

NASET Special **Educator** e-Journal

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Table of Contents

- [Special Education Legal Alert. By Perry A. Zirkel](#)
- [Buzz from the Hub](#)
- [An Exploration of Educator Attitudes and Perceptions of Serving Students with Disabilities in the Inclusive Classroom. By Christopher T. Closson, PhD and David W. Rausch, PhD](#)
- [Auditory Processing Disorder: A Literature Review . By Nori Llizo](#)
- [Barriers for Intellectual Disability Students in a Regular Classroom Setting. By Sandra Juntunen](#)
- [The Lifelong Impacts of Language Deprivation in Deaf Children. By Carolyn Sweeney](#)
- [Acknowledgements](#)

Special Education Legal Alert

Perry A. Zirkel

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This month's update identifies a pair of recent court decisions that illustrate the increasing, although here inconclusive, use of § 504/ ADA as an addition or alternative to the IDEA. For related publications and earlier monthly updates, see perryzirkel.com.

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| On February 21, 2023, a federal court in Pennsylvania issued an unofficially published decision in <i>D.M. v. East Allegheny School District</i>, addressing the § 504/ADA claims of a student with an IEP. The parents first enrolled the student in the district in 2016, when the district determined that she qualified as having specific learning disabilities (SLD) under the IDEA. In 2018, she allegedly experienced pervasive bullying, resulting in anxiety and depression diagnoses, suicidal ideations, and both attendance and academic problems. Her parents also alleged that they repeatedly reported her struggles to school officials, who failed to reassess whether she needed further services to address her mental health impairments. The bullying culminated in a sexual assault, which she allegedly reported to a school representative, who contacted the police. At a meeting in January 2019, the school officials sought to resolve the matter by transferring her to the district's cyber program. Three weeks later, claiming that the cyber program provided no direct instruction and exacerbated their daughter's downward spiral, the parents disenrolled her. They asserted that the district's action caused the father to take medical leave and the family to relocate to another district. The parents subsequently filed a civil rights suit against the district. Here, in response, the district filed a motion to dismiss the § 504/ADA claims. | |
| First, the district contended that neither the child's SLD nor her mental health conditions qualified as a disability under § 504/ADA. | Rejecting this argument, the court concluded that the child's IDEA SLD status qualified under § 504/ADA and that her mental health impairments substantially limited her everyday life, including the major life activity of concentration. |
| Second, the district argued that the parents failed to show the requisite causal connection between her disabilities and any alleged discrimination. | The court concluded that they sufficiently alleged discrimination because of her mental health conditions but not her SLD. The district had provided IEP services targeted to her SLD but not any such services for her other disabilities. |

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| Third, the district contended that the parents had not alleged a viable claim of associational discrimination in relation to their child. | The court agreed with this argument, because a claim of associational discrimination under § 504/ADA requires allegation of a direct injury against the parents separate from the alleged direct injury to their child. |
| The focus on allegations is because this decision was based on a dismissal motion, which is at the first pretrial stage, and this case did not have the factual findings of any underlying due process hearing. The defendant district did not raise the issue of the IDEA exhaustion provision, perhaps because the parents presumably were solely seeking money damages, which the Supreme Court recently held, in <i>Perez v. Sturges Public Schools</i> , to be an exception to exhaustion under the IDEA. | |

On April 18, 2023, a federal district court in Texas issued an unofficially published decision in *P.W. v. Leander Independent School District*, addressing claims under Section 504 and the Americans with Disabilities Act (ADA) on behalf of an elementary school child. In kindergarten, the child’s teacher noted on the report card that the child had a problem with letter reversals. In the beginning of grade 1, her letter and number reversals continued, and the school initiated response to intervention (RTI) services in reading and math. The child’s mother requested a special education evaluation but, after the principal advised her to see whether the RTI services worked, she withdrew her request. The RTI services continued at Tier III in grade 2, when the parents requested a dyslexia evaluation per Texas dyslexia law. The evaluation determined that the child had dyslexia, and the district provided the child with a 504 plan with dyslexia services. During the first semester of grade 3, when the child was still performing below grade level despite the 504 plan and the continued Tier III RTI services, the parents renewed their request for an IDEA evaluation based on ADHD, depression, and dyslexia. The evaluation concluded that the child qualified under the classification of health impaired (OHI), but not emotional disturbance or specific learning disabilities. The resulting IEP, which was in January, included 30 minutes of in-class support, continued dyslexia services, and various accommodations. In February, the parents filed for a due process hearing, claiming child find, evaluation, and IEP violations. Shortly thereafter, the district’s instruction moved online due to the COVID-19 pandemic. During the summer before grade 4, the parents obtained an independent educational evaluation (IEE), which contained various recommendations, including placement in a nearby private school for children with dyslexia. At the start of grade 4, the IEP team met, considered the IEE, and added some accommodations to the IEP. A few weeks later, the parents placed the child in the private school. After a delay for more than a year due to the pandemic, the hearing officer ruled in favor of the parents only for their child find claim. The remedy was compensatory education for one year but not, due to the rulings in favor of the district with regard to the evaluation and the IEP, tuition reimbursement. The parents appealed the adverse IDEA rulings, adding the § 504/ADA claims that the hearing officer had dismissed for lack of jurisdiction. The school district filed a motion to dismiss the § 504/ADA claims.

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| First, the district argued that the claim that the district violated the § 504/ADA rights of the parents lacked sufficient specificity. | The court agreed that the parents' conclusory allegation that the school district violated their independent right of "parent advocacy" warranted dismissal for not sufficiently amounting to a plausible claim of discrimination under § 504/ADA. |
| Second, the district argued that the other, child find claim lacked a specific basis for the requisite professional bad faith or gross misjudgment for § 504/ADA discrimination that was predicated on disagreement over compliance with the IDEA. | The court denied dismissal of this second § 504/ADA claim, finding the requisite gross misjudgment in the 2.5 years of RTI to delay or deny an IDEA evaluation in light of (a) the teachers' continued noting of possible signs of dyslexia, (b) the principal's alleged dissuasion against an evaluation, (c) the child's continued struggles despite the 504 plan and RTI, and (d) the staff's repeatedly asserting to the parents that "dyslexia is not under special education ... just § 504." |
| Unless settled by the parties, this case will continue until a final resolution of the § 504/ADA child find claim and the underlying IDEA appeal. The "delay or deny" admonition for RTI is oft-repeated and -overstated, but this case illustrates the potential costly consequences for what may be flagrantly fitting circumstances. Here, as in the first case in this month's update, the defendant-district did not raise the issue of exhaustion, thus leaving unaddressed whether the <i>Perez</i> exception applied and, if not, whether a hearing officer's IDEA decision on the merits, with dismissal for the § 504/ADA claims for lack of jurisdiction, was sufficient. | |

Buzz from the Hub

All articles below can be accessed through the following links:

<https://www.parentcenterhub.org/buzz-april2023-issue2/>
<https://www.parentcenterhub.org/buzz-april2023-issue1/>
<https://www.parentcenterhub.org/buzz-march2023-issue2/>
<https://www.parentcenterhub.org/buzz-march2023-issue1/>
<https://www.parentcenterhub.org/buzz-feb2023-issue2/>
<https://www.parentcenterhub.org/buzz-feb2023-issue1/>
<https://www.parentcenterhub.org/buzz-jan2023-issue2/>

RTI/MTSS May Not Be Used to Delay or Deny IDEA Evaluation

In March 2023, OSEP emailed copies of two memoranda to IDEA Part B Directors and Section 619 Coordinators regarding the child find requirements in IDEA. OSEP took this action in response to concerns that initial evaluations to determine whether a child has a disability have sometimes been delayed or denied by LEAs until a child goes through a state's multi-tiered system of supports (MTSS) process, sometimes referred to as Response to Intervention (RTI). Read OSEP's correspondence and connect with the memos at the link above.

Outreach and Engagement of Underserved Populations

Effective community engagement and outreach takes careful planning and acknowledgement that each population that we work with is unique and offers us opportunities to broaden our understanding of what makes a community. Lots of useful resources can be found in this article, which shares 6 essential strategies for inclusive engagement and culturally competent outreach. From the Vocational Rehabilitation Technical Assistance Center for Quality Employment (VRTAC-QE).

Partnering with Hard-to-Connect Families

Often, when people with disabilities consider seeking employment, their families strongly influence the decision. Especially with transition-aged youth, family influence can sway whether a consumer decides to try working. There is still a persistent belief that work income will cancel out any benefits the person with disability receives. Also from VRTAC-QE.

Native American Resource Collection

Don't forget about this invaluable resource collection designed expressly for Parent Centers to support new and current staff in their outreach to Native American parents of children with disabilities. The collection is organized in 4 tiers of learning that reflect what we know about journeys of multicultural growth. Each product within contains current information about the traditional culture and contemporary issues important to Native families. Consider, for example, articles such as **Cultural Awareness and Connecting with Native Communities** and **The Impact of Traditional Native Values on Transition Planning**.

Corporal Punishment in Schools Fact Sheet

From the Office for Civil Rights (OCR), issued Sept 2022, updated March 2023

The CRDC (Civil Rights Data Collection) defines corporal punishment as paddling, spanking, or other forms of physical punishment imposed on a child. The data reported in this **factsheet** is for K-12 students and includes data by sex, by race/ethnicity, and by state.

Dear Colleague Letter (March 24, 2023)

The Department issued this *Dear Colleague Letter* calling for the end to corporal punishment in schools. The letter reinforces the Department's position that corporal punishment in schools should be replaced with evidence-based practices, such as implementing multi-tiered systems of support that create a safe and healthy school environment. The Department included specific recommendations for evidence-based practices to give students what they need to learn and grow.

Discipline Discussions | Informal Removals Matter

Valerie C. Williams, Director of OSEP, writes about the pattern of informally removing students with disabilities from school classrooms as a way to address disruptive behavior. The parents get a call from the school that their child has caused a disruption and must be picked up immediately to help their child "calm down." This blog post from OSEP will connect you with the extensive **2022 federal guidance on discipline under IDEA**, many parts of which are also available in Spanish. OSEP ends this blog post by asking CPIR (yes, us!) to answer 4 specific questions about disciplinary practices, including "What are possible next steps a parent can take if their child's school repeatedly calls them to pick up their child from school due to their behavior?"

Bipolar Disorder in Teens and Young Adults: Know the Signs

(Also available in Spanish: **Trastorno bipolar en adolescentes y adultos jóvenes: Conozca los signos**)

Bipolar disorder is not the same as the typical ups and downs every kid goes through. The mood swings are more extreme and accompanied by changes in sleep, energy level, and the ability to think clearly. Learn the signs and symptoms.

Borderline Personality Disorder

(Also available in Spanish: **Trastorno límite de la personalidad**)

Learn more about the disorder, how it's diagnosed, and how to find support.

Advancing Racial Equity in Early Intervention and Preschool Special Education

This 9-page fact sheet provides key information and supporting evidence about racial disparities and inequities for young children with a disability, and questions for state and local leaders seeking to advance equity for all children with disabilities and their families. From the ECTA Center.

Complete Guide to PANS and PANDAS

(Also available in Spanish: **Guía completa sobre el PANS y PANDAS**)

Step-by-step information from diagnosis to treatment for kids with sudden onset OCD and other confusing symptoms.

What Does OCD Look Like in the Classroom?

(Also available in Spanish: *Cómo luce el TOC en el salón de clases*)

Signs that a child may be struggling with OCD, even if they are hiding their anxiety.

Videos | Using a Telenovela to Explain the Special Education Process

(Also available in Spanish: *Telenovela de educación especial*)

How do you demystify the special education process for parents, particularly parents for whom English is not their first language? Here's how Arlington Public Schools in Virginia tackled the challenge. The *Grandma's Soup* video series (*La Sopa de la Abuela*) is designed to support the engagement of families in the special education process, share information, encourage advocacy skills, and foster collaborative home-school partnerships that positively impact student success. There are 5 episodes in the series, beginning with "What's Going On with My Child?" and ending with "What If We Disagree?"

Family Toolkit: Pediatric-to-Adult Health Care Transition

(Also available in Spanish: *Guía para la familia*)

This 25-page toolkit from GotTransition has a set of resources for parents to use as they work with their youth during the transition from pediatric to adult health care. This includes sections such as *Questions to Ask Your Doctor*; *Changing Roles*; a *Turning 18* tip sheet; a Transition Readiness Assessment; and a Health Care Transition Quiz for youth to take to see how ready they are to transition to adult care.

Supported and Customized Employment: Side by Side Referral Decision Guide

For vocational rehabilitation agencies offering both supported and customized employment approaches to pursuing employment for people with disabilities, there may be some questions about which approach is best based on an individual's circumstances. This guide can help in determining how to choose between these two approaches.

Take Part in the Campaign

The Brain Injury Association is a great resource to turn to for info about traumatic brain injury and about this year's #MoreThanMyBrainInjury campaign. Follow the link above to find out how you can get involved and what tools and materials are available.

Center for Brain Injury Research and Training (CBIRT)

CBIRT offers many useful resources tailored for parents and caregivers and other specific audiences (e.g., administrators). Check out the *Academic Accommodations Matrix*, for example, and CBIRT's *Family Advocacy Skills Training*, which is a step-by-step handbook for family advocates.

Candid Conversations: Handing Over the Reins

This full-feature film addresses many questions and concerns parents and self-advocates have about supporting youth with disabilities as they transition to adulthood, including understanding the importance of self-advocacy skills. The entire film is 1 hour and 17 minutes, but it's divided

into three smaller parts for your viewing ease. Parts are: (1) Hopes and Dreams (@ 25 minutes); (2) Independence & Advocacy (@ 33 minutes); and (3) A Few Words of Advice (@ 21 minutes). From the NY Region 1 PTI Collaborative, with partners.

Transition Planning for Teens and Tweens

A special project of Parents Helping Parents in CA, this transition package will be useful to PTIs and CPRCs in other states, too. Includes multiple parts, such as self-advocacy, education and training, work preparation, and adult life for people with disabilities.

The History Makers

This digital archive is an incredible collection of oral histories shared by over 3,300 African Americans known and unknown. Access interviews, biographies, videos, archival photography, and more, and learn personal perspectives and unique facts from influential African Americans who made history in their own right across a wide range of fields, from art, business, education, entertainment, law, music, science, and sports.

Advancing Racial Equity in Early Intervention and Preschool Special Education

This 9-page fact sheet provides key information and supporting evidence about racial disparities and inequities for young children with a disability, and questions for state and local leaders seeking to advance equity for all children with disabilities and their families. From the ECTA Center.

Promoting Black Girls' and Women's Sexual and Reproductive Health Requires Acknowledging Their History and Experiences

This brief from Child Trends discusses how reproductive suppression has led to disproportionately adverse sexual and reproductive health outcomes for Black girls and women. The authors suggest using a holistic approach—one that focuses on intersectionality, gender equity, and culturally responsive practices—to promote the sexual and reproductive health of Black girls and women.

Confronting Color-Blindness

All of us have probably heard someone say that they “don’t see color” or that “it would be great if we could all just stop noticing race.” While these statements may be well-intentioned, colorblind ideology undermines diversity, inclusion, and equity. Here’s an online module that can help us understand the concepts of color-blindness, color evasion, and power evasion and how they may show up in our interactions with families, staff and colleagues.

What is Complex Trauma?

*(Also available in Spanish: **¿Qué es trauma complejo?**)*

When people think of trauma, they often imagine a specific experience, like a natural disaster or a violent attack. But there’s another form of trauma that involves chronic negative experiences like abuse, neglect, or violence. This is known as complex trauma, and its profound impact on kids is often misunderstood. Take a close look at complex trauma—its causes, the symptoms associated with it, and how to help kids who are dealing with it. From the Child Mind Institute.

Frequently Asked Questions (FAQs) on Pre-Employment Transition Services

The account you create at NTACT will give you access to a wide range of transition-related materials, such as this FAQ on pre-employment transition services. The questions and answers are organized into categories for easy browsing and include: administrative, allowable costs, definitions, service delivery, and RSA FAQs.

Talking to Kids About Sex and Dating

Check out this suite of stand-alone articles from the Child Mind Institute, which rounds up resources on why it matters to talk to teens about sex and romantic relationships, and how to approach this sensitive topic. Dive into consent and how kids can confidently set and respect boundaries. The suite includes tips on how to help teens deal with unwanted attention, as well as warning signs of sexual behaviors that are concerning. Some DOs and DON'Ts are outlined to help teens make good choices as they enter their first relationships. *Each article in the suite is also available in Spanish.*

Balloons lifting a winning ribbon.

Sexual Health and Wellness

PEATC, Virginia's PTI, has developed a toolkit to help guide parents through discussing sexual health and wellness with their child with disabilities. The toolkit covers topics such as sexuality, self-care, relationships, social skills, and boundaries. Many additional factsheets and resource documents (including YouTube videos) are also available.

Sexuality & Disability | 6 videos and articles to explore and share, as befits the person and the circumstances

Sex education for students with disabilities | A more scholarly article from *Law & Order*, from 2006

Dating and disabilities | Exploring love in many forms with first-hand accounts from the frontlines of dating, marriage, intimacy and friendship, all with people living—and loving—with disabilities.

Love Because, Never Despite, Disability

“I want a world where disabled people learn how to have healthy relationships alongside their abled peers, where disabled people are seen as valuable friends, lovers, partners, spouses not in spite of their disability but because disability adds to the fullness and beauty of their being. I want a society that teaches disabled people, through media portrayals, through accessible building design, and so many other avenues, that their bodymind, their personhood is valuable and worthy of love just the way they are.” Direct quote. Need we say more?

In My Own Voice: Sexual Self-Advocacy

30 people with intellectual and developmental disabilities talk about what sexual self-advocacy means to them.

An Exploration of Educator Attitudes and Perceptions of Serving Students with Disabilities in the Inclusive Classroom

Christopher T. Closson, PhD

Assistant Professor in the College of Education

State University of New York at Fredonia

280 Central Ave

Fredonia, NY 14063

716-673-3433

christopher.closson@fredonia.edu

David W. Rausch, PhD

Professor and Associate Dean

University of Tennessee at Chattanooga

651 McCallie Ave

Chattanooga, TN 37403

423-425-5270

david-rausch@utc.edu

Abstract

Inclusive classrooms are now the norm in many K-12 schools across the United States, which has made the job of general education teachers all the more difficult. The research indicated teacher perceptions regarding students with special needs can affect the success of students with disabilities in an inclusive classroom. This mixed methods study examined educator attitudes and perceptions in three northeast Tennessee school districts, regarding students with disabilities in the inclusive classroom. Participants completed the Attitudes Towards Teaching All Students (ATTAS-mm) survey to assess their attitude towards teaching all students and volunteered for the interview portion of the study to get a deeper understanding of educator attitudes and perceptions. Findings indicated teachers' attitudes and perceptions are mainly positive regarding the inclusion of students with disabilities. This study also provided data to discern the theoretical construct educators are aligned to related to the human capability theory or deficit theory.

Background to the Problem

The success and failure of special education laws hinge on the knowledge and attitudes teachers portray in the inclusive classroom (Ross-Hill, 2009). According to Odongo and Davidson (2016), the attitudes, perceptions, and concerns of teachers influence their commitment to the implementation and success of inclusive practices. As noted by Zaretsky (2005), teachers with a clear understanding of their perspectives toward inclusion are better able to establish classrooms with full inclusion and provide students with disabilities an education equal to their peers. The successful education of all students requires everyone within schools to make changes, to not only the way students are taught, but how they are perceived as successful learners (Pearman, Barnhart, Huang, & Mellblom, 1992). Assessing how educators in a school district perceive disabled students could be utilized in the implementation of evidence-based inclusive practices.

The horns effect is a bias where individuals see one attribute of someone which predisposes them to prejudge and be likely to interpret additional information in a way that supports their conclusion. The horns effect may be impacting the inclusive environment because some teachers still believe students with disabilities cannot learn or will be a distraction in general education classes. In overcoming bias the first step is acknowledging the problem (Hubbard, 2014). The current culture within special education allows for and, in some instances, supports this type of bias, creating a pattern of exclusion.

Rationale for the Study

In the study by Cope and Ward (2002), teacher perceptions impacted the integration of learning technology into classrooms. Teachers are expected to provide inclusive services, however some general educators do not believe they have the needed skills and this uncertainty will impact their efficacy (Gregory & Noto, 2018). Although the movement for inclusive education is part of a broad human rights agenda, many educators have serious reservations about implementing full inclusion. Lambe and Bones (2006) posited positive attitudes towards inclusion by practitioners will be essential to ensuring successful implementation.

Jordan, Schwartz, and McGhie-Richmond (2009) asserted teachers who believe students with special needs are their responsibility tend to be more effective with all their students. Challenges arise when teachers have the perception that a student with a disability is the primary responsibility of the special education teacher only. Horne and Timmons (2009) noted teachers must look beyond the disability and see the child for the positive qualities s/he has to offer. Another way of stating this would be looking at students with disabilities for what they can do, applying the human capability theory.

Theoretical Constructs

The objective of many K-12 schools is achieving higher scores on standardized assessments to create a viable workforce for the economy. Current educational thinking stems from the human capital development agenda that “gauges the merit and worth of a person by his or her capacity to contribute to economic productivity” (Lashley, 2013, p. 54). The problem with the current educational system is it is designed for standardization (Christensen, Horn, & Johnson, 2008). The education system in the United States is built on the concept of

standardization from the time of the industrial revolution and impacts the way teachers are trained, students are grouped, and curriculum is designed. Under this model, only those with average to above average intelligence can succeed, which often ignores the needs of minority and underserved populations.

According to Sailor, McCart, and Choi (2018), the perception of individuals with disabilities is shifting from the medical model based on deficit theory, of what individuals could not do, to the human capability theory, of what individuals with disabilities are capable of doing. Nussbaum (2000) described human capabilities as “what people are actually able to do and be, in a way informed by an intuitive idea of life that is worthy of the dignity of the human being” (p. 222). The perspective under this approach is to respect and accept others’ abilities not an attitude of condescension because of their inabilities.

Human capability theory calls for a shift away from focusing problems of learning on the individual and instead examining the learning context in its entirety (Sailor et al., 2018). This theory is related to the principle of normalization, which posits making available to all people with disabilities patterns of life and conditions of everyday living that are as close as possible to the regular circumstances and ways of life or society (Wolfensberger, 1980). Allowing all students to be educated together would need a concerted system of support to ensure all students are receiving what they need.

Under deficit theory, students reflecting measured deficits in content areas are assumed to have a structural problem within themselves, which needs to be addressed through an extraordinary intervention. This theory was the impetus behind removing students from the general education curriculum to remediate their weaknesses. According to Taylor (1988), “both P.L. 94-142 statute and regulations legitimate segregated educational settings and envision instances in which removal of handicapped children from the regular educational environment may be justified” (p. 223). These basic assumptions have guided the delivery model of special education for many decades (Burrello, Tracy, & Schultz, 1973). This model has proven ineffective for individuals with disabilities, thus providing the impetus for the inclusive movement.

There is a tendency to place students in specialized classrooms because of a misunderstanding of the continuum of services where “intensity of service is often confused with segregation” (Haines & Turnbull, 2013, p. 73). This has been a long-held belief that fuels deficit theory resulting in the separation of disabled students from their peers. The National Commission on Excellence in Education noted in 1983 that educationally disadvantaged students may require special curriculum materials, smaller classes, or individual tutoring to help them master the material presented. Their intent was to distinguish the need to improve education for the benefit of all, but it may have further segregated students with disabilities because it appears to favor individualized instruction (Pugach & Sapon-Shevin, 1987).

Wolfensberger (2013) posited individuals with disabilities are not given valued social roles in society, and are therefore devalued. Wolfensberger (2013) noted devalued individuals are often viewed as objects of pity, and, therefore, people want to make things easier for the afflicted. This devaluing of individuals with disabilities eventually leads to fewer demands on those individuals for performance, learning, or growth (Wolfensberger, 2013). This type of thinking is what led to individuals with disabilities being placed in institutions because it was

thought to be in their best interest (Wolfensberger, 1989). This thinking can be described as ableism, which is the belief that it is better or superior to not have a disability and to do things in a way that nondisabled people do (Storey, 2007). Ableism has been historically present in schools and society and is tied in part to the medical model that seeks to fix people with disabilities (Longmore, 1995).

According to Carrington and Elkins (2002), inclusive education personifies an attitude of accepting, valuing, and respecting all students. This attitude is indicative of the culture and climate of an organization and whether it is embraced. Horne and Timmons (2009) noted teachers must look beyond the disability and see the child for the positive qualities that s/he has to offer. This is another way of emphasizing the human capability theory by seeing students with disabilities for what they can do.

Methods

A nonexperimental design was utilized with the variables of gender, experience, and amount of special education courses completed by an educator. The dependent variable for this study is teacher attitudes, positive or negative, of serving all students, disabled and nondisabled, in an inclusive environment in the general education classroom. The independent variables of college (or higher) courses completed in special education and experience are ordinal, whereas gender is a nominal scale of measurement. The dependent variable is an interval scale of measurement because the data came from the Likert scale provided by the survey and will indicate whether an educator has a negative or positive attitude towards serving all students, disabled and nondisabled.

Research Questions

1. Is there a significant relationship in a teacher's gender and their attitudes and perceptions of serving all students, disabled and nondisabled, in an inclusive environment in the general education classroom?
 - a. Is there a difference, based on gender, in teachers' attitudes and perceptions of serving all students, disabled and nondisabled, in an inclusive environment in the general education classroom?
2. Is there a significant relationship in a teacher's years of experience in the profession and their attitudes and perceptions of serving all students, disabled and nondisabled, in an inclusive environment in the general education classroom?
 - a. Is there a difference, based on years of experience in the profession, in teachers' attitudes and perceptions of serving all students, disabled and nondisabled, in an inclusive environment in the general education classroom?
3. Is there a significant relationship in the number of college (or higher) courses completed in special education by a teacher and their attitudes and perceptions of serving all students, disabled and nondisabled, in an inclusive environment in the general education classroom?
4. What concerns do teachers have about implementing an inclusive environment in the general education classroom?
5. What incentives do teachers perceive could positively influence their attitudes and perceptions in serving all students, disabled and nondisabled, in an inclusive environment in the general education classroom?

6. What is an individual educator's view/definition of disability?
7. What is the school district's view/definition of disability, as identified by participant perceptions?

Survey Instrument

The Attitudes Towards Teaching All Students (ATTAS-mm) survey is a nine-item scale with strong reliability and validity that measures educator attitudes (Gregory & Noto, 2018), was used for the quantitative part of the study. The full-scale measure was utilized to determine an educators' attitude level and provided a raw score based on their responses. The lower the raw score on the ATTAS-mm indicates a positive attitude toward teaching all students, while a higher raw score indicates a negative attitude towards teaching all students. The ATTAS-mm has three components:

- The cognitive component includes thoughts, ideas, or beliefs, such as stereotyping.
- The affective aspect of attitude includes feelings or an emotional response to something or someone.
- The behavioral component describes the tendency to act in a way towards something.

While the three components are not independent, they are measurably distinct constructs (Gregory & Noto, 2012).

The ATTAS-mm was input into Qualtrics to deliver to participants via email. The results were directly collated by the system as participants completed the survey. There were open-ended questions added to the survey to delve deeper into participant responses. A question was added to elicit participation in the interview portion of the research.

An element of potential concern was related to the cognitive submeasure where the factor loadings are strong, but the alpha is low. To mitigate these issues a couple of qualitative questions were added to identify participants' experience of social cognition to see if themes relate to the measurement of interest as a means of ensuring validity beyond the psychometrics.

The interviews were used to elicit additional details from responses in the survey to verify an accurate understanding of participants' responses. Participants were asked to volunteer to be interviewed, after completing the survey, it was hoped at least five individuals would volunteer to take part in the interview. This enabled participants to share their personal experiences and opinions regarding the inclusion of children with disabilities in the general education classroom.

A logical approach was utilized in comparing the findings in this study to the deficit and human capability theories available on inclusion. Once the data were collected and reviewed, it was determined whether the educators in the study were aligned with the human capability theory or deficit theory.

The survey used in this study was utilized with permission from the author who reported an overall Cronbach's alpha of $\alpha = .833$ for the nine Likert scale questions (Gregory & Noto, 2012). The survey was employed to measure the overall scale construct and then three subscales. The overall scale construct measured educator's attitude level toward teaching all students and revealed an alpha of $\alpha = .854$, which indicated a strong internal consistency (see Table 1).

The first subscale of the ATTAS-mm was used to examine educator attitudes toward believing all students can succeed in general education classrooms. The second subscale was used to examine educator attitudes toward developing personal and professional relationships. The third subscale was used to examine educator attitudes toward creating an accepting environment for all students to learn. The reliability of each subscale and indicated alpha are listed (see Table 1).

Table 1
Reliability Statistics for the Administration of ATTAS-mm

| | Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|--------------|------------------|--|------------|
| Full Scale | 0.854 | 0.863 | 9 |
| 1st Subscale | 0.794 | 0.795 | 3 |
| 2nd Subscale | 0.749 | 0.751 | 3 |
| 3rd Subscale | 0.785 | 0.826 | 3 |

Results

There was a total of 66 educators in three Northeast Tennessee school districts who completed the ATTAS-mm. A total of 17 participants chose multiple responses on the Likert scale questions. This caused a coding problem with the Likert scale questions which was attributed to how it was input into Qualtrics. The decision was made to average those responses that had more than one selection to correctly identify the participant's choice. One participant had selected all Likert scale choices, but later indicated on one of the open-ended questions their desired response. This response was corrected since the participant identified the item they had intended to select.

The full-scale measure for the ATTAS-mm provided results based on participant input on the nine Likert scale items. The full-scale measure of the ATTAS-mm offered insight in regard to an educator's attitude toward teaching all students. The lower a participant's raw score on the full-scale measure indicates an educator is more likely to have a positive attitude toward teaching all students. Conversely, the higher the raw score on the full scale measure an educator is likely to have a negative attitude toward teaching all students.

A point-biserial correlation was run on the data from the first research question to determine if there was a significant relationship between an educator's gender and their attitude, positive or negative, toward teaching all students in the inclusive classroom. The assumption of normality was not violated when $p > .05$. The variables were found to be normally distributed,

males $p = .628$ and females $p = .158$. There was a significant correlation between educator gender and their attitude level toward teaching all students $r_{pb}(64) = -.247, p = .045$ (see Table 2). The data indicated an educator's attitude towards teaching all students was significant based on gender with the results indicating a significant relationship between females and a positive attitude toward teaching all students (see Table 2).

Table 2
Point-Biserial Correlation for ATTAS-mm by Gender

| | | What is your gender? | ATTASmm |
|----------------------|---------------------|----------------------|---------|
| What is your gender? | Pearson Correlation | 1 | -.247* |
| | Sig. (2-tailed) | | .045 |
| | N | 66 | 66 |
| ATTASmm | Pearson Correlation | -.247* | 1 |
| | Sig. (2-tailed) | .045 | |
| | N | 66 | 66 |

*. Correlation is significant at the 0.05 level (2-tailed).

A t -test was run on sub research question 1a to determine if a significant difference existed between these two variables. The results from the t -test indicated there was no significant difference between an educator's gender and their attitude, positive or negative, towards teaching all students. The mean for educators having a positive attitude toward teaching all students appears lower in female educators ($M = 26.58, SD = 7.10$) than male educators ($M = 32.14, SD = 12.73$). The data indicated there was not a statistical significance in mean attitudes towards teaching all students between males and females, $t(11.275) = 1.405, p = .187$.

These results correspond with the study of Ahsan, Deppeler, and Sharma (2013) where it was found female preservice teachers showed more positive attitudes towards inclusive education. The research done by Saloviita (2020) also found female teachers were more positive towards inclusion than their male counterparts. The meta-analysis completed by Van Steen and Wilson (2020) suggested men hold more negative attitudes towards inclusion than women. The research indicated the results based on gender are inconclusive, which may be because most studies have samples that include more females than males. The prior research samples, as well as the sample in this study, appear typical because females generally outnumber males in the profession, but this could also skew the results in a study. The significance found in this study may be skewed due to the disproportionate number of males who participated in the study in which only 17% of the sample self-identified as male.

A Spearman's Rank Order Correlation was conducted for the second research question to assess if a relationship existed between the amount of experience an educator has in the profession and their attitude, positive or negative, toward teaching all students. Preliminary analysis showed the relationship to be monotonic, based on the visual evidence indicated by a scatterplot. The data indicated that there was no significant correlation between educator experience and an educator's attitude, positive or negative, toward teaching all students, $r_s(64) = .077, p = .539$ (see Table 3).

Table 3
Spearman's Correlations of ATTAS-mm by Years of Educator Experience

| | | | How many years of experience do you have as an educator? | ATTASmm |
|-------------------|--|----------------------------|--|---------|
| Spearman's rho | How many years of experience do you have as an educator? | Correlation Coefficient | 1.000 | .077 |
| | | Sig. (2-tailed) | . | .539 |
| | | N | 66 | 66 |
| | ATTASmm | Correlation Coefficient | .077 | 1.000 |
| | | Sig. (2-tailed) | .539 | . |
| | | N | 66 | 66 |

A one-way analysis of variance (ANOVA) was utilized for sub research question 2a to compare means of the groups of educators based on experience. The data indicated there was not a significant difference between these two variables. Participants were classified into five ordinal groups: 0-4 years (n=6), 5-9 years (n=13), 10-14 years (n=14), 15-19 years (n=10), and

20 years or more (n=23) (see Figure 4.1).

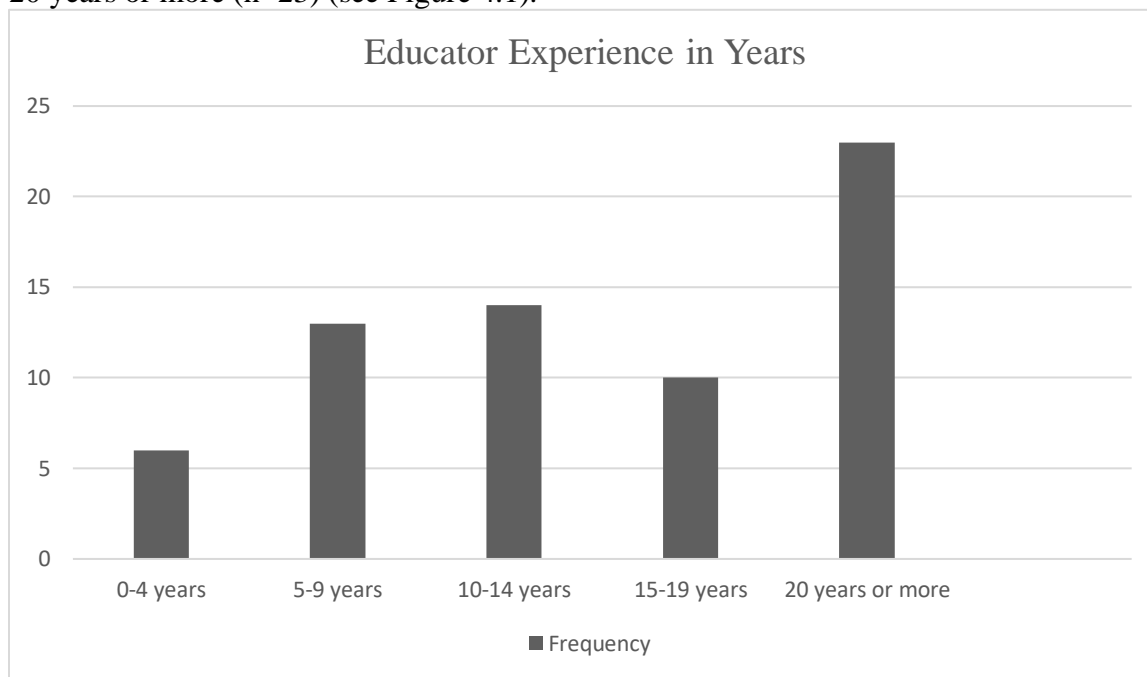


Figure 4.1. Educator Experience by Years

In the table labeled ANOVA of ATTAS-mm (see Table 5) the value in the column labelled *Sig.* is greater than .05 which indicates there are no differences between educator attitudes towards educating all students and the different groups of educator's experience, $F(3,61) = .468, p = .759$.

Table 5

ANOVA of ATTAS-mm by Years of Educator Experience

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|----|-------------|------|------|
| Between Groups | 137.539 | 4 | 34.385 | .468 | .759 |
| Within Groups | 4485.989 | 61 | 73.541 | | |
| Total | 4623.527 | 65 | | | |

The research breaks down experience into length of service in the profession and experience working with students with disabilities (SWD). This study focused on length of service in the profession when assessing for experience. Similar studies indicated teachers new

to the profession with little experience were found to have significantly more positive attitudes toward inclusion (Boyle, Topping, & Jindal-Snape, 2013; Parasuram, 2006; Supriyanto, 2019). A total of 71% of the participants in this study had 10 years or more of experience, which may have influenced the results. A more diverse sample of educators with less experience may have resulted in similar findings as previous studies.

A Pearson Product-Moment Correlation was used for research question three because it provides an indication of strength of the linear relationship between two continuous variables (Gliner, Morgan, & Leech, 2017). Preliminary analyses showed the relationship to be linear with both variables normally distributed when $p > .05$. The correlation was run to assess the relationship between the number of college (or higher) courses completed in special education and an educator's attitude, positive or negative, toward teaching all students. The analysis indicated there was no statistically significant relationship found between the number of college (or higher) courses completed in special education and having a positive or negative attitude toward teaching all students: $r(64) = -.14$, $p = .265$. The closer to zero an r value is, indicates no association. The data indicated there was no statistically significant relationship between these variables since $p > .05$.

A Spearman's rank order correlation was run next to further assess the relationship between an educator's attitude toward teaching all students and how many college (or higher) courses completed in special education. Preliminary analysis showed the relationship to be monotonic, based on the visual evidence indicated by a scatterplot. It was found that there was no significant correlation between how many college (or higher) courses in special education completed and an educator's attitude toward teaching all students, $r_s(64) = -.162$, $p = .195$ (see Table 8). These results further confirm the results found from running Pearson's Correlation on these variables.

According to Boyle et al. (2013), it was found that completing a course in special education significantly increases an educator's positive attitude towards inclusion. Teachers who are new to the profession with little experience were found to have significantly more positive attitudes toward inclusion (Boyle et al., 2013; Parasuram, 2006). This could be the result of the preservice training now expected in many pre-service undergraduate programs, where coursework in special education is required for all subject area teachers. As with the previous research question, a larger and more diverse sample may have yielded more significant results. It appears the sample in this study, which consisted of educators with considerable experience, may have limited the generalizability.

The qualitative component of the study consisted of two parts, the interview portion, and the open-ended questions added to the survey. Educators volunteered for the interview portion by indicating their willingness to participate on one of the open-ended survey questions. Seven individuals indicated a willingness to take part in the interview portion of the study, but only six participated. The interviews were used to elicit additional details from responses in the survey to verify an accurate understanding of participants' responses. This enabled participants to share their personal experiences and opinions regarding the inclusion of children with disabilities in the general education classroom. The list of interview questions are as follows:

1. What concerns you about having to implement a more inclusive environment?
2. What training do you feel you need to be more effective in an inclusive classroom?

3. What supports are needed to properly support disabled students in the inclusive classroom?
4. Why do you feel the support of your building administrator is pertinent to the success of an inclusive classroom?
5. How would you define the term disability?
6. How do you perceive your school district defines the term disability?

A logical approach was utilized in comparing the findings in this study to the deficit and human capability theories available on inclusion. Once the data were collected and reviewed, it was determined whether the educators in the study were aligned with the human capability theory or deficit theory.

The quantitative data were combined with the qualitative data to provide triangulation to the mixed methods analysis. The raw score and standard deviation participants received on the survey were included and gave further evidence of where an educator was, in terms of their attitude, positive or negative, towards serving all students. The descriptive statistics indicate a $M = 27.50$ and $SD = 8.43$. The lower the raw score on the ATTAS-mm indicated a participant is more likely to have a positive attitude towards serving all students.

Once the interviews were completed, they were transcribed and uploaded into QDA Miner™ to code. The process of coding is central to qualitative research in making sense of the text collected (Creswell & Poth, 2018). The coding report identified four emergent themes from the six questions that were asked educators. The four primary themes from the coding report were concerns, training, supports, and mindset.

Research question four asked what concerns an educator had in implementing a more inclusive environment. The data were sorted under the theme concerns and broken down into six secondary codes: concern add staff, concern money related, concern nondisabled students, concern disabled students, pace/ standards, and behavioral concerns. The first secondary code dealt with educator concern about not having additional staff in the classroom, such as a paraprofessional or a special education teacher to assist in serving all students in the inclusive classroom. Participants' noted concerns about the short period of time that additional staff are in the inclusive classroom and the frustration of waiting on getting another special education teacher hired due to shortages in the profession. There were eight cases that came under the secondary code of concern, add staff.

The concerns noted under the secondary code of additional staff was related to the need for more certified special education teachers as well as teaching assistants or aides to support SWD's in the inclusive classroom. Avramidis and Norwich (2002) found school factors, like availability of support in the classroom including learning support assistants, special education teachers, and speech therapists have been found linked to teachers' inclusion attitudes. The data from the interviews in this study would seem to support that finding and would appear to be an influential factor in assisting educators develop a positive attitude toward serving all students in the inclusive classroom. The next secondary code that emerged out of the interviews was money related concerns. The secondary code was similar to the first because educators' responded similarly by noting schools and districts are not providing the funding to hire additional staff to support SWD's in the general education classroom. Funding shortages to provide needed

support could be used as justification by school systems to avoid implementing inclusive classrooms.

The second secondary code dealt with concerns related to money, where educators alluded to concerns regarding the school district not providing the finances to provide the resources, they perceive are needed to implement an inclusive classroom. Participants' noted shortages, and issues related to budget shortcomings leading to limited resources. There were nine cases that emerged under this secondary code within the data.

The third secondary code dealt with concerns of nondisabled students, where educators mentioned their concerns about nondisabled students being distracted by disabled students or not being challenged properly in an inclusive classroom. Participant #4 asked the rhetorical question "What about those highfliers" referencing nondisabled students with average to above average ability, wondering if they would be properly challenged in the inclusive classroom. There were three cases that emerged in the data under this secondary code.

The fourth secondary code dealt with concerns of disabled students, where educators voiced their concerns about disabled students not receiving the support they need. There was a total of ten cases that emerged in the data under this category. Participants' noted, "being at a loss to help everybody" alluding to not being able to properly accommodate for disabled students in the inclusive classroom. One participant also asked a rhetorical question "what is going to happen when they go to high school and are still reading at a first-grade level" alluding to a disabled student not achieving the same level of progress as nondisabled students.

The fifth secondary code dealt with concerns of pace/standards, where educators noted their concerns about not being able to maintain a challenging pace to ensure meeting all the state standards. Participant #3 noted how "overwhelming" it is to have a disabled child in the general education classroom because of the "different things they have to focus on" making it difficult to maintain a pace to meet the standards. There was a total of eight cases that emerged in the data under this secondary code.

The sixth secondary code dealt with behavioral concerns educators voiced about students with disabilities misbehaving in the inclusive classroom. Participants' referenced "behavioral IEP's" how it becomes a problem for the rest of the class because of disruptions from the "exceptional child". A similar theme emerged to educator response to an effective classroom. It was not by educators discipline is needed in an effective classroom. Educators referred to overall classroom management and the daily structure when describing an effective inclusive classroom. Participants noted under this subheading there is "great classroom management" and "discipline is enforced". There were six cases that emerged in the data under this secondary code. Educators often noted concerns about the behaviors of SWD's in the general education classroom and how that can distract from peers in the classroom. This secondary code is a good example of how triangulation was utilized in this study to add richness and validity of the data (Patton, 2015). Under the secondary code of discipline Case #26 wrote a statement "One in which there is respect and discipline is enforced" in response to the open-ended prompt of describing in detail the effective classroom. The raw score on the ATTAS-mm was added to the table responses to provide additional depth. The raw score on the ATTAS-mm for the

participant noted under Case #26 was 56.5, indicating an educator with a negative attitude towards teaching all students which provides additional insight into this participant's response.

The four secondary codes involving concerns for nondisabled students, disabled students, pace/standards, and behavioral concerns are all related. Educators noted concern about how nondisabled students would be affected by SWD's being in the same classroom. Participants noted additional assistance needed to support SWD's and behavior issues could become a distraction and have a negative impact on the progress of nondisabled peers. These concerns are related to the secondary theme of pace/standards where educators noted the difficulty in maintaining a challenging pace to meet state standards with SWD's in the general education classroom. Lastly, educators noted concerns for disabled students not receiving the support they need in the inclusive classroom with some participants alluding to SWD's may be better served in a segregated special education classroom. These concerns may be linked to an educators' attitude, positive or negative, towards serving all students in the inclusive classroom.

Research question five asked what incentives do educators' perceive could positively influence their attitudes and perceptions of serving all students in the inclusive classroom. This question was not directly asked but could be inferred from participant responses. Participants seemed to allude to training and supports as incentives that could positively influence educator attitudes in serving all students in the inclusive classroom. The emergent theme, training, was broken down into three secondary codes of inclusive, differentiation, and coteaching. The first secondary code of inclusive training indicated when educators referenced a need for training to better serve students with disabilities in the inclusive classroom. Participants' noted how they want to help students with disabilities, but do not feel adequately prepared. Educators' referenced they do not feel they have the appropriate "tools in their toolbox" to serve students in a nontraditional way. There was a total of eight cases that emerged in the data under this category.

Through the use of triangulation, additional themes were uncovered from educator responses related to training. The theme, inclusive strategies, had five secondary codes that included collaborative learning, Universal Design for Learning (UDL)/student centered, differentiation, coteaching, and peer tutor/mentors. Educators noted the need for further training on inclusive strategies as the data indicated participants had an ATTAS-mm raw score close to the mean indicating a positive attitude towards serving all students in the inclusive classroom.

Educators noted the need to get additional training to assist them in supporting all students in the inclusive classroom. Ross-Hill (2009) found that teachers expressed they are confident to teach students with special needs when they have adequate training to serve students with diverse needs. The emergent themes regarding training in this study are consistent with findings throughout the research to develop educator self-efficacy in working with SWD's (Savolainen, Engelbrecht, Nel, & Malinen, 2012; Supriyanto, 2019; Urton, Wilbert, & Hennemann, 2014; Vaz et al., 2015). It would seem the findings in this study are consistent with the findings in previous research on how training can be a factor in an educators' attitudes and perceptions of serving all students in the inclusive classroom.

Inclusive strategies were noted throughout the responses to the open-ended questions added to the survey. In responding to the prompt, participants mentioned the importance of providing a kind and loving environment that was equitable in serving all students. Participants

mentioned the need to utilize differentiation and coteaching, cross validating participant responses from the interviews. In addition, participants mentioned the importance of utilizing collaborative learning, peer tutors and mentors, and universal design for learning. The findings in the qualitative data from the survey would seem to support the findings in the interviews where training could be a factor in developing a positive attitude to serve all students in the inclusive classroom.

The third emergent theme uncovered in the data were supports, which alludes to the supports educators believe would assist them in successfully implementing an inclusive classroom. This theme was broken down into two secondary codes which included class size and additional staff. The first secondary code under supports was class size where educators noted a smaller class would be more conducive to meeting the needs of all students in an inclusive classroom. There were two cases that emerged in the data under this category but only one participant noted the concern of class size. This was a divergence in the data, since only one educator referenced a need for a smaller class size. The participant noted under this secondary code an effective inclusive classroom would have a “low student/teacher ratio.” The example of the open-ended participant response along with their raw score and z-score provide further evidence of the consistency of these two data sets.

The secondary code of class size was noted by only one participant in the interview data but was mentioned twice by this same participant. There was also a singular mention of class size by a different participant in the open-ended survey responses. The research indicated class size is a concern for educators in order to meet the needs of all students, but does not appear to be a factor in contributing to teacher attitudes and perceptions of SWD’s in the inclusive classroom (Saloviita, 2020; Sargeant & Berkner, 2015). The current finding of this study on class size seems to be consistent with previous findings in the research.

The next secondary code under the theme of supports was administrative support, where educators noted the support of the building principal or assistant principal would assist them in implementing an inclusive classroom. Educators noted the importance of administrative support to get “classroom support for valued educational time” as well as believing that any meaningful change is going to come from the top in a “trickle down” type of manner. There were sixteen cases that emerged in the data under this category. Educators noted the importance to have the support of their leadership in implementing inclusive classrooms, such as the building principal or district administration who often set policy for the school or the entire district. The finding in this study is similar to previous findings in the research where teachers need encouragement and administrative support in the implementation of inclusive practices (Sargeant & Berkner, 2015).

The third secondary code under the theme of supports was additional staff where educators noted the support of additional staff in the classroom, such as a paraprofessional or special education teacher, in implementing an inclusive classroom. Participants noted the need to have “just extra people to help” in supporting all students in the classroom. They also noted how the “flow of the class goes smoother” with the additional staff member in the classroom. There were fifteen cases that emerged in the data under this category.

Additional staff is a secondary code that was noted previously under concerns by participants and appears again as a needed support. Educators noted the necessity of having additional staff, such as a special education teacher or aide, in the inclusive classroom to

adequately support SWD's. It would appear educators see additional staff as an important component to the inclusive classroom and a factor in developing a positive attitude of serving all students in the inclusive classroom.

Research question six asked educators' their definition of disability and research question seven asked how they perceived their district defines the term disability. These two research questions were intended to provide insight into an educator's mindset and the perceived mindset of their district. The fourth emergent theme uncovered from the data were mindset. This theme alludes to the perceived mindset of participants and fellow colleagues. Based on the responses, it appears they are aligned with either the human capability theory, a proinclusive mindset or deficit theory, a mindset based on the old medical model which often led to segregating students with disabilities. The two secondary codes were named for each of these theories under this theme.

The first secondary code under human capability theory is where educators noted in their responses a proinclusive mindset. Participant #3 noted how they "wish everybody could see that it's beneficial for everyone" when describing their experience of an inclusive classroom. Participant #5 noted how much progress has been made to include students with disabilities but acknowledged that "we're still fighting that battle" to include all students. There were seventeen cases that emerged in the data under this category.

Further evidence was uncovered through triangulating the data with the question related to educator behavior. Under educator behavior was the theme mindset/human capability theory, participants responses were aligned with the human capability theory which advocates all students are capable of learning and achieving success. Participants described ideal educator behavior as believing "all students have the ability to learn". They also described an environment where "every student is accepted and supported in the pursuit of learning". There was a total of 19 cases that emerged in the data under this secondary code.

The next secondary code under the theme of mindset was deficit theory. This is where educators noted in their responses a mindset aligned with the old medical model of separating students to remediate their deficits. Participant #3 noted how in their school the model is "based off of old methods" alluding to separating students with disabilities from being with their same age peers in the general education classroom. Participant #4 questioned why they are "not putting them together in class where the aid can meet their needs" alluding to serving those students in a self-contained special education classroom. There were 21 cases that emerged in the data under this category with examples of participant responses related to this secondary code listed. Under this secondary code participant responses were aligned with the deficit theory where the belief is that disabled students have a structural problem within themselves that requires remediation to overcome.

Research questions six and seven were related, as the purpose was to elicit information to help determine educator mindsets and how their mindset was developed. These two research questions asked for participants to define the term disability and to relate what they perceive is their school districts definition of disability. The two secondary codes that arose out of the emergent themes from the interview data as well as the data from the open-ended questions were related to the human capability theory and deficit theory. The intent was to relate participant

responses to these two theories to get a clearer understanding of participants mindset as it relates to the inclusive classroom.

Individuals answered these last two research questions directly in the interview portion of the study. The six individuals who were interviewed had various responses, but there was a noticeable difference in the individual educators' definition of disability and what they perceived as their school or districts' definition of disability. Four of the six participants' definition of disability was akin to the human capability theory, a philosophy based on how a SWD can benefit from the provision of specialized educational supports and services (Sailor et al., 2018). One of the participant's responses was problematic, as it appeared biased since she alluded in her response that this was how the district wanted her to respond. The participant was reassured all responses were confidential and would not link back to the individual nor school. It would appear in this instance, this participant was influenced by how her district would like her to respond, which impacted this participant's mindset of serving all students. The final participant's definition of disability was related to deficit theory. Each of the six participants' responses regarding the perception of the school districts definition of disability all fell under deficit theory. Educators appear more closely aligned to the human capability theory when it comes to attitudes regarding the inclusive classroom, whereas school districts seem to be coming from a different perspective related to deficit theory, based on a participant's perception of the district's policy. It would seem these differing views could negatively impact an educator's attitude towards serving all students in the inclusive classroom over time.

Participant responses through the interview and open-ended questions indicated human capability theory relates to a proinclusive mindset. Participants noted the advantages of inclusivity are beneficial for everyone. The mixed methods analysis with the survey data indicated how a low raw score on the ATTAS-mm, which indicates a positive attitude of serving all students, seems to correlate with the human capability theory with the proinclusive responses. These areas of convergence increase confidence in the findings (Patton, 2015). Educator responses noted the importance of high expectations for all students. There was a total of 19 cases that emerged in the survey data and 17 cases that emerged in the interview data under the secondary code of human capability theory, indicating most educators in this study appear to have a proinclusive mindset.

Participant responses through the interview and open-ended questions may indicate deficit theory relates to a mindset that is less positive towards the inclusive environment. One participant response noted "total frustration and exhaustion". This statement along with the triangulation from the ATTAS-mm raw score of 56.5 indicated this individual appears to have a negative attitude towards serving all students. This provides further evidence in the findings with this convergence of data. Participants mentioned old methods in responses under this secondary code referring to when SWD's were segregated into specialized classrooms confirming the connection to deficit theory.

Discussion

There were seven research questions along with two sub research questions that guided this mixed methods study. A total of 66 educators from three Northeast Tennessee school districts participated in the study by completing the Attitudes Towards Teaching All Students survey (ATTAS-mm). The nine item Likert scale questions were utilized to answer the three

quantitative research questions. There were two open ended questions added to the survey to elicit further information from participants. Those results were coded into emergent themes and used in a mixed methods analysis with the survey data to cross validate between the qualitative and quantitative data sets through triangulation. Participants were asked in the survey to volunteer to participate in the interview portion of the study. Seven participants originally volunteered for the interviews with six choosing to participate. The interview data were transcribed and then coded and analyzed into emergent themes.

Limitations

The research in this study may have been impacted by the following limitations:

- The number of participants in the sample and the disproportionate number of males to females. A larger and more diverse sample may have led to more significant findings.
- The influence social desirability could have on the results. Socially desirable responding is defined as the tendency to give answers that make the respondent look good (Paulhus & Reid, 1991). The recent popularity in educational research regarding attitudes towards inclusive education has found social desirability to have a negative impact on studies (Lüke & Grosche, 2018).

Implications for Practice

Including educators in the process of implementing a more inclusive environment appears to be linked to the success of the initiative. Educators generally have positive attitudes towards the philosophy of the inclusive classroom but often have difficulty with how it is implemented (Gonzalez, 1999). Pearman et al. (1992) noted that all too often more inclusive settings are planned and implemented, but building administrators and teachers are not involved in this process.

A participant in this study noted the importance of support from their building administrator because those decisions affect their daily life as an educator. The participant shared how their building principal determines class sizes, supplies, and professional development training. Another participant noted leadership decisions are made from the top and then trickle down to those working in the classrooms. According to Darling and Nurmi (2009), strategic leadership is not just delegating the strategy from top to bottom but, collecting data and information that emerges from within the organization. Including all stakeholders in the process of implementing a more inclusive environment would be beneficial in collecting input from all levels within an organization.

The adaptive leadership approach could be a useful leadership model to assist in implementing an inclusive environment because it is follower centered. Adaptive leadership focuses on the adaptations required of individuals in response to the changes being undertaken within an organization and the support a leader can provide during the transition ([Northouse, 2016](#)). Heavyweight teams can be incorporated into the process, as noted previously. Christensen et al. (2008) noted heavyweight teams are tools to create new ways of working together, made up of members throughout the organization that have collective responsibility to figure out a better way to meet the organization's goals. This process can be instrumental in establishing common beliefs throughout the organization ([DeHartchuck, Kruse, & Whittaker, 2019](#)).

Recommendations for Future Research

The development of a quantitative assessment to measure an educator's mindset as it relates to the human capability theory or deficit theory would be helpful for districts to develop a baseline of their staff. A quantitative assessment would be quick and easy for school districts to assess educator mindset and then create professional development to assist educators to align with a proinclusive mindset and the human capability theory. It may be beneficial to explore further if a relationship exists between an educator's mindset and the integration of evidence based inclusive practices. Further research may be beneficial on developing a mindset aligned with the human capability theory in educators and determining the variables that influence that mindset to better integrate an inclusive environment. The hope is further research in this area could lead to a theoretical framework to outline the steps in developing a proinclusive mindset aligned with the human capability theory.

Conclusion

The findings of this study indicate consistency with previous findings in the research. This study indicated such things as supports and training on inclusive practices can have a positive influence on educator attitudes toward the inclusive classroom. Participants indicated a need for further training to assist them in serving all students effectively. It was also found that educators value the support of additional staff in the classroom as well as the administrative support of building principals and district leaders. Lastly, it was found in this study there is a significant relationship between gender and having a positive attitude toward serving all students.

An additional finding unique to this study is the relationship between the proinclusive mindset and the human capability theory, through the use of triangulation. The development of a mindset aligned to the human capability could be beneficial in the implementation of a more inclusive environment. Individuals who espouse this perspective recognize the issue is not with the individual with a disability but in the need to accommodate the learning to adapt the needs of the individual.

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Auditory Processing Disorder: A Literature Review

By Nori Llizo

Abstract

This literature review examines Auditory Processing Disorder (APD). This review will define APD, state the importance of utilizing appropriate assessments to properly diagnose APD, and the process of assessment. The use of the correct assessment tools to diagnose APD can be incredibly beneficial to a developing child.

Key words: APD (Auditory Processing Disorder), ADHD (Attention Deficit Hyperactivity Disorder), FAPE (Free Appropriate Public Education), IQ (Intelligence Quotient), SLI (Speech and Language Impaired), SLT (Speech and Language Therapist, AP (Auditory Processing)

Introduction

It is widely known that classrooms are filled with children who are different types of learners: visual, kinesthetic, auditory, and reading and writing learners. Most information sent and received in classrooms, irrespective of the child's specific grade, is auditory, making central auditory processing skills critically important (Thomas & Mack, 2010). For typically developing children, auditory processing is a significant component of learning, communication, and socialization. Auditory processing skills essential for daily listening are auditory awareness, auditory discrimination, and auditory identification. Lacking any of these skills, children may not be learning at their full potential, and may fall under the Auditory Processing Disorder umbrella.

At present, Auditory Processing professionals and professional organizations have defined APD as a disorder specific to the auditory system in which the person has normal hearing but cannot successfully use information that person hears (American Academy of Audiology, 2010; Bellis, 2011; Working Group on Auditory Processing Disorders, 2005a). For some children, learning to develop auditory stimuli and speech, is a complex process involving several stages of growth. Children with auditory processing disorder may have difficulty processing and interpreting auditory information, which can lead to problems with language development, learning, and socialization. Teachers and professionals working with children who have learning difficulties, may not recognize APD, because of the similar manifestations APD has with Attention Deficit Hyperactivity Disorder (ADHD), and other Specific Learning Disabilities (SLD). Through this literature review, I hope to identify the importance of understanding how auditory processing develops and how significant the outcomes are when proper assessments are conducted, and the correct diagnosis is given.

What is Auditory Processing Disorder?

The US National Institute on Deafness and Other Communicative Disorders describes APD in the following terms: Even though your child seems to ‘hear normally’, he or she may have difficulty using those sounds for speech and language” (www.nidcd.nih.gov, 2001). In other words, children with APD do not have difficulties with their hearing. They have difficulties processing the sounds they hear. In return, they misunderstand instructions or commands, they frequently request for repetition, they encounter difficulties responding quickly orally, and spelling and reading can be a challenging task as well. Children with APD may complain about listening and related issues. They may experience difficulties in comprehending speech in noisy environments, following directions, and discriminating between similar sounding speech sounds. They may behave as if they experience hearing loss, repeatedly asking for clarification. (American Speech-Language-Hearing Association, 2014).

When it comes to learning, auditory skills are necessary. The three auditory processing skills are Auditory awareness, the ability to detect sound, Auditory Discrimination, the ability to notice and distinguish between distinct and separate sounds, and Auditory Identification, the ability to connect meaning of sounds and speech. When auditory skills are weak, the student may experience auditory overload. This makes learning more challenging and sometimes too difficult without special assistance. Classrooms are important auditory learning environments for children, but many classrooms do not provide conditions that are conducive for hearing (echo, noise, etcetera) (Küçükünal et al., 2020). Making the auditory process an even more difficult task. Most children with auditory processing problems have normal intelligence and normal hearing sensitivity. Having APD can make learning very tricky for children, and educators can misinterpret the challenge these students are facing. For example, a student that has APD can become easily distracted and lack attention skills. These two factors are possible indicators of ADHD. There are major differences between ADHD and APD. ADHD is an output disorder that involves the inability to control behavior, whereas APD is considered to be an input disorder that impedes selective and divided auditory attention (Chermak, Hall & Musiek, 1999). Most students with APD do not have ADHD, but many students with ADHD have symptoms of APD (Tillery, 1999) (State, 2001).

Why is the Correct Assessment for APD Important?

All students with disabilities age three (3) through twenty-one (21) residing in the United States have the right to Free Appropriate Public Education (FAPE) consistent with the requirements of Section 1003.571, F.S. and Rules 6A-6.03011 through 6A-6.0361, F.A.C. (*6A-6.03028 Provision of Free Appropriate Public Education (FAPE) and Development of Individual Educational Plans for Students with Disabilities*, n.d.) Research identifies the value in utilizing the correct assessment and assessment tools when evaluating a child for any possible diagnosis. For instance, an IQ measurement assessment has components that are verbal comprehensions and language-based tasks. A child with a language disorder, may be observed to have a deficiency in verbal comprehension abilities and be classified as cognitively limited rather than language impaired. This can also occur the other way around. A language evaluation given by a speech pathologist, include cognitive components. Students with limited cognitive abilities given a language evaluation, can be misdiagnosed as being language impaired rather than having

cognitive disorders. Moreover, a child possibly afflicted with APD, should not just be assessed on cognitive abilities such as reading and writing. Their evaluation should include assessments from an audiologist. Utilizing more accurate assessment methods and tools is crucial because the results of the evaluation will be specific, and professionals can then determine what types of intervention, strategies, and services a child receives in the school setting.

Assessment Process for APD

Several factors should be considered when referring a child for APD assessments: Age of the child, Peripheral hearing, Cognitive ability, Language competence, Phonology, and other present conditions (example ADHD) (State, 2001). It is best if children are evaluated for APD when they are at least seven to eight years of age. Brain function varies and is not consistent in younger children and this can lead to misinterpretation of test results. Peripheral hearing sensitivity must be in the normal range, or the child must be cleared by an audiologist for an AP evaluation. Performance on auditory tasks is greatly affected by cognitive ability. Any child that is recommended for APD evaluation should have a normal learning potential. If child has weak language or speech skills, or is the child an English second language learner, a non-verbal stimuli test must be considered. The child's phonology must be considered since the evaluations require verbal responses. Lastly, other conditions must be considered because symptoms of APD can be like other disorders such as ADHD. A multidisciplinary team will be beneficial to partake in an APD diagnosis and should collaborate to properly diagnose a child. The team would consist of psychologists, physicians, teachers, parents, and of course, audiologists and speech-language pathologists. It is easy to confuse an auditory processing problem with a language problem. A child with these symptoms may be classed as APD by an audiologist, SLI by a SLT, dyslexic by an educational psychologist, and autistic spectrum by a psychiatrist (David R. Moore (2006). Because of the examples stated above, all professionals conducting evaluations to seek an APD diagnosis, must communicate and discuss the results to come to the best conclusion for the child. Teachers are in the frontline and will most likely be the first to notice a learning difficulty in a child. They can also provide data of the child's academic performance which is useful information when determining factors of a disorder or disability. For this reason, Küçükünal, (2020) states that all teachers at primary schools should be made aware of the characteristics of APD. They should be trained on how to recognize APD (e.g. by using questionnaires. These questionnaires should include phonological awareness, reading, writing, speaking, and listening questions). The ability to distinguish between manifestations, can rule out questionable uncertainties. The task of a psychologist is to use assessments such as a Psychoeducational evaluation to determine a child's cognitive strengths and weaknesses. SPT's can determine the child's speech and language abilities. Parents should always be part of the child's evaluations. They must give consent for evaluation or screening and will provide valuable information and descriptions regarding the child's auditory behaviors outside of school. The audiologist assesses the peripheral and central auditory systems using a battery of tests, which may include both electrophysiological and behavioral tests. Peripheral hearing tests determine if the child has a hearing loss and, if so, the degree to which the loss is a factor in the child's learning problems. Assessment of the central auditory system evaluates the child's ability to respond under different conditions of auditory signal distortion and competition. It is based on the assumption that a child with an intact auditory system can tolerate mild distortions of speech and still understand it, while a child with APD will encounter difficulty when the auditory system is stressed by signal

distortion and competing messages (Keith, 1995) (*ED474303 2002-12-00 Auditory Processing Disorders: An Overview. ERIC Digest*, n.d.).

Lastly, after evaluations are completed in their entirety, the team can discuss results and identify the best diagnosis. At this moment in the process, parents should be the greatest advocates for their child. Parents must ask for explanations of evaluations and for options of treatments. Then, together, the team should create a plan of action complete with interventions, strategies and services that will be most favorable to the child.

Conclusion

Given the information above, we can conclude that APD is not a hearing loss disorder. It is a condition that affects the brain's ability to process auditory information. The manifestations of ADP can be intertwined with those of other learning disabilities. This is why the assessment/evaluation process is so important and crucial. All professionals involved in the assessment process must work together so that the results are the most beneficial to the child. A misdiagnosis can be a disservice to children. When children are properly diagnosed, valuable strategies, interventions, and services can be identified and provided to facilitate their success in an academic and non-academic environment. The ending goal in the beginning and during the evaluation process should always be how to help the child and make sure they receive a Free and Appropriate Public Education (FAPE) after they are diagnosed.

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Barriers for Intellectual Disability Students in a Regular Classroom Setting

By Sandra Juntunen

Abstract

In today's school settings, students with disabilities are integrated into the regular classroom setting or the least restrictive classroom setting depending on their level of needs. Schools follow the Individuals with Disabilities Education Act to ensure students' needs are being met. Students with disabilities are provided free appropriate public education (FAPE). IDEA governs states and public agencies on how to provide interventions to children in the United States public school systems. Students with disabilities can be placed in a regular classroom or in an inclusive classroom depending on the student's disability severity. Being placed in a regular classroom or an inclusive classroom can lead to barriers. The articles I reviewed regarding common barriers were school, economics, communication, school, and family.

Key Words: Free Appropriate Public Education (FAPE); Individual with Disabilities Education Act (IDEA), Children with Disabilities, barriers.

Barriers for Intellectual Disability Students in the Regular Classroom Setting

Special Education students are unique individuals. Per Section 300.09 IDEA (Individuals with Disabilities Education Act), subsection a:1: special education is specifically designed instruction, at no cost to the parents, to meet the needs of a child with a disability. The total number of students with disabilities (ages 3-21) attending public school in the United States is approximately 7.5 million in 2020-2021 or 15% of the school population (Riser-Kotisky, 2022). IDEA is the special education protection which ensures special needs students are protected. The special needs students receive the appropriate services to be successful. IDEA's purpose is to ensure special needs students have a free education, student and parent have rights, access to quality teachers, classrooms, education, and assess student's progress. IDEA recognizes 13 disabilities that meet the need for special education services. Intellectual Disabilities is the subject matter for this paper.

The National Center of Disabilities (2022) identifies students with intellectual disabilities, which make up 6% (432,000) of the special needs' population, significantly below average general intellectual and adaptive functioning. Per IDEA, Intellectual disability is defined as significantly sub-average general intellectual functioning, existing concurrently [at the same time] with deficits in adaptive behavior and manifested during the developmental period, that adversely affects a child's educational performance. (1) A student who has been diagnosed with a disability must have an Individual Education Plan (IEP). The disability must affect the student's learning to be considered for the special education program.

Students of Intellectual Disabilities assessed are placed in four category levels: mild, moderate, severe, and profound. In this research document, mild students with intellectual disabilities placed in a regular classroom is the focus. Students with mild intellectual disabilities have an IQ between 50 – 69. The student may have issues with cognitive functioning and skills such as communication, practical skills, social skills, and self-care. Students with mild intellectual disabilities are being placed in the general education classrooms with special education services. The students are not receiving daily Exceptional Services Education (ESE). They are not being identified immediately.

The National Center for Education (2022) statistics report 19% of students with Intellectual Disabilities spend more than 80% of their day in a regular classroom compared to other disabilities being served by IDEA. American Indian/Alaskan Natives have the highest percentage rate of disabilities: 19%, followed by African Americans at 17%. Students with disabilities in a regular classroom have many challenges. The students of disabilities must overcome issues at home, communication, stigmas, school, and lack of resources.

Students with intellectual disabilities have barriers that hinder their academic success. Barriers these students face are school personnel not being certified or school vacancies. Another barrier is the family's perception, lack of resources, knowledge, and support. The area where the family resides and the school's location. Schools in rural areas, far away from cities do not get the same resources as city schools. Stigmas hinder students' success.

Family Barriers

Students with intellectual disabilities have barriers to overcome. The student's home life and family can include parental barriers such as economic resources, stigma of the disability, lack of family, school or resource support, parental stress, parent's mental health, knowledge and skill, the number of other children in the home, parental expectations, parental involvement, parent and school communication, and the student's disability (Oranga, et al., 2022).

Parents who are not involved in their child's education are making it harder for a positive outcome. If the parent is not actively involved in school meetings, does not advocate for the child, or is not communicating with school staff, the child will not show academic, social, or emotional growth. The parents' education level plays a factor in the child's academic success. Parents who did not graduate from high school or just have a high school diploma are not equipped to address their child's needs. Parents working several jobs to meet the needs of the family do not have the resources or the time to assist the child. Other children in the home or the parent do not have the time to address everyone's needs. Parents might have their own disabilities and are not capable of meeting their own needs. Time constraints play factors in actively participating in school meetings or communication. Parents might not have the resources such as reliable transportation to get to appointments or they might not have the resources to get assistance to help with the child's needs. Another barrier is language. Parents coming from other countries or U. S. territories might not know English.

Parents want to do what is best for their child, but other factors come first. Parents who are not invested in the child's education, IEP, meetings, communication, or do not agree with the teacher or school personnel, are hurting the child's chances of getting the required services to meet the needs of the student. Parents can become disenchanted with the school personnel.

Parents might feel the school is not doing enough to help their child, the parent might feel school staff is putting them down or not respecting their concerns. Parents have many factors and situations to address. They try to do the best that they can with what they have. Parents need encouragement, a person who they can rely on and trust to do what is best for their child. Parents do not trust authority figures due to their upbringing and their education experience. Parents want to do what is best but need encouragement and that school relationship to advocate. Parents contact the principal, the school board, or the superintendent to file complaints about teachers when parents feel they were treated poorly and with disrespect. This then leads to issues with the teachers. Oranga, Obuba, and Boinett (2022) believe parents should play the vital role of ensuring continuity and practice, at home, of the academic, social, and adaptive skills that children (with intellectual disabilities) learn at school. Their involvement in the education of their children with intellectual disabilities is important.

School Barriers

School barriers can be many or few depending on the staff training and attitudes. School barriers can be teachers' negative attitude towards parents, dismissing parental observations, school personnel conflicts, lack of funds, lack of teacher training, no teaching certification, experience, and vacancies. School psychologist vacancies, evaluation times, and demands. Available resources, class sizes, lack of teacher knowledge working with ESE students and not providing accommodations or reading the IEP.

The United States has 36,000 teacher vacancies and 163,000 teachers filled positions with staff teaching in the classroom without credentials (C. Shelton, 2023). Due to the vacancies, students with special needs are not receiving the one-on-one services. Their accommodations are not provided due to the teacher's lack of training and not being certified in Exceptional Student Education. Teachers are not patient with special needs students and do not understand their learning disability or needs. Teachers are overwhelmed, tired and frustrated which leads to conflicts with students and parents. Parents are not being contacted due to the number of tasks being placed on teachers, meetings, bigger class sizes, lack of paraprofessionals, behaviors, covering other classes, loss of planning time, and other issues.

Teachers are not patient working with children with intellectual disabilities. They expect all students to learn the same way as others. It is a known fact that all students do not learn the same way. Some students grasp what is being taught in the classroom and others are lost. Some teachers do take on a persona that they know everything, and they do not have time to deal with parents who are communicating with them. The attitude is my contract hours are from this time to this time. Parents are contacted when something negative occurs. This does not sit well with the parents. Some teachers are not available to talk with parents due to the workload issue which hurts a student with intellectual disabilities or any disability. Teachers schedule meetings during working hours, and some parents are not able to take time off work. Teachers get frustrated with the lack of parental involvement.

School psychologists are the key to completing the assessments for students being evaluated for special needs. Psychologists do not have enough time in a day to keep up with the number of students being referred for evaluation. Vacancies are hindering the process. Per L. Snider, et al, (2020), school psychologists are the gatekeepers for families seeking services for their child. Students with intellectual disabilities assessed feel the assessment process is

challenging due to technical difficulties and validity (L. Snider, et al, 2020). It is felt that cognitive testing is not always reliable or a perfect science since it can be challenging and inappropriate (L. Snider, et al. 2020). The behaviors of the student, language barriers, and social skills, with intellectual disabilities can interfere with the test validity. Many factors need to be considered to ensure test validity such as language, culture, sensory development, communication skills, and other issues can raise concerns.

Classroom make up is another barrier. Students with intellectual disabilities can be placed in a regular classroom and can be overwhelmed and scared. The student might be placed in a modified classroom with students with similar disabilities or is placed in a regular classroom with 25 or more students. Being in a large classroom can be good but it can be bad. Good factors are the socialization with other students, communication, and being treated the same as everyone else. However, the negative factors are too many distractions, not enough support, and a faster paced environment for a student with intellectual disabilities to be successful. A student may not talk due to the class size or the fear of being ridiculed. Being in a smaller classroom can be a barrier since the student will be exposed to other students with the same disabilities. Students can be very cruel and make fun of students with disabilities. The classroom make up can make a student or break a student. A teacher is a safeguard and should ensure each student is treated with respect and dignity. Some teachers have classroom management and a heart, and some teachers do not have classroom management. This is also a barrier since the classroom noise and comradery needs to be a healthy one to see positive results. More barriers are in the school and classroom setting. These barriers are seen in and out of the classroom.

Conclusion

Per the Florida Department of Education, an intellectual disability is defined as significantly below average general intellectual and adaptive functioning manifested during the developmental period, with significant delays in academic skills. Developmental period refers to birth to eighteen (18) years of age.

Schools and parents need to work together to provide the best outcome and education for students with intellectual disabilities. Parents need to be proactive. They need to learn about their child's disability, what resources are out in the community and in the school. Parents can participate in meetings via zoom or teams. Parents can ask for their child to have a daily sheet sent home to see how the child is doing in classes. Barriers will exist and continue to exist if parents and the school staff do not come together and work as a team. The number one factor should be the student. Parents and teachers have barriers to overcome. Everyone should be treated with dignity and respect. Parents need to advocate for their child to ensure the child's educational needs are being met. Parents have other options to ensure their child is academically prepared. Scholarships, another teacher, meetings, understanding the disability and communication help.

Teachers need to be trained in all facets of education, not just the core curriculum area. Students with disabilities are entering general education classrooms. The students trust teachers to meet their academic needs. Teachers should provide a safe environment where all students' needs are being met, whether it is in a general education classroom or in a modified classroom. Due to the number of teacher and paraprofessional vacancies, students are being shortchanged since the positions are filled with unqualified teachers or support staff. School psychologists are

using standardized tests that are not user friendly for the intellectually disabled student. Time constraints and the number of evaluations needed are overwhelming the system. Barriers will take time to get rid of, but it will have to take the family, teachers, student, and the schools to break them. Not every student is the same nor is each barrier the same. The number one barrier is the number of teacher vacancies in the academic field. This is hindering the positive progress made for special needs students.

IDEA is a safeguard for students with disabilities. It allowed students with disabilities to be in the least restrictive learning environment. It gives safeguards to the students and the parents. It also requires teachers to be trained and qualified in their teaching positions. The schools with the help of the federal government have made progress but room for improvement is needed.

Footnotes

1[Intellectual Disability is a new term in IDEA. Until October 2010, the law used the term “mental retardation.”]

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The Lifelong Impacts of Language Deprivation in Deaf Children

By Carolyn Sweeney

Abstract

Language deprivation in Deaf and Hard-of-Hearing children is rampant within the United States. An entire population is impacted by the simple lack of accessible language, the impacts of which are lifelong and widespread. Research regarding everything from academic success to prevalence of physical abuse can be traced back to a lack of early exposure to language within the Deaf community. This review hopes to disclose a brief synopsis of the effects of language deprivation and ultimately add to the academic discussion on what can be done by both educational and medical professionals with the goal of eradicating language deprivation within the Deaf population.

Key Words: Language Deprivation (LDS), American Sign Language, Executive Functioning, Deaf

Introduction

Since Pintner and Paterson first studied the individual performance of Deaf children on a battery of tasks in 1917, the impact of a lack of formal language in Deaf children has been documented. However, while medical, educational, and technological advancements have occurred within Deaf fields of study, one thing remains constant, the prevalence of language deprivation and its impact on the Deaf population. Since 1917, researchers have studied the impacts of language deprivation from topics ranging from academic success to mental health, all while understanding there is one **concrete** solution to this potentially crippling syndrome. The literature and research discussed here all support the use of an accessible language when concerning Deaf children. It is with hope, that the research continues to share knowledge and information regarding what might be considered the greatest threat to Deaf achievement, language deprivation.

Defining Language Deprivation

Before evaluating the impacts of language deprivation, we must first define and understand the root cause. Language deprivation and Language Deprivation Syndrome (LDS) are the result of a chronic lack of natural and accessible language during the first five years of life. This short time frame for language acquisition is **a result of** natural brain development in neurotypical infants and children. During the first 5 years of life, research has shown the brain's natural ability to **gain** language, when presented in accessible ways (8). During this developmental window, the brain of neurotypical children, develops naturally, making linguistic

connections in the left-hemisphere (6). Language acquisition begins as early as four months, at which time an infant's brain phonemic awareness and *foundational* neurological connections are present. A study completed in 2003, by Jacqueline Leybaert and Murielle D'hondt, hypothesized that LDS in Deaf children changes the structure of the brain. Leybaert and D'hondt theorized that language deprivation may significantly impact brain development in Deaf children, and in addition, that children who gained an accessible language, American Sign Language, later in life and are not fluent in that language, may have atypical neurological development. While some research suggests that atypical brain development is caused by auditory deprivation, not LDS, and that deafness itself *interferes* with *natural* brain development (Conrad 1979; Gibson 1988). This study went on to prove that exposure to a robust, natural, and accessible language, regardless of modality (American Sign Language or spoken language) *results* in language acquisition and typical neurological development. (6)

Language deprivation is rarely identified in hearing children, but is evident in nearly ** of children who are born Deaf. Many children who are born Deaf will be deprived of a rich first language and fall somewhere along the spectrum of language deprivation. Even if a child is diagnosed with a hearing loss and fitted with hearing aids before the age of two, a significant amount of the "language acquisition window" has passed. Although language is not *essential* for physical health or growth, research has shown that it does lead to social and behavioral concerns, which we will discuss later (8) Unfortunately, even with medical advancements and the implementation of the Early Hearing Detection Intervention (EHDI) screening performed at birth, Deaf children across the country are still at risk for language deprivation. While historically the cause of this may have been late diagnosis, which *was on average* around 2.5 years of age, today the *negative impacts/** of the medical community, lack of research, stigma associated with American Sign Language, and the focus on speech instead of language continues to put Deaf children at risk.

The Population Affected

Now that we have defined language deprivation, let us take a deeper look into the population it affects. The Center for Disease Control (CDC) reports that in 2020, approximately 53,000 babies born in hospitals in the United States failed their EDHI screening. Statistically, we know 90% of Deaf children are born to hearing parents, considering this we can *assume* 47,700 Deaf children are born to adults who have little to no linguistic competence of American Sign Language and therefore are at risk for language deprivation. (**) While the cause of Deafness is not always known, the CDC *reports* that approximately one out of 2 babies born Deaf can be linked to genetics. One in 3 are diagnosed with a syndrome of some type, such as Down's Syndrome. Additionally, one in 4 is the result of prenatal, perinatal, or postnatal trauma in the mother or infant such as infections, physical trauma or physical malformations. (*CDC*) Deaf children born into hearing families are typically *at risk* of being impacted by what is known in the Deaf community as the "dinner-table syndrome." (7) Dinner-table Syndrome occurs when Deaf children are excluded from conversations regarding all areas of life such as routines, meals, health information, car-rides, and so on due to their inability to access spoken language. *In conclusion* *approximately* 95% of Deaf children will not be exposed to an rich and accessible language regardless of communication mode, in the first months and years of life.

Language Deprivation and Cochlear Implants

Despite the *approval* of Cochlear Implants (CI) in children and the implementation of the EDHI screening and system since 1990, educators and medical professionals continue to witness the negative impacts of LDS. (7) In the medical field, recommendations for CI's *seem* to be the first line of defense against Deafness. Considering sensory neural hearing loss is the most prevalent birth defect globally the number of children who are *candidates* for CI's are staggering. Despite medical professionals being unable to guarantee success with CI's, 80% of Deaf children (who are candidates) are implanted in developed countries (9) *Despite* more than 30 years of implanting Deaf children, there has yet to be a well-designed study of CI success in children. In fact, a research study published in 2016, concluded that while some children may have success with CI's, that there is limited knowledge on predictable factors that lead to success of implantation. (17 of 2) This study ** that the linguistic learning patters of 188 implanted children, were more than one year behind their hearing peers and that the rate of learning was delayed and inconsistent. Contrary to popular belief, cochlear implantation does not ** immediate results. Children who are implanted must attend intensive follow-up auditory and speech therapies to train the brain to correctly interpret the input from the CI. During this time, children who will not benefit from their implant will have limited exposure to and accessible language continuing the prevalence of language deprivation in Deaf children. (8)

Lifelong Implications

Language deprivation is a *condition* that has lifelong implications. The first of many being reduced executive functioning skills (EF). What are executive functioning skills and how do they impact academic preparedness? Executive functioning skills are acknowledged to have two main *components* the first being behavioral regulation and the second, metacognition (3) Developed behavioral regulation allows children to self-regulate emotions, to work past their immediate wants and needs in order to satisfy an imposed goal. It also impacts the ability to switch tasks, especially regarding preferred and non-preferred activities. The second domain, metacognition, allows adults and children to retain information, to pull from memory, problem solving, and utilize an age appropriate attention span. (3) Research conducted by Hall, Eigsti, Bortfeld , and Lillo-Martin and published in 2016 explicitly studied Deaf children and their executive functioning skills as they related to language deprivation. They noted that historically, dating back to 1917, researchers have observed Deaf children performing *poorly* on tasks and within the boundaries of executive functioning skills in comparison to their hearing counterparts (3) They also stated that these skills severely impact school and social readiness. Using the Behavioral Rating Inventory of Executive Function (BRIEF) parent questionnaire they compared their results to three other studies that also utilized BRIEF and concluded that there is clear evidence of delays in executive functioning skills in Deaf children and subsequently these delays can be associated with language deprivation (3) They arrived at this conclusion after surveying and comparing the ratings from parents of Deaf children who were born into hearing families (DoH), and children born into a family with at least one Deaf parent (DoD), who ultimately were provided a rich and accessible language from birth. (3) Their results *showed* that DoD children had scores equivalent to same age hearing children, but that DoH, who had experienced some

time frame of language deprivation scored *significantly* lower than same aged hearing children on executive functioning skills.

Executive functioning skills are ** to also have an impact on school readiness skills, and academic achievement. Deaf children who *suffer* from language deprivation not only struggle with executive functioning skills, but other areas crucial to academic success such as vocabulary development. Research has *been done* proving the connection between vocabulary development and success in literacy. (4) A strong vocabulary foundation is crucial when we consider that Nation noted that 99% of everyday conversational and written English is present on the list of the first 2,000 common words. (1990, pg. 3 on 4) We can surmise that LDS severely impacts the number of common words Deaf children are exposed to and therefore learn. It is also important to note that incidental learning of vocabulary *accounts* for the majority of language growth in school-aged children, thus perpetuating Dinner-table Syndrome (4 and 7.) Incidental learning occurs when children are exposed to new vocabulary through everyday conversation and exposure through reading. Deaf children are at a disadvantage as incidental learning is typically inaccessible to them. It is suggested that neurotypical hearing children, add three to seven new words to their lexicon daily. It is even suggested that one exposure to a novel word may result in retention, however other sources claim the exposure must occur between six to twelve times (4) Again, we see the lasting effects of LDS simply as a result of inaccessible language. A study published in 2004, compared writing samples of Deaf, English language learners, and monolingual students. This study was unique because it seems to be the first time that mastery of American Sign Language was taken into consideration. Prior to their study, Singleton, DiGello, Wiles, and Rivers analyzed and classified their Deaf subjects based on mastery and skill level in ASL. After review writing samples, subjects were asked to retell the story of “The Tortoise and the Hare,” after watching a wordless video, they concluded that children in the higher level ASL group (regardless of age) scored *equally* with the monolingual group, even using fewer common words more frequently throughout their writing.

This study once again proves that access to a visual language for Deaf children, results in typical language developments and ultimately academic skills.

In our current climate of mental health awareness and advocacy, review of the literature available regarding mental and physical health as it relates to language deprivation can not be excluded. Analysis of the Rochester Deaf Health Survey-2013 (RDHS-2013) by Hall, Smith, Sutter, DeWindt and Dye in 2018, *concluded that* Deaf adults recalled their experiences related to health-related discussions as children as being severely lacking. (7) This analysis also took into account parental hearing status, with the *result* that DoH adults, solidified the prevalence of the Dinner-table syndrome.(7) While this analysis was unable to determine age of Deafness or childhood communication methods, with the knowledge gathered by the Gallaudet Research Institute in 2010 that less than 8% of Deaf children are exposed to natural and fluent sign language, we can infer that these conclusions are compatible with the information regarding language deprivation and it’s lifelong implications.

Protective Factors and Recommendations

Seemingly, LDS is an epidemic in the Deaf community, which to the onlooker may seem shocking due to the simplicity of the preventative measure. In the literature reviewed throughout this paper there is one common thread, that LDS in Deaf children is due to a lack of accessible

language. American Sign Language is a visually accessible language for Deaf children, however the stigma associated with it and the perspective of “fixing” hearing loss from the medical community turns a simple approach into a lifelong complication. Based on the research, it has been proven that restricting access or dismissing the benefit of American Sign Language (ASL) should never be recommended by educational or medical professions. This is the case even when the goal for Deaf children, with CI’s, is spoken language. Subsequently, early access to ASL has been shown to increase receptive and expressive language within this population. (8) When exposed to ASL, Deaf children learn language and develop in the same way and at the same rate as their hearing peers, including areas of vocabulary, reading, executive functioning, as well behavioral and social norms. (3 8 and 9) It cannot be ignored that a solid foundational language, regardless of modality, is imperative to typical development in children. (5)

Conclusion

Research has shown language deprivation to be a preventable **issue** plaguing Deaf children. The chronic lack or reduced exposure to language within the first five years of life **challenges** almost all Deaf children, children born to hearing parents are **** susceptible to this syndrome. Future research **could** **address** the roadblocks within the medical and EHDI systems as it pertains to providing parents and caregivers with honest statistics and information regarding cochlear implants and the focus on a “speech-only” approach to language development. With the use of an accessible visual language, such as American Sign Language, we can prevent Deaf children from suffering the unnecessary consequences such as exclusion from incidental learning, lack of vocabulary development, delayed executive functioning skills and a life-long search for language equality.

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