

## Understanding the Characteristics and Challenges of Autism Spectrum Disorder (ASD)

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### What is Autism Spectrum Disorder?

Doctors and psychologists define Autism Spectrum Disorder (ASD) as having a marked presence of three distinct disabilities: impairment in social interaction, challenges with communication, and delays in language and cognitive skills. The differences in these areas are usually noticeable prior to three years of age. Autism Spectrum Disorder has many classifications and is the umbrella term that defines a very wide range of behaviors and abilities; therefore, the title of “spectrum” is most appropriate.



Diagnosis of ASD involves observing the individual’s communication, behavior, and developmental levels. After observing noticeable delays in developing language skills, a formal diagnosis usually occurs around the ages of 2 or 3. In older children, warning signs include unresponsiveness to his/her name, inability to play with toys, poor eye contact, odd movement patterns, not smiling, a tendency to line up toys or other items, or failure to follow any directions at all.

Children with ASDs develop at different rates in different areas of their growth due to some abnormality in the brain. Even though autistic children experience delays in language, their motor skills may be on par with other children their age. Complex activities like putting together a jigsaw puzzle or solving mathematical problems may come easily, while other very simple tasks like making friends or talking may be difficult.

### Symptoms of Autism

No two individuals exhibit the same symptoms of this disorder. Below are some of the most obvious characteristics of individuals with autism.

**Savant skills-** These skills fall into the higher functioning end of the autism spectrum. Individuals with savant skills may have special talents in music and art, mathematical aptitude, or even the ability to memorize large amounts of information, yet struggle with social interaction, changes in routine, and communication.

**Impairment of one or more of the senses-** Autism makes it difficult to process sensory information properly. Normal stimulation such as the sound of a car engine, a baby crying, or the sound of a running clothes dryer may be unbearable for some individuals with autism.

**Inability to speak or echolalia-** About 40 percent of children with autism do not speak at all, while others may have echolalia (repeating something said to them or that they hear on TV or radio over and over and over). Their voices may also sound flat, and they may have no control over how loudly or softly they speak.

**Repeated behaviors and routines-** Individuals with autism insist on a “sameness” in their routines. For example, if a child brushes his/her teeth before dressing for bed, asking to reverse this routine can be quite upsetting. Hand flapping, biting, self injury, poor sleeping/eating habits, attention deficit, and insensitivity to pain are also typical with autism.

## Understanding Diagnostic Terms of ASD

It is helpful to understand the distinctions among the more familiar ASDs. Knowing their similarities and differences will give you an idea about the unique needs of each group. Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS), Asperger's Syndrome, and autistic disorder are all under the umbrella of ASD even though their symptoms are unique.

**Pervasive developmental disorder-not otherwise specified (PDD-NOS)** refers to "mild autism" or "some autistic characteristics." This term refers to children with significant difficulties in the areas of social interaction, verbal and nonverbal communication and play, but too social to be fully autistic. Some specialists wish to eliminate this term, stating that it is a label given by psychologists who cannot determine the afflictions that these children are experiencing.



**Asperger's Syndrome-** A large number of children receive a diagnosis of Asperger's between the ages of 5 and 9, which is much later than what we recognize with autism. Asperger's presents severe and sustained impairment in social interaction, development of restricted and repetitive patterns of behavior, interests, and activities. In contrast to autism, there are no clinically significant delays in language, cognition, self-help skills, or adaptive behaviors, other than with their social interaction. A child with Asperger's syndrome may not respond appropriately to or even acknowledge a statement regarding "feelings" in a conversation as well.

Asperger's may not cause clinically significant delays in acquiring new information, but there are still differences in learning. For example, Asperger's children may be hyperlexic—identifying words and reading at a young age with little or no comprehension of text that is read. In addition, children with Asperger's demonstrate above average rote memory skills and strengths in vocabulary but cannot use terminology correctly.

**Autistic disorder (autism)** is a developmental disability significantly affecting verbal and nonverbal communication and social interaction. These disabilities may be evident before age three. Autism adversely affects educational performance. Children with this diagnosis engage in repetitive activities and stereotyped movements, resist environmental change or a change in their daily routines, and have unusual responses to sensory experiences.

Autism is three to four times more likely to affect males than females and knows no racial, ethnic, or social boundaries. Family lifestyle, income, and educational levels do not affect the occurrence of autism.

If you suspect that your child may be exhibiting any of the above signs at or before the age of three, you should contact your pediatrician. Your pediatrician may refer you to a team of developmental specialists (psychologists, speech-language pathologists, occupational therapists, physical therapists, special instructors, and/or social workers) who will work together to identify any signs or symptoms of ASD. Following a diagnosis from the developmental team, the team will create an intervention program specifically for your child's needs. For more information on Autism Spectrum Disorders, please visit the following web sites.

### Resources

Center for the Study of Autism – [www.autism.org](http://www.autism.org)

The Mayo Clinic – [www.mayoclinic.com](http://www.mayoclinic.com)

Autism Society of America – [www.autism-society.org](http://www.autism-society.org)

American Speech and Hearing Association – [www.asha.org](http://www.asha.org)

Merrell, Heather– Autism and Education, Educational Dealer, June 2005, pages 34-37.

American Psychiatric Association, (1994), Diagnostic and statistical manual of mental disorders (4th ed.), Washington, DC