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Elementary School Principals' Experiences Working with Autism Spectrum Disorder Students in an Urban Setting: A Grounded Theory Study

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Elementary School Principals' Experiences Working with Autism Spectrum Disorder Students in an Urban Setting: A Grounded Theory Study

Abstract

With an increase in students being classified as on the Autism Spectrum, the responsibilities of principals have also increased. The rise in the number of students having an Autism Spectrum Disorder (ASD) has presented behavioral and academic challenges for public school principals. Research has demonstrated that principals, who focus on instructional issues, who are knowledgeable about special education laws and ASD, can produce enhanced student outcomes. Using a grounded theory design, the present study examined how principals develop their knowledge of students with autism. Study participants were 11 elementary principals who directly supervised ASD classrooms. Data was gathered using individual interviews, a demographic form and a written case analysis. Analysis of the data revealed three major themes that described the study participants' knowledge and experience: Principals' Roles as Leaders of ASD Students, Quest for More Formalized Knowledge, and Linking Knowledge and Experience with Action. The findings pointed to the varied knowledge, experiences and preparedness of individuals in their leadership roles. The results also point to the importance of principals being instructionally competent and attending professional development to increase their knowledge and understanding of ASD.

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Students in an Urban Setting: A Grounded Theory Study

By

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Submitted in partial fulfillment
of the requirements for the degree
Ed.D. in Executive Leadership

Supervised by

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St. John Fisher College

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Dedication

I thank my heavenly Father for giving me the strength to endure this journey; for with you, anything is possible. To my daughters, Chanderess, Shyenne, and Trinity, and my son, Damien, for your patience, love, and standing arm in arm with me. To my granddaughter, Kimbrance “Mema’s Love” for keeping me laughing through it all. To my sister, Tamika, and my brother, Damien, for being my guardian angels throughout my journey. To my grandmother, Roberta “Momma”, and Uncle Harry (Leo); thanks for instilling the love of learning in me.

I would like to express my deepest gratitude and appreciation to my committee chairperson, Dr. Jeannine Dingus-Eason, for her guidance, encouragement, and diligence throughout my dissertation process. I have learned a great deal from you. I would like to also express my sincere thanks and appreciation to my committee member; Dr. Chinwe Ikepeze, for providing me with the guidance and encouragement that I needed to bring this document into completion. I also thank Dr. Guillermo Montes for his advice, guidance, and encouragement during the process. I would like to express my gratitude to the participants of this study.

I would also like to thank my mother, Delia, aunts, Anna and Mozelle, my “other” daughters, Jaida and Shardai, my siblings, China, ShaLara, Darryl, and Sonny, my “sisters-in-love,” Janine and Loretta, for their love, continuous support, patience, and prayers during this long, fulfilling, and challenging journey.

A special thank you to Krista A., Andre D., Alex S., Wilhelmina G., Mary T., and Cheryl H. for encouraging me to begin my journey. Your belief in me made this a reality.

Biographical Sketch

Kimberly M. Harris is an elementary principal in the Rochester City School, where she began her career as an elementary teacher in 1994. She holds a bachelor's degree in Elementary Education from SUNY Oneonta and a master's degree in Education and Administration from SUNY Brockport. Kimberly entered the Executive Leadership program at St. John Fisher College in May of 2012 and pursued her research on principals' knowledge and experiences with working with students with autism under the direction of Dr. Jeannine Dingus-Eason and Dr. Chinwe Ikpeze. She received her Ed. D in 2015.

“I did then what I knew how to do. Now that I know better, I do better.”

(Maya Angelou, 1928-2014)

Abstract

With an increase in students being classified as on the Autism Spectrum, the responsibilities of principals have also increased. The rise in the number of students having an Autism Spectrum Disorder (ASD) has presented behavioral and academic challenges for public school principals. Research has demonstrated that principals, who focus on instructional issues, who are knowledgeable about special education laws and ASD, can produce enhanced student outcomes. Using a grounded theory design, the present study examined how principals develop their knowledge of students with autism.

Study participants were 11 elementary principals who directly supervised ASD classrooms. Data was gathered using individual interviews, a demographic form and a written case analysis. Analysis of the data revealed three major themes that described the study participants' knowledge and experience: Principals' Roles as Leaders of ASD Students, Quest for More Formalized Knowledge, and Linking Knowledge and Experience with Action. The findings pointed to the varied knowledge, experiences and preparedness of individuals in their leadership roles. The results also point to the importance of principals being instructionally competent and attending professional development to increase their knowledge and understanding of ASD.

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Chapter 1: Introduction

Introduction

From the early 1900s, the term “autism” has referred to a range of neuro-psychological conditions (Myers & Johnson, 2007). The word autism comes from the Greek word “autos,” meaning self (Myers & Johnson, 2007). Autism describes conditions in which people remove themselves (voluntarily or involuntarily) from social interaction and isolate themselves from others. In 1911, Eugen Beuler, a Swiss psychiatrist, defined autism as adults with schizophrenia. However, in 1943, an Austrian-born psychiatrist, Leo Kanner, conducted a study over a 5-year period, describing 11 children with autism as feeble-minded, retarded, moronic, idiotic, or schizoid (Fischbach, 2007). Unlike Beuler, Kanner believed that children were born with autism. Kanner coined the term "refrigerator mother" to describe a parent whose cold, uncaring behaviors lead to the child being traumatized into autism schizoid (Fischbach, 2007).

Since Kanner’s (1943) early descriptions of autism, there have been changes in diagnostic criteria and treatments (Tidmarsh & Volkmar, 2003). In 1943, Kanner’s definition of “infantile autism” was replaced by the concept of pervasive developmental disorder (PDD). Pervasive developmental disorder-not otherwise specified (PDD-NOS) is a commonly used diagnosis of autism spectrum disorder [ASD], and it includes five conditions: autistic disorder, Asperger’s disorder, Rett’s disorder, childhood disintegrative disorder (CDD), and PDD-NOS (American Psychiatric Association [APA], 2013; Tidmarsh & Volkmar, 2003). For any of the five conditions or types of PDD,

children with autism must demonstrate at least three categories of behavior including: impaired social relationships, impaired communication, and impaired social imagination or imaginative play (Powers, 2000).

An ASD diagnosis can include milder or high-functioning subtypes, as well as those considered lower functioning with varying degrees of mental retardation (Stiefel, Shields, Swain, & Innes, 2008). Asperger's disorder, named after the Austrian psychiatrist, Hans Asperger, defines a higher functioning form of autism. Unlike autism, there are no clinically significant delays in language or cognitive development typically found in children with Asperger's (Stiefel et al., 2008).

Autism on the rise. According to the U.S. Department of Education, National Center for Education Statistics (2014), it is estimated that 1 in 54 boys in the United States have autism (Figure 1.1). Figure 1.1 shows that the number boys diagnosed with autism has drastically increased. The magnitude of the increase was greatest for boys ages 6-17 (Willingham, 2013). Although males are at greater risk for neuro-developmental disorders, such as ASD, than females, the underlying reasons have been unclear (Press, 2014). This may be attributed to the lack of research into what causes autism.

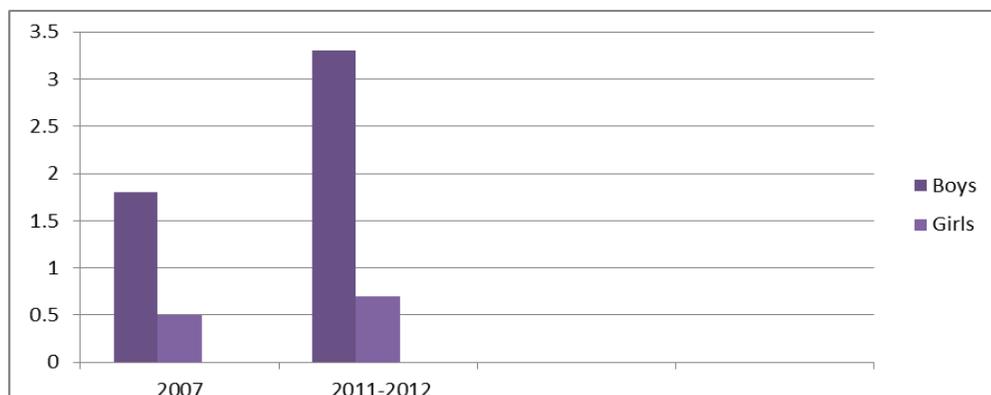


Figure 1.1. Autism on the Rise. Retrieved from www.nces.ed.gov/.

According to Karim (2009), there has been a steady increase in the number of autism cases in the United States. Figure 1.2 shows that between the years of 2000 and 2003, over 160,000 individuals between the ages of 3 and 22 had been identified with autism (Fighting Autism, 2007). About 10% of those with autism have a definitive diagnosis. The other 90% of cases are still a puzzle to autism experts. There are a number of theories that have been added to the conversation on the reasons for the drastic increase in children with autism (Karim, 2009). Swedish researchers have created a new autism model that predicts older parents are more likely to have a child who develops an autism spectrum disorder (ASD) than are younger parent (Nauert, 2014). The model shows that autism risk grows steadily with fathers' increasing age, but accelerates with mothers' age after 30. Environmental factors are also cited as contributing to autism. For example, babies whose mothers lived within a mile of crops treated with widely used pesticides were more likely to develop autism. Exposure to air pollution during pregnancy, especially heavy metals and particulates, may increase the risk of autism (Lyell, Schmidt, & Hertz-Picciotto, 2014). Not all experts are in agreement on the causes and the conversations that have been controversial, with some experts believing that autism is caused by childhood vaccinations, thus causing parents to push against vaccinations (Health Medic, 2012). The rise in the number of students having an ASD has presented behavioral and academic challenges for school principals in public schools. Principals need to understand the nature of ASD and the unique needs of these students (Bishop, 2011).

Research has demonstrated that principals, who focus on instructional issues and who are knowledgeable about special education laws and ASD, can produce enhanced

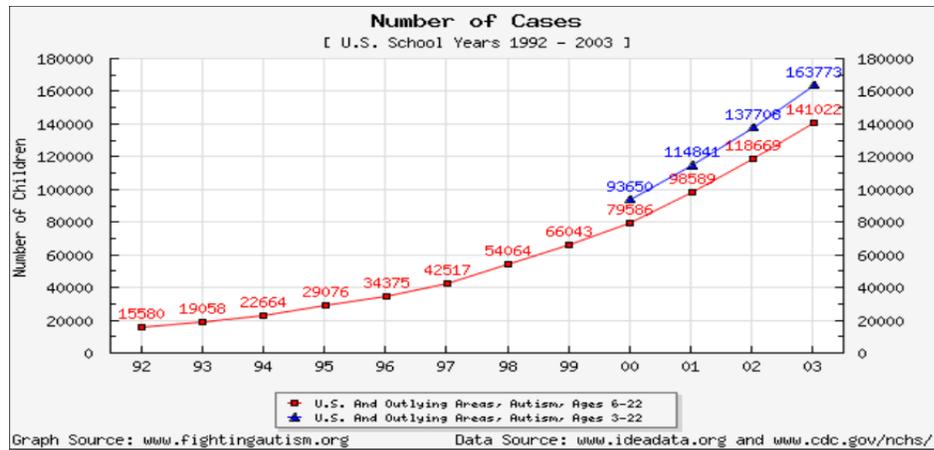


Figure 1.2. Autism Cases in the United States. Retrieved from www.fightingautism.org/idea/autism.php.

student outcomes (Benz, Lidstrom, & Yovanoff, 2000; DiPaola & Tschannem-Moran, 2003). Although principals do not need to be disability experts, they must have fundamental knowledge that enables them to perform essential special-education leadership tasks (DiPaola & Tschannem-Moran). Given the complexity of federal and state rules and regulations around students with autism, principals must know how to build positive academic and behavioral systems within their schools (Coleman, 1990).

Children with ASD have core deficits in the areas of communication and social interaction (American Psychiatric Association [APA], 2000). Children with ASD have a tendency to engage in repetitive behaviors, and they also tend to have difficulty interpreting what others are thinking and feeling (Lane & Kelly, 2012). A specialized curriculum focus that addresses these core deficits is an essential component of effective educational programs for children with ASD (Iovannone, Dunlap, Huber, & Kincaid, 2003). Strategies for Teaching Based on Autism Research (STAR), which is a research-based applied behavior analysis (ABA) curriculum that addresses curricular areas of

receptive language, expressive language, spontaneous language, functional routines, academics, and play and social skills is a commonly used strategy for students with autism (Arick et al., 2014). Researchers believe that students with ASD need to be taught an effective method of communication whether using conventional verbal language or communicating with an alternative system (Iovannone et al., 2003).

Even though behavioral interventions have proven to be especially effective, experts generally agree that there is no empirical evidence supporting one specific educational intervention or approach as the best or superior for all children with ASD (Dunlap, Iovannone, & Kincaid, 2008; Heflin & Simpson, 1998; Iovannone et al., 2003). Depending upon their individual needs, students with disabilities are offered a continuum of supports, services, and placements ranging from self-contained special-education settings to full inclusion in general-education classroom. Some students with ASD may thrive in a general-education setting with only a few modifications, while others may need major adaptations and more intensive instruction in a one-on-one or small-group setting. Therefore, no one program, support, or service is appropriate to meet the needs of all children with autism in a school district (Dunlap et al., 2008; Iovannone et al., 2003).

Experts recommend providing “structured environments” for students with autism (Dunlap et al., 2008, p. 119). Dunlap et al. described a structured learning environment as one in which the curriculum and behavioral expectations are clear and fully comprehensible to both the students and the teacher in a classroom. In structured learning environments, students with ASD are able to predict what will happen next, anticipate the demands of various settings, and generalize skills (Dunlap et al., 2008). It is important for ASD students to be provided with a structured environment in order to help them with

organization and to address challenging behaviors in a proactive manner by creating appropriate and meaningful environments that reduce the stress, anxiety, and frustration, which may be experienced by children with autism (Stokes, 2014).

Principals and teachers are expected to work together to ensure that there is collaborative discussion of student work, good teaching practice, and to share effective practices (DiPaola & Tschannen-Moran, 2003). To effectively play this role, school principals must seek information to better understand their roles when leading ASD student populations. This grounded theory study will examine how principals gain their knowledge in order to better understand their role.

Students with ASD in U.S. schools. Within public schools, roughly 30-40% of elementary and middle school students with autism receive instruction in general-education settings (Sanford, Levine, & Blackorby, 2008), and roughly 60% of high school students with autism are educated in general-education settings (Newman, 2007; Wagner, Newman, Cameto, Levine, & Marder, 2003). Because of the dramatic increases in the number of identified cases of children with autism throughout the country, parents, school administrators, educators, and paraprofessionals must have a clear understanding of what autism is and the most effective interventions, strategies, and methodologies for teaching children with autism (Karim, 2009). Children with autism are protected by the Individuals with Disability Education Act (IDEA). The IDEA of 1973 (amended in 1997) is a federal law that governs all special-education services in the United States. Autism is a qualifying condition or disability under IDEA that requires school districts to provide a free and appropriate public education for children with disabilities. IDEA also requires that measurable annual goals and objectives be written into a child's Individual Education

Program (IEP) (deBettencourt, 2002). While physicians and mental health professionals use The Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013) criteria to diagnose pervasive developmental disorders, educators and school systems must follow guidelines outlined in federal legislation to determine the presence of a disability and eligibility for special education services for children suspected of having an ASD.

Parents and professionals all agree that it takes hard work to help students with autism get the most out of classroom experiences. Children with autism can be difficult to handle in the classroom because they may show signs of aggression, exhibit repetitive behaviors, and can be difficult to manage behaviorally (Colihan, 2014). Implementing proactive approaches can prevent many disruptions or behavioral problems from occurring. For higher functioning students, student meetings can be held to address challenges and focus on finding solutions as opposed to giving consequences for behavior (Laxton, 2012).

Strategies for instructing and working with the ASD population have largely focused on behavioral interventions. The current issues in today's classrooms are that students with autism have complex needs (National Institute of Neurological Disorders and Stroke, 2014). Students with ASD may exhibit deficits in sensory processing (National Education Association, 2006). For example, ASD students' brains often work in a different way in assimilating the senses such as touch, smell, hearing, taste, and sight. Children with this disorder often present with co-occurring conditions and comorbid disorders, including intellectual disability, deficits in adaptive and personal self-sufficiency skills, emotional and behavior disorders, and problems with feeding and

sleeping (Montes, Halterman, & Magyar, 2009). They may be extremely sensitive to some senses and find something fascinating, such as the patterns of light on a wall or the rustling leaves in the wind.

Educational and behavioral interventions must be creative and innovative for children who meet the autism criteria. This is due to the nature of the disorder and its challenging characteristics. ABA and the Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) methods are often identified as the most commonly used methods among other interventions and strategies used for children with autism. The TEACCH approach was developed at the University of North Carolina, originating in a child research project in 1964 (Schopler & Reichler, 1971). The TEACCH philosophy recognizes autism as a lifelong condition and does not aim to cure it but to respond to autism as a culture (Mesibov, Shea, & Schopler, 2004). Core tenets of TEACCH include an understanding of the effects of autism on individuals; use of assessments to assist program design around individual strengths, skills, interests and needs; enabling the individual to be as independent as possible; and working in collaboration with parents and families (Cox & Schopler, 1993).

TEACCH classrooms are structured with separate, defined areas for each task such as individual work, group activities, and play (Panerai, Ferrante, & Zingale, 2002). In the TEACCH program, teachers and paraprofessional are trained to utilize methods that are all behaviorally based. Staff working with ASD students are encouraged to use strategies and language that is clear and concise and to present materials in an organized manner (Panerai et al., 2002).

ABA is the use of techniques and principles to bring about meaningful and positive change in behavior (Autism Speaks, n.d.). Ole Ivar Lovaas developed standardized teaching interventions based on behavioral principles and researched practices aimed at improving the lives of children with autism and their families (Smith & Eikeseth, 2010). ABA in the classroom can help children learn in a way best suited to their needs. It addresses the core deficits of ASDs including verbal and non-verbal communication, social interaction, restrictive repetitive behaviors, inflexibility, and peer relationships (Pellicciari, O'Donnell, Wagner, Alberts, & Niemann, 2010).

Similar to TEACCH, teachers and staff using ABA techniques use visual, verbal, gestural, positional, and physical prompts to obtain appropriate behavioral responses from students with autism (Pellicciari et al., 2010). To reinforce behavioral responses from ASD students, verbal praising and/or sensory stimulation are recommended strategies when using ABA techniques. Adults are also encouraged to model correct responses when utilizing ABA strategies (Pellicciari et al., 2010).

Both TEACCH and ABA are programs that involve specialized training and implementation within the educational setting (Symon, 2005). TEACCH and ABA behavioral techniques can be used in structured situations such as in classroom lessons (Autism Speaks, n.d.). While most teachers and paraprofessional staff working with students with ASD students are trained in specific behavioral intervention programs, such as TEACCH and ABA, research shows that school principals do not receive the same professional development opportunities (Neumann, Meyer, & Buchanan, 2011).

Most school principals reported that they had not been prepared to meet the complex needs of students with autism during their collegiate studies. Principals also

reported that they rely on their districts to provide relevant and credible professional development (Neumann et al., 2011). Neumann et al., concluded that when principals understand what an ASD diagnosis entails and learn how to teach these students effectively, they often have a more positive experience with ASD students. If principals are not aware of what behaviors are characteristic of autism, and they have identified regular-education strategies for corrective responses in autistic students, it may become problematic (Malburg, 2012).

Evolving roles of elementary school principals. A school principal is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community. Principals are responsible for the overall operation of schools with their roles focused on curriculum, discipline, and instruction (Dumas, 2010). During the late 1980s, as schools began to be held accountable for the performance of their students on national and state assessments, the duties and responsibilities of principals changed from disciplinary to instructional leader (Frost, 2011).

In a study conducted by Preetika and Priti (2013), principals raised concerns about students with disabilities, varying from disciplining, morals, and respect to academic output. For some principals, one of the main concerns was holding and keeping the students in school because absenteeism was a problem. While for others, their challenges were discipline and providing effective academic support for students with disabilities (DiPaola & Walther-Thomas, 2003; Preetika & Priti, 2013). A principal has to exercise caution when suspending students with special needs because the courts place

the burden of proof on the school in determining if the behavior was the result of a student's disability (Cooner, Tochtermann, & Garrison-Wade, 2004). If principals are not aware of special-education policies, strategies, or techniques, they may be ineffective in developing an intervention plan to help correct students' behavior (Taylor & Baker Jr, 2002).

When researching formal, special-education training for principals, Lasky and Karge (2006) found that principals lack the basic knowledge of special education. IDEA 2004, which outlines specific mandates for the administration of special-education services and procedures, can present challenges to administrators who are unfamiliar with its details. For example, if principals fail to adhere to state guidelines and regulations pertaining to the removal of students with a disability from their instructional program, without holding a meeting to determine if the behavior was caused as a direct result of the student's disability, the student could be returned to their program, and parents could potentially file a lawsuit against the district for improper practices.

Given that IDEA 2004 requires that all students with disabilities be educated in the least restrictive environment with access to general education, special-education placement begins within a school under the leadership of the principal (Lasky & Karge, 2006). The Office of Special Education Programs (OSEP) (1996), a division of the U.S. Department of Education, states that one of the central roles of a principal is providing instructional leadership to ensure that the rights of students with disabilities are protected and that the students receive an appropriate education (Heumann & Heir, 1998). This ideology is also stated in Standard 2 of the Interstate School Leader Licensure Consortium (ISLLC) Standards and Indicators (2014), which states that a school

administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and academic growth (OSEP, 1996).

Theoharis (2004) examined social justice as it relates to inclusion of students with disabilities. He found that inclusive school reform resulted in students with disabilities being placed into general-education settings including students with significant disabilities, mild disabilities, emotional disabilities, and students with autism. In order for students to be successful in a general-education setting, inclusive services must meet the needs of students' disabilities in order to eliminate pullout or self-contained special-education programs (Theoharis, 2004). School administrators, general-education teachers, special-education teachers, and other staff members should communicate processes and establish procedures to assure students with disabilities are receiving their appropriate services when being included in the general education setting (Theoharis, 2004).

School principals are expected to serve as instructional leaders for special education teachers (Billingsley, 2005; DiPaola & Walther-Thomas, 2003). Principals often have little preparation or practice in assuming this responsibility. Several studies have noted that most school principals have minimal training, through coursework and field experience, related to special education (Billingsley, 2005; DiPaola & Walther-Thomas, 2003). In a study on inclusion, Power (2007) examined inclusionary practices for students with disabilities and found that the most effective learning environment for students with disabilities was for students to be included in programs with their non-

classified peers. In order for inclusion to be effective, principals need to know the types of disabilities, appropriate placements, and special education law (Power, 2007).

The leadership role of principals is crucial for improved education for students with disabilities, yet some colleges do not offer preparation programs to include coursework on special-education policy, procedures, laws, and practices (Power, 2007). Principals often feel unprepared for their roles in the administration of special programs (Cooner et al., 2004; Goor & Schwenn, 1997). Principals can be overwhelmed by the number, diversity, and severity of children labeled “special education” (Cooner et al., 2004). Children with autism often have difficulties communicating in socially acceptable ways, and they may act out when they are confused or fearful about something. A challenge for principals may be the ability to decipher the cause, or function, of particular behaviors (Lerman, 2004). If principals are not aware of students’ patterns of behavior and when they do, or do not, occur, their ability to assist the students and staff may be problematic. A review of the literature indicates that although teachers, service providers, and paraprofessionals receive some specialized training related to autism, their knowledge related to autism is low (Lerman, 2004). A study of principals’ knowledge as it relates to students with autism would be insightful in uncovering some of the issues or challenges that principals face and how to ameliorate them in a quest to improve the school experience of students with autism.

It has been recommended that principals participate in trainings to support their efforts in becoming more competent service providers for students diagnosed with autism (Jennett, Harris, & Mesibov, 2003). Principals must also be familiar with researched-based behavioral programs and interventions recommended for ASD students. It is also

essential that principals know the legal guidelines established by Public Law 94-142, the IDEA of 1973, and other such laws that may be applicable to ASD students (Meader, 2014).

Principals' role in special education. Understanding the importance of special-needs education is vital to a school administrator (Meader, 2014). Educational leadership is ranked as the number one key variable associated with effective schools, but the principal of an effective school must be the leader for all programs within the school, including special-education services (Gersten, Keating, Yovanoff, & Harniss, 2001). When districts replace principals who are inexperienced leaders without legal or practical experiences, this poses potential problems in the placement of students, discipline practices, and academic programming for all students (Peterson, 2002).

School principals are instrumental in providing the leadership for implementing and monitoring inclusionary practices (Riehl, 2000). Since the 1990s, inclusion has been the focus of school reform; however, many principals are still unfamiliar and uncomfortable with its concept and practice (Reihl, 2000). Resistance toward inclusive reforms by principals is often due to the lack of training rather than negative perceptions or attitudes toward special education. It is important that inclusive principals understand the historical background of special education, as well as current trends and practices, in an effort to facilitate change in their schools (Cook, Semmel, & Gerber; 1999; Crisman, 2008).

Special-education teachers often solicit principals' advice on discipline. Some recommended behavior-management strategies may not be effective intervention for all students (Billingsley, 2004). When developing behavior-management strategies for

students with special needs, the principal should consider the student's disability and how that disability affects the student's behavior (Bateman & Bateman, 2001). Lack of awareness of the various types of disabilities and successful intervention strategies can limit a principal's ability to make the appropriate discipline recommendation (DiPaola & Walther-Thomas, 2003).

Today's principals are dealing with children with physical, emotional/behavioral, and learning disorders as well as those with significant health care needs (Darling-Hammond, 2004). Principals can be overwhelmed by the necessity to provide strong leadership to teachers in the instruction of students with high-incidence disabilities, including autism (Darling-Hammond, 2004). The managerial responsibilities, including reporting, compliance, program management, accountability, and decreased resources, can paralyze the efforts of the administration, leaving students' needs unmet (Bartlett, Etscheidt, & Weisenstein, 2007).

Statement of the Purpose

The purpose of this study is to develop a theory as to how working with ASD students informs principals' leadership practices, particularly in an era of greater accountability for all student learning outcomes. In addition, the study seeks to better understand elementary principals' sources of knowledge when leading ASD student populations. In this era of school accountability and standards-based assessment, many schools struggle to implement appropriate state and local curriculum requirements, special-education regulations, and ensure adequate professional development opportunities for staff (Goor & Schwenn, 1997).

Krajewski and Krajewski (2000) suggested that the success or failure of special-education programs relies greatly on the school principal. Principals are identified as the person who is responsible to provide leadership in the development of the educational programs, assist faculty with appropriate resources, and adhere to all federal and state special education regulations (Sergiovanni, 2001). Although federal and local legislation and mandates influence many of the principals' decisions related to the education of children with disabilities and the programs that serve them, some researchers agree that the leadership style and knowledge a principal exhibits can have greater influence on the academic and social climate of the school (Power, 2007). Students with disabilities must be afforded the same curriculum opportunities as their general-education peers; therefore, principals must not only be aware of students' placements, but they must also be aware of school-wide inclusion practices. Principals should assist in the implementation and creation of programs by providing the necessary resources.

Although extensive research exists on the broad topic of autism, research specifically addressing the topic of principals' experiences with ASD is limited in the literature. Some of the research focused on the themes associated with autism include teacher, parent, and sibling experiences (Kosmerl, 2011; Strauss & Sochet, 2008). These research studies are identified experiences related to students with autism.

Research Questions

In order to better understand how school principals gain their knowledge and experience of students with autism, this grounded theory study will pose the following questions to develop a theory of how principals' experiences in elementary schools with ASD students informs and enriches their special-education leadership and practices.

1. How do elementary school principals gain experiences in their roles with regard to students with autism?
2. How do elementary principals' knowledge and experiences of students with autism help them as leaders in schools with an ASD population?

Definition of Terms

An understanding of the following terms is essential to the comprehension of this study. Thus, definitions for the following terms specific to the foci of this study are provided to enhance the reader's understanding of topic-specific terminology located in this study.

Applied Behavior Analysis (ABA) – the systematic study of variables that influence behavior (Sulzer-Azaroff & Mayer, 1991). ABA is a discipline concerned with the application of behavioral science in real-world settings, such as clinics or schools, with the aim of addressing socially important issues such as behavior problems and learning (Baer, Wolf, & Risley, 1968).

Autism – A developmental disability, generally evident before age 3 years, that is characterized by qualitative impairment in communication and reciprocal social interaction, repetitive activities, stereotypical movements, and restricted patterns of interest (DSM-IV-TR, APA, 2000). The term can refer exclusively to an autistic disorder (DSM-IV TR; APA, 2000), but it is often used in the research literature to refer to a broad range of autism

Individuals with Disabilities Education Act (2004) – The reauthorization of a federal law previously known as the Education for All Handicapped Children Act (PL-

94-142) of 1975, which mandated a free, appropriate, public education for students deemed eligible and in need of specialized services or instruction (IDEA, 2004, § 2647).

Pervasive Developmental Disorder (PDD) – used by the APA in the *Diagnostic Statistical Manual of Mental Disorders* (4th ed.; DSM-IV-TR; APA, 2000), for the broad range of ASDs, including:

1. *Asperger's Disorder* – Essential features for diagnosis include impairment in social interaction and restricted, stereotyped behaviors, interests, and activities. Children with Asperger's Disorder function at the higher end of the autism spectrum because they do not have any significant delay in language development, cognitive development, or adaptive behavior skills. They may have difficulty understanding the intricacies of social communication and reading social cues, such as facial expressions, body language, and gestures, resulting in a lack of social or emotional reciprocity (APA, 2000).
2. *Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS)* – This diagnosis includes “atypical autism” and is made when some, but not all, of the criteria for Autistic Disorder or another Pervasive Developmental Disorder are met (APA, 2000).
3. *Rett's Disorder* – This relatively rare ASD has an age of onset sometime between 6 and 18 months of age. After a brief period of apparently normal development, regression and loss of ability occur in gross motor skills along with the loss of previously acquired purposeful hand skills, resulting in stereotypical hand movements, such as hand wringing or hand washing. This

disorder is found almost exclusively in females and is associated with severe language impairment and severe-to-profound mental retardation (APA, 2000).

4. *Childhood Disintegrative Disorder* – Following a period of at least 2 years of apparently normal development, there is a rapid loss of previously acquired skills, such as bowel or bladder control, play or social skills, and language skills. The regression typically occurs between ages of 3 and 4 years and prior to age 10 years.

Chapter Summary

As educators seek to develop strategies to address the growing number of students entering schools labeled “autistic,” the need to examine the specific experiences that elementary school principals have with ASD students becomes evident. Studying principals’ experiences that lead to their knowledge of autism will provide valuable insight. The ultimate goal of this research is to develop strategies and improve educational experiences for ASD students.

Chapter 2 provides a review of the literature consisting of the history of autism, causes of autism and research proven intervention strategies used to support students with autism in the classroom. Chapter 3 provides further details to the methodology, research context, participants, data collection, and data analysis for the study. Chapter 4 presents a detailed analysis of the results and findings, and Chapter 5 discusses of the findings, implications, and recommendations for future research and practice.

Chapter 2: Review of the Literature

Introduction and Purpose

In this chapter, the literature is reviewed and analyzed to provide a context for, and to substantiate, the significance of the problem, to share research previously conducted in relation to the issues being studied, and to advance the knowledge of the topic of autism (Hart, 1998). Scholarly articles were reviewed for a critical analysis of school principals' experiences with autism and how their knowledge informed their decisions and understanding of autism. Research also focused on specific researched-based interventions such as TEACCH and ABA strategies. Articles were further analyzed to address some of the challenges school principals experience within the field of education.

History of autism. In the last 70 years, autism has gone from being an obscure condition to a familiar diagnosis. Autism and Asperger's syndrome were identified as disorders in the 1940s. In 1944 Hans Asperger wrote *Autistic Psychopathies in Childhood* (Aspy & Grossman, 2012). Both researchers used the term "autistic," which was coined by a Swiss psychiatrist, Dr. Beuler, 30 years previously. Beuler described autism as a condition where individuals withdrew from the social world around them (Aspy & Grossman, 2012; Kircher, Seiferth, Plewnia, Baar, & Schwabe, 2007).

Causes of autism. According to The Autism Society of America [ASA] (2005), there is no known single cause for autism, but it is generally accepted that it is caused by abnormalities in brain structure or function. Brain scans are said to now show differences

in the shape and structure of the brain in children with autism versus children without autism. Genetics, environmental factors, food allergies, and vaccines have also been identified as contributing factors of autism (ASA, 2005; Rudy, 2007).

Brown (2003) concluded that in order for a person to be classified as having autism, another diagnosis, such as mental retardation, tuberculosis, seizure disorder, or other syndromes may accompany the ASD diagnosis. These diagnoses are usually identified prior to the autism diagnoses. This additional disorder, in conjunction with the autism classification, can make it difficult for school principals to apply the appropriate intervention and behavioral strategies (Wilkerson, 2013).

Steuernagel (2005) discussed several factors associated with the causes of autism. She identified hyperlexia as a root cause and an early possible indicator of autism. Hyperlexia is an above normal ability to read coupled with a below normal ability to understand spoken language. Children with hyperlexia display an early fascination with numbers and letters. Today, medical researchers have indicated that autism is a set of a wide variety of symptoms and may have many causes (Dryden-Edwards, 2015).

Additionally, Steuernagel (2005) suggested that the onset of autism can be attributed to a reduced head size at birth. The head size and brain volume in a child with autism then grows excessively between the ages of 1 to 2 months and 6 to 14 months of age. This researcher suggested that autism emerges during early periods of brain overgrowth. Lastly, Steuernagel believed that autism was caused by multiple genetic risk factors and that various types of autism may be linked to different genes.

Similar to Steuernagel (2005), the National Institute of Health (2014) has stated that autism is most likely a genetic predisposition. In addition to genetics, the NIH has

said that there is also an environmental component to autism. The NIH does not believe that the rapid rise in the rate of autism over the last 20 years can be attributed solely to genetics (National Autism Association [NAA], 2014).

A recent review of the world's medical literature suggests that underlying biochemical abnormalities are likely involved in environmental susceptibilities and the development of autism, including mitochondrial dysfunction, immune dysregulation, inflammation, oxidative stress, methylation problems, and toxicity (NAA, 2014). Most researchers agree that environmental factors play a role, though there is no one cause of autism identified by traditional science (NAA, 2014). Researchers claim that it is important that environmental exposures are considered among all cases, especially cases of regressive autism, which occurs when a child appears to develop typically but then starts to lose speech and social skills between the ages of 15 and 30 months (NAA, 2014; Richler, 2014).

Kanner (1943) summarized case histories of 11 children (nine boys and two girls) who he believed had autism. He found several common features among the group, including withdrawal from others, obsessive behaviors, and deficits in language and communication. Additionally, he observed that the children were unable to relate to others, preferred isolation, and appeared to be more interested in objects than in people (Kanner, 1943). Kanner added that it was difficult to elicit a response when speaking to too many of the children. He described them as having “a need for being left undisturbed” (p. 44).

Kanner's (1943) syndrome was also referred to as “infantile autism,” which was recognized in 1980 by Spitzer, Kroenke, and Williams in the *Diagnostic and Statistical*

Manual of Mental Disorders (3rd ed.; DSM-III; American Psychiatric Association [APA], 1980). In 1987, the DSM changed the name of the syndrome to an “autistic disorder.” By 1994, Kanner’s original definition of autism was broadened to include additional characteristics, such as social interactions, communication, and restricted activities and interests.

Hans Asperger (1941) wrote his doctoral thesis on a group of four children who appeared withdrawn and socially odd. The children examined in his study exhibited unusual behaviors, such as an intense interest in specific subjects, difficulties in learning, limited attention spans, and poor motor coordination. Intelligence in Asperger’s subjects varied from low to extremely gifted. Many of the children showed peculiar speech patterns and voice characteristics. The children also had difficulty with making eye contact, facial gestures, and expressions. Asperger concluded that the children had “autistic psychopathy.”

Both Kanner (1943) and Asperger (1944) described children with autism as having social deficits, and the children in Kanner’s studied failed to respond to others and exhibited significant language and communication issues (Aspy & Grossman, 2012). Contrary to Kanner’s findings, the children in Asperger’s study were socially awkward and appeared to have difficulty with their conversational skills (Aspy & Grossman, 2012). Despite different presentations, both Kanner and Asperger described the children in their studies with the same disorder and introduced the concept of autism (Wing, 1981).

Folstein and Rutter (1977) conducted a systematic study of 21 same-sexed twin pairs in which at least one twin showed the syndrome of infantile autism. It was

concluded that there were important hereditary influences concerning a cognitive deficit, which included, but was not restricted to, autism. In 12 out of 17 pairs or twins, the presence of autism was associated with a biological link to brain damage. It was further concluded that brain injury in the infancy period may lead to autism—on its own—or in combination with a genetic predisposition. As a result of their research, there is evidence today that there is a genetic component associated with autism (Rutter, 2000).

Autism in education. Autism was not recognized by the U.S. Department of Education (USDOE) as a disability category until 1991 (Ruble & Brown, 2003). Students with autism were typically served under other disability categories that did not meet their diverse needs. Today, in order for students to be classified and eligible for services related to ASD certain criteria must be met. Students must have a developmental disability, generally evident before the age of 3, significantly affecting verbal and nonverbal communication. They must also have a developmental disability affecting social interaction. Student’s deficits should not be primarily the result of an emotional-behavior disability. Evaluation information must also confirm there is an adverse effect on educational performance and lack of instruction in reading and/or math was not a determinant factor in the eligibility decision. Evaluations should also confirm that limited English proficiency was not a determinant factor in the eligibility decision (Kentucky Administrative Regulations: 707 KAR 1:002, 2008, p. 3).

Special education laws have an extensive history. The Education of All Handicapped Children Act (EHA; PL 94-142), introduced in 1975, mandated a free and appropriate education for all children with disabilities. IDEA 2004 defined autism as “a developmental disability significantly affecting verbal and non-verbal communication

and social interaction, generally evident before age 3, which affects a child's educational performance" (National Dissemination Center for Children with Disabilities, 2014). Even with the education disability term of autism defined, more qualifications are needed to receive the educational disability label of autism. ASD students must meet educational qualifications for special education support in addition to a medical diagnosis (Hollenbeck, 2004).

According to Hollenbeck (2004), the increase in students with autism places extraordinary demands on school districts to provide appropriate services to these students. Educational supports are meant to assist a student to succeed in the educational environment, whether it is in a special education classroom or in the general-education classroom. Students who have autism are protected under a variety of state and federal laws.

Gaskin v. Pennsylvania Department of Education was a class action lawsuit filed in 1994. This lawsuit involved the inclusion of students with disabilities, including students with autism. The lawsuit was eventually settled 10 years later, in 2004, concluding that Pennsylvania's Department of Education (PDE) was responsible to educate students with disabilities with their nondisabled peers in the general-education classroom (Pennsylvania Department of Education [PDE], 2005).

School principals. Historical accounts suggest that the roles of school principals have remained consistent over the past century (Hallinger, 1992b). Even as reform models have periodically changed in education, reshaping the professional roles of the profession of principal have remained unaffected (Cuban, 1984). Kotter (1990) described leadership as having two meanings, one focused on the formal structures within an

organization where people are assigned to leadership positions due to title, and the other meaning of leadership focused on guiding and mobilizing people.

In the 1960s and 1970s, school principals became increasingly responsible for managing federally sponsored and funded programs, which were designed to assist special-education students. Compensatory education, bilingual education, education for the handicapped, and other federal entitlements required implementation support from the school principals. Additionally, the 1960s and 1970s were also active decades for curricular innovation (Hallinger, 1992a). During these decades, principals assumed a new set of change-implementation functions that ranged from monitoring compliance with federal regulations to assisting in staff development and providing direct classroom support to teachers. In contrast to their earlier role, which was to manage the operations of a school, program and curriculum management became a necessity for school improvement and change. As a result of increased federal intervention in local policy, principals came to be viewed as potential change agents (Leithwood & Montgomery, 1992).

Researchers studied this phenomenon and discovered that school principals varied widely in their responses to the demands of change implementation (Leithwood & Montgomery, 1992). It also appeared that variations in the practices of principals were associated with the success or failure of implementation efforts. Studies of change implementation began to affirm that principals make a difference in the quality of schools as experienced by teachers and students.

By the mid-1980s, professional norms deemed it unacceptable for principals to focus their efforts solely on maintenance of the school or even on program management.

Instructional leadership became the new educational standard for principals (Murphy, 1994). Almost every state provided in-services aimed at developing the instructional leadership of principals (Hallinger, 1992a).

In alignment with the program or curriculum manager role for school principals, as the instructional leader, they were viewed as the primary source of knowledge for the development of the school's educational program. The principal was expected to be knowledgeable about curriculum and instruction and able to intervene directly with teachers to make instructional improvements. High expectations for teachers and students, close supervision of classroom instruction, coordination of the school's curriculum, and close monitoring of student progress became synonymous with the role definition of the instructional leader or school principal (Edmonds, 1979).

Barnett and Monda-Amaya's (1998) study on principals' attitudes toward knowledge of inclusion surveyed 115 randomly selected principals across the State of Illinois. The study elicited information regarding definitions, leadership styles, and effectiveness and implementation of educational practices associated with successful inclusive education. Findings raised issues related to principals' awareness of practices and perceived effectiveness. The study concluded that until principals take responsibility for their own learning and find ways to support their staff, there will be little improvement in academic performance and in all student groups, especially students with special needs.

Contrary to Barnett and Monda-Amaya's (1998) findings, Hoppy and McLeskey's (2013) findings indicated that if principals were nurturing and caring for their staff members, and buffered their faculty from external pressures associated with

high-stakes accountability, they were successful at leading school change efforts and developing a model of inclusive programming in his school. Hoppy and McLeskey examined the role of the principal in school change during this current 21st century era of high-stakes accountability. In their study, the principals who were most successful had a record of success in leading school change efforts, and they viewed their primary role as providing support to teachers so the teachers could do their best work.

Theoharis (2007) interviewed seven (n = 7) secondary school principals, who were employed in an urban district, to determine their knowledge and commitment to equity for all students. The findings revealed that the social justice-oriented principals built a school culture that was inviting and appealing to the community, and the principal had a major impact on the school's climate as well as on student achievement. These principals also led better learning institutions that were inclusive of all students.

An important facet of principals' jobs involves interpreting community values and ensuring that they are reflected appropriately within schools (Tyack & Honsot, 1982). By virtue of their position, principals find themselves attempting to maintain the traditional managerial role and their new role as defined by the Interstate School Leaders Licensure Consortium (ISLLC) (2008) in Table 2.1. The Consortium's initiative, which began in 1994, was developed on researching skillful leadership by school administrators and emerging perspectives about society and education (Council of Chief State School Officers [CCSSO], 1996).

The ISLLC team focused on standards for several reasons: (a) the absence of common standards in education administration; and (b) the need to improve licensure programs and assessment criteria (CCSSO, 2008). There was a belief that if a common

set of standards were developed and implemented nationwide, there would be an improvement in how stakeholders (or school principals) were being held accountable. The ISLLC team acknowledged the responsibilities of school leaders, and focused on topics that formed what they called the “heart and soul of effective leadership” (CCCSSO, 1996, p. 8). The team produced six standards that focused on matters of learning and teaching and the creation of powerful learning environments. Several standards directly highlighted learning and teaching, but all of the standards took on meaning to the extent that they supported a learning environment. Every standard began with the words: “A school administrator is an educational leader who promotes the success of all students and is accountable for the achievement of all students” (CCSSO, 1996, p. 8).

Researchers have indicated that the successful principal is one who can provide guidance, inspiration, and new vision for contemporary education (Bennis, 2003; Crawford, 2002). In the past, the main function for a school principal was thought to be the person responsible for maintaining an orderly and safe environment that was conducive to learning. However, the role of this school administrator has significantly expanded since the reauthorization of IDEA 2004. According to Federal guidelines, principals are required to be involved in the educational planning of students who are eligible for special-education services (CCSSO, 1996).

Principals’ influence in special education. Given that IDEA 2004 requires that all students with disabilities be educated in the least-restrictive environment with access to general curriculum and have participation in assessment practices, special education placement begins within the site of a student’s home school building under the leadership

Table 2.1

Interstate School Leaders Licensure Consortium: Standards for School Leaders

Standard	Description
1	A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.
2	A school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.
3	A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.
4	A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.
5	A school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness, and in an ethical manner.
6	A school administrator is an educational leader who promotes the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.

Note. Adapted from The Council of Chief State School Officers, (2008). <http://ccsso.org>

of the school principal (DiPaola & Walther-Thomas, 2003; Lasky & Karge, 2006). The Office of Special Education Programs (1996), a division of the United States Department of Education, has upheld that the central role of the school principal is to provide instructional leadership to ensure that the rights of students with disabilities are protected and that these students receive an appropriate education (Heumann & Heir, 1998). Bargerhuff (2001) stated that a principal's experience with students with disabilities is

typically limited to federal and state guidelines, even though school principals are expected to serve as instructional leaders to “the extent that the principal has been responsible for special education students has not been apparent” (p. 3).

Morgan and Demchak (1996) reported that if principals were involved in the planning of specialized programs, implementation was a successful process. According to Praisner (2003), the successful efforts to improve specialized educational programs for students with disabilities are the result of the cooperation and collaboration displayed by the building principal.

Emerging research has established a significant relationship between special education and school leadership attrition. Seltzer (2011) discussed the challenges in supply and demand for qualified faculty, district administrators, principals, and special-education teachers. Seltzer described special-education leadership as complex, unique, and diverse as the students it intends to serve. The study concluded that special-education administrative licensing requirements are in disarray, and the standards are either generic or do not provide the requisite knowledge to move forward. Additionally, it was found that special-education administrators lack the necessary training and skill to implement a balanced policy based on both compliance and accountability, which is needed to create policy-based administrative practices to move the students with disabilities within their respective districts forward.

Additionally, Boscardin (2004) recommended that a research agenda for special-education administration be developed to include: (1) the preparation of highly qualified beginning administrators, (2) the induction and ongoing support of special education administrators, (3) the effects of leadership on educational outcomes, (4) the distribution

of special education leaderships, and (5) the relationship among national, state, and local polices in addressing special education leadership. Boscardin stated that special-education leadership is complex in both compliance and accountability. Therefore, to ensure that principals are compliant with IDEA 2004 and are applying the appropriate interventions, districts should implement a systematic IEP process to achieve administrative goals and benchmarks directly benefiting students with disabilities.

DiPaola and Walther-Thomas (2003) examined principals' roles and their influence on school-based, special-education services. It is well recognized that school leaders, in particular, must be prepared to advocate effectively for the educational rights of all students if school reform goals are to be realized. DiPaola and Walther-Thomas also acknowledged that few school leaders are prepared to provide special education leadership (Monteith, 2000; Walther-Thomas, DiPaola, & Butler, 2002). To rectify the issue of preparedness, DiPaola and Walther-Thomas recommended that university preparation programs, professional organizations, educational researchers, state agencies, and local communities work together to ensure that administrators develop the essential leadership skills needed to advocate effectively for the educational rights of diverse learners.

Frost and Kersten's (2011) conducted a quantitative study that included 132 elementary (including pre-kindergarten and kindergarten) school principals in Illinois. Quantitative survey data were to obtain frequencies and percentages of closed-end responses. Open-ended question responses were recorded verbatim.

The principals' perceptions were analyzed concerning their role as the instructional leader with special-education teachers. Of the 132 principals holding a state

special-education teaching certificate, 66 reported higher knowledge and involvement with special-education teachers than any other identified group. The findings supported previous studies that school principals who hold a state special-education teaching certification reported higher knowledge and involvement with special-education students, and they were better prepared to support their special-education programs and teachers.

As the pressures in schools mount, many have questioned the impact principals have on students with disabilities and other children at risk for academic failure (DiPaola & Walther-Thomas, 2003). The relationship between the principal leadership and special education has not received much attention until recently (Seltzer, 2011). Administrators who have a clear understanding of the needs of students with disabilities and the challenges those educators, who work with students with disabilities face, are better prepared to provide appropriate support (Seltzer, 2011).

School principal training and supervision in special education. The roles, duties, and responsibilities of principals change as swiftly as the policies, budgets, best practices, and systems of accountability that govern their ability to meet the challenges of the students under their charge (Seltzer, 2011). Institutes of higher education are the primary source of training for aspiring special-education leaders (Smith, Mortorff, West, & Chowdhuri-Tyler, 2010). Administrators often complete their graduate training with the belief they have been adequately prepared for position until they are faced with accusations of inappropriate services or are confronted with a lawsuit and potentially substantial costs for their school district (Burton, 2008; Militello, Schimmel, & Eberwein, 2009; Strader, 2007). There is a growing need for specialized training programs to provide a pathway to certification in order to address the unique needs of students with

disabilities, mainly autism. (Rosenberg & Sindelar, 2005; Smith, Pion, & Chowdhuri - Tyler, 2004).

A number of studies have explored educational leaders' own feelings and their training or lack of training in special education and special-education law. These studies indicate that school leaders are aware of the need for more training but rarely receive it in their programs. Davidson and Algozzine (2002) surveyed 264 principals regarding their need for training in special-education law. Almost all respondents expressed a need for additional training. Nearly half of those surveyed reported they possessed "limited" or only "basic" knowledge of special-education law and believed their understanding of special-education law was either "below" or "well-below" standard.

In a similar study, Robicheau, Haar, and Palladino (2008) examined eight training programs. Survey materials, course content, and curriculum were collected and analyzed from all programs. Researchers found that special education and knowledge of legal issues was a critical skill for school leaders. However, the school principals who were interviewed reported receiving "limited to no preparation in special education" (p. 3). In addition, only one of the programs studied actually offered a specific course in special-education law.

Likewise, Lasky and Karge (2006) surveyed 205 principals to assess their perceptions of acquired special-education knowledge and skills and the level of their preparation pertaining to their ability to address responsibilities relevant to special education. Of the principals surveyed. 145 reported having little experience with special education during their administration credential course work. In addition, 179 of the

surveyed principals believed that formal special-education preparation was moderately to very important.

Additional studies related to principals' personal perceptions of their level of knowledge, understanding, or preparedness of special education and special education law, as provided by their administrator-preparation programs, indicated the following: (a) an emphasis on and need for more practice and training was needed in order to be an inclusive leader (Garrison-Wade, Sobel, & Fulmer, 2007), (b) there was a lack of understanding in areas related to special education or curriculum (Berstrand, Robers, & Dalton 2009), and (c) there is a desire to combine coursework with field-based experiences so special-education competencies and skills can be applied within authentic learning environments (Cooner et al., 2004).

Principals have indicated they lack the knowledge and necessary training to address the needs of students with disabilities. However, educational leadership preparation programs are continuing to promote graduates who will become building-level administrators. Studies reveal that many graduates have reported concerns about being fully prepared for the challenges they will face in their schools and communities. While others are entering the leadership positions unaware and unformed about their educational, professional, and legal obligations (Pazey & Cole, 2013).

Intervention programs for students with autism. Today there has been an increase in the attention paid to assessment and intervention issues surrounding students with autism (Koegel, Koegel, Ashbaugh, & Bradshaw, 2014). A late diagnosis for students with autism may prevent students from having access to the appropriate interventions. Behavioral interventions are far more effective when they begin early

(Lovaas, 1987). As more and more children are being diagnosed with autism, it is essential that schools' principals are knowledgeable about evidence-based behavioral intervention programs. While behavioral interventions are available for students with ASD, school principals either do not have access, or they lack sufficient training to make those interventions a part of their practice in the schools (Wilkinson, 2013).

In order to effectively support students with autism, there is a strong consensus in the research literature that all staff working with a student with ASD must be qualified to do so (Leko & Brownell, 2009; Lynch & Adams, 2008). The primary goals of treatment for students with autism is to maximize the child's ultimate functional independence and quality of life by minimizing the core ASD features, facilitating development and learning, promoting socialization, reducing maladaptive behaviors, and educating and supporting families (Aspy & Grossman, 2012).

Children with autism require specialized methods that are tailored to meet their individual academic and behavioral needs. Therefore, it is imperative for school principals to be familiar with the strategies that are most effective for allowing the child with autism to be more successful in the entire school learning environment. All staff, including principals, should be familiar with ASD students' multiple intelligences in order to provide effective learning strategies (Gardner, 1993).

Stahmer, Collings, and Palinkas (2005) conducted a qualitative study on the use of early intervention practices used for children with autism in a community setting. The Stahmer et al. study included 69 service providers or supervisors from educational/early intervention programs. The participants were to describe a basic intervention strategy used when working with ASD students. Participants listed more than 40 different

research and non-research based interventions. The study concluded that additional research was needed in order to provide a more detailed description of what early intervention programming entails for ASD students.

Applied behavior analysis: The Lovaas method. Since the early 1960s, numerous studies have been conducted using applied behavior analysis) with autistic children of all ages, and ABA remains one of the most popular and widely used treatment strategies for children with ASD. A wide variety of ABA-based interventions have been developed for use in structured situations and in more “natural” everyday situations and in one-on-one, as well as group, settings (National Research Council [NRC], 2001). Several researchers have conducted comprehensive reviews and studies documenting the effectiveness of ABA-based interventions for developing communication, play, social, academic, and adaptive skills in children with ASD and to reduce problem behaviors (Virués-Ortega, 2010).

McEachlin, Smith, and Lovaas (1993) study included 19 young children between the ages of 2 and 4 years old with autism. All participants were treated intensively in their homes with ABA therapy for a 2-year span. These students were being compared to two control groups. Children in all three groups were diagnosed by independent clinicians and were similar in chronological and mental age. The treated group received 40 or more hours per week of one-on-one ABA therapy for 2 or more years, which was provided mainly by the University of California, Los Angeles (UCLA) students trained at Lovaas’s UCLA Young Autism Model Program.

The first control group of 19 received limited amounts of ABA therapy, averaging 10 hours or less. The second control group of 21 children received no ABA therapy.

There was a large and statistically significant difference between the groups on both variables, with a mean IQ difference of 25 to 30 points between the experimental group and the two control groups, as well as significant differences in educational functioning. In the experimental group, 47% of the children were functioning “well” in typical first-grade classrooms without any special supports, whereas only 2% of the control participants were placed in typical first-grade classrooms. Only 10% of the experimental group, but 53% of the combined control groups, were in classes for children with severe disabilities, and they had IQs in the range of moderate to severe retardation (Lovaas, 1987).

When analyzing Lovaas’s (1987) initial and follow-up ABA research studies, several methodological weaknesses were discovered (Lonigan, 1998). Student assignments to groups were not random (Rogers, 1998). Critics claimed that some children were “auditory” learners and were able to function independently in typical classrooms, while children had to rely on a multitude of visual supports to aid instruction (Mesibov, 1997). Other weaknesses noted were the absence of documentation on the amount of treatment that individual children received in any one group (Mesibov, 1997; Mundy, 1993).

Bimbrauer and Leach’s (1993) study involving children treated at home was similar to Lovaas’s (1987) ABA model. Although positive outcomes were reported in the experimental group, it had methodological and analysis problems that limited the interpretation of the findings (Rogers, 1998). Likewise, the Bimbrauer and Leach study included non-random assignment of children to experimental and control conditions. The group sizes were small and included 5 to 9 children. Although the findings were reported

after 24 months, the data was not available for group comparisons, and no statistical analyses was available, thus limiting the fidelity of the study and concluding that ABA does not reduce the severity of symptoms of autism. All children that participated in the experimental group continued to meet the criteria for autism after 2 years of treatment.

According to the literature, additional ABA studies were conducted privately in center-based school programs. The private, center-based studies were also reported as having had methodological and analysis problems (Rogers, 1998). Schoen (2003) described ABA therapy as intense and intrusive and recommended monitoring of the recipients receiving therapy.

ABA/Discrete trial training. Discrete trial instruction (DTI) is a critically important teaching method used in applied behavioral analysis for teaching autistic children, because it provides a very clear and simple framework. The DTI approach is best employed while children with autism are in the early stages of learning (Harris & Weiss, 1998). Discrete trial instruction is an effective format for teaching specific skills in an intensive, efficient manner (Scheuermann & Webber, 2001). Skills are taught within a highly structured, one-on-one format, providing clear and concise instruction, an additional prompt (as necessary), and an explicit reinforcement (reward) for performing the skill successfully. Discrete trial training typically uses a least-to-most prompting hierarchy, moving from a verbal prompt to physical guidance when verbal and nonverbal prompts are inadequate. Trials of instruction are provided on a single behavior in a massed fashion with only a brief pause between trials (Scheuermann & Webber, 2001).

In his 1987 study, Lovaas' one-on-one behavioral treatments involved the use of discrete trial training (DTT). Believing that 40 hours of intensive, one-on-one, early ABA

intervention with discrete trial training (DTT) offered hope of a “normal” outcome for their autistic children, many parents successfully sued their public school systems, forcing them to provide Lovaas therapy with intensive, discrete trial programs (Feinberg & Beyer, 1998; Gresham & MacMillan, 1998). Given the labor-intensive, high cost of such an intervention, school systems often resisted implementation, resulting in conflict between parents and educators and controversy over whether the Lovaas methodology should be considered an entitlement under the Individuals with Disabilities Education Act (Feinberg & Beyer, 1998).

In a recent study, Thomas (2013) examined staff members’ correct use of DTT. All participants had been previously trained and proficient in using DTT procedures; however, baseline results showed a low level of correct demonstration of DTT procedures (mean scores: 38.3%, 43.3%, and 35.0%). Participants were then taught to use a checklist to observe and score a peer's performance during DTT sessions in a classroom setting. After conducting behavioral observations, the staff increased their correct usage of DTT procedures to 85.1%, 88.3%, and 81.1%, respectively. These data indicate that conducting behavioral observations can lead to large and rapid improvements in an educational staff’s correct use of DTT procedures with a large effect size ($d = 4.19$).

Some researchers have recommended that ASD students be placed according to the severity of students’ symptoms, rather than use the school system’s policy regarding special-needs children in general-education classrooms (Schopler, Short, & Mesibov, 1989). Many researchers have also suggested that the Lovaas (1987) method is not a good indicator for classroom placement. Therefore, school principals need to be familiar with specific behavioral strategies when deciding on the placement of ASD students.

Treatment and education of autistic and related children. TEACCH is a structured program that provides services for children and adults with autism. This comprehensive intervention program uses a different approach than traditional or modified ABA by combining features of behavioral and developmental orientations (Aspy & Grossman, 2012; Lord & Schopler, 1994). Modifications in structure of the classroom environment, instructional materials, and methods of presenting information make learning and understanding easier for children with ASD, because modifications and materials are adapted to the individual learning styles and characteristics of each child (Lord & Schopler, 1994).

The structured teaching program for TEACCH was originally developed in 1972 as a statewide program in North Carolina for the diagnosis, treatment, training, and education of children with ASD (Lord & Schopler, 1994). TEACCH currently operates nine regional centers in North Carolina that provide diagnostic evaluation, individualized curriculum development, social skills, vocational training, and parent counseling services for children and adults with ASD. TEACCH centers also provide in-service training and consultation services for educators and other professionals. The program has been implemented throughout the United States and Europe, becoming one of the most influential educational programs for children with autism disorders (Smith, 1999).

The TEACCH learning environment has clear, concrete, and visual information. The environment is structured by the use of schedules for daily routines, the use of individual systems for work and play, and visually clear organization of tasks (Aspy & Grossman, 2012; NRC, 2001). Because visual skills tend to be more advanced than verbal skills among children with autism, instructions can be presented in pictures rather

than spoken words or supplemented with visual aids. Tasks may have visual prompts such as pictures of each step in a task. Children work at individual workstations because noise and intrusions from peers may be distracting, although some work also occurs in small groups. The program involves simplified directions and the use of visual cues, prompts, and reinforcement. Because transitions from one situation to the next are often difficult for children with autism, highly structured visual schedules are displayed to help the child visualize the order of events and what comes next (Aspy & Grossman, 2012).

Panerai, Ferrante, and Caputo (1997) studied the effectiveness of the TEACCH program with 18 autistic children and youth (ages 7 to 18) with co-occurring mental retardation. Most students were nonverbal. After 1 year in a TEACCH program, study subjects showed significant gains in communication, socialization, self-help skills, perception, motor activities, and cognitive performance. Panerai et al. (1997) also found that TEACCH methods promoted more independence during work sessions and in moving from one activity to another, and study participants communicated more frequently using different ways of communication (e.g., objects, using cards, photos, and pictures).

Lord and Schopler's (1988) investigation of the TEACCH method on cognitive development in children with autism concluded that TEACCH may be especially effective in facilitating the cognitive development among a subgroup of nonverbal autistic children who are low functioning at entrance to the program. On average, children who received early intervention in TEACCH gained 3-7 IQ points between the age 3-4 and the ages of 7-9 years. These gains were fairly small in comparison to cognitive gains reported by Lovaas (1987) for children receiving early intervention using

ABA-based methods with discrete trial training. However, Lord and Schopler noted that even though the cognitive functioning of most children in the TEACCH program remained fairly stable over time, a subgroup of the 44 lowest functioning children (nonverbal children with IQ <50) made impressive IQ gains, averaging 15-24 points (Lord & Schopler, 1988).

Ozonoff and Cathcart (1998) evaluated the effectiveness of a TEACCH-based program that was implemented by parents in a home-program intervention for young children with autism. Comparisons were made between a treatment and a no-treatment control group matched for age, pretest scores, and severity of autism. After 4 months of TEACCH-based home intervention, children in the treatment group improved significantly more than those in the control group on measures of fine motor, gross motor, nonverbal conceptual skills, and imitation skills.

Although further research is needed, TEACCH has been influential in promoting the use of structured teaching for children with autism, the use of visual strategies and environmental supports, a holistic treatment approach, an emphasis on skill enhancement, and parent-teacher collaboration (Committee on Children with Disabilities, 2001; Mesibov, 1997). Similar to ABA, a major weakness reported by several studies on the TEACCH method was the lack of control groups (e.g., Keel, Mesibov, & Woods, 1997; Panerai et al., 1997).

The primary focus of the TEACCH program is to use interventions in highly structured settings for learning, which is based on the culture of autism. Mesibov (2006) firmly believed that cultural norms affect the way people think, eat, dress, work, and

communicate; therefore, autism is a culture. Mesibov believed this—despite the fact the autism is a developmental disability.

The Picture Exchange Communication System (PECS). PECS is a popular communication-training program for young children with ASD (Flippin, Reszka, & Watson, 2010). According to the Autism Spectrum Institute at Illinois State University (2007), there are six phases of PECS. The PECS strategy teaches children to communicate with pictures and symbols in order to develop functional communication (Heflin & Simpson, 1998).

Schreibman and Stahmer's (2013) randomized clinical trial compared the effectiveness of a verbally based intervention, pivotal response training (PRT), to a pictorially based behavioral intervention, PECS on the acquisition of spoken language by young (2-4 years), nonverbal or minimally verbal (≤ 9 words) children with autism. Thirty-nine children were randomly assigned to either the PRT or PECS condition. Participants received, on average, 247 hours of intervention across 23 weeks. Dependent measures included overall communication, expressive vocabulary, pictorial communication, and parental satisfaction. Children in both intervention groups demonstrated increases in spoken language skills, with no significant difference between the two conditions. Seventy-eight percent of all of the children exited the program with more than 10 functional words. Parents were very satisfied with both programs but indicated that PECS was more difficult to implement.

In a similar study conducted by Flippin et al. (2010), the study included eight single-subject experiments (18 participants) and three group studies (95 PECS participants with 65 participants in other intervention/control group). Results indicated

that PECS is a promising, but not yet established, evidence-based intervention for facilitating communication in children with ASD in ages 1-11 years. Small-to-moderate gains in communication were demonstrated following training. Gains in speech were small to negative.

Howlin, Gordon, Pasco, Wade, and Charman (2007) conducted a study to assess the effectiveness of PECS training and consultancy for service providers, including school principals who worked with children with autism. The study revealed that service providers are untrained or have only attended a brief PECS workshop. In addition to the quality of training, there were also concerns regarding the proper implementation in order to create a classroom environment that was required in order for PECS to be effective.

Social intervention strategies for students with autism. Social skills are a very important set of skills that impact social, communicative, cognitive, and emotional development for students with autism. Social skills do not come naturally to individuals with autism as these skills must be taught explicitly if they are going to be mastered. All things social—stories, groups, peer mentoring—are recommended interventions strategies for students with autism.

Social stories. Social stories are brief, structured stories that describe specific social situations a student will encounter, and there are appropriate responses to each social behavior (Scheuermann & Webber, 2001). “The goal of the story is to increase the individual’s understanding of, make him more comfortable in, and possibly suggest some appropriate responses for the situation in question” (Wallin, 2004, p. 1). The idea of using social stories is a way to provide concrete information to help improve students’ social skills and appropriate behaviors (Special Programs Branch, 2000). Social stories can be

designed by teachers, parents, or groups of students. They generally have descriptive sentences, which provide information about social content (the setting, people, activities, etc.). They also have descriptive sentences, which tell the student what to do, in addition to perspective sentences, which describe feelings of the individuals involved in the situation.

Significant impairment in social interaction is one of the core characteristics of children with ASD (5th ed.; DSM-5; APA, 2012). Vital social skills, such as sharing joint attention, initiating and maintaining social interaction, and engaging in cooperative, play may be lacking in students with ASD (NRC, 2001). Since the approach was developed by Gray in 2002, social stories have become an increasingly popular strategy for teaching social skills to children with ASD (Gray & Garand, 1993). Social stories are brief, individualized stories that describe a particular social situation and provide specific information about expected behavior in that situation, the viewpoint of others, and specific steps for implementing appropriate social skills (Sansosti, Powell-Smith, & Kincaid, 2004). A social story helps a child to understand what other people in a given situation typically do, think, say, or feel. The story provides the child with a script for what to do and what to say in various social situations. The story is read to the child before a target activity starts to help the child understand the social cues for that given setting, and it prepares and guides the child to perform appropriate social behavior in that situation (Gray, 2002; Sansosti et al., 2004).

Social stories have been used to target a variety of skills, including conversational skills, such as initiating, joining, and maintaining a reciprocal conversation; play skills,

such as sharing and taking turns; and pivotal behaviors, such as initiating requests (Machalicek et al., 2008).

Sansosti et al. (2004) found 10 studies relating to the effectiveness of social stories; however, only six studies were adequately control by using a multiple baseline design. Social stories were found to be effective in decreasing temper tantrums, loud verbal vocalizations, and disruptive behavior including chair flipping and shouting (Sansosti et al., 2004).

Most research on social stories has been conducted with children who have moderate-to-severe forms of autism. However, Sansosti and Powell-Smith (2006) examined the effects of social story interventions for three children with Asperger's syndrome (ages 9-11) on social interaction with peers. Following the social story intervention, 2 of the 3 participants showed increases in social engagement.

The major advantages of social stories are that they are simple, cost-efficient, and fairly easy to implement, and a story can be read as often as needed by the child or by the teacher (Machalicek et al., 2008). In their recently published National Standards Report, the National Autism Center (2009) identified story-based interventions, including the use of social stories as a treatment for which several well-controlled studies have shown the intervention to be effective for children with ASD. In particular, social stories were found to be effective in increasing interpersonal skills and self-regulation in children (ages 6-14) with ASD and Asperger's syndrome.

Social groups. Having important, reciprocal relationships with peers is essential to a child's social, emotional, and cognitive development (Scheuermann & Webber, 2001). Literature on the social status of children suggests that students prefer peers with

whom they have something in common, who are more like themselves, have good social and communication skills, who are leaders academically or athletically, and who do not exhibit extreme behaviors (Adler, Kless, & Adler, 1992). Students with manageable disabilities, such as autism, which involves limited social and communication skills, would be assumed to have lower status and fewer friendships.

In a study by Gonzalez-Lopez and Kamps (1997), special education teachers trained 12 typically developing peers (ages 5 to 7) to use behavior-management skills, such as modeling, prompting, giving assistance, and ignoring inappropriate behavior, to teach specific social skills to four children with autism (ages 5-7). During the 25-minute sessions 3 to 4 times a week, the teacher met with the children in small groups, consisting of three peer trainers and one child with autism. During the first 10 minutes, the teacher modeled specific social skills, such as taking turns, greeting, sharing, imitating, and requesting, and then let the children practice those skills with feedback. During the last 10 to 15 minutes of the session, the teacher did not interact with the group but allowed the peers to continue using the skills they had been taught to prompt and reinforce target social skills in the child with autism. All target students demonstrated increased frequency and duration of social interactions (Gonzalez-Lopez & Kamps, 1997).

In a similar study, Morrison, Kamp, Garcia, and Parker (2001) taught four children with autism and same-age nondisabled peers to use and monitor social skills, such as requesting, commenting, and sharing, while playing games. Each autistic child was grouped with 2 to 3 typical peers for three weekly social-skills training sessions followed by free play. For the first 10 minutes of each intervention session, typical peers and autistic children were brought together to play various games and were trained by an

adult on social skills such as requesting, commenting, and sharing. Peers and students with autism were also trained to complete monitoring sheets to track instances of the targeted social behavior. Game-play sessions followed the 10-minute training sessions. During game play, the adult did not intervene because the typical peers provided prompts, verbal praise, and tangible rewards to the target student. Study results indicated that peer-mediated social skills training, combined with reinforcement, was effective with all four children with autism in increasing initiations, interaction with peers, requesting, commenting, and sharing behaviors (Morrison et al., 2001).

Bene, Banda, and Brown (2014) conducted a meta-analysis on the effects of peer-mediated instructional arrangements and autism. Thirteen children with ASD were chosen to participate in order to improve their academic and social communication skills and behavior. The results across the studies indicated that a peer-mediated instructional arrangement is a method for teaching and improving the various academic, communication, and social skills of students with autism.

Using peers as models, trainers, or tutors, peer-mediated interventions have several strengths. The Blacher, Howell, Lauderdale-Littin, DiGennaro Reed, and Laugeson (2014) study on ASD and the student-teacher relationship examined relations among behavior problems, social skills, and student-teacher relationships (STRs) within a sample of children (mean age 8) with ASD ($n = 36$) and comparison samples of children with typical development ($n = 91$) or with an intellectual disability ($n = 38$.) STRs for children with ASD appeared to be qualitatively different from those of similarly aged children with ASD or typical development. The STRs for children with ASD were considerably poorer, with less closeness and more conflict, than in the two comparison

groups. Within the group with ASD, teacher-reported child externalizing behavior and social skills accounted for significant variance in the total score on the Student-Teacher Relationship Scale. Conflict was predicted only by externalizing behavior, whereas closeness was predicted by social skills; levels of autistic mannerisms negatively related to the teachers' perceptions of closeness. The findings addressed the implications for transition to early schooling for children with ASD.

Peer tutoring/mediation. Another intervention used to teach social skills to children with ASD is peer tutoring. Peer tutoring procedures is an effective treatment approach for developing social skills among children with autism (McConnell, 2002; NRC, 2001). This treatment approach is commonly used in research studies on improving social skills of children with autism in school settings where typical peers provide readily available models of appropriate social and play skills, especially in inclusion classrooms (Machalicek et al., 2008).

Bene et al. (2014) conducted a meta-analysis on the effects of peer-mediated instructional arrangements and autism. Thirteen instructional arrangement studies were conducted with children with ASD to improve academic and social communication skills and behavior. Results across the studies indicated that the peer-mediated instructional arrangement is a robust method for teaching and improving various academic, communication, and social skills.

Likewise, in a 2008 study conducted by Owen-DeSchryver, Carr, and Blakeley-Smith on promoting social interactions between students with ASD and their peers, data collected during lunchtime and recess showed that the peer training intervention generally resulted in increased initiations by trained peers as well as increased initiations

and responses by students with ASD. The research focused on social interactions among three students with ASD and their typical peers. Two second graders and one fourth grader with ASD participated. For each student with ASD, 2 to 4 typical peers participated in the training sessions that targeted increased social interactions.

Peer-mediated interventions have been found effective in improving a variety of skills in children with ASD including play skills. Students learn the importance of sharing, taking turns, and sportsmanship. Students also work on conversation skills, by initiating conversation, giving greetings and compliments and responding to others. Cooperative social behaviors are key components of peer interventions (Machalicek et al., 2008; McConnell, 2002; NRC, 2001, Weiss & Harris, 2001).

Chapter Summary

Educational leadership is ranked as the number one key variable associated with effective schools, but the school principal of an effective school must be the leader for all programs within the school, including special education services (Gersten et al., 2001). Support from principals has strong direct and indirect effects on virtually all critical aspects for students with disabilities (Gersten et al.). Principals, however, often feel unprepared for their roles in the administration of such special programs (Goor & Schwenn, 1997). The leadership role of principals is crucial for improved education for students with disabilities; however, states have moved away from mandating preparation programs to include coursework on special education policy, procedures, laws, and practice.

Chapter 2 began with a description of the general characteristics of the school principal. As school-site administrators and policy leaders, principals influence reform

implementation decisions, control resource allocations, serve as an instructional leader and exert a supervisory role relative to school personnel (Cook et al., 1999). Effective school leaders know how to mobilize their communities to tackle challenging issues and confront problems that have not been addressed successfully (Heifetz, 1994). However, unless principals are committed to new initiatives and can win the support and commitment of their communities, their best efforts will produce few results (Fullan, 2001). Therefore, effective administrators have a deep commitment to continuous improvement that is coupled with a thorough understanding of the change process and the ability to work creatively with others to address emerging issues (Kouzes & Posner, 2005).

Chapter 2 also revealed studies exploring children with autism spectrum disorders and various educational interventions for these children. A reliable diagnosis of autism can be made as early as 24 months, yet in many children's diagnoses are made much later. A delay in diagnosis translates into a missed opportunity to provide early intervention services and to improve outcomes for children with ASD (Daniels, Halladay, Shih, Elder, & Dawson, 2013). When measuring the fidelity of interventions for ASD students, researchers suggest significant variability in implementation of evidence-based practices and supports for these students (Mandell et al., 2013).

Chapter 3: Research Design Methodology

Introduction

The number of students diagnosed with autism has increased significantly across the United States. This study seeks to investigate the experiences of elementary principals of children with autism spectrum disorders. In addition, the study seeks to better understand elementary school principals' sources of knowledge when leading ASD student populations.

A qualitative, grounded-theory research methodology was used for this research. Creswell (2009), describes grounded theory as “a qualitative strategy of inquiry in which the researcher derives a general, abstract theory of process, action, or interaction grounded in the views of participants in a study” (p. 13 & 229). This process involves using multiple stages of data collection and the refinement and interrelationships of categories of information (Charmaz, 2006; Strauss and Corbin, 2008).

The goal of the grounded theory approach is to generate a theory that explains how an aspect of the social world operates. The goal is to develop a theory that emerges from and is therefore connected to the very reality that the theory is developed to explain (Creswell, 2009). Two primary characteristics of grounded theory research design: (a) constant comparison of data with emerging categories and (b) theoretical sampling of different groups to maximize the similarities and differences of information (Creswell, 2009).

Maintaining creativity while ensuring a “degree of rigor by grounding analysis in data” (Strauss & Corbin, 1998, p. 13) built a foundation for grounded theory. Given that very little research exists examining school principals’ specific experiences with autism, using a grounded theory, allows for concepts to emerge from the collected data (Strauss & Corbin, 1998). This qualitative method, rather than a quantitative method, allows the researcher to establish an open approach to theory development to determine how principals’ experiences enhance their knowledge of autism.

Research Context

This study takes place in a large urban school district in upstate New York. Twenty-two percent of Harris Central School District (HCSD) are at the 90% poverty level or higher. There are 35 traditional elementary (PreK-6 or K-6) schools and 20 high schools (7-12) in the Harris Central School District. During the 2013-2014 school year, the HCSD taught approximately 30,000 students in Grades K-12. The student population is 60.1% African American/Black, 25.6% Hispanic, 10.2% White, and 4.1% Asian/Native American/East Indian/Other.

HCSD had approximately 5,069 (16.5%) children with disabilities, and 395 of those students were classified as being on the autism spectrum. There were 14 self-contained ASD elementary classrooms in the district. This number was projected to increase for the 2014-2015 school year due to a newly implemented districtwide initiative to reduce the number of ASD students in self-contained classrooms from 12 students down to 6.

Harris Central School District has an autism service team that includes a Speech Pathologist, Occupational Therapist, Social Worker, Physical Therapist, and a team

Coordinator. This team was purposefully designed to provide staff members, who were working with students with autism, academic and behavioral strategies. The five-member team was expected to provide assistance to all of the schools across the district.

Research Participants

Upon IRB approval from St. John Fisher College, the interviewees were selected from eleven elementary schools from an urban district in upstate New York. The researcher asked for assistance from the district's Executive Director of Special Education, in identifying elementary principals to participate in the research based on the study's criteria. After working with the district's Executive Director of Special Education, 20 potential participants were identified. All candidates were sent an email explaining the study in detail (Appendix A). The email reminded the principals to read the criteria carefully prior to contacting the researcher and agreeing to partake in the study.

Willing participants received an invitation letter by email from the researcher (Appendix A) with three additional forms (consent, demographic, written case analysis). Participants were asked to complete all forms and return prior to the individual interview. Once signed consent was received (Appendix B), individuals were assigned a pseudonym. Researcher phoned individuals to schedule dates, times and location of interviews.

Interviews took place over a 3-week time period, averaging 3 to 4 interviews per week. Using the initial interview protocol (Appendix E), the researcher interviewed each participant, making notes of body gestures and voice tone. At the conclusion of each interview, the researcher used a transcription application, REV (n.d.) to transcribe data

obtained during the individual interviews. All transcripts were analyzed for common codes, themes, and understandings.

For this study, 11 participants were interviewed (Table 3.1). There were four males and seven females with an average of 9 years of experience working as school principals. The average number of years supervising students with disability classrooms were reported as 10. Of the participants in this study, 88% were African American. The other 12% were Caucasian. No one reported their race as being “other.” With regard to age, all but three participants reported that they were their 40s.

Of the eleven participants, five reported knowing someone, other than students within their building, as having autism. Of the five participants, two identified those specific family members, such as a nephew or cousin as having autism; while three of the participants mentioned that they knew someone, through a friend or as a former student, who had autism. The other six principals reported not knowing anyone with autism outside of their schools.

At times, recruitment was challenging, and many follow-up calls and adjustments of schedules had to be made. Trouteaud (2004) found that the style of the correspondence, and the number of invitations and reminder emails were critical elements for a successful response rate, with the optimal number of reminders being two. Phone calls and follow-up requests were sent out to request participation. Some principals, who had originally agreed to participate in the study, later declined, citing scheduling conflicts, personal dilemmas, and district reviews, as their reasons. The researcher continued to recruit and conduct interviews until saturation had been reached.

Table 3.1

Description of School Principal Participants

Participant	Years as a Principal	Years Supervising	Gender	Age	Race
George	6	10	Male	40+	African American
Loretta	5	7	Female	40+	White
Damien	7	10	Male	30+	African American
Darryl	25	25	Male	60+	African American
Harry	1	3	Male	40+	White
Raquel	8	8	Female	40+	African American
Delia	15	15	Female	50+	White
Mozelle	9	9	Female	40+	African American
Roberta	14	4	Female	40+	African American
Lara	12	14	Female	40+	African American
Anna	4	5	Female	40+	African American

Data Collection

In qualitative research, data collection is purposeful. The researcher used four methods to collect data to examine the experiences of school principals. Data collection included: (a) a demographic form (Appendix C); (b) a written case analysis (Appendix D); (c) interview protocol (Appendix E); and (d) observational field notes. By obtaining

various data sources, the researcher had a better understanding of the context as well as the ability to reduce possible misinterpretations of participants' statements and strengthen the credibility (Maxwell, 2005; Merriam, 1998; Yin, 2003).

Demographic form. The demographic form was used to collect pertinent background data for each individual. Questions requested information, such as participants' race/ethnicity, gender identity, tenure status, socio-economic status, and educational degrees. Demographic information provided a better overview of who the participants were and what their experiences were with ASD students.

Individual interviews. When interviewing, the researcher's role was to ask questions and actively listen to the participant's response. In-depth, individual interviews were used to collect explicit data regarding the principals' experiences with students who were diagnosed as autistic. Each interview was audio recorded and last approximately 1 hour. After each interview, the transcripts were transcribed using REV Transcription Services (n.d.).

Written case analysis. A case study explores a program, an event, an activity, and/or a process of one or more individuals (Creswell, 2003). Participants were asked to write a response to a case analysis as to how they would use their leadership experiences to address the placement of an ASD student with academic, language, physical and social challenges and how they would use staff, parents and others to assist in the decision making process (Appendix D). Responses were analyzed to determine if the principals' experiences were applicable when addressing ASD students' programming, placement, or academic needs.

Field notes. Field notes were taken to help the researcher further describe the settings. Descriptive field notes helped the researcher describe the participant, add information regarding the participants' tone and nonverbal gestures. Field notes were taken to describe individuals' behaviors during the interview process (i.e., extended periods of silence, fidgeting, pauses, giggles).

Reflective notes were taken after the interviews were conducted, and the notes helped the researcher reflect upon the analysis of the data, the method, the rapport, and any problems that might have occurred during the interviews. The researcher reflected on interruptions, recording the process and other information that could have been used in determining future studies. This information was recorded and was secured in a locked box. These documents will be secured for 3 years; after which they will be destroyed.

Procedures for Data Collection and Analysis

The purpose of the interview protocol and the written case analyses examined the principals' perceptions regarding their role as the school leader when working with students with ASD. The interview questions were asked as they were written in the interview protocol and modified or rephrased based on the participants' responses. Individual interviews lasted approximately 1 hour.

Interviews were transcribed and analyzed using Charmaz's (2006) two-phase coding process where all data was examined, compared, conceptualized, and categorized. Interviews, demographic forms and the case analyses were analyzed to find and conceptualize the underlying issues in the data (Allan, 2003). I analyzed the data and cross-referenced interview transcripts, demographic forms, case analyses and observation notes the collection phase of this study. The researcher's first reading of the interviews

took place immediately after transcribing interviews. Glesne (2006) stated, “Data analysis done simultaneously with data collection enables you to focus and shape the study as it proceeds” (p. 130). Highlighters were used to color code hard copies of the data and chart paper was used to record and reflect my thoughts as the themes and sub-themes emerged.

Trustworthiness. Neutrality is “not an easily attainable stance” but an essential one for creating rapport and trust with participants in a study (Patton, 2002, p. 51). As a principal colleague and researcher, it was essential that interviewees were made comfortable and relaxed enough to share their experiences. The researcher and interviewees engaged in conversation to develop what Denzin and Lincoln (2000) suggested is the development of the “sacredness of relationships” (p. 306). During the interview process the researcher actively listened and was fully engaged as principals shared their experiences and perceptions. Field notes captured participants’ reactions to words, actions and body language.

Credibility. Credibility or truth value (Denzin & Lincoln, 2005) refers to the degree to which the participants’ realities are reflected when developing a theory. After each interview was transcribed, transcripts were emailed for member-checking to be sure that information was captured accurately (Glesne, 2006). Participants were asked to respond to information that appeared to be inaccurate or that they thought needed clarification. They were asked to respond with corrected information within 3 days after receiving the transcript. Most principals responded with a confirmation that all information was captured accurately; however, there were some that added or clarified their thoughts, some responded with notes of thanks, and others did not respond at all. This process was a way to establish credibility and trust between the researcher and

interviewee. Each participant was reminded of their pseudonym name and told they would be notified when the study was published.

Data management. Accepted standards for ethical research procedures were consistently applied throughout the study. All participants were clearly informed about the nature and scope of the project. Information was provided concerning the purposes of the research and the procedures that were employed as well as the form and location to be used for the dissemination of results. The identities of the individual participants, as well as the identity of their schools, were kept confidential.

Field notes, recordings, and documents were accessible only to the researcher. Pseudonyms were used in all reporting to conceal the identities of participants and schools. No reference was made in oral or written reports that could identify a participant to the study. All survey and interview data was stored in a secure, locked file box with only the researcher possessing the key. All documents will be destroyed after 3 years.

Chapter Summary

Chapter 3 provided a detailed description of the study's methodology. In particular, the research design and rationale for the study was explored. Data collection and analysis methods were also discussed.

Individual semi-structured interviews coding process evolved through multiple readings of individual interviews. The purpose of the in-depth interview was to explore participants' experiences (no right or wrong answers) of students with ASD. The researcher looked for experiences and insights principals shared on their views of the knowledge and experiences specific to students with autism. Words and phrases were analyzed for comparison of similarities and differences and refined into themes.

After reading and analyzing the data, categories were created and re-created to align with principals' feedback on demographic forms, case analyses, and interviews. Collecting data through multiple methods added depth and credibility to the purpose of this study by a method referred to as triangulation (Patton, 2002). Furthermore, individual interviews and the written case analysis allowed principals to express their perceptions of their roles as leaders of schools with ASD students. The demographic form provided a means to cross-reference interview statements and the necessary demographic background information to compare and contrast leadership experiences.

Chapter 4: Results

Research Questions

The purpose of this grounded theory study was to examine urban elementary principals' knowledge, experiences, and perceptions of their roles when working with students with autism. Data were collected through field notes, interviews, principals' written response to a case study, and a demographic questionnaire. The research questions that guided this study were:

1. How do elementary school principals gain experiences in their roles with regard to students with autism?
2. How do elementary principals' knowledge and experiences of students with autism help them as leaders in schools with an ASD population?

This chapter presents three themes that emerged from the study. Each theme is related to the study's research question which specifically focuses on the perceptions of urban principals' roles as leaders in schools with ASD student populations. The chapter concludes with a summary of the study findings.

Data Analysis and Findings

Analysis of all data sources indicated that the principals had limited awareness about ASD students, and generally, lacked the required knowledge and experience to facilitate leadership in this area. As a result, they tended to depend on other experts within or outside their building when dealing with ASD related issues. The principals in this study participated in various capacities to facilitate autism awareness and

management in their buildings. Three major themes emerged from data analysis: (a) Principals' Roles as Leaders of ASD Students, (b) Quest for More Formalized Knowledge, and (c) Linking Knowledge and Experience with Action.

Principals' roles as leaders of ASD students. The principals in this study reported their perceptions of their roles when working with ASD students as: (a) Inclusionary Leader, (b) The Advocate, and (c) The Enforcer. These subthemes describe principals' roles according to their involvement as a member of student support teams that is responsible for making programming, placement, and instructional decisions for all students, including students with ASD. These roles also describe principals' perceptions on how they serve in multiple roles when working with staff, families, and students with autism. Additionally, principals described how their knowledge or experience of autism may influence their perceptions of their roles.

Inclusionary leader. Principals who functioned as inclusionary leaders acknowledged all suggestions and recommendations given by stakeholders such as; instructional staff, service providers, parents, and community members sitting on teams. These stakeholders were involved in the decision-making process for students with ASD. Although all recommendations may not be implemented, all stakeholders were included in the discussions pertaining to ASD students and their programming needs. Three principals, Darryl, Damien, and Harry actively incorporated all stakeholders in the discussions about the welfare of students with autism. As they noted, Darryl, Damien, and Harry valued the contributions of all the stakeholders, but served as the final decision makers at the student services meeting prior to students going to CSE. Whenever warranted, they were required to use their positions as principals to include all

participants in discussions in order to gather data relevant to ASD student's placements, programming, academic or behavioral needs. These three leaders have a combined total of thirty years of experience as principals; however, they have less than 3 years of experience working with ASD students.

Principals who participated in this study described their role as that of the inclusionary leader, who is responsible for assembling a team that is willing to engage in discussions that are relevant to ASD students. Principals discussed how they encouraged their staff and district personnel to work together in the decision making process. Participants described how they leverage the human capital in their buildings to make decisions for ASD students, because of their lack of awareness of autism.

Damien, a principal of 7 years, created opportunities for his staff to attend professional development workshops in order to be better decision makers in the area of ASD management. Damien who leads the smallest elementary school in the district, worked as a high-school social worker prior to becoming an elementary administrator. Damien, states that some of his experience or knowledge of autism was attained as a social worker while serving on previous student support teams. He states that in his current role as a principal, he uses members from the building student support team to continue to enhance his knowledge in order to make decisions that are relevant to ASD students and their needs.

I would want someone as the Occupational Therapist, Speech Therapist, and anyone who has in depth knowledge and experience working with children that were autistic. I am comfortable being included in conversations and discussions

for ASD students; however, I think that other experts at the discussion table can offer more strategies and guidance on ASD students.

Damien felt that his team was able to accomplish tasks cohesively when working collectively. “I don’t have a solution for every issue that comes across my desk; therefore, I include others that have a knowledge or experience on topics like autism.”

Darryl, a 25-year veteran, and the most senior participant, described his role as inclusionary leader. Darryl did not recall having to make decisions in isolation for ASD students in his building. He stated that all decisions are team approaches and he relied on his psychologist who he identified as the expert on autism to assist him. Darryl was confident that due to his psychologist’s experiences and expertise with autism, she was a great asset to his school. He encouraged her to meet one on one with parents and staff prior to team meetings in order to gauge different perspectives prior to team meetings. He also utilized her knowledge of autism as he encouraged staff members to be informed and seek academic and behavioral strategies prior to meetings. He stated:

If there was a behavior concern, I instructed the school’s psychologist to call for a manifestation of determination meeting to see if the behavior was due to the student being autistic, and so far, it has been concluded that the incidents were due to the student’s classification. Staff and parents are encouraged to attend these sessions as well so that they are aware of why a student’s behavior may be caused by their disability; so therefore, the way in which I handle the situation may be different as to how another student that is not classified is handled.

Additionally, Darryl encouraged building staff and parents to work together to increase an awareness of autism in the building. He admitted that due to his lack of

knowledge of autism, he was not always able to offer strategies or resources on behalf of ASD students. However, Darryl felt that his role was to include all constituencies in order to be assets to each other. He expressed:

Currently, I feel that our building has limited awareness of autism. I am not sure if anyone besides the classroom teachers and service providers can identify which students are autistic or what is autism. We need to make certain that we are creating an environment that is conducive to the needs of autistic students. Right now, I am not certain that we as a school are doing that.

Darryl noted that he now plans to contact district leaders in the Specialized Service and encourage them to offer professional development to all constituents in his building. According to Darryl, protocols used in this study has lead him to acknowledge how uninformed he is and is useless to staff, parents and ASD students. His demographic questionnaire responses also reflected that he has limited exposure and knowledge of autism. He identified a distant family member with autism and states that he has not attended any professional development in or out of district to enhance his knowledge.

Advocate. Another perception of participants' roles was that of an advocate. Principals described their roles as advocators for students, staff and families. They shared how being resourceful and advocating on behalf of students with autism was a major part of their role. Often times, resources and placement are district based decisions, which does not always include the voice of the principal.

Loretta, in her fifth year, is principal at one of the top performing elementary schools in the district. Loretta's students outperform many of their district peers on New York State assessments, with an 80% achievement rate. Loretta's only experience with

ASD students has been as a general education classroom teacher, which was over 10 years ago.

As an advocate, Loretta advocates on behalf of how ASD students are placed within her building, as well as when they are transferred out. She participates in building level CSE meetings to hear what programs are being discussed or discussed. She describes her role on the team as an advocator; to ensure that students with autism be placed according to their level of need and not by the services available within her school. She feels that some placement decisions are made according to available services and not on individual student needs. Loretta shared:

Once I had a request to move a student to a more restrictive environment due to their inappropriate behaviors in their inclusive setting. I disagreed with this change in placement and advocated that the district's behavior specialist be sent out to assist the student and offer the teachers strategies to implement within the class. This was probably one of the best decisions that I made on behalf of an ASD student; because the student has remained here in the building and is flourishing within his inclusion setting.

Prior to placing students newly enrolled in her school, she examines student's cumulative records (Cums). Student Cums, are records that detail student's yearly academic and behavioral performances, health history, and programming. Unlike students Individualized Education Programs (IEP), Cums do not give information on individual learning goals or targets; however, a copy of the IEP is usually housed inside the Cums. Loretta feels that if ASD students are placed in appropriate learning environments, then

they are more likely to be successful, which is why she finds value in advocating on behalf of these students and their families during the placement processes. She states:

I guess every kid is different, so as every kid comes through, I have to re-adjust my thoughts and what that child needs. I don't think I've ever had an autistic child be like the one before them, so it's just identifying where their needs are and creating a program that meets and supports students individual learning goals.

Loretta further acknowledged that she advocates with the district for her staff to be included in professional development that is relevant to ASD students; especially those that are working with students with autism.

Unlike Loretta, who had some exposure and experience to ASD students, Raquel, a building principal for 8 years and an administrator for 14 years, had no experience and ASD students. However, she still feels that her role is to advocate on behalf of the students and staff in ASD classrooms. Raquel states that she frequently sits in meetings for ASD students; however, she mainly takes note of what is needed to ensure that students' needs are being met. If she finds additional services or supports are needed, she calls for assistance for the district specialized service department and advocates for additional resources to be deployed to the school:

I attend meetings weekly, but I sit and listen to what everyone around the table is saying is missing for these students, then I go out and find what's missing. I do this for staff and families as well as the students. For instance, if a staff member tells me that they didn't get a special chair that is required for the student, I will send an email or place a call to the district's autism team and request that the chair be sent over. Although I am not given a special budget for ASD students, I will

purchase small items such pencil grips, large print paper or other items of that nature that the teacher's states are required for their students. It is essential that I advocate for all students within the building, but especially for students with special needs, being that they require additional services.

Raquel ended the interview, stating that she would go out and advocate for the district to provide professional development for her as well as her staff. She acknowledged her need to increase her awareness of autism in order to be a better advocator in her role as a leader.

Harry, a newly appointed principal in the seventh largest elementary school in the district, described his role as being responsible to make certain that staff working with ASD students have the appropriate resources to contribute to their achievement. Harry describes how he advocates on behalf of students, staff and parents in order to determine what level of support is needed from him. Harry shared:

I realized when I arrived at this school that there were a large number of students diagnosed with autism. Although I have limited knowledge of autism, I was able to concluded that staff working with ASD students were in need of instructional and behavioral strategies and resources, mainly technology. I did not feel confident in my ability to provide these strategies, therefore, I knew that I have to go to the district and advocate on behalf of staff, students and families. I met with the powers that be; district leaders, and advocated for professional development and additional resources, such as assistive technology be given to classrooms that demonstrated a need or let their need be known. While we are still working on the

technology, staff has been invited to numerous workshops this year that were offered within the district.

Harry feels that by advocating on behalf of his staff and students, he has developed a collaborative partnership with staff, parents and district personnel. He holds frequent meetings with staff working with ASD students to discuss students' progress or level of needs. If he finds that the building is unable to accommodate a staff member or student need, he reaches out to district leaders and advocates for additional support or accommodations. Harry feels that he has successfully advocated in his role, and is preparing to open up the district's first self-contained Pre-kindergarten class for ASD students in the fall of 2015.

Principals Loretta, Raquel, and Harry described their experiences as to how advocate on behalf of students with autism. Depicted throughout their stories is their individual account as to how they serve as advocates in their leadership role. While all three leader's shared different experiences, they have all had to advocate on behalf of ASD students and staff working with ASD students.

Enforcer. The third and final sub-theme is the enforcer. Delia, who was an experienced principal of 15 years, detailed how principals act as enforcer in order to get all student service team members seated at the table to agree on goals that are in the best interest of the student. Delia meets with classroom teachers to review instructional and intervention strategies prior to placing an ASD student in a classroom.

Delia shared that in order to create an environment that is responsive to students' needs; she must enforce mandates from the district and the state as she works with

students, staff, and parents. Delia meets weekly with most constituents to build a culture that is collaborative in finding interventions and programming needs for ASD students.

The school team, which includes the coordinator of special education, classroom and special education teachers, the speech therapist, the school psychologist, and administration, meets to discuss and develop academic or social emotional goals for ASD students. Once these goals are thoroughly discussed, we call parents in to review and gain their support. If parents are not in agreement, we review and revise goals prior to including them on a student's IEP or behavioral plan. As the enforcer, I have to my role is to make certain that the goals as added to students IEPs and implemented by staff working with ASD students.

Delia further stated that staff working with special needs students, including students with autism, must have students IEP goals available for her to review as she observes the learning environment. Delia states that this is another way for her to monitor and enforce that goals are being met according to IEPs.

While principals reported that the district does not always provide them with the strategies or description of their roles with working with ASD students, they have self-identified descriptions of their roles as leaders. Participants also stated that they could use extra resources or support to expand their knowledge of autism. Thereby, requesting that the district provide more formalized training to enhance their role or building leaders of students with autism.

Quest for more formalized knowledge. The second theme, quest for more formalized knowledge, describes participants as wanting more knowledge as it relates to autism. These individuals described themselves as lacking knowledge and basic

awareness of autism, district and/or community services, interventions, or special education law. However, their desire to learn more about autism was expressed clearly throughout the data.

George a principal of 6 years with no formal knowledge of autism has 10 students classified as being on the autism spectrum in his school. George's school is one of the oldest schools in the Harris District and is expected to close over the next year. While George has no idea as to where he will be placed for his next principal assignment, he still has a desire to learn more about autism. George explained:

I'm not really clear on what that looks like or what it is. It seems like there's some variability in how students present themselves with autism. I did not realize that there were students with autism in the building until I was asked to participate in this study. Therefore, I assume that things are working out." I need to know more about it. I meet with the Intervention Team at times to discuss students with special needs; I am not aware of which students that are classified as being autistic or on the spectrum.

The above excerpt demonstrated that although George had ASD students in his building, he was unaware of it. He noted that the student service teams frequently had detailed discussions prior to any programming, placement or academic decision being made for ASD students. George was confident in his team's collaborative discussions on ASD students, and stated that this process eliminated him having to make decisions in isolation for students that he has limited knowledge about.

George's views were echoed by Anna, a principal in her fourth year in a k-8 building with over 500 students, 30 which are classified as ASD. Anna has attended a

basic workshop but states that she has no knowledge of community agencies that offer workshops to families or staff. Anna stated that although the workshop gave her basic background information on autism, she needs more concrete information on building structures, and intervention systems within the building. There is a partnership with a local university that currently pushes into four classrooms once a week, to increase ASD student's social skills with their peers in the inclusive setting. However, Anna does not get a chance to observe strategies, due to her daily responsibilities as a principal.

Members from the university and central office administrators meet monthly to discuss the social skills program; however, Anna has not attended any of these meetings due to the extended day program that is offered afterschool, when these meetings are held.

My day to day responsibilities as the principal do not allow me to escape during school hours to attend trainings. I can always go in and observe at any time, but this limited time would not allow me to engage in activities and practice strategies to enhance my professional growth.

Mozelle, a principal in the second largest elementary school in the district, has 11 years of administrative experience. Nine of those years have been spent in a school that serves the highest population of ASD students. There are approximately 700 students enrolled, with 5% of the students being classified as being on the spectrum. There are four self-contained classes ranging from grades K- 6. Each of these classrooms has an adult, student ratio of five adults and six students. There are approximately 10 ASD students assigned to inclusive general education classrooms.

Mozelle states that she has some experience with ASD students being that she has supervised the ASD programs over the past 9 years, however, she would like more

formalized training to increase her knowledge on how to implement state mandated curriculum in ASD classrooms that have students with severe language delays; which is common in students with autism. Mozelle describes her frustration with the Common Core Learning Standards:

As the instructional leader of the building, I am required to be familiar with district and state curriculum, including the CCSS Listening and Learning standards. I have no idea how to assist with the implementation of these standards with students that use assisted technology. I don't know where to begin to seek the training, nor have I had anyone come out to provide training for me or the staff.

Mozelle exclaimed that she has requested exemption for ASD students with severe speech delays on the NYS Common Core assessment. However, she informed by members from the district's CSE committee that her students did not qualify according to special education laws and regulations. Therefore, Mozelle feels that there should be more formal training available to assist her and her staff in meeting the needs of the ASD students with language deficits.

Although Delia has a family member that was diagnosed with autism, the 15 veteran principal admits that her interest in autism was peaked after receiving a kindergarten ASD class in her building this fall. The district's director of special education services approached Delia last spring and informed her that the district was considering placing a kindergarten inclusive class with ASD in the building. While she was apprehensive about the placement of the class, she was relieved after hearing that she would have to opportunity to visit classroom in New York City that implemented the

same program. After returning from her visit, Delia now reads literature and attended professional development workshops on autism whenever available. However, Delia still feels that she is need of more formal training, to enhance her knowledge of services and strategic interventions. To date, Delia has received more training than any other participant.

Based on the theme, participants were able to articulate their need for knowledge of autism in order to increase their awareness, provide interventions, recommended community support or apply special education relating to ASD students. Participants wanted to know more about students with autism in order to better aid their building. At the same time, participants utilized their limited knowledge and experience in taking actions to facilitate the well-being of students with autism.

Linking knowledge and experience with action. The third and final study theme, described how participants were able to take action in various capacities to facilitate the learning of students with autism, by relying on their knowledge and experiences. Participants engaged in numerous professional development opportunities and were aware of outside agencies that could provide additional information on students with autism. These participants were also able to highlight specific interventions and apply special education laws when making programming, placement, and/or academic decisions for students with autism. Although, principals were able to use their knowledge of special education requirements, they also experienced a need to be better informed of laws, interventions, or services that were available to ASD students.

Lara, a principal with 14 years of experience supervising classrooms for students with disabilities, acknowledged how her knowledge and experiences of students with

disabilities has influenced her actions when working with ASD students. Lara's K-6 building has approximately 375 students enrolled, with less than 10 students with autism in inclusive setting classrooms. Although, she has not taken any professional development on autism, Lara described an experience that demonstrated how she applied her experiences and knowledge of working with special education, although she could not recall having worked with ASD students. Like most of her principal colleagues, Lara learned about autism and ASD students through trial and error. Participants that had no formal training described how they handled issues that arise with ASD as doing what they perceived was best at the time, or asking others to assist them in finding resolutions on how to address an issue.

When dealing with a recently transferred immigrant student, Lara had to make a choice about his placement. Specifically, how best to address his language delays and other behavioral problems that he was experiencing. Lara explained:

This student appeared to be oppositional defiant and was intentionally defying the adult. Whenever he would get into a difficult situation, he would take his shoes off. He didn't really like to be touched by anyone. He would take his clothes off and run through the halls. We would have to chase him down the hall and return him to class or to my office where he was made to sit until his parents arrived. We thought that he was trying to escape and do what he wanted to do. I finally met with the parents about his inappropriate behaviors and recommended that we take him to the committee on special education. They were from another county, so they had little knowledge about the CSE process.

Lara shared that the parents were in favor of the student being evaluated, after having experienced these behaviors at home as well. The support team, which included the parents, immediately agreed to have the student tested to assess his cognitive, speech and physical skills.

After conducting building level assessments, Lara describes how various members from the assessment team met to discuss the student results. The team members included various members that had experience and knowledge of ASD students, such as: the psychologist, the speech therapist, the occupational therapist and the social worker.

The team talked and knew that there was something else wrong with this student.

The district's autistic team came out and conducted additional assessments. I have absolutely no idea of the assessments that they used to determine that he was autistic. Shortly after the team came out and classified him as being autistic, he was moved to another school. He needed a smaller class to support him. The staff here could not do it.

With the guidance of an interpreter that translated in the parents' native language and members from the district's CSE team, Lara assisted in the transition of the student to a program that was expected to meet his needs according to his ASD classification. Lara shared that she felt that the district did not provide sufficient staff professional development on how to identify students with autism. She feels that there may be more students at her school that may be on the spectrum. But because of her limited experience, she did not feel knowledgeable enough to engage staff in discussions of ASD. Lara did not attend any professional development workshops on autism, and was not aware of offerings sponsored or suggested by the district.

This year has been the first year that the district has extended invitations to principals with students with ASD. Prior to this year, most participants shared that they have not received information or invites to workshops pertaining to ASD. Darryl, Damien, and Raquel exclaimed that they still have not officially received invites or information on workshops sponsored in district or outside of the district. Although principals are now being invited to district sponsored workshops that was once offered only to teachers and support staff, principals are not attending. The district does not cover the cost of administrative substitutes, registration, travel or meals for principals; although these fees are covered for teachers and support staff. Principals have been encouraged to use their yearly allotted professional development funds to attend district sponsored workshops. Principals expressed a concern regarding the inequity of professional development that is offered to teachers and not principals. They shared that this practice should be reviewed and funding should be made available to all staff working with ASD students.

Four principals that recently received specialized ASD programs within their buildings, were sought out or encouraged by district leaders to attend professional development courses that focused on ASD students. They all have taken the initiative to attend workshops sponsored by the district. Delia stated:

The courses that I have taken within the past year on autism have helped me to engage in conversations and discussions with teachers and parents. I have found that I the classes that I took over the summer has allowed me to sit in forums to make decisions that are supportive and aligned with students IEP goals.

Roberta, a 14-year principal and a former director in the district's Specialized Service Department, finds that her experiences and knowledge of autism allows her to be fully engaged in conversations with all stakeholders.

I believe that it is vital to have knowledgeable service providers that understand students on the spectrum. When making decisions for ASD students, all must be able to offer input based on their area of expertise. The psychologist has unique testing that has to happen for students on the spectrum and must be interpreted appropriately in order to address the students' cognitive abilities. The Speech Therapists must have a strong knowledge base of language skills in order to recommend strategies for language delays that generally impacts students on the autism spectrum. The occupational and physical therapists' knowledge is needed in order to address the sensory and fine motor skills that are often present in ASD students. Parents are also involved, being that they know their child best.

Roberta finds value in having community agencies involved in discussions so that all experts are at the table. "Whenever possible, I invite someone from the Autism Council; so that community resources can be offered to the school and the family. Parents are usually very receptive of them being at the table." Roberta doesn't meet with parents outside of the team, unless there is an immediate behavioral concern.

Whenever there's a minor behavioral or academic concern that requires immediate action, a meeting is scheduled with parents, the classroom teacher and sometimes a service that works directly with the student. Otherwise, all major decisions are reserved for the large group meeting that includes all stakeholders.

Roberta explains that the community advocates are very knowledgeable and often makes recommendations that the team members collectively agrees with. In Roberta's previous role as a district leader, she became aware of community agencies such as the Autism Council. Although Roberta has not engaged in professional development as a principal, she has some awareness of agencies and district level staff that she utilizes to provide resources when needed. Roberta stated:

In my former role in the Specialized Service department, I did not focus on any one subgroup of students with disabilities. Therefore, I am not familiar with all of the strategies and interventions that are available for students with autism. However, I have secured individuals that I respect for their knowledge and experiences to come in and provide trainings for staff and offer strategies at the intervention table. I try to attend weekly RTI meetings to hear strategies and recommendations that are being made for all students, but particularly for students with disabilities, including autism.

Loretta appeared confident and competent with the manner in which she applies her knowledge of autism. Although Loretta has had some formal training, she has developed her own system that she utilizes when placing ASD students in the inclusion classrooms in the building.

I have a student right now who just came over from another school. He came as a real red flag with all kinds of behavioral needs. It was recommended that the student be placed in a classroom with six students, one teacher and one paraprofessional; in addition to having his own one-on-one assigned to work with only him. He ended up needing some modifications, and he needed teachers to

really understand what his needs were. It took about a month to settle him in, but he's been absolutely fine. I would foresee great success. In about 2 or 3 more months, I think we're going to have him right where we want him as far as on the learning curve.

Loretta found that her involvement in the placement process helped to identify the appropriate placement. "I would rather take the time to hear what the students and parents want, as opposed to making a decision in isolation that might create a stressful situation for the class and the student." Loretta has implemented a system in which she meets with each ASD student upon entry. This is a process that she undertakes alone.

While Loretta found meeting with students and parents valuable, Roberta and Mozelle shared the importance of being able to secure service providers that have experience and knowledge of ASD students. Principals are only able to secure staff if a vacant position becomes available. The district's hiring process can pose a problem when trying to secure an experienced and knowledgeable team. Roberta stated:

I think it's important that buildings have service providers that are knowledgeable about autism and understand how to work with ASD students. These are the people that we look to when making programming, placement and instructional decisions. They should also have knowledge of intervention programs that are available in and out of district for ASD students, families and staff. If I'm not able to secure the right team, it can be difficult to make the right decisions for students.

I am in the midst of resolving a personnel issue as we speak.

Roberta went on to explain that when service providers are not knowledgeable about ASD, it will be difficult for decisions to be made on behalf of the student.

“Principals really look to building service providers for guidance. If service providers have limited awareness, then this is not good for the school.” Roberta stressed how knowledgeable service providers are essential when making decisions for students, especially those with ASD. Roberta communicates with other district leaders; including leaders of individual departments whenever she feels that a service provider is not the appropriate fit for her building. Although she has not always been successful in getting experienced staff, she has been successful in getting staff that was willing to learn and grow as a member of her team.

Mozelle finds value in having highly qualified service providers as well. She feels that her inability to be involved in the hiring process when securing skilled providers, impacts the effectiveness of her team. Mozelle has shared her concerns with the district leadership; and describes her frustrations with being assigned service providers with limited experience and knowledge of autism. Mozelle explained:

I need the ability to hire staff specifically trained in autism. We need staff that knows what’s good for ASD students. Last year we had to make a decision for our sixth-grade students that were transitioning to high school. Without a team that was collaborative and knowledgeable about programs available in our district, we would have struggled with selecting an appropriate learning environment.

Mozelle shares that she will continue to meet with district leaders and share her desires to have the autonomy to hire and adjust staff members working with ASD students within the building. While the district has agreed to exempt classroom teachers and allow principals to interview teachers prior to placement, this process does not hold true for other staff members such as service providers and paraprofessionals. Mozelle plans to

meet with district leaders to change this policy that mandates all staff working with ASD students be exempt and interviewed prior to being placed in schools.

In linking knowledge and experience with action, principals shared how they used their knowledge and experiences to take actions to increase their awareness of autism, applied special education laws, provided interventions, and acquired the appropriate services for staff, families and ASD students. All participants' actions demonstrated perceptions of their roles when working with staff, students and/or families of students with autism. Their actions were often driven by their knowledge and experience of autism, or for those that lacked formal knowledge or personal experiences, their actions were applied due to collaboration, guidance, and knowledge of available resources within the building, district or community.

Summary of Results

In summary, the findings from this study showed that principals had limited knowledge about students with autism. However, as leaders working with ASD students, they worked in various capacities to ensure that these students get their mandated services. Participants juggled various roles such as inclusionary leaders, advocates and mediators. They expressed the desires to learn more about autism students through formalized means including, hiring autism consultants to provide professional development at monthly principal's meeting or over the summer. Most participants attributed their sources of knowledge on autism to building staff, district personnel, parents, community agencies and personal experiences. However, most participants had not engaged in professional development that was offered and supported by the district.

In conclusion, principals are aware of their limited knowledge and experiences with autism and ASD students. Hence, the reason why participants in this study described their leadership role based on their limited knowledge and experiences. Chapter 5 of this study will include the summary, recommendations, the implications for change and the conclusion.

Chapter 5: Discussion

Introduction

With an increase of students being classified on the autism spectrum, the responsibilities of principals have also increased. The rise in the number of students having an autism spectrum disorder (ASD) has presented behavioral and academic challenges for school principals in public schools. Research has demonstrated that principals, who focus on instructional issues, who are knowledgeable about special education laws and ASD, can produce enhanced student outcomes (Benz et al., 2000; DiPaola & Tschannem-Moran, 2003; Bishop, 2011).

The purpose of this chapter is to discuss the emergent findings from this grounded theory study of urban elementary principals' knowledge, experiences, and perceptions of students with autism. Implications for practice and future research will be suggested in this chapter. Additionally, limitations of the study will be discussed and presented. Finally, a summary of conclusions from Chapter Five and from the entirety of the dissertation will be shared.

The goal of this study was to explore principals' perceptions of their roles and how they use their knowledge and experiences as leaders when making decisions for students with autism. The study was guided by the following research questions: How do elementary school principals perceive their roles with regard to students with autism?

How do the principals' knowledge and experiences if any, of students with autism help them as leaders in schools with an ASD population? Eleven elementary principals

were selected to participate in this study. The researcher used four data collection tools to examine the perceptions and experiences of principals, including: (a) demographic forms, (b) individual interviews, (c) a written case analysis, and (d) observational field notes.

Three findings discussed below emerged.

Implications of the Findings

Participants' shared mixed feelings of preparedness for their roles in the administration of special programs involving ASD students. Results showed that participants' knowledge and experiences of ASD varied widely, although all participants were from the same district and were elementary principals. There was no determining factor as to what attributed to the variation of knowledge and experiences other than personal commitment to enhance individual learning paths. The findings also added to the existing literature focused on principals as instructional leaders. For examples, principals in this study maintained their interest in instructional leadership by participating in round table discussions regarding instructional process and procedures for ASD students. Although, some participants shared that they often depended on others around the table to assist in making decisions, they did not remove themselves from discussions involving instructional decisions. These principals also attended professional development sessions offered that included academic and behavioral strategies for students with autism.

Consistent throughout all themes was a shared expression on the importance of the participants' needing professional development on autism. These findings are consistent with literature reviewed which highlights the need for parents, school administrators, educators, and paraprofessionals having a clear understanding of autism

and the most effective interventions, strategies, and methodologies for teaching children with autism (Karim, 2009). This study also supports Frost and Kersten, (2011) findings where principals are no longer considered as the school's disciplinarian as they were prior to the 1980s. Principals now have the duties and responsibilities to ensure that students are prepared and skilled to meet national and state standards. IDEA requires that all students with disabilities be educated in the least restrictive environment and have access to the general curriculum and participate in like assessments as their general education peers when possible (Lasky & Karge, 2006).

The Office of Special Education Programs (1996), a division of the U.S. Department of Education, has also maintained that a central role of the principal is providing instructional leadership to ensure that the rights of students with disabilities are protected and that these students receive an appropriate education (Frost & Kersten, 2011). Similar to this study, other studies have also found that most school principals have minimal training, through coursework and field experience, related to special education (Billingsley, 2005; DiPaola & Walther-Thomas, 2003).

Social justice leaders for ASD students. Theoharis (2004) described social justice leaders as leaders that develop, articulate and implement a vision of inclusionary practices that are supported by the school's community. However, principals in this study may lack knowledge or experience of ASD and struggle to create an environment that effectively implements or develop inclusionary practices within their schools. Principals in this study identified with four categories or "stages" as ASD leaders, knowledge, awareness, professional resources and instructional leadership (Figure 5.1). The model captures principals' voices as to their perception of their role as social justice leaders.

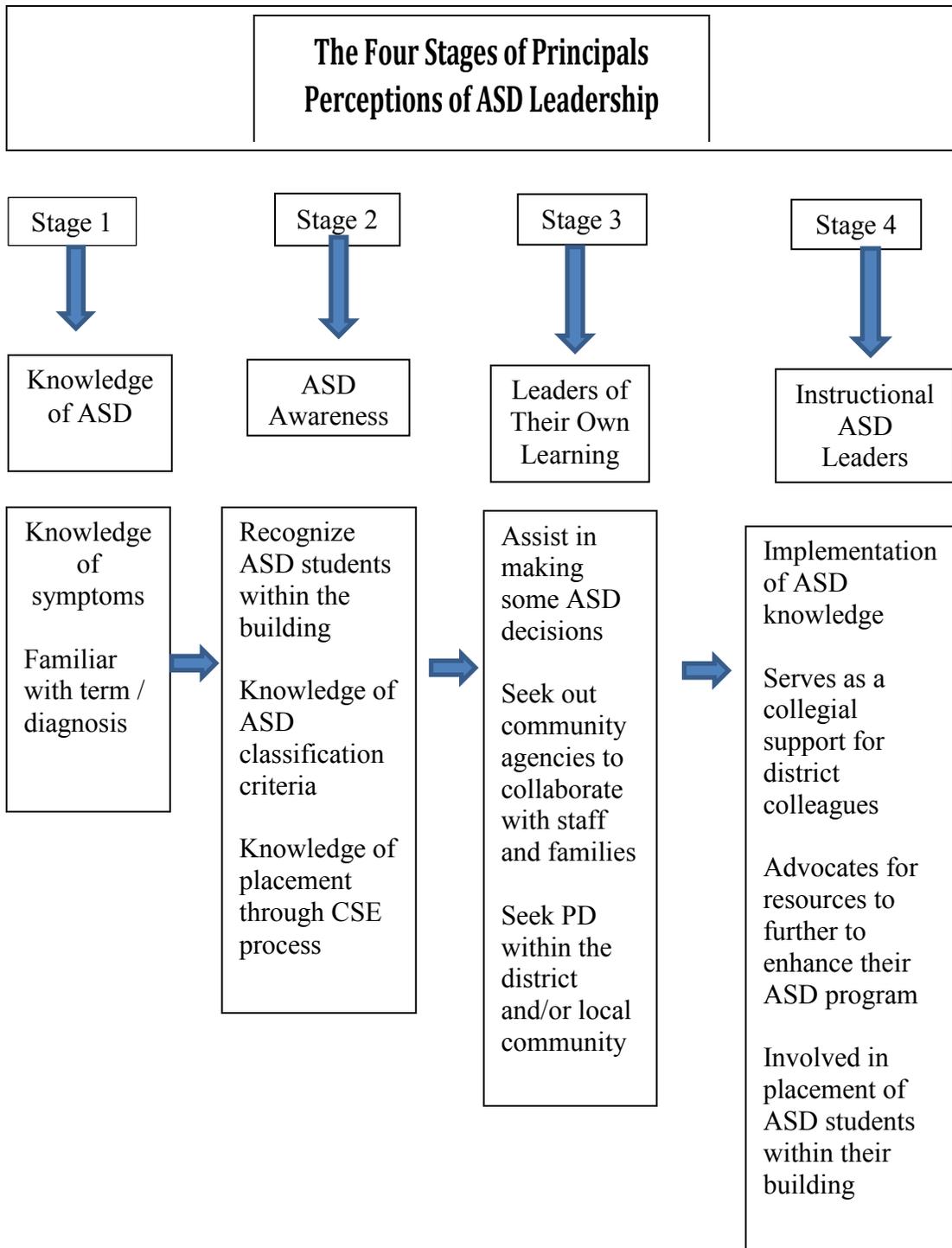


Figure 5.1. Model: The Four Stages of Principals Perceptions on ASD and Leadership.

Four stages of ASD leadership. Figure 5.1 highlights the different stages that emerged for instructional leaders within this study. Principals in Stages 1 through 4

transitions throughout each stage fluidly; depending on knowledge of autism or experiences with autistic students. An example would be, if a principal in Stage 3 sought out professional development to increase her knowledge of specific interventions programs; had limited to no knowledge of how students are diagnosed. Due to the principals limited knowledge of how students are diagnosed with autism, they would have considered themselves to be in Stage 1; but transitioning into Stages 2 and 3 where they are seeking professionally development to learn more about ASD diagnoses.

Principals' ultimate goal is to be in Stage 4 for all students, including students with disabilities such as autism (Billingsley, 2005; DiPaloa & Walther-Thomas, 2003; Frost & Kersten, 2011). Stage 4, the final stage encumbers all other stages and focuses on instructional leadership. The instructional stage is also in standard two of the Interstate School Leader Licensure Standards and Indicators (ISLLC), which states that a school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth (CCSSO, 1996, p. 14). In this study, not all participants were able to position themselves comfortable in the Stage 4, the instructional stage when it came to ASD and special education placement.

Stage 1: Knowledge of ASD. Principals in Stage 1 had an awareness of ASD symptoms and were able to articulate what is ASD. Principals were able to verbalize that ASD was a medical diagnosis given by student's physicians. They also understood that this diagnosis was used to create a specialized program or an Individualized Learning Plan (IEP) to address the students' academic and/or social emotional needs. These participants usually had a relative with ASD living outside of the household which

increased their awareness and exposure to children with autism. Thus, principals had a basic understanding of ASD.

Transitioning to stage 2. Prior to transitioning to Stage 2, the Professional Sphere, there is usually some awareness of ASD, coupled with knowledge of the ASD students within the school. Principals were aware of the number of students and could identify the classrooms where the students were located. These participants were also included in placement discussions and teacher selection.

Stage 2: ASD awareness. Stage 2 participants were also familiar with symptoms of autism and how students are diagnosed. However, there was still some limited knowledge of specific tools used to diagnosis students with ASD. Participants functioning in Stage 2 maintained an inclusive school and classroom learning environments, where ASD students were expected to participate in school wide events. These participants also developed a sharpened focus of ASD within the school environment. But also began to look externally for specific ASD academic and behavioral interventions and resources available within the district and/or community.

Transitioning to stage 3. Individuals transitioning to Stage 3, were leaders increasing knowledge of ASD. These leaders were able articulate their limitations on ASD and worked to secure staff that possess a variety of strategies and skills to support their school. They attended professional development sessions to enhance their knowledge of ASD students and/or their families. Principals in Stage 3 had a keen awareness of the importance to securing staff that had experience of working with ASD students. These principals described how they lost qualified and experienced ASD staff due to district controlled staffing process. Preetika and Priti, (2013) study indicated that

securing effective support staff is a challenge that administrators face in special education.

Stage 3: Leaders of their own learning. Leaders included in this category shifted beyond district offerings or non-offerings to individualized professional growth. Principals that perceived their knowledgeable and experienced with autism to be adequate, stated that their choice to participate in professional development would be focused on gathering information on community resources or specific interventions programs such as TEEACH. These principals utilized the knowledge and expertise of staff, district personal and local colleges to provide training information for themselves as well as their staff. Taylor and Baker Jr. (2002) study also showed that principals who are not aware of special education policies, strategies, or techniques, may be ineffective in developing an intervention plan to help correct students' behavior and therefore need support staff that can offer specific interventions for ASD students.

Transitioning to stage 4. Principals transitioning to Stage 4 described their roles as the instructional leaders and were confident in making programming decisions for students with ASD. Principals in the transitional stage of Instructional Leadership focused on instructional issues and sought out high quality professional development for themselves and staff in order to produce enhanced outcomes for students with disabilities. Barnett and Monda-Amaya (1998) found when principals decide to take responsibility of their learning and their staff, they will see true improvement for all student groups, especially students with special needs.

Stage 4: Knowledgeable instructional leaders. Stage 4 is the “comfort” stage. Principals in this stage would described themselves as leaders for social justice. Social

justice leaders guide their schools to transform the culture, curriculum, pedagogical practices, atmosphere, and schoolwide priorities to benefit marginalized students (Theoharis, 2004). Principals shared their experiences as being knowledgeable about programs, interventions and laws and process for students with special needs. Principals in Stage 4 advocated for instructional materials, curriculum control and autonomy with staffing decisions in order to get appropriate services for ASD students.

Stage 4 principals described their role as instructional leaders as: (a) having high expectations for teachers and students (b) providing close supervision of classroom instruction, (c) coordinating, and monitoring the school's curriculum, and (d) closely monitoring inclusionary practices. These leaders described how all students were expected to participate in school wide assemblies and events, including students with disabilities. Principals talked about having to reassign staff in order to make certain that students with disabilities were able to attend educational field trips if there were limited parent volunteers to accompany the class on the trip.

Principals within Stage 4 also function as advocates for their schools. Their knowledge of autism and ASD students allows them to seek internal and external resources to meet the needs of all schoolwide stakeholders. Due to their schools' academic achievements and knowledge of ASD, these principals were also viewed as creditable resources by colleagues and personal across the district. Principals in Stage 4 also were very involved in the decision making process for ASD student placement. Principals shared their experiences with attending building based CSE meetings or conferences where discussions involved the appropriate placement for students with ASD. Dumas (2010), a principal is an educational leader who promotes the success of all

students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school's community. Several principals in this study perceived their roles as a conduit for ASD students, if they were knowledgeable and experienced about autism, made decisions regarding student's placement and programming, and created a culture and climate within their buildings that were inclusive and embraced students with ASD.

In summary, the Four Stages of Principals Perceptions ASD Leadership model (Figure 5.1) describes how principals perceived their knowledge, awareness, role and leadership for students with autism. The model depicts the need for principals to be continuous learners and not limit their knowledge and role as the instructional leaders in their buildings. Principals not possessing the special education knowledge necessary to engage in activities with special education teachers are not impactful on student achievement and remain in Stage 1, occasionally moving to Stage 2. The model also shows that some principals have the knowledge but are not engaging in activities or interacting with special teachers regularly and remain in Stages 2 and 3, therefore never reaching Stage 4 which is the most impactful stage for the ASD leader

Recommendations for Practice

Two areas emerged from the research that are worthy of further consideration. One is the need for a network of support providing dialogue, collaboration and professional development on ASD for principals. This would allow principals the opportunity to discuss what is working and the challenges that remain to be addressed. Principals and any individual seeking knowledge of how to work with teachers, families and students with autism are recommended to review this study. It is recommended that

all principals and building leaders attend workshops and professional development seminars on ASD in order to actively engage in discussions and bring an increased awareness to ASD and students with autism. Building leaders may then be able to put systems and strategies in place that will be impactful on ASD students' behaviors and academic achievements as well as their life skills. The research study could be used as a tool to survey or as a point of reference for leaders to identify their stage or perception.

Districts and community agencies might reference this study to identify specific topics to include on their professional development action plan. Local colleagues might also use results from this study to add to their course offerings; as it was found that most school principals have minimal training, through coursework and field experience, related to special education (Billingsley, 2005; DiPaola & Walther-Thomas, 2003). Bays and Crockett (2007) also found that principals often have minimal interactions with special education teachers about improving teaching and learning. Therefore, districts might review this study to administer a data collection form, such as the one used in this study, to determine principals' knowledge of the processes and systems for students with disabilities, and specifically who have autism.

Recommendations for Future Research

Additional studies to determine the impact on ASD students' outcomes on assessments, when principals are fully engaged in Stage 4 (Instructional Leadership) of the perception model would be recommended. Principals in this study that considered themselves transitioning in Stage 4 appeared to have assessment data that showed an overall increase on state and district assessments for students with disabilities, although no specific data was reported regarding ASD students. These principals described

themselves as instructional competent, but having limited awareness on effective interventions strategies to support ASD students, thereby keeping them from being fully engaged in Stage 4 where principals must be instructional competent and have knowledge of effective behavioral strategies and interventions.

Future research might also include parent's perceptions on the effective and knowledge of principals working with ASD students. Principals reported working and collaborating with parents on specific decisions in regards to ASD students. A future study would help to gain insights from parents' perspectives as to how knowledgeable and engaged principals are in the decision making process. Findings might help principals to understand the urgency of creating a collaborative and inclusionary culture for students with autism and other disabilities.

Limitations of Study

Given the relatively small sample size, the findings are not unique to the overall district population. Adding to this limitation was the fact that the data collected in this study stemmed primarily from interviews and the written case study, hereby greatly increased the risk of reporter credibility and responder credibility (Yin, 2003). To account for this participants were invited to read over transcripts and drafts for accuracy through a process referred to as member checking to ensure transcripts reflected participants' statements both accurately and completely (Patton, 2002). The researcher could not be certain if the participants were merely responding to what might be the 'politically' correct response, based on the roles and responsibilities of the principals.

Lastly, the literature review in this study indicates that the individuals who have limited knowledge of special education laws and interactions with students with

disabilities are not effective in their roles as leaders of students with disabilities, including autism. Due to the need to increase student performance on State and district assessments, districts struggling to meet state set performance goals immerse leaders, particularly principals in professional development workshops focused on instructional practices and student performance. However, there was no mention of how professional development specifically impacted the ASD population in buildings.

Conclusion

Although principals do not need to be disability experts, they must have fundamental knowledge and skills that will enable them to perform essential special education leadership tasks. Effective administrators need to develop a working knowledge about disabilities and the unique learning and behavioral challenges various conditions present. Additionally, districts must support building principals as they implement a social justice inclusionary culture for student with disabilities.

Research suggests that few school leaders are well prepared to provide special education leadership (Walther-Thomas, DiPaola, & Butler, 2003). According to Federal guidelines, principals are required to be involved in the educational planning of students who are eligible for special-education services (CCSSO, 1996). However, research has indicated that principals lack the knowledge and necessary training to address the needs of students with disabilities. Many leaders are unaware and uninformed about their educational, professional, and legal obligations (Pazey & Cole, 2013).

Principals in this study perceived their roles as leaders working with ASD students as inclusionary leaders, advocates and enforcers. Principals described how they included others stakeholders, such as an autism specialist from community agencies,

knowledgeable and experienced staff that work directly with ASD students, and parents in the decision making process for student with autism. Principals also identified their role as advocates for ASD students, advocating for resources including staff that has knowledge and experience of ASD. Additionally, principals described how they enforced state and district mandates related to special education students, including students with autism.

In this study, principals also discussed a need for more formalized training on autism. Some reported have limited knowledge and awareness of autism and expressed a need to attend more training opportunities in order to enhance their knowledge. Principals further expressed how formalized training opportunities on autism would help them to link that knowledge and experience to make decisions and create a social justice environment that is academically and behaviorally conducive and governed by special education laws and regulations.

To achieve the goal of instructional leadership in special education classrooms, effective leadership preparation must become school districts major priority. Although principals do not need to be disability experts, they must have basic knowledge and skills that will enable them to perform essential special education leadership tasks (Frost & Kersten, 2011). Principals need to develop a working knowledge about disabilities and the distinctive learning and behavioral challenges various conditions present. Barnhill (2007) noted the importance of this cognizance with this statement "A clear understanding of the condition is necessary to accurately interpret a student's behavior and effectively intervene" (p. 116).

University and college preparation programs, professional organizations, education researchers, state agencies, and local communities must work together to ensure that principals develop their awareness by becoming leaders of their own learning and enrolling in professional development opportunities. Principals must also become instructionally competent to advocate for appropriate instructional resources, serve as collegial support to colleagues as well to ensure that parents are included in the decision making process for ASD students. During a time of educational reform, principals must create a culture of preparedness.

This study's findings have great implications on how principals' roles have evolved over the years. Principals must be self-driven leaders in order to ensure that all students have access to res from the time that they enter school. Our nation depends upon principals' effectiveness in leading this new era in education.

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Appendix A

Recruitment Email

Dear ,

Hello, I am inviting you to participate in a research study that I am conducting as a doctoral candidate at St. John's Fisher College. The study seeks to explore elementary principals' experiences with students with autism. The title of the study is: Elementary Principals Experiences Working with Autism Spectrum Disorder Students in an Urban Setting: A Grounded Theory Study on Principal's Knowledge.

There will be several benefits to your participation in this study. Your voice will contribute to the understanding and knowledge for future studies. Additionally, you will be compensated with a \$25 gift card to Barnes and Nobles.

If you agree to participate, please electronically sign and return the consent form attached. You must also select three possible dates and times to conduct your individual interview within the next weeks.

Criteria to participate in this study include:

- Elementary Principal
- Supervision of staff and students with autism

Your participation will include:

- Electronic signature on the informed consent
- Demographic Form and Case Analysis (must be completed prior to interview.)
- A 1 hour one-to-one interview (audiotaped)

You will receive a phone call from the researcher to confirm the location, date and time for your individual interview. Please make certain that you have completed the Demographic Form and Case Analysis prior to your scheduled interview.

Your participation in this study is completely voluntary and you will have the option of terminating your participation at any time without prejudice or penalty. Additionally, your participation will be confidential. During all aspects of the study, your identity will be protected with use of pseudonyms. Your school district has been assigned a pseudonym as further effort of protecting privacy.

All documents and tape recordings collected or analyzed will be kept in a secured locked file cabinet that is only accessible to the researcher. These documents and recording will be maintained for up to 2 years after the completion of the study after which time, all information will be destroyed and disposed of by shredding.

For further information about the study or your role in it, you may contact: Kimberly Harris-Pappin via email at kmh09618@sjfc.edu or my Doctoral Advisor, Dr. Jeannine Dingus-Eason at jdingus@sjfc.edu. The research study is reviewed and approved by St. John Fisher Colleges' IRB Review Committees.

Thanks again for your time and consideration.

Sincerely,

Kimberly Harris-Pappin

Appendix B

Informed Consent

Title of study: Elementary Principals Experiences working with Autism Spectrum Disorder Students in an Urban Setting: A Grounded Theory Study on Principals' Knowledge

Name(s) of researcher(s): Kimberly Harris-Pappin

Faculty Supervisor: Dr. Jeannine Dingus-Eason **Phone for further information:**
585-385-8002

Purpose of study: The purpose of this study is to examine principals and their experiences with students with autism.

Place of study: Upstate New York School District

Length of participation: 1- 1.5 hours

Risks and benefits: The expected risks and benefits of participation in this study are explained below:

- There are no foreseen potential risks for participating in this study. This study will benefit you by providing information, such as autism references and websites, which may be a useful resource to you as a building leader.
- Method for protecting confidentiality/privacy: During all aspects of the study, participants' identity will be protected with the use of pseudonyms. The district will also be assigned a pseudonym as further effort of protecting privacy. Additionally, all documents and tape recordings collected or analyzed will be kept in a secured locked file cabinet that is only accessible to the researcher. These documents and recordings will be maintained for up to 3 years after completion of

the study after which time, all information will be destroyed and disposed of by shredding.

Benefit: All participants will be given a \$15 dollar gift card for their participation.

Your rights: As a research participant, you have the right to:

1. Have the purpose of the study, and the expected risks and benefits fully explained to you before you choose to participate.
2. Withdraw from participation at any time without penalty.
3. Refuse to answer a particular question without penalty.
4. Be informed of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to you.
5. Be informed of the results of the study.

I have read the above, received a copy of this form, and I agree to participate in the above-named study.

Print name (Participant)

Signature Date

Print name

Signature Date

If you have any further questions regarding this study, please contact the researcher listed above. If you experience emotional or physical discomfort due to your participation in this study, please contact the researcher, the faculty supervisor and/or your personal physician immediately.

The Institutional Review Board (IRB) of St. John Fisher College has reviewed this project. For any concerns regarding confidentiality, please call Jill Rathbun 585-385-8012. She will direct your call to a member of the IRB at St. John Fisher College.

Appendix C

Demographic Questionnaire

Please complete the following questionnaire with as much information possible. All information will remain anonymous.

Biographic Information

Pseudonym Name: _____

Pseudonym School Name: _____ Location (Zone): South ___ North East ___

North West _____

Race/Ethnicity: _____

Age: (Please check one) 30+ _____ 40+ _____ 50+ _____ 60+ _____

Experience

Number of years as a Principal: _____

Number of years supervising classrooms and/or programs of students with disabilities:

Do you know anyone other than the students in your building with autism? Yes _____

No _____ If yes, in what capacity? _____

Professional Development

Please list the most recent names and dates of Professional Development workshops attended to support students with Autism:

Session/Title	Date

Compiled by Kimberly M. Harris-Pappin, Doctorial Candidate, St. John Fisher College,

Rochester, New York July 2014

Appendix D

Written Case Analysis

Please read the case study below and respond in writing to the questions below.

Your completed response will be collected on the date of your individual interview.

Trinity is a 7-year-old girl who was diagnosed with ASD at age 2. Trinity is generally healthy although she has recently been diagnosed with rheumatoid arthritis and is sensitive to cold. She has difficulty with small spaces when many people are congregated together. Her strengths include being curious, social, and visually astute. Although she speaks without assisted technology, her challenges include communication, impulsivity, and behavior that may include tantrums, aggression, and property destruction. These challenges have made it difficult for Trinity to participate in activities with peers.

Trinity's parents are insisting that she be included in a second grade classroom with her age level peers for the upcoming school year. They have asked the principal to ensure that she is included and all services and accommodations are provided to ensure her success. Trinity is working above grade level for Reading and Math. Although she shows very little interest in her peers, she is very focused on cars and knows the make and model of all Acura's. There are only two second grade classrooms to consider placement. One classroom has a teacher that will retire in 2 years and has shown no interest in learning anything new, including the Common Core Learning Standards. The other classroom has a second year teacher and is eager to learn; however, she struggles with classroom management and student engagement.

As the building principal, what would be your plan for Trinity's academic placement? How do you factor teachers, parents and service coordinators into your plan? Please write a paragraph of no more than 6-8 sentences that details interventions and/or strategies that you would use to accommodate the student, teacher, staff and/or parents.

Appendix E

Interview Protocols

1. You were purposefully selected to partake in this study. Tell me about your initial perceptions of students with autism?
2. What do you feel are the current needs for your staff as it relates to autism?
3. What do you feel is your current need as the principal when working with ASD students?
4. If you were creating a new school for students with autism, what process or systems would you use?
5. Sometimes principals are asked to partake in discussions and to make decisions (programming, placement, academic, etc.) for students with special needs, can you tell me a story of a time when you had to make a decision for a student with autism?
6. If you could select a team to partake in discussions regarding students with autism, who would sit at the table and why?

What to you perceive to be your limitations/barriers as it relates to autism or students with autism?

Do you know of Professional Development opportunities for Principals to participate in district? Community?

Do you know of any Community organizations that you could refer parents and staff too?