On Campus Transition

The On Campus Transition is an educational program designed for students who have an intellectual or developmental disability. Some of the students have one diagnosis, others have several. This information package is designed to give an insight to some of the conditions and disorders that students may have.

The term Pervasive Development Disorder - PDD (sometimes referred to as autism spectrum disorder) covers five conditions; autism, Asperger syndrome, childhood disintegrative disorder, Rett’s syndrome and pervasive development disorder - not otherwise specified. These disorders are typically characterized by social deficits, communication difficulties, stereotyped or repetitive behaviors and interests, and/or cognitive delays. Although these diagnoses share some common features, individuals with these disorders are thought to be "on the spectrum" because of differences in severity across the domains. It is important to remember that these conditions are complex and not every individual with a diagnosis will display the same signs and symptoms.

Autism

Autism is a disorder of neural development characterized by impaired social interaction and communication and by restricted and repetitive behavior. These signs can be seen before a child is approximately three years old. Autism affects information processing in the brain by altering how nerve cells and their synapses connect and organize. However, exactly how this occurs is not well understood.

Those with autism may have mild, moderate or severe characteristics of the disorder. Several problems with communication may become evident. These may include the inability to start or maintain a social conversation and communicates with gestures as opposed to words. They may be slow in developing language skill, if any at all. They may not understand the concept of self fully and find it hard to find the words to describe this. Memorizing certain passages and phrases are common and they often have some degree of conversation with themselves.

Social interaction also proves difficult for those with autism. They have a tendency not to make friends as they find it difficult to approach others and make conversations. They do not engage in interactive activities and often appear withdrawn. They may not respond to skills (such as smiling) and will avoid eye contact. In more severe cases they may treat others as if they are objects rather than people. This is because they do not have the social skills required to interact. Finally, they show a lack of empathy and often spend time on their own and avoid company.

Common behavior patterns for someone with autism include intense tantrums over change of routine and the possibility of the unfamiliar. They also have a short attention span, often with narrow interests and the tendency to like one subject matter. They may have a specific interest and become very talented in this one area (e.g. music). They may have aggressive tendencies and have a strong sense of routine.
It is suggested that autism has a strong genetic basis, although the genetics of autism are complex and it is unclear whether pervasive developmental disorders are explained more by rare mutations, or by rare combinations of common genetic variants. In rare cases, autism is strongly associated with agents that cause birth defects. Controversies surround other proposed environmental causes, such as heavy metals, pesticides or childhood vaccines. However, research the vaccine hypothesis has been found to have insufficient evidence to show any link to autism.

The prevalence of autism is estimated at 1-2 in every 1000 children. In addition to this, the Center for Disease Control and Prevention, is approximately 9 in every 1000 children in the United States are diagnosed with pervasive developmental disorder. The number of people diagnosed with autism has increased dramatically since the 1980s, partly due to changes in diagnostic practice. Criteria for diagnosis of autism from the DSM-IV can be located at the back of this information package.

**Asperger Syndrome**

Asperger syndrome can be distinguished from autism as there is no delay in early language development. Additionally, individuals with Asperger syndrome do not have significant cognitive delays as seen in some of the other conditions on the spectrum. An individual with Asperger syndrome typically demonstrate social awkwardness along with inappropriateness and an obsessive interest in a single topic or activity. Other symptoms include repetitive routines or rituals, peculiarities in speech and language, problems with non-verbal communication, and clumsy or uncoordinated motor movements. Due to these difficulties, individuals with Asperger syndrome often have trouble interacting with others. In general Asperger syndrome is considered to be at the milder end of the spectrum.

The exact cause for Asperger's is unknown, although research supports the likelihood of a genetic basis. Brain imaging techniques have not identified a clear common pathology. There is no single treatment, and the effectiveness of particular interventions depends much upon the individual. Intervention is aimed at improving symptoms and function. The mainstay of management is behavioral therapy, focusing on specific deficits to address poor communication skills, obsessive or repetitive routines, and physical clumsiness. Most children improve as they mature to adulthood, but social and communication difficulties may persist. Some researchers and people with Asperger's have advocated a shift in attitudes toward the view that it is a difference, rather than a disability that must be treated or cured.

**Childhood disintegrative disorder**

Unlike autism and Asperger syndrome, childhood disintegrative disorder is characterized by significant regression or loss of functioning after at least two years of typical development. A child who is affected with this condition may lose communication skills, nonverbal behaviors, motor functioning, and/or skills that have already been learned. Some other symptoms include: lose of bowel and bladder control and problems forming relationships with peers and other family member.
Rett syndrome

Rett syndrome appears only in females and is characterized by multiple deficits after a period of normal functioning after birth. At onset, Rett's Disorder is characterized by deceleration of head growth, loss of purposeful hand skills, loss of social engagement and language, and poor physical coordination.

Pervasive Developmental Disorder – Not Otherwise Specified

This category is used to refer to those individuals who have significant problems with communication and difficulty interacting with others, but are too social to be considered autistic.

Pervasive Developmental Disorder - Not Otherwise Specified (PDD-NOS) is considered "sub threshold autism" and "atypical autism" because it is often characterized by milder symptoms of autism or symptoms in only one area (such as social difficulties). - Those with PDD-NOS may demonstrate pervasive deficits in the development of reciprocal social interaction or stereotyped behaviors, but do not meet the criteria for a specific pervasive developmental disorder or other psychological disorders (such as avoidant personality disorder).

Social function skills may not develop as normal. Once a child with PDD-NOS enters school, they will often be very eager to interact with classmates, but may act socially different from peers and are unable to make genuine connections. As they age, the closest connections they make are typically with their parents. Those with PDD-NOS have difficulty reading facial expressions and relating to feelings of others. They may not know how to respond when someone is laughing or crying. Literal thinking is also characteristic of PDD-NOS. They will most likely have difficulty understanding figurative speech and sarcasm.

Inhibited communication skills are a sign of PDD-NOS that begins immediately after birth. Infants with PDD-NOS do not babble; as the child grows they do not speak at the age at which speech develops in typical children. Once verbal communication begins, vocabulary is often limited. Some characteristics of language-based patterns are repetitive or rigid language, narrow interests, uneven language development, and poor nonverbal communication.

Some other conditions and disabilities that are not covered by Pervasive Developmental Disorder are:
**Dandy Walker Syndrome**

Dandy-Walker Syndrome is a congenital brain malformation involving the cerebellum (an area at the back of the brain that controls movement) and the fluid-filled spaces around it. The key features of this syndrome are an enlargement of the fourth ventricle (a small channel that allows fluid to flow freely between the upper and lower areas of the brain and spinal cord), a partial or complete absence of the area of the brain between the two cerebellar hemispheres (cerebellar vermis), and cyst formation near the lowest part of the skull. An increase in the size of the fluid spaces surrounding the brain as well as an increase in pressure may also be present.

The syndrome can appear dramatically or develop unnoticed. Symptoms, which often occur in early infancy, include slow motor development and progressive enlargement of the skull. In older children, symptoms of increased intracranial pressure such as irritability and vomiting, and signs of cerebellar dysfunction such as unsteadiness, lack of muscle coordination, or jerky movements of the eyes may occur. Other symptoms include increased head circumference, bulging at the back of the skull, problems with the nerves that control the eyes, face and neck, and abnormal breathing patterns.

Dandy-Walker Syndrome is frequently associated with disorders of other areas of the central nervous system, including absence of the area made up of nerve fibers connecting the two cerebral hemispheres (corpus callosum) and malformations of the heart, face, limbs, fingers and toes.

The effect of Dandy-Walker Syndrome on intellectual development is variable, with some children having normal cognition and others never achieving normal intellectual development even when the excess fluid buildup is treated early and correctly. Longevity depends on the severity of the syndrome and associated malformations. The presence of multiple congenital defects may shorten life span.
Williams Syndrome

Williams syndrome is a rare genetic disorder that can lead to problems with development. Its occurrence is approximately 1:8000 births and is caused by missing genes. Parents may not have any family history of the condition. However, a person with Williams syndrome has a 50% chance of passing the disorder on to each of his or her children.

One of the missing genes is the gene that produces elastin, a protein that allows blood vessels and other tissues in the body to stretch. It is likely that having only one copy of this gene results in the narrowing of blood vessels seen in this condition.

There are several signs and symptoms of Williams syndrome are; initial delayed speech that later turns into a strong speaking ability along with strong hearing, developmental delay, becoming easily distracted, intellectual disability, being overly friendly, fearing loud noises and physical contact. Some physical signs may include indented little finger, short in size, sunken chest, prominent lips with open mouth, tooth defects and unusual facial features.

Physiological changes may include; narrowing of the blood vessels, farsightedness, high blood calcium levels, high blood pressure, scoliosis, and joint problems.
Obsessive-Compulsive Disorder

Obsessive-compulsive disorder (OCD) is an anxiety disorder in which people have unwanted and repeated thoughts, feelings, ideas, sensations (obsessions), or behaviors that make them feel driven to do something (compulsions).

Often the person carries out the behaviors to get rid of the obsessive thoughts, but this only provides temporary relief. Not performing the obsessive rituals can cause great anxiety.

OCD is more common than was once thought. Most people who develop it show symptoms by age 30. There are several theories about the cause of OCD, but none have been confirmed. Some reports have linked OCD to head injury and infections. Several studies have shown that there are brain abnormalities in patients with OCD, but more research is needed.

About 20% of people with OCD have tics, which suggest the condition may be related to Tourette syndrome. However, this link is not clear.

There are many types of obsessions and compulsions. One example is an excessive fear of germs and the compulsion to repeatedly wash the hands to ward off infection. The person usually recognizes that the behavior is excessive or unreasonable.

The individual’s own description of their behavior can help diagnose the disorder. A physical exam can rule out physical causes and a psychiatric evaluation can rule out other mental disorders. Questionnaires, such as the Yale-Brown Obsessive Compulsive Scale (YBOCS), can help diagnose OCD and track the progress of treatment.

Medication is commonly used to manage the compulsions and obsessive thoughts. In addition to medications cognitive behavioral therapy (CBT) can be used and has been shown to be the most effective type of psychotherapy for this disorder. The patient is exposed many times to a situation that triggers the obsessive thoughts, and learns gradually to tolerate the anxiety and resist the urge to perform the compulsion. Medication and CBT together are considered to be better than either treatment alone at reducing symptoms.

Psychotherapy can also be used to provide effective ways of reducing stress reduce anxiety and resolve inner conflicts.
Attention Deficit Hyperactivity Disorder (ADHD)

ADHD is a problem with inattentiveness, over-activity, impulsivity or a combination of these symptoms. For these problems to be diagnosed as ADHD, they must be out of the normal range for a child’s age and development.

ADHD is the most commonly diagnosed behavioral disorder of childhood. It affects about 3 - 5% of school aged children. ADHD is diagnosed much more often in boys than in girls. ADHD may run in families, but it is not clear exactly what causes it. Whatever the cause may be, it seems to be set in motion early in life as the brain is developing. Imaging studies suggest that the brains of children with ADHD are different from those of other children.

Depression, lack of sleep, learning disabilities, tic disorders, and behavior problems may be confused with, or appear with, ADHD. Every child suspected of having ADHD should be carefully examined by a doctor to rule out possible other conditions or reasons for the behavior.

Most children with ADHD also have at least one other developmental or behavioral problem. They may also have a psychiatric problem, such as depression or bipolar disorder.

The symptoms of ADHD fall into three groups, lack of attention (inattentive), hyperactivity and impulsive behavior. Some children with ADHD primarily have the inattentive type. Others may have a combination of types. Those with the inattentive type are less disruptive and are more likely to not be diagnosed with ADHD.

Symptoms for inattentive ADHD may include failure to give close attention to detail, has difficulty in keeping focused, does not listen when spoken to directly, does not follow instruction, has difficulty in organizing tasks and activities, avoids and dislikes tasks that require concentration, looses accessories, easily distracted and forgetful.

Hyperactivity ADHD symptoms may include fidgeting of hands and inability to remain in seat, has difficulty in carrying out independent tasks, has difficulty to stay in one place and pay attention and talking excessively.

Impulsivity symptoms of ADHD may include shouting out answers to questions before the question has been completed, has difficulty awaiting their turn and interrupts and intrudes on others.

Too often, difficult children are incorrectly labeled with ADHD. On the other hand, many children who do have ADHD remain undiagnosed. In either case, related learning disabilities or mood problems are often missed. The American Academy of Pediatrics (AAP) has issued guidelines to bring more clarity to this issue.

The diagnosis is based on very specific symptoms, which must be present in more than one setting.

- Children should have at least 6 attention symptoms or 6 hyperactivity/impulsivity symptoms, with some symptoms present before age 7.
- The symptoms must be present for at least 6 months, seen in two or more settings, and not caused by another problem.
The symptoms must be severe enough to cause significant difficulties in many settings, including home, school, and in relationships with peers.

Medication may be used to treat cases of ADHD. Along with medication, behavioral therapy may also be used. Talk therapy for both the child and family can help everyone understand and gain control of the stressful feelings related to ADHD. Parents should use a system of rewards and consequences to help guide their child's behavior. It is important to learn to handle disruptive behaviors. Support groups can help you connect with others who have similar problems.
Diagnostic Criteria for 299.00 Autistic Disorder

The following is from Diagnostic and Statistical Manual of Mental Disorders: DSM IV

(I) A total of six (or more) items from (A), (B), and (C), with at least two from (A), and one each from (B) and (C)

(A) qualitative impairment in social interaction, as manifested by at least two of the following:

1. Marked impairments in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body posture, and gestures to regulate social interaction
2. Failure to develop peer relationships appropriate to developmental level
3. A lack of spontaneous seeking to share enjoyment, interests, or achievements with other people, (e.g., by a lack of showing, bringing, or pointing out objects of interest to other people)
4. Lack of social or emotional reciprocity (note: in the description, it gives the following as examples: not actively participating in simple social play or games, preferring solitary activities, or involving others in activities only as tools or "mechanical" aids)

(B) qualitative impairments in communication as manifested by at least one of the following:

1. Delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)
2. In individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others
3. Stereotyped and repetitive use of language or idiosyncratic language
4. Lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level

(C) restricted repetitive and stereotyped patterns of behavior, interests and activities, as manifested by at least two of the following:

1. Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
2. Apparently inflexible adherence to specific, non-functional routines or rituals
3. Stereotyped and repetitive motor mannerisms (e.g. hand or finger flapping or twisting, or complex whole-body movements)
4. Persistent preoccupation with parts of objects
(II) Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years:

(A) social interaction
(B) language as used in social communication
(C) symbolic or imaginative play

(III) The disturbance is not better accounted for by Rett's Disorder or Childhood Disintegrative Disorder
Further reading

Below are some interesting websites that you may find of interest for further reading.


Centre for disease control and prevention - [http://www.cdc.gov/](http://www.cdc.gov/)

World health organization - [http://www.who.int/en/](http://www.who.int/en/)


International ODC - [http://www.ocfoundation.org/whatisocd.aspx](http://www.ocfoundation.org/whatisocd.aspx)

ADD Association - [http://www.add.org/](http://www.add.org/)


Did you know?

The following famous people and celebrities also suffer from the disabilities that our students have.

- **Justin Timberlake**  Singer  ADHD & OCD
- **Jamie Oliver**  Celebrity Chef  ADHD
- **Michael Phelps**  Athlete  ADHD
- **Jim Carrey**  Actor  ADHD
- **Sir Richard Branson**  Entrepreneur  ADHD
- **Daryl Hannah**  Actress  Borderline autism
- **Matt Savage**  Musician  PPD
- **Satoshi Tajiri**  Creator of Pokenon  Aspergers syndrome
- **Daniel Tammet**  Writer / Linguist / Educator  Autism
- **Donald Trump**  Entrepreneur  OCD
- **David Beckham**  Soccer Player  OCD
- **Temple Grandin**  Author / professor / Animal rights activist  Higher function autism