading, and children with autism have trouble learning social communication skills (Freeman & Cronin, 2002).

Since children with autism benefit from early intervention, the need for early identification and diagnosis has become increasingly important for these children. However, few disorders seem to be more confusing than autism; the complexity of the diagnosis process and the early onset diagnosis between eighteen and thirty months of age mean many children with autism are often first misdiagnosed with other similar disabilities (Wei, Wagner, Christiano, Shattuck, & Yu, 2013). Autism Spectrum Disorder is a pervasive neurodevelopmental condition characterized by a triad of qualitative impairments in the areas of social interaction, communication, and restricted patterns of behavior and interests (Hashemian
& Pourghassem, 2014). Even though these deficits are consistent across those diagnosed with ASD, the severity of the symptoms vary considerably from child to child.

With the number of students being diagnosed with an ASD steadily increasing, a correct diagnosis of a child with an ASD depends on first understanding the way a typical child develops. In the first three to four years of life, typical children make tremendous developmental strides (Freeman & Cronin, 2002). They learn to regulate states of arousal, gain physical coordination, and develop increasing knowledge about persons and objects in the world (Maggi, Irwin, Siddiqi, & Hertzman, 2010). While individual physical growth patterns may vary, most typical children reach developmental milestones at an even rate, and all areas of development are intimately related (Maggi, et al., 2010). Developmental milestones in a child with ASD may be difficult to determine. Is the delay caused by a spectrum disorder or are they just behind their same aged peers? This confusion can be due to the fact that some of the symptoms are not readily apparent until a child is past three years of age (Freeman & Cronin, 2002).

Until recently, diagnosis most frequently occurred when the child reached school age (five to seven years of age). However, efforts are being made to push that age down to younger children as early as eighteen months. There is no consensus on when the best time would be to start treatment. Most researchers simply say the earlier the better (Matson & Goldin, 2014). Despite the average age of diagnosis being four to five years of age, a variability of assessment pathways is broadening the spectrum to include higher functioning individuals who tend to present deficits later due to factors such as the lack of recognition of subtle differences at a young age (Yates & Couteur, 2008). For example, a preschool child may have a referral initiated due to concerns with their speech; a child who is high functioning with adequate language skills
may present difficulties later with peer interaction which becomes more apparent as academic and social demands increase (Yates & Couteur, 2008).

According to IDEIA (2004), autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident after age three and will adversely affect educational performance. IDEIA (2004) states that the term does not apply if a child’s educational performance is adversely affected primarily because a child has a serious emotional disturbance. It must be determined that there are no other mental impairments such as an Intellectual Disability or an Emotional Behavior Disorder that is causing these children to have delays in their social and communicative performance. In diagnosing a student with autism, one must follow a very strict and stringent diagnostic criterion that first demands an understanding of typical child development before determining if a child suspected of having an ASD is not developing as typical peers. The rigid and rigorous diagnostic criterion requires a person understand the exact standards being used to diagnose a student with ASD in order to make educational placement decisions about that student.

The rigid and rigorous criterion poses another level of complexity. The Diagnostic and Statistical Manual of Mental Disorders (DSM-V) defines a person with an Autism Spectrum Disorder, 299.00 (F84.0), as having:

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history

1. Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.
2. Deficits in nonverbal communicative behaviors used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication.

3. Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.

Severity is based on social communication impairments and restricted repetitive patterns of behavior.

B. Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following, currently or by history (examples are illustrative, not exhaustive; see text):

1. Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases).

2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns or verbal nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat food every day).

3. Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interest).
4. Hyper- or hypo-reactivity to sensory input or unusual interests in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).

Severity is based on social communication impairments and restricted, repetitive patterns of behavior.

C. Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life).

D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.

E. These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay. Intellectual disability and autism spectrum disorder frequently co-occur; to make comorbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.

ASD is clearly a subjective and varying disorder which makes it difficult to clearly identify. The ambiguity and complexity of the DSM-5 render it an unfriendly diagnostic criterion for non-medical professionals to use. Church (2009) more clearly defines easily observed characteristics that those with a possible spectrum disorder can have leading to a diagnosis of an ASD. According to Church (2009), parents should contact medical personnel for further testing if a child:

- Does not smile or use other warm, joyful expression by 6 months.
• Does not engage in a back-and-forth sharing of sounds, smiles or other facial expressions by age 9 months.
• Does not babble, point or make meaningful gestures by age 1
• Does not speak 1 word by age 16 months.
• Does not combine 2 words by age 2 years.
• Loses previously gained language or social skills.
• Has poor eye contact.
• Does not seem to understand how to play with toys, is attached to 1 specific toy or object, excessively lines up toys or other objects or a combination of these.
• Seems to be hearing impaired (e.g., a child may not respond to his name but may instead overreact to small inconsequential sounds) (p. 527).

Summary
Principals in today’s schools are tasked with the responsibility of educating all students within the least restrictive environment. The purpose of this study is to contribute to the body of research surrounding secondary principals’ perceptions toward the inclusion of students with autism in a general education environment. Although there has been some research and discussion regarding this topic, there is very little information that identifies the variables and their impact on principals’ perceptions in West Virginia. This literature review has identified past variables conducted in other studies as well as added data to the body of knowledge which can impact perception of inclusion for students with autism. An adequate evaluation of the perceptions of school principals is vital because of federal regulations mandating all students have access to a free and appropriate education within the least restrictive environment (Chandler, 2015).
In social psychology, the term “person perception refers to the different mental processes that people use to form impressions of others” (Akdag, 2015, p. 454). This term includes how they form these impressions, and the different conclusions they make about other people based upon their impressions. In schools, the principal’s perception is very important, in that it determines the effectiveness and the overall climate and acceptance of the school environment. The principal’s perception is often portrayed through their actions and the decisions that they make. With the ever-changing educational system and the push to include more students with disabilities within a general education setting, the principal’s attitude toward inclusion in very important. Research has shown experience with individuals with disabilities is related to positive perceptions toward including these students within the regular education environment (Workman, 2016). To favor inclusion, a principal should have previous and noteworthy experience with disabled students insofar as such an experience is associated with more positive attitudes toward these children, thus predisposing administrators to adopt the philosophy, principles, and practices of inclusion schooling (Schmidt & Venet, 2012).

Albert Bandura proposed a social learning theory on how people learn new behavior from observational learning of the social factors within the environment (1977). According to research conducted by Praisner (2003) and Hesselbart (2005), there is an impact on the principal’s perception concerning the inclusion of students with ASD; therefore, those principals who have a negative attitude about students with ASD will place fewer of these students within inclusion classrooms. One conclusion that can be drawn about the research on inclusion is that it is a federal mandate that will work for all children (McKelvey, 2008). Therefore, two dominant but contradictory perspectives can be identified within inclusion literature about least restrictive placements for student with autism (Allen, 2008; Cigman, 2007). The first perspective might be
designated as a rights-based perspective that argues for an end to all educational practices that will segregate any student from the regular education classroom and calls for the inclusion of all children within a mainstream school (CSIE, 2008). The second predominant perspective of educating students with autism within an inclusion classroom can be defined as a needs-based perspective. These two perspectives present very different interpretations of what inclusion means and how it should be enacted (Ravet, 2011).

A person’s perception is how they process information from the environment and define it in order to give meaning to the world around them. Alfred Adler developed a theory called cognitive dissonance that suggests a person’s thoughts, feelings, and behaviors were transactions with one’s physical and social surroundings and that the direction of influence flowed both ways—our attitudes are influenced by the social world and our social world is influenced by our attitudes (Borkowski, 2005). Dissonance occurs when new learning or ideas are presented that conflict with what is already known. According to the cognitive dissonance theory a person’s perceptions define their reality, and behavior is based on what one believes to be real; therefore, perception is the path to belief, and one usually acts upon belief (Colaianni, 2015). Perception is very important in understanding human behavior because people act on what they perceive to be reality, and this is no different for school principals. For a principal to be labeled as effective, they must be perceived as having the ability to make important decisions that will affect the well-being of others. Knowing what their perception is and having vision that extends to the external environment is especially important during times that are characterized by rapid change.

One example of the rapid change principals face in education is the push to include more students in the regular education environment. In examining how a principal’s perception of inclusion can impact the decisions that they make regarding placement, McKelvey (2008) stated,
the success or failure if an inclusive classroom depends on the perspectives and beliefs of the school-based administrator. In most districts, the building level administrator are the personnel responsible for the daily supervision of special education department and placement decisions (Horrocks, White, & Roberts, 2008). While many principals feel ill prepared to make decisions regarding students with disabilities, modeling a positive collaborative approach that advocates the success for all students can influence the success of inclusive programs.

With the increasing demands placed on school administrators based on the No Child Left Behind federal mandate of 2001, many principals can at times become overwhelmed. As the instructional leader, the principal has direct influence over the programs and resources implemented in the school (Vazquez, 2010). Until the 1970s, the principal’s job was quite clear, although narrowly defined: principal’s serve as “building managers and student disciplinarians” (DiPaola & Walther-Thomas, 2003, p.7). In recent years, with the (NCLB) legislation, the role of the principal shifted toward being the instructional leader within their school with the responsibility of education all students, even those with disabilities. New principles report being unprepared to begin their responsibilities as a school leader (Petti ew, 2013). However, as new administrators become more comfortable with their job, staff, and the everyday flow of the school they will begin to branch out to look at other options for placement of students with disabilities (Parker, 2016). Effective leaders know their own professional strengths, interests, and weaknesses. Over time effective administrators will strive to expand their knowledge to better improve the practice, and many times increasing their knowledge of special education is at the top of the list.

Under the Individuals with Disabilities Education Act (IDEA), states must set forth policies and procedures demonstrating they have established adequate educational opportunities
for all students with disabilities (McElhinny & Pellegrin, 2014). It is the responsibility of the classroom teacher to implement services and accommodations within the classroom for students with disabilities; however, it is the building level administrator’s responsibility to coordinate resources and schedules to ensure the classroom teachers have the resources available to meet the needs of these students. The building principal plays a key role in collecting data from various experts while at the same time providing open lines of communication which will allow all services to come together (Hozien, 2016). At times, the task of overseeing IEP meetings can be difficult; however, principals with larger numbers of students with disabilities in their building are more comfortable with managing this process.

With the prevalence rate of autism increasing there is a rising concern relating to the lack of training on these students’ administrators have received prior to obtaining their position. The state of West Virginia requires that all administrators take a minimum of three semester hours of coursework in the identification and education of children with disabilities (West Virginia Department of Education, 2016), and many times administrators are only receiving the minimum required hours. Most administrators received specific training in their educational leadership courses on the day-to-day operations and functions of the school; however, administrators find themselves spending most of their day working on a special education related issue (Smith, 2011). One of the main focuses for school administrators is to ensure that all students, especially those with disabilities receive a free and appropriate education designed to meet their individual needs. This task can at times be difficult for those administrators who have limited knowledge and background in working with the diverse needs of these students.

The placement of students with disabilities especially those with ASD within a regular education classroom has become the placement of choice for many schools around the country.
Just thirty years ago, students with autism were excluded from typical educational settings, and were labeled as not educable or trainable; many were even sent to institutions and stayed for a lifetime (Ferraioli & Harris, 2010). According to advocates, the benefits of full inclusion for children with ASD greatly outweigh the negatives, in that students will learn behavior modeling from normal developing peers as well as from their teachers (Mesibov & Shea, 1996). Although, the focus for students in a general education classroom is academic gains many students with ASD will benefit from observing peer interactions, and may decrease negative behaviors (Chanberlain, Kasari, & Rotheram-Fuller, 2007).

Due to the prevalence rate of autism increasing one might think that autism is a new problem; however, it has been around for more than seventy years. The first law that gave children with disabilities equal rights to education was the Education for All Handicapped Children Act of 1975. Prior to this act many students with disabilities were educated within confines of state mental institutions. In 1997 EAH was renamed to Individuals with Disabilities Education Act (IDEA). It was during this reauthorization that and autism spectrum disorder appeared as a separate category. In 2004, the Individuals with Disabilities Education Act of 1997 was reauthorized and once again renamed as the Individuals with Disabilities Education Improvement Act (IDEIA, 2004). This reauthorization included children who can be identified as early as their third birthday. With early intervention being the best treatment for student with ASD, many children are not diagnosed until later in life, when they reach school age. With the myriad of problems student with ASD have, diagnosis and treatment can at times be difficult. There is no consensus on when the best time would be to start treatment. Most researchers simply say the earlier the better (Matson & Goldin, 2014).
With the rising number of students with ASD in today’s schools, providing free and appropriate education within the least restrictive environment has come to the forefront. The instances of autism are increasing, and the students are being placed in the least restrictive environment, the general education classroom, as a starting point. The perceptions of secondary school principals and the factors that impact these perceptions is becoming more important as the number of students with autism is increasing. The focus of this study was on the perceptions of secondary level administrators of students with ASD as related to inclusion. Research has been conducted over the years on the perceptions of elementary principals of inclusion (Hesselbart, 2005; Praisner, 2003), but the connection to students with autism is lacking. Chapter Three will present an overview of the research design that will be used in this study, as well as how the data will be statistically analyzed. The research questions, as well as the null hypotheses will be presented, along with the methods and design. The participants and the setting will be stated as well as the data collection methods.
CHAPTER THREE: METHODOLOGY

Design

Substantial attention has been given to teacher’s perceptions about inclusion practices. Even though there has been much attention given to teachers’ perceptions of inclusive practices, few researchers have focused on principals’ perceptions toward inclusion, with only a small number of studies being published in the past six years (Ball & Green, 2014; Farris, 2011). Praisner (2012) conducted a research study on principals’ perceptions and found that they were more likely to be accepting of inclusion practices if they had training and knowledge of developmental disabilities. McKelvey (2008) conducted a study to examine secondary principals’ perceptions toward inclusion of students with autism and found that the principals who had background training through their graduate training credits on inclusion and autism practices demonstrated a greater likelihood to include students with autism within the general education classroom. They also tended to have a more positive view toward inclusion in general.

The purpose of this study is to contribute to a body of research surrounding the perceptions of secondary school principals toward the inclusion of students with ASD in the general education environment. To meet this goal, a quantitative research study will be conducted using a causal-comparative design. The population to be studied is school-based administrators at the secondary level in West Virginia. The researcher is trying to determine if years of experience, graduate level credits, and number of students with IEPs in the building are affecting secondary school administrators’ perceptions about inclusionary practices for student with ASD in this study.

Chapter Three is separated into four major sections: research method and design, participants and setting, data collection including rationale, and data analysis. The independent
and dependent variables are defined; an assurance of content validity and reliability is shared. Within the research method and design section, discussions of and support for the quantitative research methods and causal-comparative design are addressed. Next, the section of participants and setting, data collection procedures and rationale focus of participants, number of participants, and instrument that will be used for data collection is presented. After the population is defined and the sampling is discussed, the reliability and validity of data collection will be addressed. The last section of the chapter will be data analysis and the identification of the data analysis which will be performed, as well as a description of the appropriateness to the causal-comparative design.

**Research Questions**

Workman (2016) conducted a research study that measured the attitudes of principals and assistant principals toward the inclusion of students with ASD in a rural region of Virginia. The results of this study concluded that principals have a very neutral attitude for student with ASD. However, they do tend to favor a more inclusive placement of these students within their schools. Previous researchers have indicated that principals play a key role in implementing successful and effective inclusive programs (Chandler, 2015). However, there remains a gap in the literature regarding the attitudes of principals and assistant principals at the secondary level toward including students with autism within a regular education environment. Therefore, this study will contribute to the body of research surrounding the perceptions of secondary school principals toward the inclusion of students with ASD in a general education environment with a quantitative research using a causal comparative design. The following research questions will be addressed:
RQ 1: What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of special education credits they took in their administrative training programs?

RQ 2: What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of years as an administrator?

RQ 3: What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of students with IEPs in their building that are in regular education classes for at least 50% of their day?

The research questions focus on identifying commonalities of secondary school-based administrators regarding the number of special education credits they took, years as an administrator, number of students who have IEPs and if their perceptions of inclusion are affected by these variables.

Hypotheses

The hypotheses provide specific ideas about the relationships between the secondary school administrators’ graduate course work in special education, years as an administrator, and number of students who have IEPs and if their perceptions of inclusion are affected by these variables. Ramirez (2006) conducted research on 110 elementary school principals in the state of Texas. The results from this study indicated that demographic factors, training, and experience did not have a statistically significant effect in principles’ attitudes toward inclusion. However, the study did find that a principal’s special education teaching experience had statistically significant effect in principles’ perceptions toward inclusion. The results from this study indicated the importance of developing educational administrative programs in preparing school principals to demonstrate more positive attitudes toward including students with
disabilities in the general education setting (Ramirez, 2006). Therefore, to strengthen his body of knowledge the following null hypotheses will be tested:

Null Hypothesis 1: There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principal’s Perception of Autism Inclusion Survey who have taken 10 or more special education credits in their administrative graduate training credits to those who did not.

Null Hypothesis 2: There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principal’s Perception of Autism Inclusion Survey who have 11 or more years of experience being an administrator and those who do not.

Null Hypothesis 3: There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principal’s Perception of Autism Inclusion Survey who have more than 21 percent of their students with IEPs in regular education classrooms for at least 50 percent of their day and those who do not.

Method and Design

Method

A quantitative method uses “a description of trends and relationships, whereas, a qualitative research uses an exploration and understanding of a central phenomenon” (Creswell, 2013, p. 50). A qualitative study was not chosen as the research method because this research is not trying to understand other people’s perspectives and motivations; it is trying to determine if there is a difference between years of experience, graduate level credits, and number of students
with IEPs in the building of secondary school administrators and their perceptions toward inclusionary practices of student with ASD. A quantitative method will be used in this study to address the research problem that requires a description of trends or an explanation of the relationship among variables. The research problems being discussed are on perceptions of secondary school administrators and the inclusion of students with ASD. A description of trends is the placement of students with ASD in the general education classroom, and the variables in the study are the secondary school administrator’s years of experience, graduate level credits, and number of students with IEPs in the building with students with ASD. This study will attempt to establish an overall tendency and pattern of responses given by secondary school administrators in terms of their years of experience, graduate level credits, number of students with IEPs, and their perceptions toward inclusion of students with ASD.

Data will be collected using the Principal’s Perception of Autism Inclusion Survey (PPAIS) (see Appendix C). The data collection tool, PAAIS, will be used to address the variables of principals’ perceptions toward inclusion of student with autism, the demographics of the schools, and the backgrounds of the secondary school administrators. The selected data that will be collected and measured will be perceptual, because the study involved identifying and assessing the perceptions of secondary administrators toward inclusion practices. After the demographic information section, the tool was designed to indicate the perception toward inclusion of students with ASD.

Performance tools, observation, and factual information will not be selected to identify and measure the perception of secondary school administrators toward inclusion of students with ASD. Performance tools would involve concentrating on the growth of an individual person or comparing one person to another. Observation would involve according individual behaviors,
not measuring the attitude of secondary school administrators. Factual information would involve recording information about a sample population. The data tool PAAIS, is a modification of McKelvey’s Administrator’s Autism Inclusion Survey, which is a modified tool of Praisner’s Principals and Inclusion Survey.

**Design**

Praisner (2003) and Hesselbart (2005) used a correlation design to research and concluded that a relationship exists between (a) inclusion and the attitude of elementary principals and (b) the attitude of the administrator toward inclusion and the impact of administrator preparation. To further expand and continue their research on the importance of the perception of administrators, this causal-comparative study will examine if an administrator’s years of experience, graduate level credits, and number of students with IEPs in the building will affect their attitude about inclusionary practices of these students.

A causal-comparative design was used to determine if a cause and effect relationship exists between one factor or sets of factors (Creswell, 2013). In this study, a causal-comparative design was used to show the relationship between two variables. The independent variables in the proposed study are (1) secondary school administrators’ years of experience (2) graduate level courses, (3) number of students with IEPs in their building. The dependent variable to be measured is secondary school administrators’ perceptions toward students with ASD in inclusionary practices. The relationship was examined, and the years of experience, graduate level credits, and number of students with IEPs in the building of the secondary school administrator were measured. The purpose of this study is to determine if one variable causes the other.
Appropriateness of Design

A causal-comparative study is used to determine if a relationship exists between one factor or set of factors (Creswell, 2013). The variables in the study are (a) years of experience, (b) graduate level credits, (c) number of students with IEPs in the building (independent variables) and (d) perceptions of secondary school administrators and inclusion practices of student with ASD (dependent variable). The independent variables show the affect with the dependent variable, the perceptions toward autistic students included in the general education classroom.

Participants and Setting

Since the present policy set forth by the state of West Virginia supports inclusion for most students, the researcher is trying to determine if years of experience, graduate level credits, and number of students with IEPs in the school building are affecting secondary school administrators’ perceptions about inclusionary practices for student with ASD. In 2000, 326 or 0.65 percent of children ages 3-21 who received special education services in West Virginia were diagnosed with autism. In 2014-2015 1,848 or 4.18 percent of children with disabilities ages 3-21 who received special education services were diagnosed with autism (West Virginia Department of Education, 2016). Although there has been some research and discussion regarding the importance of principals’ perceptions toward the inclusion of students with autism in the general education environment, there is very little that identifies the current state of those perceptions in West Virginia. Since the present policy set forth by the state of West Virginia supports inclusion for most students, examination is necessary to contribute to the body of knowledge surrounding how principals’ perceptions in West Virginia can impact the placement of students with autism.
The sampling will consist of schools that practice an inclusion model. The inclusion model, as defined for this study, includes students who spend 50 percent or more of their time within a general education classroom. Inclusion models are inconsistent from school to school as well as from middle school to high school based on personnel availability, school size, and number of students with ASD that are in the school. The general education classroom can be defined as any of the core content areas such as English, math, science, and social studies. A general education class can also be defined as any classroom that has 75 percent or more of the population without an individualized education plan. These can also include related subjects such as art, physical education, computer integration classes, and music related classes (band & choir). The students who have ASD in the schools were diagnosed with autism spectrum disorder by a clinical psychologist or a certified school psychologist. Students identified by the schools’ IEP teams are on track to receive a regular or modified diploma.

The secondary level administrators are from public schools within West Virginia with students in grades 6-12. The breakdown of the schools can either be classified as middle schools with grades 6-8, high schools with grades 9-12, elementary schools with grades K-8 with the focus of this research on grades 6-8, or schools that have both middle and high schools within the same building incorporating grades 6-12. The administrators were selected from a list of schools provided by the West Virginia Department of Education (WVDE). The secondary school administrators were contacted by email (see Appendix A) to confirm participation. The willing participants who responded to the email were randomly selected by being assigned a number and then the researcher randomly selected a number that corresponded to an administrator. The researcher then sent an email containing a link to the survey.
There are currently 653 secondary level administrators in the state of West Virginia; this number includes both principals and assistant principals. Therefore, the population for this study consists of 653 secondary level administrators. The administrators are responsible for the placement of diploma and non-diploma track students with ASD into the general education classroom. The participants included principals and assistant principals. Questionnaires were distributed to 150 of those who agreed to participate in the survey after the initial email, with an anticipated return rate of 90 percent or 135 responses. The expected number of 135 responses is above the minimum number of respondents for this study’s effect size.

**Data Collection**

**Instrumentation**

The instrument to be used in the study is a modification of the Administrators Autism Inclusion Survey (AAIS), which was designed and used by McKelvey (2008). McKelvey’s instrument was a modified version of the Principals and Inclusion Survey (PIS), survey designed and used by Praisner (2003) and Hesselbart (2005). McKelvey (2008) used a quantitative study with a correlational design to determine the relationship between the attitudes of school-based principals toward inclusion of students with autism and Asperger’s disorder. The section on Asperger’s was removed in the current survey because Asperger’s is no longer a DSM-5 diagnostic category.

The original questionnaire by McKelvey (2008) included four sections: (a) demographics, (b) training and experience, (c) attitudes toward inclusion, and (d) beliefs about most appropriate placements. The current questionnaire also includes four sections: (a) demographics, (b) training and experience, (c) attitudes toward inclusion, and (d) beliefs about most appropriate placements for students with ASD. The questions on the instrument are closed-
ended with predetermined choices. Within the sections of training and experience, questions that pertain to Asperger’s syndrome were removed from McKelvey’s (2008) survey.

Section I of the AAIS questionnaire was developed by Praisner (2003) and used by McKelvey (2008) to identify the demographic information including six questions on the population of the school. Section II includes fourteen questions about the training and experience of the school-based administrator. Section III of the survey is taken directly from McKelvey’s (2008) survey; however, the section on Asperger’s syndrome was omitted. Section III is in the form of a Likert-type scale measuring perceptions toward inclusion of students with autism. The section measured the perceptions of the secondary administrator using a five-point Likert-type scale. Within section III, the school-based administrator will respond to ten statements that measure the perceptions toward inclusion of students with ASD with a five-point Likert-type scale ranging from strongly agree to strongly disagree; the middle ground of uncertain separated the agree from disagree. Section IV, the last section of the questionnaire, requires that the administrator select the most appropriate placement for students with ASD on the diploma or non-diploma-track. The section was designed to measure the administrator’s beliefs about the most appropriate placement for these students. The respondent will choose one out of six placements that is most appropriate for the defined population of students with ASD, which are: special education services outside regular school, special class for most or all of the school day, part-time special education class, regular classroom instruction and resource room, regular classroom instruction for most of day, and full-time regular education with support.

The placements are the federal-identified continuum of services for special education. The questionnaire was selected because it identifies and measures the perceptions of administrators in regard to inclusion models, a goal of the study. Other questionnaires do not
measure the perceptions of principals toward inclusion practices regarding their years of experience, graduate level credits, and number of students with IEPs in the building.

**Reliability and Validity**

The Principal’s Perception of Autism Inclusion Survey (PPAIS) was a modified tool from Praisner’s (2003) Principals and Inclusion Survey (PIS) and McKelvey (2008) Administrators Autism Inclusion Survey (AAIS). Section I relates to demographic information of the school itself. The questions include the number of students in the building, the size of classes and the percent of students with IEPs. In addition, the percent of students in inclusion, the percent of students with autism and the percent of students with autism that were in inclusion are questions within the demographic information.

Section II includes fifteen questions that Praisner (2003) developed from a review of inclusion literature. Praisner presented the questions in Section II to a panel of professors to review, analyze, and evaluate. The questions in Section I and Section II model the original questions of Praisner (2003) and Hesselbart (2005) with clarification of the term autism. Validity and reliability of Section I, Demographic Information, and Section II, Training and Experience, of the tool were pre-established by Praisner (2003) and Hesselbart (2005). The repetition of the PIS tool in two different states by two different researchers, Praisner (2003) in Pennsylvania and Hesselbart (2005) in Ohio, added to validity and reliability for Section I and Section II of the instrument. McKelvey (2008) added the sections on autism within Section I and II.

**Validity**

Questions in section III of the Principal’s Perception of Autism Inclusion Survey (PPAIS) tool (Appendix D) contained questions from Praisner’s Principals and Inclusion Survey (PIS)
tool. Questions that focused on autism was added to the PIS by McKelvey (2008), using triangulation, the tool was given to three doctoral educators to determine content validity. The four-point scale Content Validity Index (CVI) was used to rate the categories of relevance, clarity, simplicity, and ambiguity. The score for relevance was 4, clarity was 3.5, simplicity was 4 and ambiguity was 3.75. The rated items were used in the survey. Survey items that were added with a total score of 3 out of a possible 4 were used, survey items with a total score of 2 out of 4 would have been modified, and survey items with a total score of 0 or 1 out of 4 would have been removed. Seventy-two survey items with a CVI of .75 (¾) or more were used without modifications. No survey items were removed or modified.

Validity of Section III, Attitudes toward Inclusion of Students with Autism, and Section IV, Most Appropriate Placements for Students with Autism, have validity determined through Cronbach's alpha with a reliability coefficient of .70 or higher. Section IV, Most Appropriate Placements for Students with Autism, was established by McKelvey (2008) for this study by using the federal accepted placements for students. Section IV includes the federal possible placements for education of students; the validity is considered excellent because there are no other options for placement.

Reliability

Section III includes questions, according to Praisner (2003), that were adapted by Stainback (1986) from the *Autism Attitude Scale for Teachers*. The questions were constructed to be evenly distributed in terms of positive or negative in tone (Praisner, 2003). A Pearson product moment correlation coefficient with a split-half correction factor will be used as an analysis of reliability for Section III. The split half correction factor measures the degree in which the items on the questionnaire reflect the same constraints. Split half correction is a result
of splitting the indicators (items on the questionnaire) into two groups to determine if the same results are produced for each group. The coefficient is reported as 0.899 for the section. Section III incorporates the responses developed by McKelvey for the study Relationship Between Attitudes of School-Based Administrators and Inclusion Practices of Students with Autism/Asperger’s (McKelvey, 2008). Section IV includes the federal possible placements for education of students; the reliability is considered excellent because there are no other options for placement.

**Informed Consent**

The researcher provided informed consent. The secondary school administrator responded to an email sent by the researcher (see Appendix A). After the secondary school administrator response to the initial email stating that they will be willing to consent to participate in the study a response email was sent to those willing participants (see Appendix C) containing the link to the PPAIS. The informed consent included an introduction, purpose of the research, and statement of confidentiality (McKelvey, 2008). The email response acknowledged agreement by the responder to participate in the study by completing and returning the Principal’s Perception of Autism Inclusion Survey (see Appendix D).

**Confidentiality**

To ensure confidentiality, the researcher stored the data on external hard drive. Only the researcher and a statistician have access to the data (Chandler, 2015). The secondary school administrators who agreed to participate were the only ones to whom the email responses were sent (McKelvey, 2008). There is no place for the name or a method to identify the administrator on the survey (McKelvey, 2008). After receiving an email stating that they will participate, administrators received a response email containing a link for the PAAIS, and the results were
tabulated using the survey website. If the researcher had not received a response from one of the willing participants after one week, another email was sent containing the survey link asking for their participation.

**Procedures**

After submitting an internal review board (IRB) packet and gaining approval from Liberty University IRB review committee on March 15, 2018, the researcher executed the research. After IRB approval, 150 secondary school administrators in West Virginia were contacted through email (see Appendix A), from a list of secondary school administrators obtained from the West Virginia Department of Education to ask if they would participate in a research survey. If the total number of desired participants for the study are not received, then a second email was sent to reach the desired number of responders (n=135). The researcher then used a self-selecting random sampling method from the population of secondary administrators who agreed to participate in the study. Once the desired number of respondents was received, those who agreed to participate were sent an email (see Appendix A) with a link to Survey Monkey which contains the Principal’s Perception of Autism Inclusion Survey (PPAIS). If after one week the researcher has not received a response from one of the participants a reminder email was sent (Appendix B). The results from the survey will be tabulated by the survey site within a data base, and the raw scores will be calculated through statistical means.

**Data Analysis**

A Wilcoxon Two-Sample Z-test was used at alpha = .05 to determine if two populations means are equal (Gall, Gall, & Borg, 2007). A statistical power of .05 was used to determine if the null hypothesis is going to be rejected. There is a medium sample size of (n = 135) used with a statistical power of .7 at the .05 alpha level (Gall, Gall, & Borg, 2007). The effect size for this
study was based on Cohen's d interpretation, small (0.2), medium (0.5), and large (0.8). A Box and Whisker Plot will be employed to show the shape of the distribution, its central value, its variability, as well as any outliers in the data (Gall, Gall, & Borg, 2007). If outliers are found, they will be removed. When the data was collected, the responses were analyzed to determine if the normality and variance assumptions are met. If so, an independent two-sample t-test will be completed to determine if the hypotheses are correct. If the assumptions are not met, a non-parametric test (Wilcoxon-Mann-Whitney test) will be used.

The completed data collection tools were given to a statistician to scan using SAS v9.2 program. The researcher analyzed the data based on graduate credit work in special education, years as an administrator, and number of students who have IEPs, and perception of the secondary school administrator. The perception of the school-based administrators was measured and analyzed using measure of central tendency. The desired level of significance of the inferential statistics was 0.05. Relationships were computed to determine the significance between the independent variable and the dependent variable, as identified in the research questions and the hypotheses.

Section III of the survey tool will use a Likert-type scale summated rating. The alphanumeric reasoning of the scale includes strongly agree (1), agree (2), uncertain (3), disagree (4) and strongly disagree (5). The respondents circled the corresponding number one to five for each statement concerning perceptions toward inclusion of students with autism. The results were analyzed using measure of central tendency calculating a mean score for perception toward inclusion of students with autism. Section III, Attitudes Toward Inclusion of Students with Autism, are comprised of statements the respondents strongly agreed, agreed, uncertain, disagreed or strongly disagreed. The responses to the items in Section III of the survey were
ranked from highest to lowest; highest will be most positive toward inclusion and lowest is less positive toward inclusion. A total score for attitude was obtained for attitude toward inclusion of students with autism. The research questions were addressed and analyzed using the data that was collected from the sections of the PPAIS. The first portion of each research question identifies a component of the school-based administrators and the second addresses the inclusion practices of students with ASD using the mean score for perceptions toward inclusion of students with autism:

1. What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of special education credits they took in their administrative training programs? This question was analyzed using Section II Training and Experience of the PPAIS. The perception score was obtained from the measure of central tendency for perception toward inclusion of students with autism from section III of the survey.

2. What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of years as an administrator? This question will be analyzed using Section II Training and Experience of the PPAIS. The perception score was obtained from the measure of central tendency for perception toward inclusion of students with autism from section III of the survey.

3. What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of students with IEPs in their building that are in regular education classes for at least 50% of their day? Question three was analyzed using Section I Demographics Information of the PPAIS. The perception score was obtained from the measure of central tendency for perception toward inclusion of students with
autism from section III of the survey. Each question was correlated with the perception measurement of Section III of the survey using a measure of central tendency for perception toward inclusion of students with autism.

Summary

The research study is designed to identify a relationship between years of experience, graduate level credits, and number of students with IEPs in the building of secondary administrators and their perception of inclusion practices of student with autism. A quantitative research method with a causal-comparative design was implemented to identify and measure the perception of the school-based administrators and how their years of experience, graduate level credits, and number of students with IEPs in the building affect their perception toward inclusion of students with ASD. From the sample population, a random sample, of secondary school administrators in West Virginia was taken. The data was collected using the PPAIS, a modification of an instrument developed by Praisner (2003) for an earlier study measuring attitudes of elementary principals toward inclusion, and McKelvey (2008) for an earlier study measuring relationships between attitudes of school-based administrators and inclusion practices of student with autism/Asperger’s syndrome. Descriptive statistics and inferential statistics were conducted to respond to the research questions, and a Wilcoxon Two-Sample Z-test was used to determine the relationships between the two variables, and the perceptions of school-based administrators toward inclusion of students with ASD. In chapters four and five, the findings and a discussion of the findings will be presented.
CHAPTER FOUR: RESULTS

Overview

In the contemporary educational system, the issue of inclusion has brought about much discussion. Because the principle of the least restrictive environment (LRE) mandates that students with autism should have the opportunity to be educated with non-disabled peers to the greatest extent appropriate, the necessary components of inclusion impact all educational circles without exception (Vander Wiele, 2011). In fully inclusive settings, students with disabilities are provided with the services and supports appropriate to their individual needs within the general education classroom (Workman, 2016). Principals’ perceptions toward inclusion are based upon their experience and/or lack of experience with disabled students. Through a survey of 408 elementary school principals, Praisner (2003) determined that the more positive experience that the elementary school principal has had, the more positive the principal’s attitude is toward inclusion. 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 the 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 purpose of this quantitative research study is to contribute to a body of research surrounding the perceptions of school-based, secondary level administrators in West Virginia toward the inclusion of students with ASD in the general education setting. A quantitative research study was conducted using a causal-comparative design. The population studied was school-based administrators at the secondary level in West Virginia. The researcher determined if years of experience, graduate level credits, and number of students with IEPs in the building, are affecting secondary school administrators’ perceptions about inclusionary practices for student with ASD in this study.
The descriptive statistics included measurement of the perception of the school-based administrators using measure of central tendency. The desired level of significance of the inferential statistics is 0.05. Section III of the survey tool used a Likert-type scale summated rating. The results were analyzed using measure of central tendency, calculating a mean score for perception toward inclusion of students with autism. A total score for perception toward inclusion of students with autism was obtained. The research questions were addressed and analyzed using the data collected from sections of the PPAIS. The first portion of each research question identifies a component of the school-based administrators’ perceptions. The second addresses the inclusion practices of students with ASD using the mean score for perceptions toward inclusion of students with autism. Data were analyzed using a non-parametric Wilcoxon Two-Sample Z-test. This was done in lieu of a traditional parametric test (such as the Student’s t-test) because the outcome data was not normally distributed, and the data assumptions were not met.

Chapter Four is separated into four major sections: research questions, hypotheses, descriptive statistics and results. The purpose of this chapter is to review and discuss the statistical results conducted for hypothesis testing. In this chapter the research questions, as well as the null hypotheses, were examined. Descriptive statistical data on the gender breakdown of the population, age of the population, number of respondents in each of the categorical areas regarding special education credits, years as a secondary school administrator, and number of students IEPs who are in regular education classroom for at least 50% of the day were collected. Means and standard deviations for each of the null hypotheses were derived. The results section includes data analysis (Wilcoxon Two-Sample Z-test). The chapter concludes with a summary of the results.
Research Questions

RQ 1: What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of special education credits they took in their administrative training programs?

RQ 2: What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of years as an administrator?

RQ 3: What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of students with IEPs in their building that are in regular education classes for at least 50% of their day?

Null Hypotheses

Null Hypothesis 1: There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principal’s Perception of Autism Inclusion Survey who have taken 10 or more special education credits in their administrative graduate training credits to those who did not.

Null Hypothesis 2: There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principal’s Perception of Autism Inclusion Survey who have 11 or more years of experience being an administrator and those who do not.

Null Hypothesis 3: There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principal’s Perception of Autism Inclusion Survey who have more than 21
percent of their students with IEPs in regular education classrooms for at least 50 percent of their day and those who do not.

**Descriptive Statistics**

One hundred and thirty-five secondary school principals in the state of West Virginia participated in this comprehensive research study. Demographic information regarding the gender breakdown of the population will be presented in Table 1. Of the 135 secondary school principals who responded to the PPAIS, seventy-five or 55.56% were male, and sixty or 44.44% were female.

Table 1:

*Gender breakdown of the population*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of respondents</th>
<th>Percent of total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>75</td>
<td>55.56</td>
</tr>
<tr>
<td>Female</td>
<td>60</td>
<td>44.44</td>
</tr>
</tbody>
</table>

Demographic information regarding the age breakdown of the population is presented in Table 2. Of the 135 secondary school principals who responded to the PPAIS, one respondent or 0.74% stated that they are between the ages of twenty and thirty, twenty-eight or 20.74% said that they were between the ages of thirty-one and forty, fifty-seven or 42.22% said that they were between the ages of forty-one and fifty, thirty-nine or 28.89% stated that they were between the ages of fifty-one and sixty, and ten or 7.41% stated they were sixty-one or older.
Table 2:

**Age breakdown of the population**

<table>
<thead>
<tr>
<th>Age categories</th>
<th>Number of respondents</th>
<th>Percent of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>1</td>
<td>0.74</td>
</tr>
<tr>
<td>31-40</td>
<td>28</td>
<td>20.74</td>
</tr>
<tr>
<td>41-50</td>
<td>57</td>
<td>42.22</td>
</tr>
<tr>
<td>51-60</td>
<td>39</td>
<td>28.89</td>
</tr>
<tr>
<td>61 or older</td>
<td>10</td>
<td>7.41</td>
</tr>
</tbody>
</table>

Demographic information regarding the secondary school principals and the number of special education credits in their graduate training program are presented in Table 3. Of the 135 secondary school principals who responded to the PPAIS, thirty-two or 23.70% responded they had zero; fifty-six or 41.48% had 1 to 9; eighteen or 13.33% 10 to 15; six or 4.44% had 16 to 21; and twenty-four or 17.78% had twenty-two or more special education credits in their graduate administrative training program.

Table 3:

**Secondary school principals and the number of special education credits in their graduate training program**

<table>
<thead>
<tr>
<th>Number of graduate credits</th>
<th>Number of respondents</th>
<th>Percent of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>32</td>
<td>23.7</td>
</tr>
<tr>
<td>1-9</td>
<td>56</td>
<td>41.48</td>
</tr>
<tr>
<td>10-15</td>
<td>18</td>
<td>13.33</td>
</tr>
<tr>
<td>16-21</td>
<td>6</td>
<td>4.44</td>
</tr>
<tr>
<td>22 or more</td>
<td>24</td>
<td>17.78</td>
</tr>
</tbody>
</table>

Demographic information regarding the secondary school principals and the number of years as a secondary school administrator is presented in Table 4. Of the 135 secondary school principals who responded to the PPAIS, fifty-four or 40.00% have 0 to 5; thirty or 22.22% have
6 to 10; twenty-nine or 21.48% have 11 to 15; seventeen, or 12.59% have 16 to 20; and five or 3.70% have twenty-one or more years of experience as a secondary administrator.

Table 4:

Secondary school principals and the number of years as a secondary school administrator

<table>
<thead>
<tr>
<th>Years as an administrator</th>
<th>Number of respondents</th>
<th>Percent of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>54</td>
<td>40</td>
</tr>
<tr>
<td>6-10</td>
<td>30</td>
<td>22.22</td>
</tr>
<tr>
<td>11-15</td>
<td>29</td>
<td>21.48</td>
</tr>
<tr>
<td>16-20</td>
<td>17</td>
<td>12.59</td>
</tr>
<tr>
<td>21 or more</td>
<td>5</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Demographic information regarding the secondary school principals and the number of students with IEPs who are in regular education classrooms for at least 50% of their day is presented in Table 5. Of the 135 secondary school principals who responded to the PPAIS, thirty-seven or 27.41% indicated 0 to 20%; thirty-one or 22.96% had 21 to 40%; twenty-seven or 20.00% had 41 to 60%; twenty-two or 16.30% had 61 to 80%; and 19 or 14.07% had 81 to 100% of their students with IEPs in the regular education classroom for 50% or more of their day.

Table 5:

Secondary school principals and the number of students with IEPs who are in regular education classrooms for at least 50% of their day

<table>
<thead>
<tr>
<th>Student’s with IEPs that are in regular education for 50% of their day</th>
<th>Number of respondents</th>
<th>Percent of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-20%</td>
<td>37</td>
<td>27.41</td>
</tr>
<tr>
<td>21-40%</td>
<td>31</td>
<td>22.96</td>
</tr>
<tr>
<td>41-60%</td>
<td>27</td>
<td>20</td>
</tr>
<tr>
<td>61-80%</td>
<td>22</td>
<td>16.3</td>
</tr>
<tr>
<td>81-100%</td>
<td>19</td>
<td>14.07</td>
</tr>
</tbody>
</table>
Descriptive statistics, including the means and standard deviations, were calculated for all variables as they relate to the ten, perceptual question on the PPAIS and are presented in tables 6, 7, and 8. Ritchey (2008) notes that for continuous variables, means and standard deviations are the appropriate descriptive statistics to report. The descriptive statistics displayed in tables 6, 7, and 8, provide: the means and standard deviations for each of the ten perceptual questions asked to on the PPAIS and how they relate to the number of special education credits administrators had in their graduate training programs; the number of years they have been secondary school administrator; and number of students with IEPs that are in the regular education classroom for 50% of their day.

Table 6:

*Means and standard deviations, special education credits in graduate training programs.*

<table>
<thead>
<tr>
<th>Questions from PPAIS section III</th>
<th>9 or Fewer</th>
<th>10 or Greater</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>MEAN</td>
</tr>
<tr>
<td>Question 18</td>
<td>84</td>
<td>3.9880</td>
</tr>
<tr>
<td>Question 19</td>
<td>84</td>
<td>1.9397</td>
</tr>
<tr>
<td>Question 20</td>
<td>84</td>
<td>4.4642</td>
</tr>
<tr>
<td>Question 21</td>
<td>84</td>
<td>1.6190</td>
</tr>
<tr>
<td>Question 22</td>
<td>84</td>
<td>3.7380</td>
</tr>
<tr>
<td>Question 23</td>
<td>84</td>
<td>1.6785</td>
</tr>
<tr>
<td>Question 24</td>
<td>84</td>
<td>2.3214</td>
</tr>
<tr>
<td>Question 25</td>
<td>84</td>
<td>4</td>
</tr>
<tr>
<td>Question 26</td>
<td>84</td>
<td>4.1190</td>
</tr>
<tr>
<td>Question 27</td>
<td>84</td>
<td>2.7619</td>
</tr>
</tbody>
</table>
### Table 7:

**Means and standard deviations, number of years as a secondary administrator**

<table>
<thead>
<tr>
<th>Questions from PPAIS section III</th>
<th>10 or Fewer</th>
<th>11 or Greater</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>MEAN</td>
</tr>
<tr>
<td>Question 18</td>
<td>87</td>
<td>3.9425</td>
</tr>
<tr>
<td>Question 19</td>
<td>87</td>
<td>2.1395</td>
</tr>
<tr>
<td>Question 20</td>
<td>87</td>
<td>4.3218</td>
</tr>
<tr>
<td>Question 21</td>
<td>87</td>
<td>1.8160</td>
</tr>
<tr>
<td>Question 22</td>
<td>87</td>
<td>3.6781</td>
</tr>
<tr>
<td>Question 23</td>
<td>87</td>
<td>1.7126</td>
</tr>
<tr>
<td>Question 24</td>
<td>87</td>
<td>2.3218</td>
</tr>
<tr>
<td>Question 25</td>
<td>87</td>
<td>3.9195</td>
</tr>
<tr>
<td>Question 26</td>
<td>87</td>
<td>3.9770</td>
</tr>
<tr>
<td>Question 27</td>
<td>87</td>
<td>2.7931</td>
</tr>
</tbody>
</table>

### Table 8:

**Means and standard deviations, number of students with IEP’s that are in regular education for 50% of their day**

<table>
<thead>
<tr>
<th>Questions from PPAIS section III</th>
<th>20% or lower</th>
<th>21% or higher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>MEAN</td>
</tr>
<tr>
<td>Question 18</td>
<td>36</td>
<td>3.8888</td>
</tr>
<tr>
<td>Question 19</td>
<td>36</td>
<td>2.1388</td>
</tr>
<tr>
<td>Question 20</td>
<td>36</td>
<td>4.3611</td>
</tr>
<tr>
<td>Question 21</td>
<td>36</td>
<td>1.8333</td>
</tr>
<tr>
<td>Question 22</td>
<td>36</td>
<td>3.6388</td>
</tr>
<tr>
<td>Question 23</td>
<td>36</td>
<td>1.7222</td>
</tr>
<tr>
<td>Question 24</td>
<td>36</td>
<td>2.5277</td>
</tr>
<tr>
<td>Question 25</td>
<td>36</td>
<td>3.9722</td>
</tr>
<tr>
<td>Question 26</td>
<td>36</td>
<td>4.0277</td>
</tr>
<tr>
<td>Question 27</td>
<td>36</td>
<td>2.9166</td>
</tr>
</tbody>
</table>
Results

In order to investigate the research question and corresponding hypotheses associated with the research question, each of the null hypotheses were tested using Wilcoxon Two-Sample Z-test. This was done in lieu of a traditional parametric test (such as the Student’s t-test) because the outcome data was not normally distributed. The data were analyzed using SAS v9.2. As Ritchey (2008) notes, “the Wilcoxon Two-Sample Z-test is a non-parametric statistical hypothesis test used to compare two related samples, matched samples, or repeated measurements on a single sample to assess whether their population mean ranks differ” (i.e. it is a paired difference test). “It can be used as an alternative to the paired Student’s t-test, t-test for matched pairs, or the t-test for dependent samples when the population cannot be assumed to be normally distributed” (Ritchey, 2008). A Wilcoxon signed-rank test is a nonparametric test that can be used to determine whether two dependent samples were selected from populations having the same distribution. These criteria are satisfied under the current circumstances. Gall et al. (2007) also emphasized the importance of a separate t-test for each category, explaining that there is a more likely outcome of find a significant difference between groups, by comparing groups on a number of variables. For each of the three null hypotheses, a Shapiro-Wilk test showed a p-value of less than 0.01 for every Likert scale survey item. Therefore, the normality assumption is broken, and a non-parametric test was used instead.

Hypotheses

Null Hypothesis One

The first null hypothesis states, $H_0$: There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principal’s Perception of Autism Inclusion Survey who
have taken 10 or more special education credits in their administrative graduate training credits to those who did not. A Wilcoxon Two-Sample Z-test was used in lieu of a traditional parametric test (such as the Student’s t-test) because the outcome data was not normally distributed requiring an alternative analysis. A Wilcoxon Two-Sample Z-test “can be used as an alternative to the paired Student’s t-test, t-test for matched pairs, or the t-test for dependent samples when the population cannot be assumed to be normally distributed” (Ritchey, 2008). A Wilcoxon signed-rank test is a nonparametric test that can be used to determine whether two dependent samples were selected from populations having the same distribution. These criteria are satisfied under the current circumstances. Based on the p-values obtained, it was determined that none of the results for Null Hypotheses 1 were statistically significant. Table 9 shows that none of the p-values fell below the 0.05 threshold.

The number of special education credits administrators took during their graduate education training did not influence secondary school principal’s perceptions towards inclusion of students with autism in a regular education environment. Therefore, the researcher failed to reject the null hypothesis and cannot accept the alternative hypothesis.

**Null Hypothesis Two**

The second null hypothesis states, H₀: There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principal’s Perception of Autism Inclusion Survey who have 11 or more years of experience being an administrator and those who do not. A Wilcoxon Two-Sample Z-test was used in lieu of a traditional parametric test (such as the Student’s t-test) because the outcome data was not normally distributed. A Wilcoxon Two-Sample Z-test “can be used as an alternative to the paired Student’s t-test, t-test for matched pairs, or the t-test for dependent samples when the population cannot be assumed to be normally distributed” (Ritchey, 2008).
Wilcoxon signed-rank test is a nonparametric test that can be used to determine whether two dependent samples were selected from populations having the same distribution. These criteria are satisfied under the current circumstances. The results are reported in table 10.

More experienced administrators were more likely to agree that students with autism and students without disabilities would enhance the learning experience of students with severely profound disabilities (Z = 2.81, p = 0.0025). They were also more likely to agree that a good regular educator could help a student with autism (Z = 3.07, p = 0.0011) and students without disabilities could profit from contact with students with autism (Z = 2.40, p = 0.0083). Similarly, administrators with more experience were much less likely to believe that students with autism were too impaired to benefit from the activities of regular school (Z = -2.91, p = 0.0018). Likewise, they were also less likely to agree that it was unfair to ask regular teachers to accept students with autism (Z = -1.65, p = 0.0491). Based on the results, the researcher rejected the null hypothesis.

Null Hypothesis Three

The third null hypothesis states, \( H_0^3 \): There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principal’s Perception of Autism Inclusion Survey who have more than 21 percent of their students with IEPs in regular education classrooms for at least 50 percent of their day and those who do not. A Wilcoxon Two-Sample \( Z \)-test was used in lieu of a traditional parametric test (such as the Student’s \( t \)-test) due to the fact that the outcome data was not normally distributed. A Wilcoxon Two-Sample \( Z \)-test “can be used as an alternative to the paired Student’s \( t \)-test, \( t \)-test for matched pairs, or the \( t \)-test for dependent samples when the population cannot be assumed to be normally distributed” (Ritchey, 2008). A Wilcoxon signed-rank test is a nonparametric test that can be used to determine whether two dependent samples
were selected from populations having the same distribution. These criteria are satisfied under the current circumstances. Based on the p-values obtained, it was determined that none of the results for Null Hypotheses 3 were statistically significant. Table 11 shows that none of the p-values fell below the 0.05 threshold.

Similarly, the approximate number of students with IEPs who were in regular education classrooms for at least 50% of the day did not influence secondary school principal’s perceptions toward the inclusion of students with autism in a regular education environment. Therefore, the researcher failed to reject the null hypothesis and cannot accept the alternative hypothesis.
Table 9:

Wilcoxon Two-Sample Z-test Results, special education credits in graduate administrative training programs.

<table>
<thead>
<tr>
<th>Question</th>
<th>9 or less (N=87)</th>
<th>10 or more (N=48)</th>
<th>Wilcoxon Two-Sample Z</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only teachers with extensive special education experience can be expected to deal with students with autism in a school setting.</td>
<td>3.94 (0.93)</td>
<td>3.83 (0.97)</td>
<td>-0.61</td>
<td>0.2708</td>
</tr>
<tr>
<td>Schools with both students with autism and students without disabilities enhance the learning experience of students with severe profound disabilities</td>
<td>2.14 (0.87)</td>
<td>2.13 (1)</td>
<td>-0.27</td>
<td>0.3922</td>
</tr>
<tr>
<td>Students with autism are too impaired to benefit from the activities of a regular school</td>
<td>4.32 (0.74)</td>
<td>4.19 (0.84)</td>
<td>-0.82</td>
<td>0.2052</td>
</tr>
<tr>
<td>A good regular educator can do a lot to help a student with autism.</td>
<td>1.82 (0.74)</td>
<td>1.81 (0.96)</td>
<td>-0.71</td>
<td>0.2377</td>
</tr>
<tr>
<td>In general, students with autism should be placed in special classes/schools specifically designed for them.</td>
<td>3.68 (0.91)</td>
<td>3.54 (0.97)</td>
<td>-0.77</td>
<td>0.2203</td>
</tr>
<tr>
<td>Students without disabilities can profit from contact with students with autism.</td>
<td>1.71 (0.57)</td>
<td>2.06 (1.08)</td>
<td>1.34</td>
<td>0.0907</td>
</tr>
<tr>
<td>Regular education should be modified to meet the needs of all students including students with autism.</td>
<td>2.32 (0.96)</td>
<td>2.46 (1.15)</td>
<td>0.64</td>
<td>0.2605</td>
</tr>
<tr>
<td>It is unfair to ask/expect regular teachers to accept students with autism.</td>
<td>3.92 (0.88)</td>
<td>3.83 (1)</td>
<td>-0.36</td>
<td>0.3584</td>
</tr>
<tr>
<td>No discretionary financial resources should be allocated for the integration of students with autism.</td>
<td>3.98 (0.91)</td>
<td>4.17 (0.78)</td>
<td>0.99</td>
<td>0.1609</td>
</tr>
<tr>
<td>It should be policy and/or law that students with autism are integrated into regular educational programs and activities.</td>
<td>2.79 (0.98)</td>
<td>2.9 (1.21)</td>
<td>0.29</td>
<td>0.3871</td>
</tr>
</tbody>
</table>
Table 10:

Wilcoxon Two-Sample Z-test Results, number of years’ experience being a secondary school administrator.

<table>
<thead>
<tr>
<th>Question</th>
<th>10 or less years as an administrator (N=84)</th>
<th>11 or more years as an administrator (N=51)</th>
<th>Wilcoxon Two-Sample Z</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only teachers with extensive special education experience can be expected to deal with students with autism in a school setting.</td>
<td>3.99 (0.92)</td>
<td>3.76 (0.97)</td>
<td>-1.42</td>
<td>0.0779</td>
</tr>
<tr>
<td>Schools with both students with autism and students without disabilities enhance the learning experience of students with severe profound disabilities</td>
<td>1.94 (0.77)</td>
<td>2.45 (1.05)</td>
<td>2.81</td>
<td>0.0025</td>
</tr>
<tr>
<td>Students with autism are too impaired to benefit from the activities of a regular school</td>
<td>4.46 (0.55)</td>
<td>3.96 (0.98)</td>
<td>-2.91</td>
<td>0.0018</td>
</tr>
<tr>
<td>A good regular educator can do a lot to help a student with autism.</td>
<td>1.62 (0.6)</td>
<td>2.14 (1.02)</td>
<td>3.07</td>
<td>0.0011</td>
</tr>
<tr>
<td>In general, students with autism should be placed in special classes/schools specifically designed for them.</td>
<td>3.74 (0.79)</td>
<td>3.45 (1.1)</td>
<td>-1.45</td>
<td>0.0736</td>
</tr>
<tr>
<td>Students without disabilities can profit from contact with students with autism.</td>
<td>1.68 (0.62)</td>
<td>2.1 (0.98)</td>
<td>2.40</td>
<td>0.0083</td>
</tr>
<tr>
<td>Regular education should be modified to meet the needs of all students including students with autism.</td>
<td>2.32 (1.04)</td>
<td>2.45 (1.01)</td>
<td>0.86</td>
<td>0.1944</td>
</tr>
<tr>
<td>It is unfair to ask/expect regular teachers to accept students with autism.</td>
<td>4 (0.84)</td>
<td>3.71 (1.03)</td>
<td>-1.65</td>
<td>0.0491</td>
</tr>
<tr>
<td>No discretionary financial resources should be allocated for the integration of students with autism.</td>
<td>4.12 (0.78)</td>
<td>3.92 (1)</td>
<td>-0.93</td>
<td>0.1770</td>
</tr>
<tr>
<td>It should be policy and/or law that students with autism are integrated into regular educational programs and activities.</td>
<td>2.76 (1.07)</td>
<td>2.94 (1.05)</td>
<td>1.06</td>
<td>0.1452</td>
</tr>
</tbody>
</table>
Table 11:

*Wilcoxon Two-Sample Z-test Results, number of students with IEPs in regular education classrooms for at least 50 percent of their day.*

<table>
<thead>
<tr>
<th>Question</th>
<th>20 or less percent (N=36)</th>
<th>21 or more percent (N=98)</th>
<th>Wilcoxon Two-Sample Z</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only teachers with extensive special education experience can be expected to deal with students with autism in a school setting.</td>
<td>3.89 (0.85)</td>
<td>3.9 (0.98)</td>
<td>-0.44</td>
<td>0.3311</td>
</tr>
<tr>
<td>Schools with both students with autism and students without disabilities enhance the learning experience of students with severe profound disabilities</td>
<td>2.14 (0.9)</td>
<td>2.12 (0.93)</td>
<td>0.22</td>
<td>0.4139</td>
</tr>
<tr>
<td>Students with autism are too impaired to benefit from the activities of a regular school</td>
<td>4.36 (0.54)</td>
<td>4.24 (0.85)</td>
<td>0.13</td>
<td>0.4483</td>
</tr>
<tr>
<td>A good regular educator can do a lot to help a student with autism.</td>
<td>1.83 (0.91)</td>
<td>1.81 (0.8)</td>
<td>0.00</td>
<td>0.9978</td>
</tr>
<tr>
<td>In general, students with autism should be placed in special classes/schools specifically designed for them.</td>
<td>3.64 (0.87)</td>
<td>3.63 (0.96)</td>
<td>-0.17</td>
<td>0.4337</td>
</tr>
<tr>
<td>Students without disabilities can profit from contact with students with autism.</td>
<td>1.72 (0.78)</td>
<td>1.88 (0.82)</td>
<td>-1.04</td>
<td>0.1491</td>
</tr>
<tr>
<td>Regular education should be modified to meet the needs of all students including students with autism.</td>
<td>2.53 (0.97)</td>
<td>2.32 (1.05)</td>
<td>1.19</td>
<td>0.1179</td>
</tr>
<tr>
<td>It is unfair to ask/expect regular teachers to accept students with autism.</td>
<td>3.97 (0.91)</td>
<td>3.86 (0.93)</td>
<td>0.60</td>
<td>0.2756</td>
</tr>
<tr>
<td>No discretionary financial resources should be allocated for the integration of students with autism.</td>
<td>4.03 (0.91)</td>
<td>4.05 (0.87)</td>
<td>-0.07</td>
<td>0.4709</td>
</tr>
<tr>
<td>It should be policy and/or law that students with autism are integrated into regular educational programs and activities.</td>
<td>2.92 (1.16)</td>
<td>2.81 (1.03)</td>
<td>0.56</td>
<td>0.2892</td>
</tr>
</tbody>
</table>
Summary

The purpose of the study was to examine whether certain variables impact secondary school principal’s perception of student with autism in an inclusive classroom. Preliminary data analysis showed the data assumptions were not met, and the data was not normally distributed, therefore a nonparametric test (Wilcoxon Two-Sample Z-test) was run in lieu of the traditional parametric test. Results of the PPAIS showed that the number of special education credits administrators took during their graduate education training did not influence secondary school principals’ perceptions towards inclusion of students with autism in a regular education environment. However, regarding the number of years as a secondary administrator, a more experienced administrator was more likely to agree that students with autism and students without disabilities would enhance the learning experience of students with severely profound disabilities ($Z = 2.81, p = 0.0025$). They were also more likely to agree that a good regular educator could do a lot to help a student with autism ($Z = 3.07, p = 0.0011$) and students without disabilities could profit from contact with students with autism ($Z = 2.40, p = 0.0083$). Similarly, administrators with more experience were much less likely to believe that students with autism were too impaired to benefit from the activities of regular school ($Z = -2.91, p = 0.0018$). Likewise, they were also less likely to agree that it was unfair to ask regular teachers to accept students with autism ($Z = -1.65, p = 0.0491$). Similar, the approximate number of students with IEPs who were in regular education classrooms for at least 50% of the day did not influence secondary school principals’ perceptions toward the inclusion of students with autism in a regular education environment. Chapter 5 will include: overview, discussion, implications, limitations, delimitations, and recommendations for future research.
CHAPTER FIVE: CONCLUSIONS

Overview

This chapter begins with a discussion of the purpose and findings of this study according to each research question as well as each null hypothesis. Implications for this study are provided, followed by the, limitations, and recommendations for future research. The findings provide additional data to the existing body of knowledge and theory of secondary school principal’s perceptions toward the inclusion of students with ASD in the general education environment.

Discussion

The purpose of this causal-comparative study was to examine secondary school principals in the state of West Virginia perceptions regarding (a) number of special education credits they took in their graduate administrative training programs, (b) number of years as an administrator, and (c) number of students with IEPs in the regular education classroom for 50% of their day. Using the PPAIS, the study surveyed 135 secondary school principals to determine if their perceptions are impacted by any or all the variables. The findings provide additional data to the existing body of knowledge and theory regarding principals’ perceptions of inclusion for students with ASD.

Specifically, descriptive analysis and a Wilcoxon Two-Sample Z-test were used to analyze self-reported perceptions of a sample of West Virginia secondary principals to determine if there is a difference in means between each of the variables and secondary principal’s perceptions of inclusion for students with autism.
The first research question for this study was:

**RQ 1**: What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of special education credits they took in their administrative training programs?

The corresponding null hypothesis for this research question was:

**H₀₁**: There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principal’s Perception of Autism Inclusion Survey who have taken 10 or more special education credits in their administrative graduate training credits to those who did not.

The PPAIS indicated that the number of special education credits administrators took during their graduate education training did not influence secondary school principal’s perceptions towards inclusion of students with autism in a regular education environment. Therefore, we fail to reject the null hypothesis and cannot accept the alternative hypothesis.

The prevalence rate of autism is increasing; however, administrator training on students with ASD is not corresponding to that increase (Maddox & Marvin, 2012). As a result of the increasing number of students being diagnosed with an ASD that have unique educational and social needs, it has been suggested that the principals need specialized training to ensure that all students have equal access to an education based on academic excellence and high expectations (Herrity & Glasman, 1999). However, personnel preparation remains one of the weakest elements of effective programming for children with autism spectrum disorder (Maddox & Marvin, 2012). For changes to occur within a school setting it is required that corresponding changes in the university-based administrator programs must occur (Herrity & Glasman, 1999).
The state of West Virginia requires that all administrators take a minimum of three semester hours of coursework in the identification and education of children with disabilities (West Virginian Department of Education, 2016). Many times, they are only receiving the minimum requirement regarding special education, with the rest of the hours being in curriculum and instructional strategies (Lashley & Boscardin, 2003).

Most administrators have received specific training in their educational leadership courses to address day-to-day operations as well as oversee educational programs within their schools. However, many administrators lack sufficient training necessary to supervise programs for diverse student populations, particularly students with ASD (Pazey, Gevarter, Hamrick, & Rojeski, 2014). Administrators help students, staff, and community understand how a student with ASD learn. However, without a true understanding from a background in specialized training, or a prior interaction and experience with these students, it may be difficult for school administrators to encourage and support the students in their educational journey (Weller, 2012).

As more children with ASDs are served in the public-school system, administrators’ knowledge of the students will impact what types of instruction, resources, and related services are made available for developing academic and functional skills (Hughes, et al., 2012). Therefore, it becomes necessary for school administrators to have knowledge and training about students with autism to ensure they are receiving a free and appropriate education within the least restrictive environment.

In a study conducted by Geter (1998) of 550 Georgia principals’ attitudes toward inclusion, the results showed no significant difference between high school and elementary principals attitudes toward inclusion of students with disabilities in a general education classroom. The study also found no significant difference between high school and elementary
principal’s attitudes toward inclusion of students with disabilities into general education classroom regarding principals’ gender and training in special education (Geter, 1998). Even though, Hof (1994) has reported that principals have limited knowledge or no academic background regarding the educational, social, and emotional needs of students with disabilities. This study showed that the number of special education credits in their graduate administrative training programs did not have a significant impact on secondary school principal’s perceptions of inclusion for student with autism.

The second research question for this study was:

RQ 2: What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of years as an administrator?

The corresponding null hypothesis for this research question was:

H0 2: There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principal’s Perception of Autism Inclusion Survey who have 11 or more years of experience being an administrator and those who do not.

The PPAIS indicated that more experienced administrators were more likely to agree that students with autism and students without disabilities would enhance the learning experience of students with severely profound disabilities (Z = 2.81, p = 0.0025). They were also more likely to agree that a good regular educator could do a lot to help a student with autism (Z = 3.07, p = 0.0011) and students without disabilities could profit from contact with students with autism (Z = 2.40, p = 0.0083). Similarly, administrators with more experience were much less likely to believe that students with autism were too impaired to benefit from the activities of regular school (Z = -2.91, p = 0.0018). Likewise, they were also less likely to agree that it was unfair to
ask regular teachers to accept students with autism (Z = -1.65, p = 0.0491). Based on the results, the researcher rejected the null hypothesis.

Roles and demands on school administrators have changed in the last several decades. Increased job complexity, demanding standards, and greater amounts of accountability due to the No Child Left Behind (NCLB) mandate in 2001 resulted in increased numbers of administrators leaving the profession nationwide (DiPaola & Walther-Thomas, 2003). It is apparent in the current research that there is a significant number of principals with ten or fewer years of experience as a secondary administrator. However, the drive toward educating students with disabilities in a more inclusive setting has many of today’s principals assuming a new role with which they may not be familiar (Livingston et al., 2001). As an administrator becomes more familiar with their job, many times the negative perceptions if inclusion will improve with actual administrative experience (Villa, Thousand, Meyers, & Nevin, 1996).

Inexperienced principals are more willing to comply with internal perceptions and are not always willing to change what has been done in the past regarding educational placement decision for students with disabilities (Bradley, 2013). They will at times relapse to a managerial leadership style due to their own insecurities and lack of identity within their school’s community (Fink & Brayman, 2006). Due to challenges brought on by rapid change, many administrators spend much of their time engaging in expanding their managerial responsibilities rather than focusing on their educational and curriculum leadership (Bradley, 2013). A study conducted by Inzano (1999) investigated the attitudes of school principals in the state of New Jersey toward inclusive education. The results of the survey found that neither years of experience as a principal nor location of the school had an effect in principals’ attitudes toward
inclusion. The study also found that principals were in favor of including students with disabilities in the general education classroom.

Effective principals know their own professional strengths, interests, and weaknesses. Over time effective administrators will strive to build their working knowledge of areas where they may have a weakness, with special education knowledge being reported as the greatest weakness for new administrators (Pettiegrew, 2013). New principals report being unprepared to begin their responsibilities as school leaders (Pettiegrew, 2013). This lack of preparation can impact the whole educational process in a school, but even more so when it comes to the responsibility of overseeing special education placement and following the numerous compliance requirements and laws for students with disabilities (Parker, 2016). However, as new administrators become more comfortable with the job, supervision of staff and students, and the everyday flow of the school they may begin to branch out to look at other options for placement of students with disabilities.

The third research question for this study was:

RQ 3: What is the relationship between secondary school administrators’ perceptions toward the inclusion of students with autism and the number of students with IEPs in their building that are in regular education classes for at least 50% of their day?

The corresponding null hypothesis for this research question was:

H₀ 3: There is no statistically significant difference in perceptions toward the inclusion of students with autism by secondary school principals in West Virginia based on the results from the Principals’ Perception of Autism Inclusion Survey who have more than 21 percent of their students with IEPs in regular education classrooms for at least 50 percent of their day and those who do not.
In the past 10 years, the idea of inclusion has moved to the forefront of being the most prominent placement for students with disabilities (McElhinny & Pellegrin, 2014). With more state and federal regulations recommending administrators place these students within a general education classroom, many administrators are taking a second look at placement decisions (Field, 2015). Ball and Green (2014) conducted a study that investigated the attitudes of school leaders toward the inclusion of students with disabilities within a general education setting. The results of this study fell under six specific headings: limited training and experiences for school leaders in relation to special education and inclusive practices, school leaders who have a negative attitude toward inclusion, inclusive placements are supported by school leaders; however, differences exist with different disabilities, and lastly the number of students with IEPs in the regular education classroom should be an indicator for appropriate placements occurring and positive principal perceptions on inclusion (Ball & Green, 2014). Many attitudes and misconceptions discovered through this study were due to lack of professional development/training and negative previous personal experiences with inclusion (Ball & Green, 2014).

Wakeman, Browder, Flowers, and Ahlgrim-Delzell (2006) surveyed 362 secondary school principals in relation to their special education knowledge and sorted them into two domains, fundamental and current issues. The domains were further sorted in relation to variables that were associated with that knowledge. A factor analysis was conducted in order to interpret the results, which supported a five-factor structure. These five factors included daily routine, current issues, evaluation, legislation, and fundamental knowledge. The highest ranked items were related to daily routine and the lowest ranked items related to evaluation. In this study, the variables that had statistical significance include the percentage of students with
disabilities in the principal’s school, having an education certification, and having appropriate personal experience with an individual who has a disability.

Between 2004 and 2011 the number of 6 to 21 years old students with disabilities receiving academic services for more than 80% of the typical school-day in the general education classroom had increased from 51% to 61% (The National Center for Education Statistics, 2013). In a research study on inclusion completed by Barnett and Monda-Amaya (1998) on 115 randomly selected school principals, the results indicated that at the high school level, most students with disabilities who are being served are in the general education environment. Even though research has confirmed that more students with autism are being educated in the regular education environment it does not appear to have an impact on the perceptions of secondary school principals.

**Implications**

School administrators, as a group, provide leadership and are the norm setters for school organization (McKelvey, 2008). Principals as transformational leaders can 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 nondiscriminatory setting (Ainscow & Sandhill, 2010; Pazey & Cole, 2013).

The findings of this study demonstrate the importance of perceptions of school-based administrators toward the inclusion of students with autism. Principals are the foundation of leadership within the school and the mortar that establishes the educational community among the staff while trying to plan for certain programs within the school (Smith, 2011).
Consequently, for a school to have a successful inclusion program the principal needs to have a positive attitude toward inclusion (Smith 2011). Therefore, the perception of school-based administrators needs to be addressed in order to understand the complexity of the presence of a student with autism within a general education classroom (Chandler, 2015). An awareness of what factors may impact a secondary principal’s perception toward inclusion of students with ASD is essential to develop a support system within the school organizations for not only the teachers working with these students but also the administrators. Internal and external consultants who have experience with the inclusion of students with ASD would benefit the school and help to bridge the gap between the needs of the school and the needs of the students (Wiele, 2011). A proactive approach in which they consult can take an active part in not only the academic and behavioral components of peer relations and adult relations can be a resource. It would also be beneficial to the school administrators if they were provided the opportunity to observe positive experiences and successful inclusion of students with ASD (Wiele, 2011).

The results of this research established that secondary administrators in the state of West Virginia who have more years of experience being an administrator have a more positive perception of inclusion for student with ASD than secondary administrators with less experience. Professional development for administrators in terms of building background knowledge, academic planning, characteristics of students with ASD, and behavioral management needs to be ongoing and pertain to the situation that administrators face (Wiele, 2011). The individual needs of the student in the diverse nature of the students create a void that can be filled by developing a support team of consultants to work with the administrator within the school. It is essential that the professional development be within the educational environment in order for inclusion model to be developed for each individual child without the need for the child or
administrator to be compelled to transfer the information to a second environment. There should be an ongoing dialogue with open lines of communication that are honest and nonjudgmental between administrator and a consultant, this is necessary to build a positive attitude toward the inclusion of students with ASD (Smith, 2011).

**Limitations**

Limitations apply to the respondents, the instrument, and the program implementation. In terms of the respondents, the study was limited to people who voluntarily agreed to participate. The candor and the background knowledge of the secondary school administrator in reference to students with autism are some of the limitations in this study (Mckelvey, 2008). This can be due to the fact that administrators answering the survey questions come from varying educational backgrounds with different educational experiences. The requirement that the secondary administrator be in a school that included students with autism is a limitation because the number of students with autism may vary within a school; however, the cognitive ability of the students with autism was not determined to be a factor in the study.

The secondary administrators may interpret the questions differently, a limitation regarding the truthfulness of the respondent and validity of the instrument (Mckelvey, 2008). The self-reporting of data is limited by the fact that it rarely can be independently verified (Goley, 2013). The reliability of the data relies upon the honesty of the participants. Although no obvious identifiers in the demographic questionnaire were collected to ensure responses that truly reflect the respondents' perceptions, there can be no guarantees honest responses were recorded. Additionally, there may be some element of political correctness in the participant's responses (Goley, 2013). Consciously, the participants may find it socially acceptable to say or infer individuals do not want or like students with disabilities in their schools (Field, 2015).
Finally, the program resources, including the least restrictive environment that is available in the school, the training and quality of the teachers and special educators, and the supports that were available, were limitations to this study. Another limitation in this study was the demographics of the secondary schools within the state of West Virginia. This limitation was due to the varying social economic differences throughout the state of West Virginia and resources available in those areas. An unforeseen limitation was the initial e-mail that was sent to the schools to ask for participation: some school districts have a security block on receiving outside emails (McKelvey, 2008). The initial request for participation was not received by all of the school-based administrators within the state, and, consequently, not all school-based administrators were given the opportunity to participate in the study (Mckelvey, 2008). The data collection in terms of quantitative appropriateness limited the ability to understand why the attitude of school-based administrators was overall negative as it did not provide the option to expand or provide narratives (Alston, 2017). Further questions or questions for clarity on a response were not provided. An additional limitation to the study was the training and resources available within each state and school (Bradley, 2013).

**Recommendations for Future Research**

It is recommended that a future study examine the differences between the perceptions of teachers toward inclusion of students with ASD compared to the perceptions of principals (Mckelvey, 2008). It is also recommended that a mixed method study be completed with the additional question of why respondents provided the answer that they did in regard to the perceptual questions. It would be beneficial if this study were re-created in other states to determine if the same variables impact secondary principles perceptions. With research saying that the overall attitude of principals is negative toward inclusion of students with ASD it would
be beneficial to include a behavior component (Field, 2015). It would also be beneficial to identify the characteristics of students with ASD in conducting research on the perceptions of administrators and the behavior of students with ASD, the perceptions of administrators and the cognitive ability of students with ASD, and the perceptions of school-based administrators and the social interaction of students with ASD (Field, 2015).

In relation to the actual study, a recommendation to increase the validity of the study would be to design the study and the quantitative method framework. Conducting interviews, observations, and longitudinal studies over time can help to identify the reasons for the perceptions and the antecedent behavior that the student with ASD portray and the reactionary perceptions of the administrators. Further investigation into the differences that exist between disability categories in relationship to perception, experience, and placement would increase our knowledge and improve practices. Future considerations could include research in more diverse school districts to determine the factors that influence positive perceptions toward the inclusion of students with disabilities. Another area of further research would be to examine the relationship of perceptions of inclusion toward the various disability categories (Goley, 2013). The present study examined students with ASD, not taking into consideration the varying ranges of the disability. Future research may wish to take into consideration the various dynamics that exist between those students and separate them based on the severity of their diagnosis.

**Conclusion**

The results of the study indicate that perception is an important part of creating inclusive settings. It also demonstrates the perceptions are associated with exposure to special education concepts and, more importantly, to experience with individuals with disabilities. The findings
bring light to the negative attitude that exists between administrator and the inclusion of students with ASD. These discoveries are important in order to understand and rectify the perceptions of administrators regarding the inclusion of students with ASD. The findings of this study are important because it add to the body of research regarding the role that perception, experience, background, and disability play in the inclusion of students with ASD in the general education setting.
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APPENDICES

APPENDIX A

Subject: Participation in a Dissertation Study

Dear Principal:

My name is Jason Conaway. I am currently a doctoral student at Liberty University. I am conducting a study for my dissertation to determine the perceptions of secondary school principals toward inclusion of students with autism in a general education classroom. The benefits of this study will be to provide further research to school leaders on academic and social merit of educating students with autism within an inclusive environment. I am writing to invite you to participate in my study.

If you are 18 years of age or older and are a secondary school administrator in the state of West Virginia and are willing participate you will be asked to complete a 20-minute survey. Your participation will be completely anonymous, and no personal, identifying information will be collected.

To participate, please go to https://www.surveymonkey.com/r/PPAIS and click on the link provided.

A consent document is provided as the first page you will see after you click on the survey link. The consent document contains additional information about my research. Please click on the survey link at the end of the consent information to indicate that you have read the consent information like to take part in the survey.

Thank you for your time and for your participation in my research.

Jason Conaway
APPENDIX B

Follow-up Email if desired number of participants was not received after initial Email

Subject: Follow up on your participation

Dear Principal:

My name is Jason Conaway. I am currently a doctoral student at Liberty University. I am conducting a study for my dissertation to determine the perceptions of secondary school principals toward inclusion of students with autism in a general education classroom. The purpose of this study is to contribute to a body of research surrounding the perceptions of secondary school principals toward the inclusion of student with autism in the general education environment. I am writing to invite you to participate in my study if you have not already done so.

If you are 18 years of age or older, are a secondary school principal in West Virginia, and are willing to participate, you’ll be asked to complete a 10-minute survey. Your participation will be completely anonymous, and no personal, identifying information will be collected.

To participate, please go to https://www.surveymonkey.com/r/PPAIS and click on the link provided.

A consent document is provided as the first page you’ll see if you click on the survey link. The consent document contains additional information about my research. Please click agree at the end of the consent information to indicate that you read the consent information and would like to take part in the survey.

Thank you for your time and for your participation in my research.

Jason Conaway
APPENDIX C

Request for permission to use Dr. McKelvey’s instrument

Email sent: June 8, 2016

Dr. Diane McKelvey
Email address: DMMcKelvey@bcps.k12.md.us

Dear Dr. McKelvey,

I would like to have permission to use your survey from your dissertation entitled, Relationships between attitudes of school-based administrators and inclusion practices of students with autism/Asperger’s. The survey, Administrator's Autism Inclusion Survey, will be modified and expanded to include the category of, Autism Spectrum Disorder. Please respond to this email giving me permission to use your survey. I will use appropriate citations within the paper and provide acknowledgment for the survey.

Thank you for your time.

Sincerely,

Jason Conaway
APPENDIX D

Response from Dr. McKelvey granting permission to use instrument

Email response from Dr. D. McKelvey: June 8, 2016

Dr. Diane McKelvey
Email address: DMMcKelvey@bcps.k12.md.us

Good afternoon,

I give you permission to use my survey entitled, Relationships between attitude of school-based administrators and inclusion practices of students with autism/Asperger’s Syndrome.

Diane McKelvey, EDD
Educational Specialist
Autism Programs
The survey was removed due to copyright.
March 15, 2018

Jason Conaway

Dear Jason Conaway,

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

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

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

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

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

Sincerely,

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

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