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Inclusion and Autism: General Education Teachers' Perceptions

A dissertation

presented to

The faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

by

Deborah B. Hayes

May 2014

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Keywords: Autism, Inclusion, General Education, Perceptions

ABSTRACT

Inclusion and Autism: General Education Teachers' Perceptions

by

Deborah B. Hayes

The purpose of this quantitative study was to investigate general education teachers' perceptions of being prepared to work with students identified with autism, grade level assignments, time concerns, and the presence of an ancillary attendant in their classrooms. Participants in this study were located in one city school system in North East Tennessee. All data were collected through an online survey distributed to 230 teachers, of whom 79 responded. Four research questions were analyzed, 3 with single sample *t* tests and 1 with a one-way ANOVA. Results indicated no statistical significance regarding grade level assignments and general education teachers' perceptions of inclusion of students identified with autism. General education teachers who participated in this research indicated significant negative perceptions of feeling prepared to manage social issues, communication issues, and aggressive behaviors associated with autism as well as having adequate time to work with students identified with autism. Significant positive perceptions were indicated for the presence of an ancillary attendant in their classroom to assist with students identified with autism.

DEDICATION

I dedicate this work first and foremost to the memory of my parents, Carroll and Barbara Barnett. You are missed with longing and remembered with love. I thank my sons Trevor, Taylor, and Parker for their support and encouragement through this long journey. You are blessings beyond words. To my aunt Ruth Dowdy who has always been an inspiration I thank you for your example to always strive for the best. And of course I thank my husband, Jim, for his patience, understanding, and acceptance of my desire to attain the goals I set for myself. All my love!

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Dr. Foley, you arouse the desire of self-exploration and further personal development through your commitment for continual learning. You are an educator to truly emulate.

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CHAPTER 1

INTRODUCTION

The numbers of students in our public school systems identified with Autism Spectrum Disorder (ASD) have greatly increased in the last several decades. Prevalence rates from the Centers for Disease Control and Prevention (2012a) indicate “an average of 1 in 88 children in the United States as having ASD” (para. 1). Autism Spectrum Disorder occurs in all ethnicities, racial groups, and socioeconomic levels and is more common in males than females.

Students identified with Autism Spectrum Disorder convey extra challenges to educators owing to the associated behaviors of the syndrome that include an evident requirement of undeniable habits and episodes, elevated amounts of repetition of physical activities such as hand-flapping or head-banging, and tantrums (Bright Tots, 2014, para.2). Other challenges of working with this population in the public school setting are self-injurious behaviors, aggression against others, and limitations of social interactions and communication. Two imperative pieces of legislation, the No Child Left Behind Act of 2001 and the Individuals with Disabilities Education Act of 1990, (reauthorizations in 1997 and 2004) present legal suppositions that have substantial implications for students with disabilities. These laws require that students participate in the general education classrooms with their age appropriate peers without disabilities or in the Least Restrictive Environment except in extreme circumstances. Policies suggest that the Individual Education Program (IEP) Team should “consider placement in the regular education classroom as the starting point in determining the appropriate placement for the child” (Wisconsin Education Association Council, IDEA section, para.16, 2011). “Perhaps no disability category has challenged the U.S. educational system more than autism spectrum disorders” (Bellini, Henry, & Pratt, 2011, p. 37). According to Friedlander (2009):

A child's profile along the continuum of Autism Spectrum Disorders dictates the severity of impairment in language engagement, social connectedness, sensory integration, and cognitive skills. This can often be overwhelming for teachers who are uninformed and untrained in the unique issues of autism (p. 141).

Statement of the Problem

The factors outlined in the introduction place a high degree of accountability on regular education teachers in this age of educational reform. Understanding general education teachers' perceptions of inclusion of students identified with autism (ASD) in their classrooms is of immense importance as to best educational teaching practices and the learning of all students. The topic is noteworthy as well in relation to the enhancement of professional development and teacher training programs. The purpose of this study is to examine general education teachers' perceptions of inclusion of students identified with autism in classrooms of the Johnson City School System in Northeast Tennessee.

Research Questions

Four research questions were developed to fulfill the research objective.

RQ1: To what extent do general education teachers feel prepared to work with students identified with autism?

RQ1₁: To what extent do general education teachers feel prepared to manage social issues associated with autism?

RQ1₂: To what extent do general education teachers feel prepared to manage communication issues associated with autism?

RQ1₃: To what extent do general education teachers feel prepared to manage aggressive behaviors associated with autism?

RQ2: To what extent do general education teachers perceive inclusion as academically beneficial for students identified with autism when compared by grade level?

RQ3: To what extent do general education teachers perceive that time constraints affect their working with students identified with autism?

RQ4: To what extent do general education teachers support the presence of an ancillary attendant in their classroom to assist students identified with autism?

Significance of the Study

There seems to be substantial debate questioning whether an actual increase in numbers of students identified with autism in our school systems is due to more cases of autism, better identification, or previous cases of intellectual disability now being identified as autism (Autism Speaks, 2012b; Mayo Clinic, 2013c) . However, autism increasingly impacts families, communities, and school systems. “Autism is the fastest-growing serious developmental disability in the U.S...” and “costs the nation \$135 billion per year. This figure is expected to significantly increase in the next decade...” due to “more children being diagnosed with autism than AIDS, diabetes, and cancer combined” (National Autism Network, 2013, para.1).

Prominent educational legislation such as the Individuals with Disabilities Improvement Act of 2004 and the No Child Left Behind Act of 2001 both place an emphasis on inclusion in the general education setting for students with disabilities (Southwest Educational Development Laboratory, 2014; Wisconsin Education Association Council, 2011). The No Child Left Behind Act of 2001 also directs an emphasis on “assessments and accountability” based on student test

scores. These legislative mandates place strong accountability requirements on general education teachers. Therefore, general education teachers' perceptions of inclusion of students identified with disabilities, specifically autism, are of utmost importance in this age of educational reform.

The purpose of this study was to obtain information of general education teachers' perceptions of inclusion of students identified with autism in their classrooms in a public school system of Northeast Tennessee. The information may add to the knowledge base of general education training programs, professional development programs of school systems, and improvements in the educational programs experienced by students identified with autism that are included in general education classrooms.

Definitions

The following definitions of terms are provided to clarify the study:

Autism Spectrum Disorder/Autism: Autism spectrum disorder (ASD) and autism are both general terms for a group of complex disorders of brain development (Autism Speaks, 2012c).

Free Appropriate Public Education (FAPE): "Special education and related services that are provided at public expense, under public supervision and direction, and without charge, include an appropriate preschool, elementary school, or secondary school education in the State involved, and are provided in conformity with an individualized education program (IEP)" (Individuals with Disabilities Education Act 2004, 20 U.S.C. §300.17).

General Education: Educational placement for typically developing students.

IDEA (Individuals with Disabilities Education Act) (1990, amended 1997 and 2004): A federal law ratified in 1990 and reauthorized in 1997 and 2004. The law is designed to protect the rights of students with disabilities by ensuring that everyone receives a free and appropriate

public education (FAPE) regardless of ability in the least restrictive environment (LRE) by providing special education services and procedural safeguards.

Inclusion: The placement of students with disabilities in the general education classroom with peers without disabilities (Yell, 1995).

Individualized Education Program (IEP): A written statement for a child with a disability that is developed, reviewed, and revised (Individuals with Disabilities Education Act 2004, 20 U.S.C. §300.22). The IEP must include the child's present levels of academic achievement and functional performance that includes how the child's disability affects the child's involvement and progress in the general education curriculum or for preschool children as appropriate.

Individualized Education Program Team: A "group of people who are responsible for developing, reviewing, and revising the IEP for a student with a disability" (Orfei & Wagner, 2011, para.1).

Least Restrictive Environment (LRE): "The classroom placement of a child with disabilities where he or she can have the most freedom to be a child" (Special Education News, 2013, para.1). "Least Restrictive Environment means that the child with a disability should be educated in a setting that is, as much as possible, within or like a general education classroom" (Tennessee Department of Education Parent Guide, 2013, para. 8)

No Child Left Behind Act of 2001(NCLB): A reauthorization of the Elementary and Secondary Education Act of 1965 and stipulates its purpose is to guarantee that all children have a rational, equivalent, and considerable chance to gain a choice education and reach, at the least, a rating of proficiency on challenging state academic achievement standards and state academic assessments (Goodwin, Arens, Barley, & Williams, 2002). Funds were provided "to ensure that every student can read at grade level or above not later than the end of grade 3" (No Child Left

Behind Act, 2001, 20 U.S.C. § 6381). The law included the condition that all states must test at least yearly every student...with reasonable adaptations and accommodations for students with disabilities... (Goodwin et al., 2002). Annual testing scores were required to be reported to the state educational governing body and schools with inadequate progress or scores could face penalties and consequences. The Individuals with Disabilities Education Act 2004 reauthorization “focused on accountability and improved outcomes by bringing IDEA 2004 into conformity with NCLB” (Wrights law, 2008, para. 14).

Perception: The act or faculty of apprehending by means of the senses or of the mind; cognition; understanding; immediate or intuitive recognition or appreciation, as of moral, psychological, or aesthetic qualities; insight; intuition; discernment (Dictionary Reference, 2012).

Special Education: A range of educational and social services provided by the public school system or other educational institutions to individuals with disabilities who are between 3 and 21 years of age (Encyclopedia of Children’s Health, 2012, para.1). Special education services are individualized to meet the unique needs of students with disabilities and are provided in the least restrictive environment (LRE). Special education may include individual or small group instruction, curriculum or teaching modifications, assistive technology, transition services, and other specialized services such as physical, occupational, and speech therapy.

Special Education Inclusion: A term that expresses commitment to educate each child, to the maximum extent appropriate in the school and classroom he or she would otherwise attend. It involves bringing the support services to the child (rather than moving the child to the services) and requires only that the child will benefit from being in the class (rather than having to keep up with the other students). Full inclusion means that all students regardless of the handicapping

condition or severity will be in a regular classroom or program full time. All services must be taken to the child in that setting (Wisconsin Education Association Council, Definitions section, 2011, para. 10).

Special Education Teacher: Teachers who are required to have full state certification, pass the state special education teacher licensing examination, and hold a license to teach in the state. The teaching certification cannot be waived on an emergency, temporary, or provisional basis, and teachers must hold at least a bachelor's degree (Wrightslaw, Important Definitions Section, 2009, para. 19). Special education teachers may work within the continuum of educational settings from coteaching in the general education classroom to a self-contained classroom for students with more severe disabilities. The educational placement of a student with a disability is an IEP Team decision and is based on the best educational fit for the student.

Limitations

This study was confined to one school system in Northeast Tennessee and should not be considered a normative representation for other areas or school systems. The respondents to the questionnaire were regular education teachers of three elementary schools, one intermediate school, and one high school of the Johnson City School system who agreed to participate in the study. A small number of general education teachers of this school system participated in the study and the questionnaire used was self-created with the responses to one question typically being used to arrive at data. Additionally, as a special education teacher I have made a conscious effort to prevent personal bias related to the subject of autism from interfering with this study. However, personal bias may be unintentionally reflected.

CHAPTER 2

REVIEW OF LITERATURE

Introduction

In an effort to frame the study the review of literature includes background information on the nature of autism and behaviors associated with the disorder, research based methodology in the treatment of autism and instructional interventions for classroom use, and teacher perceptions in a broad sense and in relation to the inclusion of students with autism in the general education setting.

Autism

Autism was first thought “to be a range of psychological conditions” (WebMD Medical Reference, 2011, para 1). The term “autism”, which is from the Greek word “autos,” meaning “self” was first used by a Swiss psychologist, Eugene Bleuler, in reference to indicators of schizophrenia in children. In the 1940s an Austrian physician, Leo Kanner, doing research at Johns Hopkins University started using the term “autism” to “describe the withdrawn behavior” of some of the children he had studied (WebMD Medical Reference, 2011, para. 4). The perceived relationship between autism and schizophrenia remained until the 1960s.

In varying degrees the characteristics of the disorder include difficulties in social interactions and verbal and nonverbal communication and repetitive behaviors. Included within the spectrum of autism are autistic disorder, Rett syndrome, childhood disintegrative disorder, pervasive developmental disorder-not otherwise specified (PDD-NOS), and Asperger Syndrome. Intellectual disability, problems with motor coordination, and attention and physical health issues

such as sleep and gastrointestinal disturbances may be congruent with an ASD diagnosis (Autism Speaks, 2012a).

Exact causes of autism are not known, although past incorrect suppositions such as the “Cold “ or “ Refrigerator Mother” cause and childhood vaccinations have recently been ruled out. Current research indicates the beginnings of autism during early brain development combined with the presence of autism risk genes (Autism Speaks, 2012a). Children with autism may also display other characteristics such as stereotyped movements, resistance to environmental change or change in the daily routine, and unusual responses to sensory experiences (National Dissemination Center for Children with Disabilities, 2011a).

Previous to IDEA 1990 autism was not a separate disability but was included within other disabilities such as mental retardation (now called intellectual disability) or other health impaired. Autism characteristics are generally evident before the age of 3. These characteristics include difficulty relating to others or interacting in a socially appropriate manner and the absence, disorder, or delay in verbal and/or nonverbal communication. The addition of one or more of the following may lead to a diagnosis of an autism spectrum disorder: insistence on sameness as evidenced by restricted play patterns, repetitive body movements, persistent or unusual preoccupations, and/or resistance to change; and unusual or inconsistent responses to sensory stimuli (Tennessee Department of Education, 2010). The Autism Society of America (ASA) defines autism as:

a complex developmental disability that typically appears during the first three years of life and is the result of a neurological disorder that affects the normal functioning of the brain, impacting development in the areas of social interaction and communication skills...with difficulties in verbal and non-verbal

communication, social interactions, and leisure or play activities (Definition of Autism, 2012a, para. 1).

The following signs or symptoms, if displayed by a young child, should be noted by parents and reported to their child's pediatrician with follow-up reports to a speech pathologist or psychologist (Definitions of Autism, 2011):

1. The child is unable to coo by 12 months.
2. The child does not point or gesture by 12 months.
3. The child does not say single words by 16 months.
4. The child does not say 2 or more words by 24 months.
5. The child has lost some of the social skills or language abilities.
6. The child does not display fear or danger.
7. The child may be over or under sensitive to pain.
8. The child may avoid eye contact with parents/caregivers.
9. The child may prefer to be by him/herself.
10. The child may have difficulty expressing what they want or need and may then try to use gestures.
11. The child may echo words or phrases.
12. The child may have inappropriate attachments to objects.
13. The child may spin his/herself or objects.
14. The child may exhibit prolonged repetitive play.
15. The child may insist on things/routines always being the same.
16. The child may exhibit inappropriate laughing (laughing when not appropriate to the situation).

17. The child may display tantrums for no apparent reason.
18. The child may avoid cuddling.
19. The child may exhibit self-injurious behavior when upset (biting selves or banging heads, etc).
20. The child may have an overall difficulty interacting with others (para.5).

More specifically, Autism Spectrum Disorder (ASD) “is one of five disorders that falls under the umbrella of Pervasive Developmental Disorders (PDD), a category of neurological disorders characterized by severe and pervasive impairment in several areas of development” (Definition of autism, 2011, para. 3). The Individuals with Disabilities Education Act (IDEA) defines autism as:

A developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three that adversely affects a child’s educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences (Individuals with Disabilities Education Act, 2004).

The State of Tennessee adds to the IDEA definition with:

The term does not apply if a child’s educational performance is adversely affected primarily because the child has an Emotional Disturbance, as defined in this section.

The term of Autism also includes students who have been diagnosed with an Autistic Spectrum Disorder such as Autism, Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) or Asperger’s Syndrome when the child’s

educational performance is adversely affected. Additionally, it may also include a diagnosis of a Pervasive Developmental Disorder such as Rett's or Childhood Disintegrative Disorder. Autism may exist concurrently with other areas of disability.

After age three (3), a child could be diagnosed as having Autism if the child manifests the above characteristics. Children with Autism demonstrate the following characteristics prior to age 3:

- 1) Difficulty relating to others or interacting in a socially appropriate manner;
- 2) Absence, disorder, or delay in verbal and/or nonverbal communication, and
- 3) One or more of the following:
 - a. Insistence on sameness as evidenced by restricted play patterns, repetitive body movements, persistent or unusual preoccupations and/or resistance to change.
 - b. Unusual or inconsistent responses to sensory stimuli (Tennessee Department of Education's Approved Disability Eligibility Standards, 2010).

Autism Speaks, an organization that promotes understanding, research, and increased awareness of autism, states "autism spectrum disorder (ASD) and autism are both general terms for a group of complex disorders of brain development" (2012c, para.1). The majority of identifiable indications of an ASD typically become obvious "between two and three years of age" (para.3). The majority of autism diagnoses seem to "be caused by a combination of autism risk genes and environmental factors influencing early brain development" (para.6)

A person receiving the diagnosis of PDD-NOS displays some of the criteria relevant to autism, such as social skills limitations, but does not meet the criteria in all identifying signs or symptoms (possibly lacking repetitive movements). Those diagnosed with PDD-NOS may present “atypical symptomatology” in that they may be verbal with fewer cognitive limitations (Autism Speaks, 2011b).

Asperger’s Syndrome was first described by Hans Asperger in 1944 and is distinguished through struggles in interactions and communication abilities with others (Mayo Clinic, 2011a). Asperger’s Syndrome is typically thought to be at the milder end of Autism Spectrum Disorders and symptoms include singular interests with a lack of empathy, monotonic voice, lack of understanding of humor or other people, and little or no interest in developing friendships.

Rett Syndrome was identified by Dr. Andreas Rett in 1966 and usually affects girls. The characteristics of Rett Syndrome are “normal early growth and development followed by a slowing of development, loss of purposeful use of the hands, distinctive hand movements, slowed brain and head growth, problems with walking, seizures, and intellectual disability” (National Institute of Neurological Disorders and Stroke, 2011). A gene mutation was identified in 1999 that causes most cases of Rett Syndrome.

Childhood Disintegrative Disorder (CDD), also known as Heller’s Syndrome, “is a condition in which children develop normally until ages 2 to 4, but then demonstrate a severe loss of social, communication, and other skills” (Mayo Clinic, 2011b, para. 1). CDD was first identified by Theodore Heller, an Austrian educator, in 1908. There is some controversy in the categorization of the syndrome in that some consider it to be a form of late-onset autism while others emphasize the relationship to the concurrence of excessive lipid storage in the brain as a

causing factor. The loss of two or more previously acquired skills is necessary for a diagnosis of CDD:

- Language, including a severe decline in the ability to speak and have a conversation.
- Social skills, including significant difficulty in relating to and interacting with others.
- Play, including a loss of interest in imaginary play and in a variety of games and activities.
- Motor skills, including a dramatic decline in the ability to walk, climb, grasp objects, and other movements.
- Bowel or bladder control, including frequent accidents in a child who was previously toilet-trained (Mayo Clinic, 2011b, Symptoms Section).

The *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., *DSM-IV-TR*, 2000) of the American Psychiatric Association suggests diagnostic criteria for autistic disorder is as follows:

(I) A total of six (or more) items from (A), (B), and (C), with at least two from (A), and one each from (B) and (C)

(A) qualitative impairment in social interaction, as manifested by at least two of the following:

1. marked impairments in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body posture, and gestures to regulate social interaction
2. failure to develop peer relationships appropriate to developmental level

3. a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people, (e.g., by a lack of showing, bringing, or pointing out objects of interest to other people)

4. lack of social or emotional reciprocity (note: in the description, it gives the following as examples: not actively participating in simple social play or games, preferring solitary activities, or involving others in activities only as tools or “mechanical” aids

(B) qualitative impairments in communication as manifested by at least one of the following:

1. delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternate modes of communication such as gesture or mime

2. in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others

3. stereotyped and repetitive use of language or idiosyncratic language

4. lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level

(C) restricted repetitive and stereotyped patterns of behavior, interests, and activities, as manifested by at least two of the following:

1. encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus

2. apparently inflexible adherence to specific, nonfunctional routines or rituals

3. stereotyped and repetitive motor mannerisms (e.g. hand or finger flapping or twisting, or complex whole-body movements)

4. persistent preoccupation with parts of objects

(II) Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years:

(A) Social interaction

(B) Language as used in social communication

(C) Symbolic or imaginative play

(III) The disturbance is not better accounted for by Rett's Disorder or Childhood Disintegrative Disorder. (p .75).

Autism is not restricted to race, ethnicity, socioeconomic status, or region of residence.

“Nationally and in Tennessee the number of children and youth ages 3 through 21 receiving special education services related to autism tripled between 2001 and 2007” (Offices of Research and Education Accountability, 2009, Autism in Tennessee Introduction section, para. 1).

Tennessee reported 1,242 students receiving special education services identified with autism for the 2000-2001 school year as opposed to 3,744 students receiving special education services identified with autism for the 2006-2007 school year (Tennessee Department of Education, Annual Statistical Report, 2012, Table 11.). For the 2011-2012 school year Tennessee reported 6,736 students identified with autism. Recent autism statistical data indicate Minnesota and Maine with leading diagnoses of autism (1:81 and 1:87 respectfully) and diagnosis in Tennessee at 1:264 (The AUTOSPOT, 2012, Autism Statistics section).

Behaviors Associated with Autism

The related characteristics of autism may present unique general education classroom challenges for teachers and peers. According to the Interactive Autism Network Community (2008a) these challenging behaviors include but are not limited to:

- Social issues,
- Communication and language issues,
- Stemming: Repetitive, stereotyped, and sometimes self-injurious behaviors,
- Restricted interests: Obsessions, “special topics,” and attention deficits,
- Insistence on sameness,
- Sensory issues: Seeking and avoiding,
- Mood instability and meltdowns,
- Sleep issues,
- Motor skill issues,
- Executive function issues,
- Activities of daily living.

Social Issues

“One of the hallmarks of autism is a lack of interest or connection with other people (American Psychiatric Association, 4th ed., rev., 2000). Babies with an ASD do not display typical curiosity for human faces and voices shown by infants with characteristic development (Interactive Autism Network, 2008b). Individuals with autism may focus on one area of a person’s face such as the nose or mouth and miss the presented social cues presented for typical social development, or the focus may be on an object that is around the person speaking to them, such as a light fixture or picture on the wall. Individuals with autism also have a mutual

impediment with the interpretation of what is presented to them from accepted social cues, which exacerbates obstacles to developing relationships. Social deficits are most obvious in associations with contemporaries.

Communication and Language Issues

Expressive and receptive language skills and communication are among the center of most struggles for those identified with an autism spectrum disorder (American Psychiatric Association, 4th ed., rev., 2004). The difficulties vary from never using speech, acting as if they are deaf even though testing indicates normal hearing values, displaying regression in which speech is achieved only to be lost by the age of 2 or 3, echolalia (repeating words or phrases), and pronoun reversal (saying you are hungry instead of I am hungry). Individuals may also present inappropriate or strange tonal inflection when speaking. “Odd intonation patterns associated with autism seem to be one of the most immediately recognizable clinical signs of the disorder” (Interactive Autism Network, 2004, para. 5). Persons with autism also have a tendency to interpret speech with absolute literalness, which causes confusion and frustration as they attempt to decipher less unambiguous expressions or jokes. An added area of difficulty for this population is the inability to manage pragmatic language, or the complexity of dyadic communication. Instead of holding a discussion with others, individuals with autism are more prone to speak “at” them (Interactive Autism Network, 2008c).

Stemming, Repetitive, Stereotyped, and Sometimes Self-Injurious Behaviors

Individuals with autism may flap their hands, flick their fingers, bang their heads, grind their teeth, or endlessly perform other seemingly random physical acts (Interactive Autism Network, 2008d). The function of these behaviors for the person with autism is widely debated varying between helping to block out overwhelming sensory input, gain attention or to escape

unpleasant tasks, and possibly a retreat to familiar ground when presented with situations that defy their coping skills. The behaviors also consist of banging one's head, biting the hand, and forceful scratching which may cause observable injury.

Restricted Interests: Obsessions, "Special Topics," and Attention Deficits

Limited and recurring pursuits and endeavors are an integral characteristic of autism (American Psychiatric Association, 4th ed., rev., 2004). A student with autism may spend hours and hours studying facts regarding a favorite topic such as trains or movie characters but have extreme difficulty focusing on a classroom activity. Interrupting a favored activity can lead to the student displaying tantrums, total emotional meltdowns, or aggressive behaviors. Caregivers and educators have been cautioned against defining these behaviors as satisfying for the student when they "cannot speak about their internal state of mind" (McDougle, Kresch, & Posey, 2000, p.428). Establishing and maintenance of focus along with attention struggles are frequently perceived in individuals identified with autism. Regulating these disparities can be challenging in a classroom setting.

Insistence on Sameness

Persons within the autism spectrum are inclined to demand consistency in routine and abhor variations of their day (American Psychiatric Association, 4th ed., rev., 2004). Individuals with an ASD also tend to become upset when there is a break in routine or when it is time to transition from one activity to another. They also may demand that their ritual be followed with exact sameness day after day. Interruptions to this ritual may lead to meltdowns and may be related to the "tendency to have a special topic" (Interactive Autism Network, 2008e, para. 9). The cause for the need or insistence on sameness is still debated, but the need is definitely there. A neurological basis also continues to be debated (2008e).

Sensory Issues: Seeking and Avoiding

“Some individuals with an ASD can be hypersensitive to stimuli such as sound or touch...while other individuals appear to be hyposensitive to sensory information” (Interactive Autism Network, 2008f, para. 2). This may help us understand individuals who may cover their ears and attempt to flee in a loud, noisy classroom as well as students who do not react when spoken to even though they have no identified hearing disability. Also of consequence regarding those with an ASD are proprioceptive and vestibular issues. “Some individuals seek proprioceptive input by crawling under furniture or into small, cramped spaces, or seek vestibular input by spinning, swinging, or bouncing repetitively” (Lord & Spence, 2006, p. 2). As noted by the Interactive Autism Network Community:

Noise, light, and other aspects of the environment that most people filter out can become like an assault for a person with an ASD. Understanding this can help families and other supporters comprehend how a classroom or a workplace that looks OK to a typical person can seem deafening, blinding, and otherwise nerve-wracking to a person with an ASD (2008f, para. 10).

Mood Instability and Meltdowns

The possibility of an individual with an ASD experiencing a meltdown should be understood and in some cases expected. “There is so much that can potentially destabilize a person with an ASD...such as lack of language and the inability to communicate, broken routines, items out of order, and sensory overload” (Interactive Autism Network, 2008g, para. 2). Added to these sources of disquiet for this population is the possibility “they may suffer from an actual mood disorder in addition to their ASD, such as bipolar disorder, anxiety, and

depression (2008g, para. 3). Regardless of the foundation or source of the frustration the matter of mood discrepancies must be taken vigilantly in a most circumspect manner (2008g).

Sleep Issues

Individuals with autism have displayed struggles acquiring customary onset and maintenance of sleep routines (Williams, Spears, & Allard, 2004, p. 265). The difficulty may be in getting to sleep, remaining asleep, awaking too early and staying awake the rest of the day, or from an identified sleep disorder. The sleep issues experienced by the person with autism will generally affect the entire family. Parents may become sleep deprived as they attempt to work with their child to establish a normal night time behaviors, which adds to the already increased stress levels for the family.

Motor Skills Issues

Motor skills issues, whether fine motor (small, precise movements) or gross motor (involving large muscles), are prevalent among individuals with an ASD. These difficulties may present in a number of signs such as awkward gait when walking, clumsiness, difficulties with coloring or writing, and intense struggles with sports. Motor skills deficits intensify difficulties in developing life skills for increased independence.

Executive Function Issues

“Executive Function is a set of mental processes that helps connect past experiences with present action. People use it to perform activities such as planning, organizing, strategizing, paying attention to and remembering details, and managing time and space” (National Center for Learning Disabilities, 2008, para. 1). Individuals with Autism Spectrum Disorders (ASDs) have impediments with cognitive adaptations, scheduling, and orderliness. Many challenges are presented in this area, especially those related to the school environment (Hill, 2004).

Activities of Daily Living

Daily living skills include being able to dress independently, feed oneself, and to manage toileting. Mastering such tasks can be especially challenging for those on the autism spectrum (Gillham, Carter, Volkmar, & Sparrow, 2000). Learning skills for self-determination often collides with the sensory, social, and motor concerns.

Treatment and Instructional Interventions

“While there is no known cure for autism, there are treatment and education approaches that may reduce some of the challenges associated with the condition” (Autism Society, 2012b, para. 3). Vast ranges of therapies and treatments abound but should be carefully investigated as they range from the accepted and authentic to malicious hoaxes only seeking monetary gain from caregivers (Autism Spectrum Disorders Fact Sheet, 2012). “Research indicates that intensive educational and behavioral interventions can have major effect when started as early as possible” (para.1). Early Intervention services are intended to “minimize developmental delays and maximize chances of reaching normal milestones to development” (para. 2). The Centers for Disease Control and Prevention identify the following treatment categories in relation to Early Intervention Services:

- Behavior and Communication Approaches: behavior and communication approaches that help children with ASDs are those that provide structure, direction, and organization for the child in addition to family participation. A notable treatment approach for people with an ASD is called applied behavior analysis (ABA). ABA has become widely accepted among health care professionals and is used in many schools and treatment clinics. The child’s progress is tracked and measured. There are different types of ABA:

- Discrete Trial Training (DTT): DTT is a style of teaching that uses a series of trials to teach each step of a desired behavior or response. Lessons are broken down into their simplest parts and positive reinforcement is used to reward correct answers and behaviors. Incorrect answers are ignored.
- Pivotal Response Training (PRT): PRT aims to increase a child's motivation to learn, monitor one's own behavior, and initiate communication with others. Positive changes in these behaviors should have widespread effects on other behaviors.
- Verbal Behavior Intervention (VBI): VBI is a type of ABA that focuses on teaching verbal skills.
- Developmental, Individual Differences, Relationship-Based Approach (DIR): DIR focuses on emotional and relational development (feelings, relationships with caregivers). It also focuses on how the child deals with sights, sounds, and smells.
- Treatment and Education of Autistic and related Communication-handicapped Children (TEACCH): TEACCH uses visual cues to teach skills. For example, picture cards can help teach a child how to get dressed by breaking information down to small steps.
- Speech Therapy: Speech therapy helps to improve the person's communication skills. Some people are able to learn verbal communication skills. For others, using gestures or picture boards is more realistic.
- The Picture Exchange Communication System (PECS): PECS uses picture symbols to teach communication skills. The person is taught to use picture symbols to ask and answer questions and to have a conversation.

- **Dietary Approaches:** Many dietary treatments call for changes in diet. Such changes include removing certain types of foods from a child's diet and using vitamin or mineral supplements. Dietary treatments are based on the idea that food allergies or lack of vitamins and mineral cause symptoms of ASDs.
- **Medication:** There are no medications that can cure ASDs or even treat the main symptoms. But there are medications that can help people with related symptoms. For example, medication might help manage high energy levels, inability to focus, depression, or seizures. Also, the U.S. Food and Drug Administration approved the use of risperidone and aripiprazole (antipsychotic drugs) to treat certain ages of children with ASDs who have severe tantrums, aggression, and cause self-injury.
- **Complementary and Alternative Medicine:** To relieve the symptoms of ASDs, some parents and health care professionals use treatments that are outside of what is typically recommended by the pediatrician. These types of treatments are known as complementary and alternative treatments (CAM). They might include special diets, chelation (a treatment to remove heavy metals like lead from the body), biologicals (secretin), or body-based systems (like deep pressure). (Treatment section, 2012b). These types of treatments are very controversial.

The National Institute of Neurological Disorders and Stroke add the following options as treatments for autism:

- **Nutrition Therapy:** One popular dietary treatment involves removing gluten and casein from the autistic child's diet. Another dietary treatment is a Specific Carbohydrate diet, designed to treat inflammatory bowel disease. The third diet that some people feel might be beneficial to children with autism is the Elimination diet. Many children with autism

have been found to have food allergies that can contribute to some of their autism behaviors. The foods found to be responsible for 90% of the allergic reactions include milk, egg, peanut, fish, wheat, soy, tree nuts, and shellfish.

- Occupational Therapy: Occupational therapists can help students with autism respond to the information coming through the senses and help with transitions. Occupational therapists also help with appropriate daily living skills such as dressing and play.
- Therapeutic Listening: Therapeutic Listening makes the distinction between hearing (passive) and listening (active and voluntary). Listening requires a person to want to communicate and focus the ear on certain sounds. The entire brain is needed to listen. If children with autism have listening difficulties, it will interfere with their ability to accurately perceive, process, and respond to sounds. This can impact their perception, motor, attention, and learning.

New treatments have been developed that might be effective but have not been scientifically proven:

- Facilitated Communication: This technique assumes that by supporting a nonverbal child's arms and fingers so that he or she can type on a keyboard, he or she will be able to type out his or her inner thoughts.
- Holding Therapy: The parent continues to hold the child for longer periods of time, even if the child resists. Proponents of this technique say it forges a bond between the parent and child.
- Auditory Integration Therapy: The child listens to a variety of sounds with the goal of improving language comprehension.
- Dolman/Delacato Method: People are to crawl and move as they did at each stage of early development in an attempt to learn missing skills (2012).

IDEA 2004 requires special education teachers to demonstrate matter competence in the academic subjects taught as related to the highly qualified component of NCLB (20 U.S.C. §1401(10)[B]). Tennessee endorses the following special education areas: special education comprehensive K-12, special education early childhood PreK-3, special education hearing PreK-3, special education modified K-12, speech/language pathologist PreK-12, speech/language teacher, and speech communication (Tennessee Department of Education, 2012).

Part B of IDEA ensures services for school-age children and provides special education and related services for children and youth ages 3 to 21. Part C of IDEA: Early intervention for babies and toddlers provides early intervention services for infants and toddlers and with disabilities and their families from birth to 3 (National Dissemination Center for Children with Disabilities, 2012b). IDEA determines in its findings that “almost 30 years of research and experience has demonstrated that the education of children with disabilities can be made more effective by having high expectations for such children and ensuring their access to the general education curriculum in the regular education classroom, to the maximum extent possible...” (Individuals with Disabilities Education Improvement Act, 2004, 20 U.S.C. §1400 (d)(5)[A]).

The educational placement of a student with a disability is an IEP Team decision and is based on the best educational fit for the student.

According to IDEA 2004 an IEP Team must include:

- (i) The parents of a child with a disability,
- (ii) Not less than 1 regular education teacher of such child (if the child is, or may be, participating in the regular education environment);
- (iii) Not less than 1 special education teacher, or where appropriate, not less than 1 special education provider of such child;

- (iv) A representative of the local educational agency who is qualified to provide, or supervise the provision of, specially designed instruction to meet the unique needs of the children with disabilities; is knowledgeable about the general education curriculum; and is knowledgeable about the availability of resources of the local educational agency;
- (v) An individual who can interpret the instructional implications of evaluation results;
- (vi) At the discretion of the parent or the agency, other individuals who have knowledge or special expertise regarding the child, including related services personnel as appropriate; and
- (vii) Whenever appropriate, the child with a disability (20 U.S. C. §1414(d)(1)[B]).

The IEP Team must consider how the disability affects the child's participation in appropriate activities during and after school hours. The team must also include measureable annual goals including academic and functional objectives designed to meet the child's needs that result from the child's disability. These goals and objectives should enable the child to be involved and make progress in the general education curriculum.

Children with disabilities who take alternate assessments aligned to alternate achievement standards require a description of benchmarks or short-term objectives; a statement of the special education and related services and supplementary aids and services based on peer-reviewed research to the extent practicable to be provided to the child. General education program modifications or supports for school personnel provided to enable the child to advance appropriately toward attaining annual goals must be addressed.

Also included in the IEP Team decisions are the right of the student to be involved and make progress in the general education curriculum and to participate in extracurricular and other nonacademic activities. The IEP must also consider a special education student's right to be educated and participate with other children with disabilities and nondisabled children. In severe cases an explanation of the extent, if any, to which the child will not participate with nondisabled children in regular education classes must be included in the IEP. Also, a statement of any individual appropriate accommodations that are necessary to measure the academic achievement and functional performance of the child on state and district-wide assessments must be included. If the IEP Team determines the child must take an alternate assessment instead of a particular regular state or district-wide assessment of student achievement, a statement of why the child cannot participate in the regular assessment and the particular alternate assessment selected as appropriate for the child must be included.

The projected date for the beginning of the services and modifications as well as the anticipated frequency, location, and duration of those services and modifications are further considerations of the IEP Team (Individuals with Disabilities Education Act, 2004, 20 U.S.C. §300.320).

The Least Restrictive Environment is a provision of IDEA 1990, 1997, and 2004. Instead of a true definition the LRE provision of IDEA specifies each public agency must ensure that to the maximum extent appropriate children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled. Special classes, separate schooling, or other removal of children with disabilities from the regular educational environment only occurs if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved

satisfactorily (20 U.S.C. §300.114). “School districts are required to make a continuum of alternate placements available to meet the needs of all students” (Logsdon, 2013, para. 7). A regular education setting is the first environmental decision the IEP Team should contemplate (Learning Disabilities Association of America, 2011).

Instructional interventions should naturally follow the guidelines established by the IEP Team during the IEP Team Meeting taking the individual student’s needs and present levels of performance into consideration as an educational program is instituted. Some interventions will be a continuation of early interventions services. Several of these services, such as behavior interventions, speech, occupational therapy, dietary modifications, and medications, may carry through into adulthood. Others will be introduced as the child progresses through the educational levels of instruction. Additional services are offered outside the educational setting. Instructional strategies may be used in diverse settings for maximum generalization possibilities. “Instruction will likely be needed in academics, vocational exploration and training, hygiene, personal management, community-based life skills, and recreation and leisure” (Wehman, Smith, & Schall, 2009).

Some general strategies or interventions that are implemented by general education teachers as well as special educators are direct instruction, prompting, modeling, graphic organizers, teacher proximity, and mnemonic devices. Approaches for students with disabilities and inappropriate behaviors include applied behavior analysis of which a functional behavior assessment and a behavior intervention plan are important components. Teachers may also incorporate time delay, discrete trial teaching, task analysis, social scripts, highlighting important concepts, establishing alternate modes of assignment completion, extra time to complete assignments or tests, assistive technology, texts on tape or CD, copies of teacher notes,

dismissing the student from class before the bell rings to manage the halls without crowds, and an escape plan if the student needs to leave the classroom due to anxiety or stress as other approaches of support. This list is not comprehensive but suggests options for the teacher and students for greatest educational success.

Peer tutoring allows interactions between students with an ASD and typically developing students as they work together in regular or special education classrooms. This is an accepted evidence-based intervention that has been found to have positive effects with students with an ASD in social and academic areas (Stenhoff & Lignagaris/Kraft, 2007).

“A social story facilitates social understanding between people who have ASD and those who interact with them” (Lal & Ganesan, 2011, p. 38). Social stories are written on an individual basis, usually by a teacher or parent, and should include pertinent and precise information about an upcoming event to assist the student with autism with social cues, upcoming events, or even what to expect in a given situation. The social story is generally read to the student and at times it may become part of the instruction sequence.

Video modeling is purported to increase social interactions, daily living skills, and communication skills. This method has also been shown to decrease inappropriate behaviors and is relatively easy to implement (Ganz, Earles-Vollrath, & Cook, 2011).

Music therapy has been used with children with autism since 1940 (Reschke-Hernandez, 2011). Lim and Draper suggest that music therapy combined with applied behavior analysis verbal training can “enhance the functional verbal production in children with ASD” (2011, p. 534).

Corbett et al. reported theatre as therapy “showed some improvement in face identification and theory of mind skills” (2011, p. 508). A theatre group specifically for

individuals with disabilities has been created in association with East Tennessee State University and has several members identified with an ASD.

Therapeutic horseback riding may result “in a reduction of aberrant behaviors and an increase in social behavior...” (Nelson et al., 2011, Abstract). Others have tried water therapy, sensory interventions, emotion recognition, reciprocal imitation training, reciprocal pretend play training, summer camps designed specifically for individuals with autism, visuomotor skills assessment, acupuncture, herbal medicine, yoga, and lastly an actress in California reports her son has been cured of autism through diet changes and vitamins.

“Intervention may help to lessen disrupting behaviors, and education can teach self-help skills that allow for greater independence. But just as there is not one symptom or behavior that identifies individuals with ASD, there is no single treatment that will be effective for all people on the spectrum” (Autism Society, 2012b, para.3). “Educational services are recommended to begin as soon as a child is suspected of having an autistic spectrum disorder” (National Autism Center, 2009, p. 81).

Teacher Perceptions

Day (2012) offers the following regarding the circumstances affecting teachers on a global scale:

The work and lives of teachers have always been subject to external influences as those who are nearing the end of their careers will attest, but it is arguable that what is new over the last two decades is the pace, complexity, and intensity of change as governments have responded to the shrinking world of economic competitiveness and social migration by measuring progress against their position in international

league tables (p. 8).

He continues with the following:

Externally-imposed curricula, management innovations, and monitoring and performance Assessment systems have been introduced but have often been poorly implemented, and have resulted in periods of destabilization, increased workload, intensification of work, and a crisis of professional identity for many teachers who perceive a loss of public confidence in their ability to provide a good service (p.8).

The adage that “those who can’t teach” confirms the contested condition of education and teaching manifested through societal norms. “Society seeks out its ‘masters’ and its ‘professors’ to teach new, upcoming individuals a ‘profession,’ whether they are preparing students to become a doctor, engineer, or a lawyer. Yet, society blurs the line of being a professional when it applies to teacher preparation and teaching” (Matinez, Desiderio, & Papakonstantinou, 2010, p. 295). Labaree (2011) offers “in many ways, teaching is the most difficult of professions” and “teaching is a people-changing profession” (p. 11). He continues this sentiment: “But at the same time, in the eyes of the public, teaching doesn’t look that hard at all. And this makes us easy targets for anyone selling a simple mechanism for distinguishing the good teacher from the bad” (p. 13). “Evidence regarding low teacher morale has been linked to lack of recognition” and feeling “undervalued as professionals...” and dissatisfaction “with the amount and type of recognition and respect received as teachers...” (Willis & Varner, 2010, para. 6).

The *Status of the American Public School Teacher 2005-2006* published by the National Education Association to provide “insights about trends in the composition of the teaching profession, the characteristics of teaching service, and the position of teachers in society over the

past 45 years” (2010, Preface, para. 4) offers the following statistics related to the changes in perceptions of elementary and secondary grade level educators from 1961 to 2006:

- Attitudes towards the profession: willingness to teach again has decreased from 50% in 1961 to 38% in 2006 (p. 10). Between 1971 and 1981 all age groups reported huge decreases in the percentages of teachers who would teach again, ranging from a minimum of 23 percentage points among teachers under 30 (falling from 76% to 53%) to as much as 30 percentage points among those 40 to 49 years (falling from 75% to 45% (p.87) .
- Required hours per week: 40+ hours/week has increased from 14% in 1961 to 22% in 2006 (p. 48).
- Total number of hours per week teachers expend on all teaching duties: 60+ hours has increased from 5% in 1966 to 20% in 2005 (p 55).
- Mean length of lunch periods had decreased for elementary teachers from 44 minutes in 1961 to 32 minutes in 2006, for secondary teachers from 35 minutes in 1961 to 31 minutes in 2006 (p. 61), with the Southeast indicating the shortest lunch periods of 27 minutes in 2006 (p. 62).
- Relative rankings of factors that hindered teachers most listed in order most to least 1966: lack of time to teach, classroom interruptions; lack of materials, resources, and facilities; discipline and negative attitudes of students; incompetent/uncooperative administrators; poor preparation of students, unsatisfactory remuneration; insufficient preparation for the field in which teaching (p. 93).

- Relative rankings of factors that hindered teachers most listed in order most to least 2006: heavy workload, extra responsibilities, paperwork, meetings; testing demands/teaching to the test; discipline and negative attitudes of students; incompetent/uncooperative administrators/lack of support from administrators; lack of preparation/planning time; lack of materials, resources, and facilities (p. 93).
- The use of standardized tests for evaluating teachers was more prevalent among teachers in the Southeast (25%) compared with teachers in other regions (Northeast, 12%; Middle, 6%; West, 11%) in 2006 (p. 131).

An analysis of teacher attrition in Tennessee (Tennessee Tomorrow, Inc., 2002), reported the following findings:

- The most identifiable reasons why teachers chose to leave the profession are childrearing/pregnancy, lack of support from administration, and dissatisfaction with salary and benefits (p. 9).
- Professional prestige and salary and benefits were the two areas with which former Tennessee teachers were the most dissatisfied (p. 2).
- 42% of the new teachers who entered Tennessee schools in 1995 left the profession within 5 years (p. 3). (Nationally close to 50 percent of new teachers leave their schools within five years).

According to an Alliance for Excellent Education Issue Brief (2005) “it is believed to cost the United States \$2.2 billion a year to restore the number of educators that have left the profession in twelve months” (para. 3). The Issue Brief contains a state by state breakdown of costs related to teacher attrition with Tennessee’s amount being over \$32 million and concludes

“there is a growing consensus among researchers and educators that the single most important factor in determining student performance is the quality of his or her teacher” (para.5).

Teachers, Inclusion, and Autism Spectrum Disorders

“The schools our youth attend and the educators who teach them can be considered a part of the core foundation of American society” (Martinez, Desiderio, & Papakonstantinou, 2010, p. 289). Parents in the United States have high expectations for the public schools as they feel the schools are responsible not only for scholastic gains but student character, occupational readiness, and community responsibility (Tye, 2000). “The effect the classroom teacher can have on student achievement is clear because student achievement begins and ends with the quality of the teacher, the instructional program, and his/her leadership” (Korkmaz, 2007, p. 390).

“In implementing IDEA’s LRE provisions, the regular classroom in the school the student would attend if not disabled is the first placement option considered for each disabled student before a more restrictive placement is considered” (Wrightslaw, 2012, para.6). The additional teacher accountability with regard to teacher evaluations being tied to student achievement scores or high stakes testing, common core standards, NCLB requirements, demands of school policies, and inclusion of special education students and the necessity to create a learning environment for all students in the general education classroom exacerbate the responsibility of the general educators of today.

“Schools are expected to become more ‘inclusive’ or ‘equitable’, at the same time as they pursue a standards agenda based on narrowly defined notions of ‘excellence’ within a context of increased public accountability and government control” (Avramidis, 2005, para. 9). “General

educators play a primary role in the education of students with disabilities, and often they report feeling unprepared to undertake this role” (Brownell, Adams, Sindelar, & Waldron, 2006, p. 171). According to Robertson, Chamberlain, and Kasari of all students identified with a disability those identified with autism present the greatest educational complexity to the general education teacher (2003). The growing numbers of students identified with autism combined with the general education placement expectation suggests teachers in regular education classrooms are confronted with an excess of responsibilities regarding students identified with an ASD (Busby, Ingram, Bowron, Oliver, & Lyons, 2012). “There may be no greater challenge facing public schools today than the staggering increase in children diagnosed with autism” (Smith, 2012, para.1).

General education teachers are faced with the substance of educational realization for students with autism included in the general education classroom. “Different learning styles, difficulty communicating, impairment in social interactions, resistance to change in routines, repetitive body movements, and speech patterns are some of the characteristics of ASD that can cause stress and a variety of problems for both students and educators within the fully integrated classroom” (Leblanc, Richardson, & Burns, 2009, p. 167). The attributes of ASD “can often be overwhelming for teachers who are uninformed and untrained in the unique issues of autism” (Friedlander, 2008, p.141).

Inclusion in general may be controversial. “In 2007 80% of all students with disabilities spent at least some portion of their day in a regular classroom” (American Recovery and Reinvestment Act of 2009, (2014, para8). “In 2009, some 95% of 6-21 year old students with disabilities were served in regular schools” (National Center for Education Statistics, 2012, para. 3). Inclusion initiatives are increasing and add to concerns of educators. Scruggs and

Mastropieri (1996) conveyed that although two thirds of general education teachers affirmed the concept of inclusion with 50% reporting inclusion as advantageous for special education students, less than 33% believed they had the preparation, time, or sufficient means to provide comprehensive assistance for those students in their classrooms.

A survey conducted by DeSimone and Parmer yielded “that while the majority supported the idea of inclusion, teachers felt that the general education classroom was not the ideal placement for special education students” due to “pressure to cover mandated curriculum and not feeling responsible for ensuring the success of included students” (2006, p. 339). Agran, Alper, and Wehmeyer (2002) used a survey to obtain opinions of teachers concerning inclusion initiatives found “that the majority of respondents did not believe that access to the general curriculum is appropriate for students with severe disabilities and that these students should not be held accountable to the same performance standards as typical peers” (p. 129). They also reported “many of the teachers indicated that their students’ challenging behaviors represented a major burden to ensuring access” and “these teachers continue to believe that students need to ‘earn’ their way into general education” (p. 132).

Within the research regarding teacher perceptions of students with special needs teachers in the elementary grade levels had more optimistic opinions of inclusion than teachers of secondary grade levels (Olson, Chalmers, & Hoover, 1997). “Student grade level and severity of disability have been found to influence teachers’ attitudes toward inclusion” in that “students with disabilities were viewed more favorable in lower grade levels than in higher grade levels (Elliott, 2008, p. 48).

General education teachers who have students with disabilities included in their classrooms, and more specifically, autism spectrum disorders, “perceived a need for

training...help from personnel outside the classroom...and help within the classroom” (Werts, Wolery, Snyder, & Caldwell, 1996, p. 16). “The teachers with students perceived as having more severe problems were concerned more with support, whereas those with children with milder disabilities noted that time, meeting their needs, and a need for adapted curriculum were more important” (Werts et al.,1996, p. 16).

“Students diagnosed with ASD often present unique and challenging behaviors that impede their success in inclusive classrooms” such as “perseverative and self-stimulatory behaviors, impairments in social interactions and relationships, and impaired communication and language skills. They often display a limited range of interests, lack peer relationships, and resist participation in games and activities... which are contrary to common characteristics for same-grade peers in general education settings” (Goodman & Williams, 2007, p.53). “The few inclusion studies that have addressed problem behavior suggest that problem behaviors can have a negative influence on social acceptance and teacher attitudes” (Lohrmann, Boggs, & Bambara, 2006, p. 158).

The characteristics of students identified with ASD may naturally interfere with their learning but also instigate limitations in the learning environment for the typically developing peers in the same classroom (Goodman & Williams, 2007). Daniel and King found in their study on the impact of inclusion the “higher instance of behavior problems among students in inclusion classrooms” may have “the inclusion teacher devoting more time to discipline problems, diminishing time spent on instruction. Moreover, the behavior problems brought into the inclusion classroom by students with special needs may potentially have negative effects on other students in the classroom” (2001, p. 79).

An added caveat for general education teachers working with students with ASDs is that “strategies researched in well-controlled laboratory settings may be difficult for classroom teachers to implement” (Goodman & Williams, 2007, p. 54) although a plethora of interventions and strategies abound. “The time demands of teaching have become more densely packed, multiple innovations have had to be accommodated, the integration of special needs students into ordinary class has required additional planning, and shared decision-making has also called for extra investments of time” (Hargreaves, 1994. p. 149).

Within the population of students identified with special needs a diagnosis of autism is associated with greater levels of violence or hostility, personal belonging damages, and personal harm (McClintock, Hall, & Oliver, 2003). Rubin, Burgess, and Hastings (2002) have conveyed that violent behavior linked with youth identified with intellectual disability (ID) and autism defines noteworthy psychological fatigue and job dissatisfaction among general and special educators.

Nickels (2010) identified several obstacles reported by stakeholders as they attempted to meet the diverse needs presented by those identified with autism which consisted of inadequate time, the innate traits associated with autism itself, difficult teacher opinions, difficult parent standpoints, issues with change, and the desire for more numerous and supplementary treatments and assistance.

Idol (2006) did find positive teacher attitudes regarding inclusion in that “educators had generally favorable impressions of the impact of students with disabilities on other students in their classes” although “none of them were in favor of inclusion without extra support for the classroom teacher” (p. 80).

Wehman, Smith, and Schall (2009) mandate “the best place to teach many students with disabilities, including autism, is with their peers who do not have disabilities” as these “experiences present students with autism the opportunity to observe, learn, and practice social skills with peers who do not have disabilities” (p. 13). The authors do maintain “some of the challenges faced by students in inclusive settings include difficulties adjusting to new people, environments, and activities; communicating effectively; and interacting with others in formal and informal ways. They may also display challenges related to sensory activities, sequencing tasks, and organization of materials” (p. 98). Students with autism may also need a place to “get away” or “cool down” if they become stressed or agitated.

Research indicates that teacher perceptions regarding their students have an important impact on student success. Autism Spectrum Disorders have been shown to be on the rise and inclusion initiatives are mandated by legislation. The consideration of the perceptions of general education teachers regarding inclusion of students identified with ASDs is central.

“Being a teacher seems to involve a special relationship with other people that you don’t find in most other professions” (Trier, 2001, p.135). “It is true that ‘children are our future,’ but teachers lead the way” (Richards, 2012, p. 312).

CHAPTER 3

METHODOLOGY

This study was used to investigate the perceptions of general education teachers regarding the inclusion of students identified with an Autism Spectrum Disorder (ASD) in their classrooms. Specifically, the research included general education teachers' perceptions related to being prepared to work with students identified with autism, grade level assignment, time concerns, and the presence of an ancillary attendant in their classrooms. This chapter provides descriptions of the research design, population selection, data collection instrument, research procedures, and data analysis actions.

McMillan and Schumacher (2010) posited “quantitative research seeks to establish relationships and explain *causes* of changes in measured outcomes” (p. 12). Creswell (2009) described quantitative research “as a means for testing objective theories by examining relationships among variables” (p .4). The study was an examination of variables between particular perspectives of general education teachers regarding the inclusion of students identified with autism.

This follows a “positivist/postpositivist deterministic philosophy about research in which causes probably determine effects or outcomes” (p. 231). “Non-experimental research (ex post facto research), is systematic empirical inquiry in which the researcher does not have direct control of the independent variable because the variable has already occurred” (Hoy, 2010, p. 125). For these explicit purposes nonexperimental quantitative research was fundamental to complete this study.

A questionnaire was developed for this research. According to Johnson and Christensen (2012) “a quantitative questionnaire is based on closed-ended items and typically used in conformity or quantitative research” (p. 592). This is an accepted means of data collection in that a questionnaire is a “written set of questions or statements that is used to assess attitudes, opinions, beliefs, and biographical information” (McMillan & Schumacher, 2010, p. 499). A four-point Likert-type survey of four demographic statements and 20 closed-ended statements and was developed to determine the perception of general education teachers regarding inclusion of students identified with an ASD in their classrooms.

Research Questions and Null Hypotheses

The study was guided by the following research questions and corresponding null hypotheses.

Research Question 1: To what extent do general education teachers feel prepared to work with students identified with autism?

RQ1₁: To what extent do general education teachers feel prepared to manage social issues associated with autism?

H₀1₁: The extent to which general education teachers feel prepared to manage social issues associated with autism is not significantly different from neutral.

RQ1₂: To what extent do general education teachers feel prepared to manage communication issues associated with autism?

H₀1₂: The extent to which general education teachers feel prepared to manage communication issues associated with autism is not significantly different from neutral.

RQ1₃: To what extent do general education teachers feel prepared to manage aggressive behaviors associated with autism?

H₀1₃: The extent to which general education teachers feel prepared to manage aggressive behaviors associated with autism is not significantly different from neutral.

Research Question 2: To what extent do general education teachers perceive inclusion of students identified with autism as academically beneficial when compared by grade level?

H₀2: There is no difference in general education teacher perceptions of the academic benefits of inclusion for students identified with autism based on grade level.

Research Question 3: To what extent do general education teachers perceive that time constraints affect working with students identified with autism?

H₀3: General education teachers do not perceive that time constraints affect working with students identified with autism to a significant extent.

Research Question 4: To what extent do general education teachers support the presence of an ancillary attendant in their classroom to assist students identified with autism?

H₀4: General education teachers do not support the presence of an ancillary attendant in their classrooms to assist students identified with autism.

Sample

Study participation request correspondence was conveyed to the Superintendent of the Johnson City School System of Northeast Tennessee. Study participation requests were also sent to the principals of the eight elementary schools, one intermediate school, one middle school, and one high school of the Johnson City School System and the population for this study consisted of the general education teachers of this system. The Johnson City School System of

Northeast Tennessee was chosen as the demographic area of research due to this being the personal location of the researcher.

Instrumentation

A Likert-type survey instrument (Appendix B) was developed and included four demographic statements and twenty closed-ended statements rating general education teachers' perceptions of inclusion of students identified with autism in their classroom. The survey format of research was chosen as a pragmatic means of obtaining information from general education teachers in the Johnson City School System of Northeast Tennessee. Questions were developed from previous research issues acknowledged by general education classroom teachers who have had students identified with autism in their classrooms. These issues were related to general education teachers feeling unprepared to work with students identified with autism (Brownell et al., 2006; Friedlander, 2008; LeBlanc et al., 2009; Werts et al., 1996), time issues (Daniel & King, 2001; Scruggs & Mastropieri, 1996), elementary teachers having more optimistic opinions of inclusion than secondary teachers (Olson et al., 1997) as well as behaviors associated with autism (American Psychiatric Association, 2000; Lohrmann et al., 2006; Rubin et al., 2002), and the need for an ancillary attendant to support inclusion initiatives (Idol, 2006). The issues guided the development of the survey instrument for this research. The survey measured the perceptions of general education teachers in relation to these previously recognized concerns through a rating scale to display the participants' perceptions in response to the presented items. Four demographic questions covered gender, age, the presence of a high stakes test associated with their content area, and grade level assignment. Twenty closed-ended statements addressed perceptions of social issues, communication issues, and aggressive behaviors as well as

preparation to work with this population, time concerns, and the presence of an ancillary attendant in their classrooms.

“In reference to research designs, validity is defined as the extent to which the outcomes accurately answers the stated research questions of the study” (Edmonds & Kennedy, 2013, p. 3). To ensure reasonable validity the research survey was administered as a pilot to general education teachers at the Career Technical Education building of Science Hill High School in the Johnson City school system. Adjustments were made to the survey and the second wave of the pilot survey indicated no further changes. The Career Technical Education teachers were excluded from the actual research of the general education teachers of the Johnson City School system.

Data Collection

Preceding the research for this study, permission to conduct research was obtained from the Institutional Review Board (IRB) of East Tennessee State University (Appendix C). Permission was obtained from the school system’s Director of Schools. Letters to principals and general education teachers of elementary, middle or intermediate, and high school grade levels were sent to schools within the system explaining the purpose of the study and appealing for participation (Appendix A). The survey was distributed to general education teachers through an online service, Survey Monkey. Individuals participating in the survey were instructed that all information collected was confidential. Participants were given one week to respond to the survey request with follow-up communication resent after this time limit. An additional week was offered at the second request. Identification and any identifying information of participants was not collected.

Data Analysis

A nonexperimental quantitative methodology guided the data analysis from the survey instrument. *Statistical Package for Social Sciences* (SPSS) Version 19.0 software was used for all data analysis.

All research questions had corresponding null hypotheses. The null hypotheses of the questions were analyzed through a series of one-sample t tests for Research Questions 1, 3, and 4. Research Question 2 was analyzed through an Analysis of Variance (ANOVA). All data were analyzed at the .05 level of significance. Descriptive statistics were also calculated and reported. Findings of the data analysis are indicated in Chapter 4.

CHAPTER 4

FINDINGS

The purpose of this study was to investigate the perceptions of general education teachers regarding inclusion of students identified with autism. General education teachers of the Johnson City (Tennessee) School System participated in this study.

In this chapter data were presented and analyzed to answer four research questions with corresponding null hypotheses. Data were analyzed from four demographic questions with 20 closed ended statements on a four point Likert-type scale at the completion of the survey administered through an online survey service. Emails were sent to general education teachers of three elementary schools, one intermediate school, and the one high school of the system as these were the schools from which the principals granted permission for participation. Two follow-up emails were sent as reminders and to request teacher participation. Two hundred thirty teachers were asked to participate and 79 responded. All participants were informed that demographic information did not include identifying responses.

Research Question 1

Research Question 1: To what extent do general education teachers feel prepared to work with students identified with autism?

RQ1₁: To what extent do general education teachers feel prepared to manage social issues associated with autism?

H₀1₁: The extent to which general education teachers feel prepared to manage social issues associated with autism is not significantly different from neutral.

A single sample t test was conducted on general education teachers' perceptions of managing social issues associated with autism to determine if the mean score was significantly different from 2.5, which represents neutrality. The population mean of 2.24 (SD = .668) was significantly lower than 2.5, $t(77) = 3.39$, $p < .001$. Therefore, the null hypothesis was rejected. The 95% confidence interval ranged from -.407 to -.106. The mean score effect size d of .8 indicates a large effect size. The results indicated general education teachers have a significantly negative perception regarding preparation to manage social issues associated with autism. Question 13 was used for this analysis. Figure 1 shows the distribution of the participants' responses as indicated by SD (strongly disagree), D (disagree), A (agree), and SA (strongly agree) from the online survey.

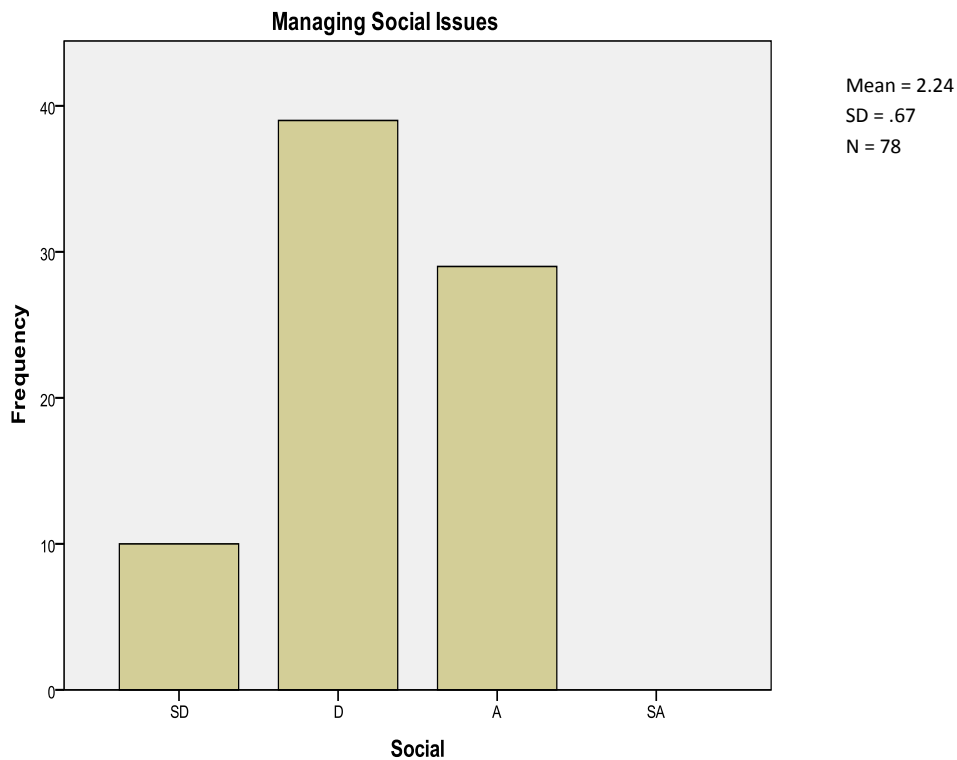


Figure 1. General Education Teachers' Perceptions of Managing Social Issues

RQ1₂: To what extent do general education teachers feel prepared to manage communication issues associated with autism?

H₀1₂: The extent to which general education teachers feel prepared to manage communication issues associated with autism is not significantly different from neutral.

A single sample *t* test was conducted on general education teachers' perceptions to manage communication issues associated with autism to evaluate whether the mean score was significantly different from 2.5, which represents neutrality. The population mean of 2.23 (SD = .662) was significantly lower than 2.5, $t(78) = 3.59$, $p < .001$. Therefore, the null hypothesis was rejected. The 95% confidence interval for general education teachers' perceptions of managing social issues associated with autism ranged from -.419 to -.120. The mean score effect size *d* of .8 indicates a large effect size. The results indicate general education teachers have a significantly negative perception of being prepared to manage communication issues related to autism. Question 14 was used for this analysis. Figure 2 shows the distribution of participant responses as indicated by SD (strongly disagree), D (disagree), A (agree), and SA (strongly agree) from the online survey.

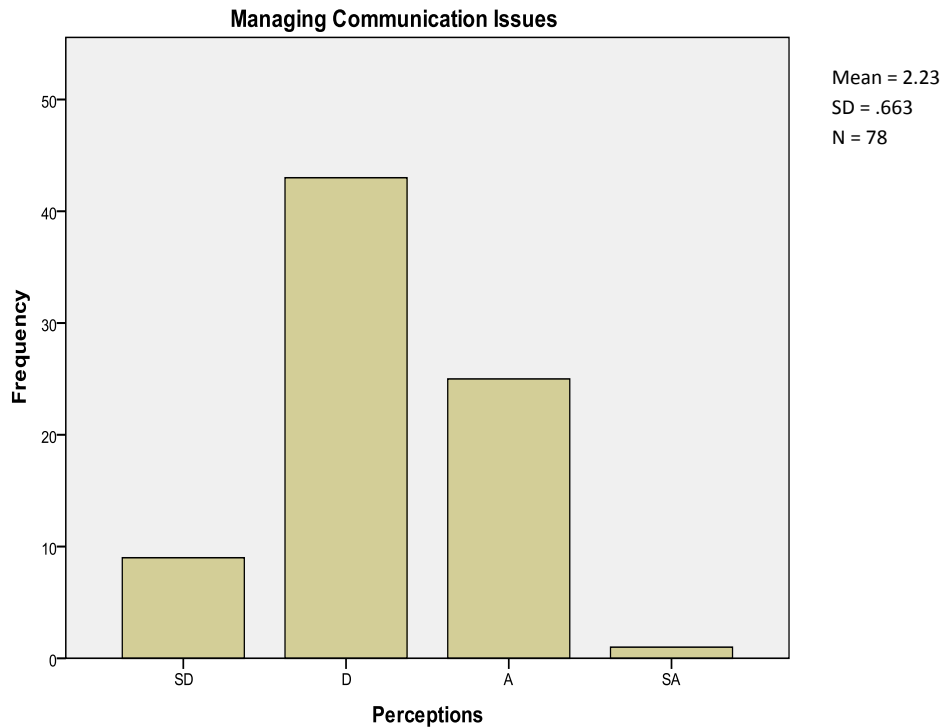


Figure 2. General Education Teachers' Perceptions of Managing Communication Issues

RQ1₃: To what extent do general education teachers feel prepared to manage aggressive behaviors associated with autism?

H₀₁₃: The extent to which general education teachers feel prepared to manage aggressive behaviors associated with autism is not significantly different from neutral.

A single sample *t* test was conducted on general education teachers' perceptions to manage behavior issues associated with autism to evaluate whether the mean score was significantly different from 2.5, which represents neutrality. The population mean of 1.97 (SD = .720) was significantly lower than 2.5, $t(78) = 6.45$, $p < .001$. Therefore, the null hypothesis was rejected. The 95% confidence interval ranged from -.689 to -.362. The mean score effect size *d* of 1.5 indicate a large effect size. The results indicated general education teachers have a significantly negative perception of being prepared to manage behavior issues associated with autism. Question 15 was used for this analysis. Figure 3 shows the distribution of the participant

responses as indicated by SD (strongly disagree), D (disagree), A (agree), and SA (strongly agree) from the online survey.

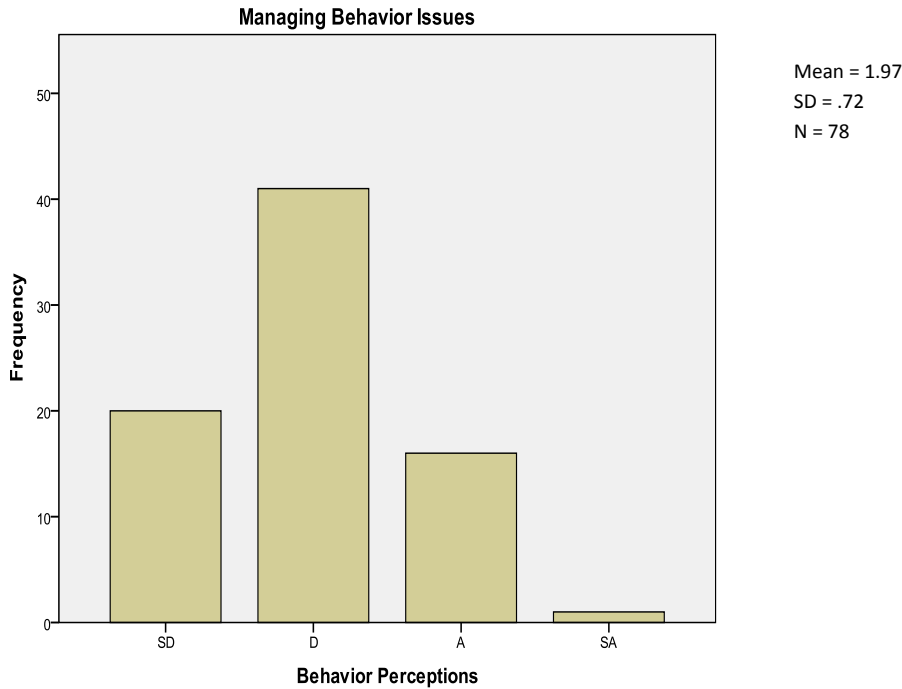


Figure 3. General Education Teachers' Perceptions of Managing Behavior Issues

Research Question 2

To what extent do general education teachers perceive inclusion of students identified with autism as academically beneficial when compared by grade level?

H₀2: There is no difference in general education teachers' perceptions of the academic benefits of inclusion for students identified with autism based on grade level.

A one-way Analysis of Variance (ANOVA) was conducted to compare general education teachers' perceptions of the academic benefits of inclusion for students identified with autism and grade levels taught by the general education teachers. There was no significant difference of the perception of academic benefits of inclusion for students identified with autism when compared by grade level for the conditions [F (3, 69) = .855, p = .469, ns]. Therefore, the null hypothesis was retained. The results indicated general education teachers' perceptions of the

academic benefits of inclusion for students identified with autism yielded no significant difference based on grade levels taught. Questions 3 and 6 were used for this analysis. Figure 4 shows the distribution of inclusion perceptions by grade level.

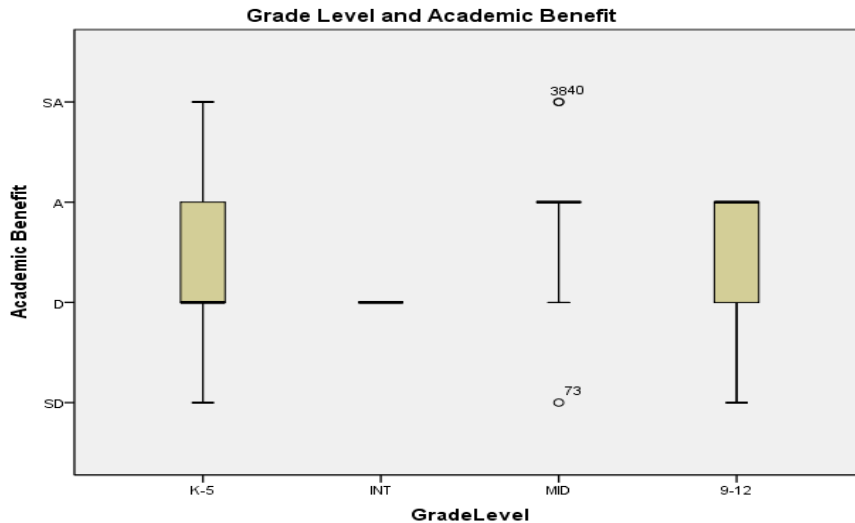


Figure 4. Grade Level and Academic Benefit in Perceptions of Inclusion Practice

Research Question 3

To what extent do general education teachers perceive that time constraints affect their working with students identified with autism?

H₀3: General education teachers do not perceive that time constraints affect their working with students identified with autism to a significant extent.

A single sample *t* test was conducted on general education teachers' perceptions of time constraints and working with students identified with autism to evaluate whether the mean score was significantly different from 2.5, the value representing neutrality. The population mean of 2.15 (SD = .722) was significantly lower than 2.5, $t(78) = 4.23$, $p < .001$. Therefore, the null hypothesis was rejected. The 95% confidence interval ranged from -.509 to -.183. The mean score effect size *d* of .9 indicates a large effect size. The results indicated general education

teachers have a significantly negative perception of adequate time to work with students with autism. Question 21 was used for this analysis. Figure 5 show the distribution of participants' responses as indicated by SD (strong disagree), D (disagree), A (agree), and SA (strongly agree).

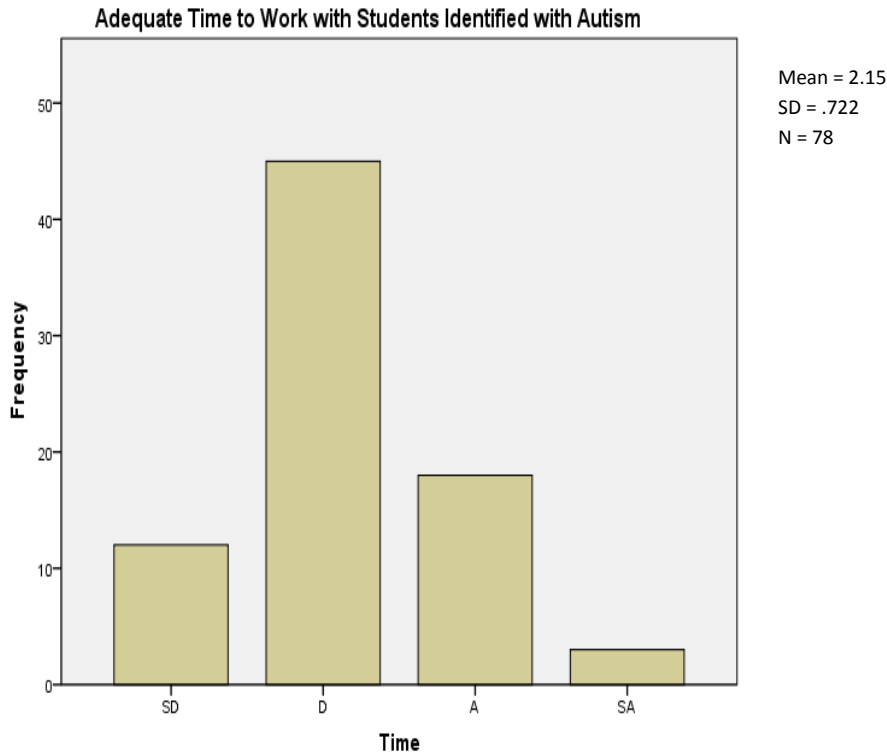


Figure 5. Time Constraints of General Education Teachers (Adequate Time)

Research Question 4

To what extent do general education teachers support the presence of an ancillary attendant in their classroom to assist students identified with autism?

H₀4: General education teachers do not support the presence of an ancillary attendant in their classroom to assist students identified with autism.

A single sample *t* test was conducted on general education teachers' perceptions of support of an ancillary attendant in their classroom to evaluate whether the mean score was

significantly different from 2.5, the value representing neutrality. The population mean of 2.91 (SD = .724) was significantly higher than 2.5, $t(78) = 5.00$, $p < .001$. Therefore, the null hypothesis was rejected. The 95% confidence interval ranged from .247 to .574. The mean score effect size d of 1.1 indicates a large effect size. The results indicated general education teachers have a positive perception of support for an ancillary attendant in their classrooms. Question 17 was used for this analysis. Figure 6 shows the distribution of participants' responses as indicated by SD (strongly disagree), D (disagree), A (agree), and SA (strongly agree).

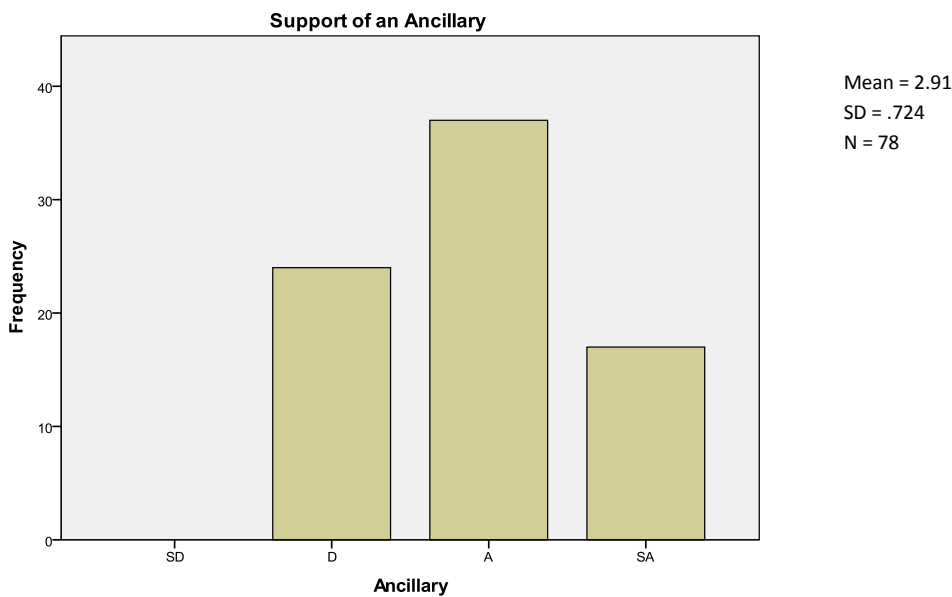


Figure 6. General Education Teachers' Support of an Ancillary Attendant

Summary

In this chapter data obtained from general education teachers were presented and analyzed. There were four research questions with corresponding null hypotheses. All data were collected through an online survey. The online survey was distributed to two hundred thirty teachers with seventy-nine respondents.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter contains a summary, conclusions, and recommendations of the findings of this research study. The purpose of this study was to determine general education teachers' perceptions of inclusion of students identified with autism in one school system of North East Tennessee. More specifically, the research investigated general education teachers' perceptions of inclusion of students identified with autism as related to preparation to work with students identified with autism, grade level assignment and academic benefit, time constraints, and the presence of an ancillary attendant in their classrooms. This information may be useful as the numbers of students identified with autism in our public school systems have increased substantially combined with the emphasis of inclusion initiatives. Added to these factors are the federal legislations implicating inclusion for students with disabilities as the first placement consideration and the extra needs of these students. This study was conducted using data collected through an online survey of general education teachers.

Summary

The statistical analysis reported in the study was based on four research questions with corresponding null hypotheses. Research Questions 1, 3, and 4 were analyzed using a series of single sample *t* tests. Research Question 2 was analyzed using an Analysis of Variance (ANOVA). The number of participants in the study was seventy- nine. All hypotheses were tested at the .05 level of significance. Findings indicated no difference in general education teacher perceptions of the academic benefits of inclusion for students identified with autism

based on grade level. Significant negative perceptions were indicated for general education teachers' views on preparation to manage social issues, communication issues, and aggressive behaviors as well as time constraints in working with this population. Significant positive perceptions were indicated for the presence of an ancillary attendant in their classroom to work with students identified with autism.

Conclusions

The purpose of this study was to investigate general education teachers' perceptions of inclusion of students identified with autism. Specifically, this researcher explored the perceptions of inclusion based on managing social and communication issues and aggressive behaviors, grade level assignment and academic benefit, time constraints, and the presence of an ancillary in their room to assist with students identified with autism. The following conclusions were based on the findings from the data of this study.

Significantly negative perceptions were indicated by general education teachers in relation to being prepared to manage social issues associated with students identified with autism. Social issues involve interactions with others that do not follow accepted norms. Individuals with autism generally prefer their own company, do not respond to smiles or facial expressions and cues, lack or do not understand empathy, do not make friends, and have narrow interests and short attention spans. This population also may insist on sameness in routine, lack the ability to start or maintain a conversation, and cannot maintain composure in reaction to loud noises or physical contact. They may have difficulties with too much or too little light, different smells and tastes, as well as notable issues with pain tolerances.

Significantly negative perceptions were indicated by general education teachers in relation to being prepared to manage communication issues associated with students identified with autism. Students with autism may be nonverbal or may prefer to use gestures instead of words. Language development is usually delayed and could be very literal with little understanding of idioms, slang, and teasing, or they may repeat what they have heard with no pragmatic meaning. Some students rely on a picture exchange method of communicating, which can be difficult to develop into a general education classroom environment whether they are using picture cards or an electronic communication device. Students identified with autism may hum or jabber with no recognizable meaning for those attempting interactions.

Significantly negative perceptions were indicated by general education teachers in relation to being prepared to manage aggressive behaviors associated with students identified with autism. Students with autism may rock, jump, flail their arms or hands, or run with no regard to others in their vicinity. They may exhibit self-injurious behaviors such as smacking their heads, biting their own hands or fingers, or they may hit, smack, bite, pull hair, run over or through others, or knock others down. These aggressive behaviors may or may not be preceded by signs the individual with autism is getting upset. Aggressive behaviors associated with students with autism can be very upsetting to witness and in some situations there is potential for harm, both for the student identified with autism and for those around him or her. The negative perceptions of general education teachers related to managing social issues, communication issues, and aggressive behaviors agree with previous research that suggested these issues can lead to acceptance difficulties by general education teachers (American Psychiatric Association, 2000) with more time spent towards managing behaviors than instruction (Daniel & King, 2001),

and aggressive behaviors associated with autism leading to psychological fatigue and job dissatisfaction (Rubin et al., 2002).

There was no significant difference found in general education teachers' perceptions of academic benefits of inclusion for students identified with autism based on grade levels taught. This was not consistent with previous research that indicated elementary grade level teachers were more accepting of inclusion than secondary grade level teachers (Olson et al., 1997). Nineteen (25%) respondents for this survey had an elementary grade level assignment, ten (13.18%) had an intermediate grade level assignment, 3 (3.95%) had a middle school grade level assignment, and forty-six (60.53%) of survey respondents had a secondary grade level assignment.

Significantly negative perceptions were indicated by general education teachers in relation to time constraints. Curriculum and classroom modifications for students identified with autism may include alternate testing methods (oral testing, Braille translation, separate testing areas, having the test read to the student), copies of notes and instructional items, extended time for testing, modified content expectations (fewer questions, fewer pages assigned), planning time with a special education teacher to coteach and coplan instructional benefits for the student, repetition of instruction, redirection if needed, visual cues, being allowed to leave class early to ease transition fears, and even being allowed to leave class to "cool down" for however long the student needs. This issue was expressed by Scruggs and Mastopieri in that although general education teachers were in favor of inclusion, they deemed time concerns as a major caveat in working with this population (1996).

Significantly positive perceptions were indicated by general education teachers in relation to an ancillary attendant being present in their classrooms to work with students identified with

autism. This seems to agree with previous research that indicated a need for assistance within the classroom for general education teachers with an included student identified with autism (Werts et al., 1996). Also, although teachers may suggest they are in favor of inclusion, they were not in favor of inclusion for students identified with autism without added support (Idol, 2006). An ancillary will generally have a more in-depth understanding of possible triggers to student meltdowns and sensory issues. The ancillary attendant will usually have a positive relationship development with the student that can reduce potential behavior issues. The presence of an ancillary attendant may also be helpful if aggressive behaviors are manifested as restraint training and nonconfrontational methods of calming are offered to ancillaries in these work situations.

Recommendations for Practice

Owing to the findings of this research the following recommendations for practice are offered:

- General education teachers should have more training options available as related to social and communication issues and aggressive behaviors associated with students identified with autism.
- More discussion within administration and classroom leadership programs should occur due to differences in common expectations and student requirements in grade levels, especially as students reach secondary grade levels.
- Adequate planning time and time to collaborate with appropriate school personnel regarding students identified with autism should be addressed.
- Ancillary attendants should be available to students identified with autism, especially when the student is included in a general education classroom.

General educators have the principal charge to educate students with disabilities as inclusion initiatives expand. The presence of an ancillary attendant to work with students identified with autism may well alleviate general education teacher and student concerns. High school presents additional stressful prospects with more transitions, more stringent class obligations related to courses needed for a general education diploma, usually more students and staff, different yearly testing, and broader student responsibilities. These factors can greatly impact the learning of students identified with autism. Sufficient time to plan and collaborate with the necessary professional domains associated with autism should be mandatory. Adequate and appropriate budgeting allows for the potential of an ancillary attendant in general education classrooms as needed and should be addressed at school board and city or county commissioner meetings.

Recommendations for Future Research

Findings in this research denote general education teachers of the Johnson City School System who participated in this study indicated negative perceptions related to being prepared to manage social issues, communication issues, and aggressive behaviors associated with students identified with autism. Additional research expanded to other areas should be conducted to further explore this topic.

Although there was no significance of general education teachers' perceptions of inclusion for students identified with autism based on grade levels taught, further research should be conducted as previous research did indicate significance.

Inclusion initiatives are expanding in educational environments with the passage of federal legislation and state mandates. Time constraints of general education teachers should be further researched to fully engage in an understanding of what our educators require to offer

superlative educational opportunities to our students. The presence of an ancillary attendant to work with students identified with autism in general education classrooms seems to be of positive importance. Further research should include the level of supervisory responsibility attributed to an ancillary attendant and the level of responsibility of the general education teacher for the ancillary attendant.

Continued research should also include topics such as high stakes testing and students identified with autism as well as the potential effects of students identified with autism and typically developing peers.

REFERENCES

- Agran, M., Alper, S., & Wehmeyer. (2002). Access to the general curriculum for students with significant disabilities: What it means to teachers. *Education and Training in Mental Retardation and Developmental Disabilities*, 37(2), 123-133.
- Alliance for Excellent Education, (2005). *Issue Brief*. Retrieved from <http://www.all4ed.org/files/archive/publications/TeacherAttrition.pdf>
- American Psychiatric Association, (2000). *Diagnostic and statistical manual of mental disorders (4th ed., DSM-IV-TR)*. Washington, DC: Author.
- American Psychiatric Association, (2012). *Clarification of the definition of pervasive developmental disorder not otherwise specified*. Retrieved from <http://psych.org/MainMenu/Research/DSMIV/DSMIVTR/DSMIVvsDSMIVTR/Su...>
- American Recovery and Reinvestment Act of 2009, (2014). *Using ARRA funds provided through Part B of the Individuals with Disabilities Education Act (IDEA) to drive school reform and improvement*. Retrieved from <http://www.ed.gov/policy/gen/recovery/guidance/idea-b.pdf>
- Autism Society, (2012a). *About autism*. Retrieved from <http://www.autism-society.org/about-autism/>
- Autism Society, (2012b). *Treatment options*. Retrieved from <http://www.autism-society.org/living-with-autism/treatment-options/>
- Autism Speaks, (2012a). *Autism facts*. Retrieved from www.autismspeaks.org/what-autism/facts-about-autism
- Autism Speaks, (2011b). *PDD-NOS*. Retrieved from <http://www.autismspeaks.org/what-autism/pdd-nos>
- Autism Speaks, (2012c). *What is autism?* Retrieved from <http://www.autismspeaks.org/what-autism>
- Autism Spectrum Disorders Fact Sheet, (2012). *An introduction to early intervention*. Retrieved from <http://autism-help.org/intervention-autism-aspergers-introduction.htm>
- The AUTOSPOT, (2012). *Autism statistics*. Retrieved from http://www.theautspot.com/library/article/12/autism_statistics

- Avramidis, E. (2005, August). *Developing inclusive schools: Changing teachers' attitudes and practices through critical professional development*. Paper presented at the Inclusive and Supportive Education Congress, International Special Education Conference, Inclusion: Celebrating Diversity?, Glasgow, Scotland. Abstract retrieved from http://www.isec2005.org.uk/isec/abstracts/papers_a/avramidis_e.shtml
- Bellini, S., Henry, D., & Pratt, C. (2011). From intuition to data: Using logic models to measure professional development outcomes for educators working with students on the autism spectrum. *Teacher Education and Special Education, 34*(1), 37-51.
- Bright Tots, (2014). *Autistic behaviors*. Retrieved from http://brighttots.com/Autistic_behaviors.html
- Brownell, M.T., Adams, A., Sindelar, P., & Waldron, N. (2006). Learning from collaboration: The role of teacher qualities. *Exceptional Children, 72*(2), 169-185.
- Busby, R., Ingram, R., Bowron, R., Oliver, J., & Lyons, B. (2012). Teaching elementary children with autism: Addressing teacher challenges and preparation needs. *Rural Education, 3*(2), 27-35.
- Centers for Disease Control and Prevention, (2011a). *Data and statistics*. Retrieved from <http://cdc.gov/ncbddd/autism/data.html>
- Centers for Disease Control and Prevention, (2012b). *Treatment, autism spectrum disorders-NCBDDD*. Retrieved from <http://www.cdc.gov/ncbddd/autism/treatment.html>
- Corbett, B.A., Gunther, J.R., Comins, D., Price, J., Ryan, N., Simon, D., ...Rios, T. (2011). Brief report: Theatre as therapy for children with autism spectrum disorder. *Journal of Autism and Developmental Disorders, 41*, 505-511. doi: 10.1007/s1083-010-1064-1
- Creswell, J.W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. (3rd ed.). Thousand Oaks, CA: Sage.
- Daniel, L.G., & King, D.A. (2001). Impact of inclusion education on academic achievement, student behavior, and self-esteem, and parental attitudes. *Journal of Educational Research, 91*(2), 67-80.
- Day, C. (2012). New lives of teachers. *Teacher Education Quarterly, (39)*1, 7-26.

Definition of Autism, (2011). Retrieved from <http://difiinitionofautism.com/>

DeSimone, J. R., & Parer, R.S. (2006). Middle school mathematics teachers' beliefs about inclusion of students with learning disabilities. *Learning Disabilities Research and Practice, 21*, 98-110.

Define perception, (2009). *Perception*. Retrieved from www.dictionary.reference.com/browser/perception?s=t

Education for All Handicapped Children Act (1975). PL 94-142, 20 U.S.C. § 1400 *et seq.*

Edmonds, W.A., & Kennedy, T.D. (2013). *An applied reference guide to research designs: Quantitative, qualitative, and mixed methods*. Thousand Oaks, CA: Sage.

Elliott, S. (2008). The effect of teachers' attitude toward inclusion on the practice and success levels of children with and without disabilities in physical education. *International Journal of Special Education, 23*(3), 48-55.

Encyclopedia of Children's Health, Special Education, (2012). *Special education-average, definition, purpose, description*. Retrieved from <http://www.healthofchildren.com/S/Special-Education.html>

Friedlander, D. (2008). Sam come to school: Including students with autism in your classroom. *Clearing House: A Journal of Educational Strategies, 82*(3), 141-144.

Ganz, J.B., Earles-Vollrath, T.L., & Cook, K.E. (2011). Video modeling: A visually based intervention for children with autism spectrum disorder. *Teaching Exceptional Children, 43*(6), 8-19.

Gillham, J.E., Carter, A.S., Volkmar, F.R., & Sparrow, S.S. (2008). Toward a developmental operational definition of autism. *Journal of Autism and Developmental Disorders, 30*(4), 269-278.

Goodman, G., & Williams, C.M. (2007). Interventions for increasing the academic engagement of students with Autism Spectrum Disorders in inclusive classrooms. *Teaching Exceptional Children, 39*, 53-61.

Goodwin, B., Arens, S., Barley, Z., & Williams. (2003). *Understanding No Child Left Behind: A report on The No Child Left Behind Act of 2001 & its implications for schools,*

communities, & public support for education. Issue Brief retrieved from <http://www.nationaldialogue.org/resources/Understanding>

Hargreaves, A. (1994). *Changing teachers, changing times.* New York: Teachers College Press.

Hill, E.L. (2004). Executive function in autism. *Trends in Cognitive Sciences*, 8(1), 26-32.

Hoy, W.K. (2010). *Quantitative research in education: A primer.* Thousand Oaks, CA: Sage.

Idol, L. (2006). Toward inclusion of special education students in general education. *Remedial and Special Education*, 27(2), 77-94.

Individuals with Disabilities Education Act of 1990, 20 U.S.C. § 1400 *et seq.* (1990).

Individuals with Disabilities Education Act of 1997, 20 U.S.C. § 1400 *et seq.* (1997).

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

Interactive Autism Network, (2008a). *Challenging behaviors, interactive autism network community.* Retrieved from http://www.iancommunity.org/cs/challenging_behavior/social_issues

Interactive Autism Network, (2008b). *Social issues.* Retrieved from http://www.iancommunity.org/cs/chanllenging_behavior/social_issues

Interactive Autism Network, (2008c). *Communication and language issues.* Retrieved from http://iancommunity.org?cs?challenging_behavior/language_and_communication_issues

Interactive Autism Network, (2008d). *Behaviors that puzzle: Repetitive motions and obsessive interests in autism.* Retrieved from http://www.iancommunity.org/cs/challenging_behaviors/repetitive_motions_and_obsessions

Interactive Autism Network, (2008e). *Insistence on sameness.* Retrieved from http://www.iancommunity.org/cs/challenging_behavior/insistence_on_sameness

Interactive Autism Network, (2008f). *Sensory issues: seeking and avoiding.* Retrieved from http://www.iancommunity.org/cs/challenging_behavior/sensory_issues

- Interactive Autism Network, (2008g). *Mood instability and meltdowns*. Retrieved from http://www.iancommunity.org/cs/challenging_behavior/mood_instability_and_meltdown
- Johnson, R.B., & Christensen, L.B. (2012). *Educational research: Quantitative, qualitative, and mixed approaches (4th ed.)*. Thousand Oaks, CA: Sage.
- Korkmaz, I. (2007). Teacher's opinions about the responsibilities of parents, schools, and teachers in enhancing student learning. *Educators*, 27(3), 389-399.
- Labaree, D. F. (2011). Targeting teachers. *Dissent*, 58(3), 9-14.
- Lal, R., & Ganesan, K. (2011). Children with autism spectrum disorders: Social stories and self management of behavior. *British Journal of Educational Research*, 1(1), 36-48.
- Learning Disabilities Association of America, 2011. *Principles of IDEA*. Retrieved from www.Idaamerica.org/aboutld/parents/special_ed/principles.asp
- Leblanc, L., Richardson, W., & Burns, K.A. (2009). Autism spectrum disorder and the inclusive classroom: Effective training to enhance knowledge of ASD and evidence-based practices. *Teacher Education and Special Education*, 32(2), 166-179. doi: 10.1177/0741932507334279
- Lim, H.A. & Draper, E. (2011). The effects of music therapy incorporated with applied behavior analysis verbal approach for children with autism spectrum disorders. *Journal of Music Therapy*, 48(4), 532-550.
- Logsdon, A. (2013). *What is the least restrictive environment? Choosing placement in the LRE*. Retrieved from www.learningdisabilities.about.com/od/publicschoolprograms/a/leastrestrictiv.htm
- Lohrmann, S., Boggs, E.M., & Bambara, L.M. (2006). Elementary education teachers' beliefs about essential supports needed to successfully include students with developmental disabilities who engage in challenging behaviors. *Research and Practice for Persons with Severe Disabilities*, 31(2), 157-173.
- Lord, C., & Spence, S. (2006). Autism spectrum disorders: Phenotype and diagnosis. *Understanding autism: From basic neuroscience to treatment*. 1-23. New York: Taylor & Francis.

- Martinez, D.M., Desiderio, M.F., & Papakonstantinou, A. (2010). Teaching: A job or a profession? The perceptions of educators. *The Educational Forum*, 74, 289-296. doi: 10.1080/00131725.2010.507095
- Mayo Clinic, (2011a). *Asperger's Syndrome*. Retrieved from <http://www.mayoclinic.com/health/aspergers-syndrome/DS00551/METHOD=print>
- Mayo Clinic, (2011b). *Childhood disintegrative disorder*. Retrieved from <http://mayoclinic.com/health/childhood-disintegrative-disorder/DS00801/METHOD=print>
- Mayo Clinic, (2013). *Autism definitions*. Retrieved from <http://www.mayoclinic.org/diseases-conditions/autism/basics/definitions/con-20021148>
- McAdams, R.P. (2010). *Exploring the myths and realities of today's schools*. Lanham, MD: Rowman & Littlefield Education.
- McClintock, K., Hall, S., & Oliver, C. (2003). Risk markers associated with challenging behaviors in people with intellectual disabilities: A meta-analytic study. *Journal of Intellectual Disability Research*, 47(6), 405-416.
- McDougle, C.J., Kresh, L.E., & Posey, D.J. (2000). Repetitive thoughts and behaviors in pervasive developmental disorders: Treatment with serotonin reuptake inhibitors. *Journal of Autism and Developmental Disorders*, 30(5), 427-435.
- McMillan, J.H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry* (7th ed.). Upper Saddle River, NJ: Pearson.
- National Autism Center, (2009). *National standards report: The national standards project-addressing the need for evidence-based practice guidelines for Autism Spectrum Disorders*, NAC:MA.
- National Autism Network, (2013). *Autism facts and statistics*. Retrieved from <http://nationalautismnetwork.com/about-autism/what-is-autism/facts-and-statistics-references.html>
- National Center for Education Statistics, (2012). *Fast facts*. Retrieved from <http://nces.ed.gov/fastfacts/display.asp?id=59>
- National Center for Learning Disabilities, (2008). *Executive function fact sheet*. Retrieved from www.idonline.org/article/24880

- National Dissemination Center for Children with Disabilities, (2011). *Autism spectrum disorders*. Retrieved from <http://nichcy.org/disability/specific/autism>
- National Dissemination Center for Children with Disabilities, (2012b). *IDEA-The Individuals with Disabilities Education Act*. Retrieved from <http://nichcy.org/laws/idea>
- National Education Association, (2010). *Status of the American public school teacher 2005-2006*, Washington, DC:NEA
- National Institute of Neurological Disorders and Stroke, (2011). *Autism fact sheet*. Retrieved from http://www.ninds.nih.gov/disorders/autism/detail_autism.htm
- Nelson, K., Axtell, J., Derby, K.M., Moug, R., Berrera, S., & McLaughlin, T.F. (2011). A preliminary analysis of therapeutic horseback riding (Abstract). *International Journal of Social Sciences and Education*. 1(4), 644.
- Nickels, P.A. (2010). *Educational interventions for children with autism spectrum disorders: Perceptions of parents and teachers in a Northeast Tennessee school system*. (Doctoral Dissertation). Retrieved from ETSU Libraries Online. (1010110-152717).
- No Child Left Behind Act of 2001. (2002). Public Law print of PL 107-110, The No Child Left Behind Act of 2001. U.S. Department of Education: Author. Retrieved from <http://www.ed.gov/policy/elsec/leg/esea02/index.html>
- Offices of Research and Education Accountability, (2009). *Autism in Tennessee: Part 1-An introduction to issues and data collection methods*. Retrieved from www.tn.gov/comptroller/orea
- Olson, M.R., Chalmers, L., & Hoover, J.H. (1997). Attitudes and attributes of general education teachers identified as effective inclusionists. *Remedial and Special Education*, 18, 28-35.
- Orfei, M. & Wagner, A. (2006). *IEP Team Members*. Retrieved from [Http://concordspedpar.org/TeamMembers.html](http://concordspedpar.org/TeamMembers.html)
- Reschke-Hernandez, A.E. (2011). History of music therapy treatment interventions for children autism. *Journal of Music Therapy*, 48, 169-207.
- Richards, J. (2012). Teacher stress and coping strategies: A national snapshot. *The Educational Forum*, 76, 299-316. doi: 10.1080/00131725.2012.682837

- Robertson, K., Chamberlain, B., & Kasari, C. (2003). General education teachers' relationships with included students with autism. *Journal of Autism and Developmental Disorders*, 33(2), 123-130.
- Rubin, K.H., Burgess, K.B., & Hastings, P.D. (2002). Stability and social-behavioral consequences of toddlers' inhibited temperament and parenting behaviors. *Child Development*, 73(2), 483-495.
- Scruggs, T.E., & Mastropieri, M.A. (1996). Teacher perceptions of mainstreaming/inclusion, 1958-1995: A research synthesis. *Exceptional Children*, 63, 59-74.
- Smith, F. (2012). *Educators deal with the growing problem of autism*. Retrieved from <http://www.edutopia.org/autism-school>
- Southwest Educational Development Laboratory, (2014). *Input from legislation and litigation*. Retrieved from <http://www.sedl.org/change/issues/issues43/legislation.html>
- Special Education News. (2013). *LRE-Least restrictive environment*. Retrieved from <http://www.specialednews.com/special-education-dictionary/lre---least-restrictive-environment>
- Stenhoff, D.M., & Lignaugaris/Kraft, B. (2007). A review of the effects of peer tutoring on students with mild disabilities in secondary settings. *Exceptional Children*, 74(1), p. 8-30.
- The AUTSPOT, (2012). *Autism statistics*. Retrieved from http://theautspot.com/library/article/12/autism_statistics
- Tennessee Department of Education, (2012). *Current endorsement codes*. Retrieved from <http://www.state.tn.us/education/lic/emdcode.shtml>
- Tennessee Department of Education. (2010). *Disability eligibility standards, autism*. Retrieved from <http://www.tn.gov/education/speced/doc/41610apprvdlig.pdf>
- Tennessee Department of Education. (2012). *Annual statistical report*. Retrieved from http://tn.gov/education/reports_data.shtml
- Tennessee Department of Education Parent Guide. (2013). *Assistive technology information for parents*. Retrieved from www.state.tn.us/education/speced/doc/21210parentgde.pdf

- Trier, J.D. (2001). The cinematic representation of the personal and professional lives of teachers. *Teacher Education Quarterly*, 28(3), 127-142.
- Tye, B. B. (2000). *Hard truths: Uncovering the deep structure of schooling*. New York, NY: Teachers College Press.
- WebMD Medical Reference, (2011). *History of autism*. Retrieved from <http://www.webmd.com/brain/autism/history-of-autism>
- Wehman, P., Smith, M.D., & Schall, C. (2009). *Autism & the transition to adulthood*. Baltimore, MD: Paul H. Brooks.
- Werts, M.G., Wolery, M., Snyder, E.D., & Caldwell, N. K. (1996). Teachers' perceptions of the supports critical to the success of inclusion programs. *Journal of the Association for Persons with Severe Handicaps*, 21, 9-21.
- Williams, G.P., Sears, L.L., & Allard, A. (2004). Sleep problems in children with autism. *Journal of Sleep Research*, 13, 265-268.
- Wisconsin Education Association Council, 2011. *Special education inclusion*. Retrieved from [http://www.weac.org/Issues_Advocacy/Resources/Pages/On_Issues_one/Special Education...](http://www.weac.org/Issues_Advocacy/Resources/Pages/On_Issues_one/Special_Education...)
- Willis, M. & Varner, L.W. (2010). Factors that affect teacher morale. *Academic Leadership Live The Online Journal*, 8(4), para. 5.
- Wrightslaw, (2008). *10 tips: How to use IDEA 2004 to improve your child's special education*. www.wrightslaw.com/idea/art/10.tips.steedman.htm
- Wrightslaw, (2012). *Inclusion: Answers to frequently asked questions from the NEA*. Retrieved from <http://www.wrightslaw.com/info/lre.faqs.inclusion.htm>
- Wrightslaw, (2009). IDEA 2004: Highly qualified special education. *Important Definitions*. Retrieved from www.wrightslaw.com/idea/tcr.hg.require.htm
- Yell, M.L. (1995). Least restrictive environment, inclusion, and students with disabilities: A legal analysis. *The Journal of Special Education*, 28(4), 389-404.

APPENDICES

APPENDIX A

Participation Request Letters

To School System Director:

Dr. Bales,

I am a doctoral student at ETSU in the Educational Leadership and Policy Analysis program. I will soon be conducting research to fulfill my program guidelines. The research I am pursuing concerns the attitudes and perceptions of general education classroom teachers regarding the inclusion of students identifies with an Autism Spectrum Disorder in their classrooms.

All information collected will be confidential as teacher identification is not part of the survey instrument that will be distributed through an online survey method. The survey should not take too much of your teachers' valuable time.

I am sending this letter with hopes that you will grant permission for your general education teachers to assist me with this endeavor. If you have any questions or concerns please contact me at any time.

I thank you for your time and consideration,

Deborah Hayes

To School Principals:

Dear Sir/Madam, (filled in with actual name)

My name is Deborah Hayes and I am conducting a research study using an anonymous online survey. This survey is being conducted for research purposes as part of my dissertation in the Educational Leadership and Policy Analysis department of ETSU. The title of my research is “Inclusion and Autism: General Education Teachers’ Attitudes and Perceptions” and the purpose is to gather information regarding how general education teachers feel about inclusion of students identified with autism.

Participation in this survey is completely voluntary. Participants must be 18 years of age or older in order to participate in this study.

I am hoping you will grant approval for your general education teachers to participate in this survey.

If you have any questions please contact Deborah Hayes at 423-283-2501 or hayesd@jcschools.org.

I thank you for your time and consideration,

Deborah Hayes

To General Education Teachers:

Dear Teachers:

My name is Deborah Hayes and I am conducting a research study using an anonymous online survey. This survey is being conducted for research purposes as part of my dissertation in the Educational Leadership and Policy Analysis department of ETSU. The title of my research is “Inclusion and Autism: General Education Teachers’ Attitudes and Perceptions” and the purpose is to gather information regarding how general education teachers feel about inclusion of students identified with autism.

Participation in this survey is completely voluntary. You must be 18 years of age or older in order to participate in this study.

If you have any questions please contact Deborah Hayes at 423-283-2501 or hayesd@jcschools.org.

By completing this online survey you are consenting to be a part of this research study.

Please click on the following link to access the survey:

<https://www.surveymonkey.com/s/HKSKSGN>

I thank you for your time and consideration,

Deborah Hayes

Follow-up:

Hello again,

Last week I emailed you with a request to complete an anonymous online survey to assist me with a research study as part of my dissertation. I am interested in general education teachers' attitudes and perceptions regarding inclusion of students identified with autism. I feel this information is very valuable as all of us in the education field strive to better the learning environment for all students.

Again, if you have any questions please contact Deborah Hayes at 423-483-2501 or email me at hayesd@jcschools.org.

Participation is completely voluntary. You must be 18 years of age or older in order to participate in this study.

By completing this online survey you are consenting to be a part of this research study.

Please follow this link to access the survey and I thank you for your assistance.

<https://www.surveymonkey.com/s/HKSKSGN>

Deborah Hayes

APPENDIX B

Autism Inclusion Survey

1. Gender

- Male
- Female

2. What is your age?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

3. Does your primary content area involve high stakes testing?

- Yes
- No

4. Grade level you mainly teach:

- Elementary K4
- Elementary K5
- Intermediate 56
- Middle 58
- Secondary 912

5. I have taught or am currently teaching student(s) with autism.

- Yes
- No

6. Inclusion is beneficial academically to all students with autism.

- Strongly Disagree
- Disagree
- Strongly Agree
- Agree

7. Inclusion is beneficial socially to all students with autism.

- Strongly Disagree
- Disagree
- Strongly Agree
- Agree

8. I am adequately prepared (either through college classes or professional development)

to work with students identified with autism.

Strongly Disagree

Disagree

Strongly Agree

Agree

9. My opinions/concerns are considered at IEP Team Meetings

Strongly Disagree

Disagree

Strongly Agree

Agree

10. I feel intimidated at IEP Team Meetings.

Strongly Disagree

Disagree

Strongly Agree

Agree

11. Inclusion of students identified with autism is beneficial to general education students.

Strongly Disagree

Disagree

Strongly Agree

Agree

12. Teaching students identified with autism is within my job description.

Strongly Disagree

Disagree

Strongly Agree

Agree

13. I am adequately trained to manage issues related to social impairments that may occur

with students identified with autism.

Strongly Disagree

Disagree

Strongly Agree

Agree

14. I am adequately trained to manage issues related to communication and language skill

impairments that may occur with students identified with autism.

Strongly Disagree

Disagree

Disagree

Strongly Agree

Agree

15. I am adequately trained to manage aggressive behaviors that may occur with students identified with autism (self injurious or towards others).

Strongly Disagree

Disagree

Strongly Agree

Agree

16. Students identified with autism should be educated in special education classes.

Strongly Disagree

Disagree

Strongly Agree

Agree

17. Students identified with autism should have an ancillary assistant present with them in general education classes.

Strongly Disagree

Disagree

Strongly Agree

Agree

18. I feel intimidated by students identified with autism.

Strongly Disagree

Disagree

Strongly Agree

Agree

19. My experiences with students identified with autism have been positive.

Strongly Disagree

Disagree

Strongly Agree

Agree

20. I can create a welcoming and accepting atmosphere in my classroom for students identified with autism.

Strongly Disagree

Disagree

Strongly Agree

Agree

21. I have adequate time to appropriately modify curriculum or manage time/attention needs of students identified with autism.

Strongly Disagree

Disagree

Strongly Agree

Agree

22. Students identified with autism desire to be in regular education classrooms instead of special education classrooms.

Strongly Disagree

Disagree

Strongly Agree

Agree

23. Students identified with autism desire to be in special education classrooms instead of general education classrooms.

Strongly Disagree

Disagree

Strongly Agree

Agree

24. The most challenging aspect of working with students identified with autism is or would be:

Noncompliance issues

Executive functioning issues

Insistence on sameness

Routine or schedule issues

Lack of connectedness/indifference towards others

Selfinjurious behaviors

Aggression towards others

Selfstimulating behaviors (rocking, stemming/flapping, roaming)

Lack of empathy towards others

Time demands

APPENDIX C

IRB Approval Letter



East Tennessee State University
Office for the Protection of Human Research Subjects • Box 70565 • Johnson City, Tennessee 37614-1707
Phone: (423) 439-6053 Fax: (423) 439-6060

IRB APPROVAL – Initial Exempt

September 26, 2013

Deborah Hayes

RE: Inclusion and Autism: General Education Teachers' Attitudes and Perceptions
IRB#: c0913.1e
ORSPA#: n/a

On **September 15, 2013**, an exempt approval was granted in accordance with 45 CFR 46. 101(b)(2). It is understood this project will be conducted in full accordance with all applicable sections of the IRB Policies. No continuing review is required. The exempt approval will be reported to the convened board on the next agenda.

- xform New Protocol Submission; Initial & Follow-up Email Scripts; Survey; References; Resume; Site Permission

Projects involving Mountain States Health Alliance must also be approved by MSHA following IRB approval prior to initiating the study.

Unanticipated Problems Involving Risks to Subjects or Others must be reported to the IRB (and VA R&D if applicable) within 10 working days.

Proposed changes in approved research cannot be initiated without IRB review and approval. The only exception to this rule is that a change can be made prior to IRB approval when necessary to eliminate apparent immediate hazards to the research subjects [21 CFR 56.108 (a)(4)]. In such a case, the IRB must be promptly informed of the change following its implementation (within 10 working days) on Form 109 (www.etsu.edu/irb). The IRB will review the change to determine that it is consistent with ensuring the subject's continued welfare.

Sincerely,
Chris Ayres, Chair
ETSU Campus IRB



Accredited Since December 2005

VITA

DEBORAH BARNETT HAYES

Education: Ed. D., Educational Leadership
East Tennessee State University, Johnson City, TN 2014

Master of Education in Special Education
East Tennessee State University, Johnson City, TN 2006

Bachelor of Science in Special Education
East Tennessee State University, Johnson City, TN 1998

Professional Experience: Special Education Teacher
Johnson City TN Schools
2007-Present

Adjunct Faculty, Special Education
ETSU 2010, 2011

Special Education Teacher
Washington County TN Schools
1999-2007

Presentations: 2011 Tennessee Council for Exceptional Children
Nashville, TN

Tennessee Transition
ETSU 2013, 2012, 2011

TCAP ALT Portfolio Assessment
ETSU 2008, 2009, 2010, 2013

TN State Monitoring Implications
Johnson City Schools 2009

1998 National Council for Exceptional Children Conference
Minneapolis, MN

Honors and Awards: Kappa Delta Pi
Alpha Sigma Lambda