

Pervasive Developmental Disorders

Gaining much public exposure through the 1980s movie, *Rainman*, Autistic Disorder is now a ubiquitous topic in both academic journals and in the popular news. Despite increasing exposure to information and lifestyle stories relating to Autistic Disorder and other Pervasive Developmental Disorders, these labels continue to garner confusion among the general public. This article will attempt to define, at a broad level, a group of related disorders known as Pervasive Developmental Disorders. The information is based on lectures by Emily Rubin, MS, CCC-SLP that incorporate information from the [Handbook of Autism and Pervasive Developmental Disorders](#), 2nd Ed. (D. Cohen & F. Volkmar, 1997).

Pervasive Developmental Disorder (PDD) is actually an umbrella term for the following disorder subtypes: Autistic Disorder, PDD-Not Otherwise Specified (PDD-NOS), Rett's Syndrome, Childhood Disintegrative Disorder (CDD), and Asperger's Syndrome. Common to all of these subtypes are impairment in social interaction, impairment in verbal and nonverbal communication, and exhibition of a restricted and repetitive set of behaviors. The disorders differ in terms of etiology, age of onset/diagnosis, intellectual functioning, neuropsychological profile, and prognosis. General characteristics of each subtype will be briefly discussed based on the *Diagnostic and Statistical Manual of Mental Disorders, 4th Ed.* (American Psychiatric Association, 1994).

In Autistic Disorder, one sees difficulties with social interaction and communication as well as stereotypic patterns of behavior. Social interaction is characterized by impaired nonverbal communicative behaviors (e.g. gestures), impaired ability to share attention or direct another's attention to an object or event of joint interest, and difficulties forming friendships with peers. Communication impairments include delays in intentional verbal and nonverbal communication; difficulty initiating and maintaining a conversation; scripted, rote, or repetitious verbal language; and, limited imaginary play. Stereotypic patterns of behavior such as the following exist: atypical preoccupations and/or behavior patterns; preoccupation with sameness and routine; and, stereotypic motor mannerisms (e.g. flapping hands). These characteristics may present with varying degrees of severity among those with autistic disorder.

The diagnosis of PDD-NOS often causes great confusion. This subtype, unlike the others, is not a uniform clinical entity. This diagnosis can characterize a wide variety of people with vastly different ranges of functioning. People with PDD-NOS demonstrate significant difficulty developing reciprocal social interaction, significant difficulty communicating--both verbally and nonverbally, and also exhibit stereotypic behaviors. The criteria, however, are not met for a specific subtype of PDD. Delays in social development are often noted first in this group of people rather than a glaring language delay.

Rett's Syndrome, a PDD typically seen in females, is severe due to the progressive nature of the disorder. There is a period of stagnation and deterioration of cognitive and daily living skills starting around 5 to 8 months of age. At that time, head growth decelerates, purposeful hand skills diminish and stereotypic hand movements emerge, and coordination of trunk and gait movements diminish. The intellectual impairment, language and cognition, is more severe than that seen in severe cases of autism.

Childhood Disintegrative Disorder (CDD) is characterized by normal development until at least age two at which point a regression of skills begins. The child then develops characteristics of autistic disorder. A loss of skills occurs in at least two of the following competencies: social interactions, communicative functioning, play skills, motor skills, and bowel/bladder control. Prognosis for CDD is sometimes worse than that of autistic disorder.

Asperger's Syndrome is characterized by seemingly normal language and cognitive development; however, non-verbal learning disabilities generally occur in this population. This disability involves impaired expressive and receptive nonverbal communication, which includes but is not limited to impaired use and understanding of facial expressions, gestures, and intonation which can affect a person's ability to decipher and participate effectively in social situations. The person with Asperger's Syndrome not only has difficulties deciphering nonverbal cues but also has related difficulties with perspective-taking and empathizing. This is related to the tendency to intellectualize emotions. Children with Asperger's have often been described as "little professors" due to the verbosity and pedantic style of speech characteristic of the disorder. This label also stems from the development of a narrow and specific field of interest that tends to dominate the person's conversation due to extensive knowledge in the area.

This circumscribed interest is one of the characteristics claiming to distinguish Asperger's Syndrome and Autistic Disorder. Another factor possibly differentiating the disorders is the neuropsychological profile. Those with Asperger's seem to show a significantly higher Verbal IQ than Performance IQ; those with High Functioning Autism seem to show a slightly higher Performance IQ than Verbal IQ. Some have also made the following generalization: those with Asperger's Syndrome are "people-oriented" but lack the ability to attend to and process the social information necessary for being successful with people; those with Autism are more "object-oriented." Given these differences, teaching strategies would differ for these two populations with one style being more verbally mediated and the other depending heavily on visual supports. Still, many experts in the field claim the only difference between the two disorders to be the label. Fundamental differences over the diagnostic criteria for these disorders have made it difficult for research studies to use consistent and commonly accepted subject pools; therefore, the research findings are often the subject of debate.

This broad description of Pervasive Developmental Disorders is designed only to provide basic information regarding the subtypes of which it is comprised. Medical professionals, psychologists, and speech-language pathologists are generally good sources for information on PDD. Please refer to the links on this website and the list of the suggested readings to learn more about PDD and its subtypes.

Center for Speech and Language Pathology