Deafness and Autism

There is no current data on the number children with deafness and autism.

**What is Autism and Deafness:**

Autism spectrum disorder (ASD) and deafness both have a major common problem; the factor of communication. Gallaudet Research institute has gathered data for the past five years in the Annual Survey of Deaf and Hard of Hearing Children and Youth. Their data showed that during the 2009-2010 school years the number of children with hearing loss and receiving services for autism was 1 in 59. That is nearly twice the rate of hearing children with autism that is 1 in 110.

Gallaudet Research

Epidemiological studies that investigate the prevalence of autism have been increasing in recent years. In the 1970’s blindness, deafness or auditory deprivation, and ear infections were suggested as possible causes of autism. This came from the belief that children with hearing loss led them to social isolation, emotional distress, physiological disorders and language difficulties. The rate of autism in children with hearing loss is higher than hearing children. Hearing loss in children with autism is ten times higher than the general public and is often overlooked.

**Reasons:**

It is common for children with hearing loss to be at risk for additional disabilities. Gallaudet research approximates that 40% of children with hearing loss also have additional disabilities. (During the 2009-2010 school year) The reason for this is due to Neurological Risk Factors. These can be severe enough to cause deafness in a child and depending on the severity of the neurological condition, also cause other disabilities to occur.

Genetics is another implication in both hearing loss and autism. They both have their own documented genetic influences, so it is not correct to say that deafness causes autism. Research is continuing to be done.

**Intervention:**

The use of intervention in children with autism is very common, however intervention for children who are deaf and have ASD the research is starting to emerge. Educational services for students who are deaf and have additional disabilities are “scarce, problematic and not always appropriate” (Szymanski et al, 2012). Behavioral interventions, educational strategies, and social skills services for children who are deaf or hard of hearing, and have autism are not documented to yet exist.

**Deaf Children with Autism Spectrum Disorders**

- *Applied Behavior Analysis (ABA)*

Applied Behavior Analysis was previously known as Behavior Modification. Most of the time children with AS tend to engage in challenging behaviors. It is crucial that school should respond by conducting Functional Behavioral Assessment (FBA). FBA is a tool that provides a comprehensive assessment and/or overview of what stimuli or prior behavior that may have triggered the student's behavior. The goal of the therapy is to increase the desired behavior engaged by the student with Autism. Therapy has been effective when applied to working with individuals with an autism spectrum disorder in that intervention is focused on setting up the environment, reducing behavioral symptoms, and increasing functional replacement skills.

List of things that applies to ABA and what does not:

<table>
<thead>
<tr>
<th>What is ABA?</th>
<th>What is not ABA?</th>
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<tbody>
<tr>
<td>• Clear representative of student's behavior</td>
<td>• Not a specific method for treating autism or developmental disorders.</td>
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<td>• Use specific information about behavior to choose intervention to improve.</td>
<td>• Does not increase dependence on others.</td>
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<tr>
<td>• Research based philosophy</td>
<td>• Does not apply to all behavior; specifically for behaviors which are socially inappropriate.</td>
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<tr>
<td>• Based on applied and functional goals.</td>
<td>• Does not use for behavior reduction.</td>
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<tr>
<td>• Data-Driven Assessment</td>
<td>• Not based on Aversion or punishment.</td>
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<tr>
<td>• Teach both complex and simple skills</td>
<td>• Not exclusive to the treatment of Autism.</td>
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<td>• Individualized approach to address strength and weakness of student</td>
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<td>• A set of tools with a specific combination of what is determined based on their need.</td>
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Use of ASL in Deaf Autistic Children:

The visual nature of ASL may pose specific challenges to deaf autistic learners that are different from those facing hearing children in learning speech. Children with autism have difficulty understanding other people's thoughts and feelings, and an early step towards reaching this understanding is the recognition that other people's visual perspectives differ from their own. Since sign languages are perceived visually, signers have to mentally take the visual perspective of their conversational partners in order to understand utterances properly.

Aaron Shield, PhD, postdoctoral research scholar at the Research on Autism and Developmental Disorders (ROADD) Center at Boston University has been working on a study that shows how Deaf Autistic children acquire and use ASL. His findings/results so far can be seen in his blog at Autism Speaks and in the Journal of Communication Disorders.


Parental Resources

It is natural for parents to feel alone when it comes to finding the right resources and support for their child. Parents with a child who has deafness and autism are not alone. There is a new resource in the Autism Research Institute's Deaf/ HOH and Blind/ Visually Impaired Network. The mission of the network is to raise awareness of communication and educational needs, also to promote advocacy and research for deafness and autism. The network consists of a diverse group of families, teachers, and professionals that are working to advance educational and social options for their members. They have online discussion groups, e-newsletters and so much more. You can check it out at the: Network Link

Minnesota Hands & Voices

Another website that is a wealth of information and support for families with children with Autism is MATT - Managing Autism Today. MATT is a non-profit organization with the goals of parental support in mind. They cover everything, including your next step after diagnosis, to which hair dressers are comfortable with children with Autism. MATT is truly a wonderful start to any parent!

Educational and Parental Resources for Deaf Students with Autism:

- Classroom Strategies for Students with Deafness and Autism
- Deafness and autistic spectrum disorders (ASD)
- Gallaudet Oddsey- Deaf Autism Issue
- The Puzzle of Autism: The NEA produced a new resource in collaboration with the Autism Society of America, the American Speech-language-Hearing Association, and the National Association of School Psychologists. This article is an informational guide for all education personnel who work with students with Autism Spectrum Disorders. The guide explains common characteristics and suggests effective classroom strategies for improving the communication, sensory, social, and behavioral skills of children who have autism. The Puzzle
- The Autism Map in Education: This presentation provides an overview of connections between research, educational practice and needs so that we can better evaluate program effectiveness. It reviews the NCLB requirement that educational programs be based on scientifically-based research. It outlines the findings of the National Research Council regarding 'best practices' in educating students with autism. It reviews Dr. Richard Simpson's critique of many of the most frequently used methodologies. Last, it points to how we can connect needs and learning style features of a student to methodologies that would adequately address the needs. The primary purpose of the presentation is to show that a variety of methods can incorporate and use the 'best practice' guidelines. As Dr. Richard Simpson notes, it is "increasingly evident that there is no single .. universally accepted method for all students .. with ASD."

Deaf Autism Programs:

- Vermont Center for the Deaf and Hard of Hearing
- Deaf Autism America

VCDHH is a residential program that serves autistic children ages 8-22 who are physically or functionally deaf. This program provides a more intense clinical and educational program than others can provide. VCDHH has a specialized curriculum and master level staff specialists that work to meet every child's needs. They are staffed with a ratio of 1:1 and equipped with a facility especially for the support and soothing of autistic children, which all contribute to creating a safe and supportive learning environment. The program operates 12 months a year, 7 days a week. They serve students who come single days, 5 days or 7 days. Students have 40 days of summer school, one week of camp, and all students have 1:1 assistance in the classroom along with classroom teacher, and 1:1 supervision in the residence halls. Further information is provided at their website: VCDHH

- Deaf Autism America

DAA purpose is to increase mutual support, understanding, learning and collaboration among families and professionals to enhance the quality of life for Deaf and Hard of Hearing children with autism. DAA's goal is to improve education, networking, resources, and advocacy for individuals. This program was started by two women, both mothers of deaf children with autism and it has continued to grow today. They strive to create a large referral and information network, and are interested in recruiting families and professionals to develop a larger inclusive group to continue the goals of the program. If you would like more information or ways you can help support DAA's mission to increase understanding and provide education and support of children with deaf autism you can contact deafautism@hotmail.com

For more information visit Deaf Autism America

- TEACCH

TEACCH is: The Treatment and Education of Autistic and related Communication handicapped Children is a division of the Dept. of Psychiatry of the School of Medicine at the University of North Carolina at Chapel Hill. It provides evaluations, individualized curriculum, social skill training, vocational training, parent counseling and training. An emphasis is placed on individual needs, goals, curriculum and classroom are made for that child to reduce autistic tendencies. The goal is to develop individual plans to help people with autism and their families to live together more effectively by decreasing the autistic like tendencies that limit the quality of life. TEACCH

Video of ABA: