

Autism Practice Brief

VCU Autism Center for Excellence (VCU-ACE)

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Autism Q&A: Autism Spectrum Disorders

Recent reports estimate that, on average, as many as one in every 110 children in the United States has an autism spectrum disorder (ASD). ASD is considered to be a lifelong neurological developmental disability for which there is no known etiology or cure. It affects individuals from all racial, ethnic, and socioeconomic backgrounds. ASD is four times more common in boys, and the first signs usually appear before the age of three.

Question: What is ASD?

ANSWER

Autism spectrum disorders represent a complex developmental disability that is the result of a neurological disorder that affects the normal functioning of the brain. ASD shares many of the same characteristics and impacts an individual's ability to communicate, understand language, play, and relate to others. The term autism spectrum disorder is used, because the symptoms can occur in any combination and can range from very mild to quite severe.

Question: What are the primary characteristics of autism spectrum disorders?

ANSWER

Every individual is different. However, there are primary characteristics that are associated with ASD. The primary characteristics are 1) poorly developed social skills, 2) difficulty with expressive and receptive communication, and 3) the presence of restrictive and repetitive behaviors.

Young children who have poorly developed social skills may have inappropriate play skills. They may not be able to use objects including toys and games in an age-appropriate or functional manner, or the ability to do so is delayed. Youth and teens may not understand social rules such as knowing which jokes to tell a peer and which to tell an adult. Often, the individual with autism may display difficulties in relating to people including establishing and maintaining reciprocal relationships. The person with ASD may give the impression that he or she wants to be alone.

Some individuals with ASD may develop typical speech, while others will have difficulty with expressive and/or receptive communication. For instance, a person with ASD may use single words or short phrases to communicate; another may be nonverbal. Language, if present, may have limited function or content. For example, the person may only use words to ask for a desired item rather than speak in sentences.

Additionally, language may sound different, and the person might speak in a loud voice or with a robotic quality.

An individual with ASD may display unusual behaviors or stereotypical body movements. This could present as flapping hands, jumping, or lining up blocks or spinning wheels on a car rather than playing with the item as intended. The person might also have difficulty transitioning from one activity to another or show distress over changes in the environment.

Question: What are the secondary characteristics of autism spectrum disorders?

ANSWER

Individuals with ASD may also demonstrate secondary characteristics. These are characteristics that are common to ASD but do not need to be present for the person to have a diagnosis of ASD. Remember that no two individuals with an ASD are the same! Each person has a mixture of characteristics. Each has a distinct personality, strengths, and interests that make him or her unique! A few of the secondary characteristics are as follows.

- **An unusual response to sensory stimuli.** A person with ASD might be overly or under sensitive to sounds, touch, smells, tastes, or sights.
- **Uneven skill development or "splinter skills."** An individual may develop some skills normally or have advanced skills for his or her age; while other skills may be delayed.
- **Difficulties with changes in surroundings.** Many individuals with ASD like to have things in the same place and become upset when their environments change.
- **Strength with visual processing.** A person with ASD may find it easier to process information presented in a visual format, thus compensating for deficits in auditory processing.

Question: Are the terms Asperger's Syndrome, and pervasive developmental disorder -- not otherwise specified (PDD-NOS) the same?

ANSWER

Autism spectrum disorders include autism and related disorders. There are five primary diagnostic terms that fall under this heading: autism, Asperger's Syndrome, PDD-NOS, Rett's Syndrome, and Childhood Disintegrative Disorder. While each shares common characteristics, there are slight differences between them.

Autism is the term that has been recognized for the longest time. To have a diagnosis of autism, the individual must have impairments in each of the three primary characteristics previously described. This includes social deficits, communication difficulties, and repetitive or restricted behaviors.

Asperger's Syndrome is a form of ASD. The person with Asperger's Syndrome demonstrates severe challenges with social functioning and displays repetitive interests or behaviors. A diagnosis of Asperger's Syndrome typically means that the person has strong language skills but has challenges with the social elements of communication such as carrying on a conversation or understanding figurative language.

Pervasive Developmental Disability – Not Otherwise Specified (PDD-NOS) is defined by deficits in social interaction with marked challenges in communication or the presence of restrictive and repetitive behaviors. Characteristics are similar to those in autism but may not be as severe resulting in the person not meeting the full criteria for autism.

Rett's Syndrome and Child Disintegrative Disorder are both very rare. Severe forms of ASD have particular patterns of onset, and, in the case of Rett's Syndrome, a specific genetic basis.

Question: Why are more and more people being diagnosed with ASD?

ANSWER

The number of individuals with an ASD has dramatically increased in Virginia and across the nation over the last 20 years. This increase can be attributed to a number of factors. First, there now is increased awareness and better diagnostic tools that have resulted in more diagnoses. Children are being diagnosed with an ASD who would have been labeled with a different diagnosis in the past.

Second, there have been changes in the diagnostic criteria. Autistic disorder or autism was initially the only diagnosis possible. Over the past 30 years, the criteria for receiving a diagnosis broadened resulting in the addition of Asperger's syndrome, Rett's Syndrome, childhood disintegrative disorder, and PDD-NOS. Despite solid reasons for an increase in ASD, there may be other unknown factors as well contributing to the rise.

Question: What causes ASD?

ANSWER

It is now widely accepted that ASD is caused by differences in the shape and structure of the brain. At this time, there is no known etiology or reason for the neurological differences. Many causes have been proposed, but there has not been one main cause identified. Researchers are investigating a number of theories including the impact of heredity and genetics. Many studies support a genetic basis to the disorder. While no one gene has been identified as causing ASD, researchers are searching for irregular segments of genetic code in individuals with ASD.

Question: Can a person have ASD and another disability?

ANSWER

Many individuals with an ASD are affected by other disabilities. Some individuals might have, for example, a diagnosis of Down syndrome or Visual Impairment in addition to having a diagnosis of an ASD. And, some may also have other medical or psychiatric diagnoses. Some of the most frequently reported disabilities are epilepsy, anxiety, depression, attention deficit, and obsessive compulsive disorder.

Summary

Autism spectrum disorders include autism and related disorders. They are usually detected during early childhood and are life long developmental disabilities. They are characterized by impairments in social interaction, deficits in verbal and nonverbal communication, restricted, repetitive behaviors and unusual responses to sensory stimuli. It should be remembered that individuals with ASD vary widely in their abilities, interests and strengths.

While teachers need to understand a student's disabilities, they must focus on how to promote skill development. This includes supporting individuals in integrated community settings. Additional Q and A Fact Sheets will provide information on how to support individuals with ASD in the classroom and the community. Please visit the ACE website for these resources.

References

Data and Statistics (n.d.). Retrieved online December 8, 2010. Centers for Disease Control and Prevention Web site: [<http://www.cdc.gov/ncbddd/autism/data.html>].

For additional information, the following resources are recommended.

American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text rev.). Washington, DC: Author.

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