



RESEARCH BRIEF

Pervasive Developmental Disorders in Young Children

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Pervasive developmental disorder

(PDD) refers to a spectrum of disorders characterized by impairments in social interaction, verbal and nonverbal communication, and a range of behaviors and interests. According to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) the subtypes of PDD include: Autism, Asperger's disorder, Childhood Disintegrative Disorder, Rett's disorder, and Pervasive Developmental Disorder-not otherwise specified (PDD-NOS). The exact cause of PDD is not known, but research indicates that it is biological in nature, possibly due to genetic factors, structural abnormalities in the brain, and/or various pre-, peri-, or postnatal factors.

A majority of the information concerning characteristics of PDD centers on autism. Children with autism vary in severity and display a wide range of cognitive, sensorimotor, social, and communicative characteristics.

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Cognitive Characteristics

The majority of children with autism have an IQ less than 70, indicating cognitive functioning in the mentally retarded range. Their performance IQ tends to be higher than their verbal IQ. Children with autism also have difficulty shifting attention from one spatial location to another and have poor executive planning skills, which are needed to perform complex behaviors. In addition, children with autism have difficulty understanding the mental state of others and pretending that an object is something other than what it really is.

Sensorimotor Characteristics

There is limited information concerning sensorimotor behaviors in children with autism. Children with autism often display inappropriate use of objects or unusual play, unusual motor behaviors and unusual postures, attachment to unusual objects and unusual visual interests,

inconsistent responses to sound, insensitivity to pain, heat, or cold, and hypersensitivity to taste.

Social Characteristics

Children with autism typically demonstrate the following social behaviors: poor imitation, abnormal or absent eye contact, deficits in joint attention (lack of pointing and/or alternating gaze between an object and a partner), decreased responses to others, preference for being alone and fewer interactions with others, little interest in social games, little interest in being held as an infant, and few facial expressions.

Communicative Characteristics

Communication of children with autism is extremely variable, ranging from nonverbal to verbal with vocabulary and syntactic skills within normal limits for age. Overall, children with autism develop speech and language at a slower rate than typically developing children. Specifically, most children with autism tend to be delayed in the development and use of social language. Children with autism may also display echolalia (repeating words or phrases they hear), which can be either immediate or delayed. Other communicative characteristics may include lack of intentional communication, better nonverbal than verbal requesting skills, and monotone speech.

There are many intervention strategies that have been suggested for children with autism, which include educational and behavioral approaches, medications to reduce activity, anxiety, and/or agitation, and special diets. Early Intervention is key for children with autism. Early Intervention programs need to be intensive, focusing on family involvement. Goals of these programs often include: 1) encouraging the child's attention to elements in the environment necessary for learning, imitation, language use and comprehension, appropriate play with toys, and social interaction with others; 2) providing a supportive teaching environment; and 3) providing predictability and routine. Intervention for children with autism who have minimal or no verbal skills centers on improving social awareness and interaction with others. For these children, the focus may be on teaching them to obtain their wants and needs through an object or picture exchange system. Sign language and/or augmentative communication, such as a programmable device, can also be beneficial modes of communication. Communication intervention with those children that have verbal skills focuses on structured approaches to teach two-word phrases, strategies to encourage spontaneous instead of echolalic speech, and social stories to teach appropriate behavior.

