

## Autism Spectrum Disorder (ASD)

Definition	Autism is a brain disorder that typically affects a person's ability to communicate, form relationships with others, and respond appropriately to the environment.  -Autism Resource Centre, Singapore (2007)
Subtypes	<ul style="list-style-type: none"> <li>• Autistic Disorder</li> <li>• Asperger's Syndrome</li> <li>• Childhood Disintegrative Disorder</li> <li>• Rett's Disorder</li> <li>• PDD – Not Otherwise Specified (PDD-NOS) (PDD - Pervasive Developmental Disorder)</li> </ul>
General Characteristics	<ul style="list-style-type: none"> <li>• Impairment in language and communication skills</li> <li>• Lack of imagination</li> <li>• Repetitive or restricted patterns of thought and behaviour</li> <li>• Unlike children with autism, children with Asperger's Syndrome retain their early language skills.</li> <li>• Emotionally immature and has difficulty interacting with others.</li> <li>• Problems with non-verbal communication</li> <li>• Clumsiness and uncoordinated motor movements. (Zee, P.)</li> </ul>
Prevalence	Once considered to be a very rare condition, affecting only 3-4 individuals in every 10,000, recent studies have suggested much higher prevalence rates. If people within the wider 'autistic spectrum' are included the prevalence rate maybe as high as 91 per 10,000 (Wing, 1996). Retrieved on 27 August, 2007 from Autism Association (Singapore) via <a href="http://web.singnet.com.sg/~autism/autism.htm">http://web.singnet.com.sg/~autism/autism.htm</a>
Diagnostic criteria	There is no medical test for diagnosing autism. However, diagnosis must be based on observation of the individual's communication, behaviour and the developmental levels. (Autism Society of America) A comprehensive evaluation involves a team of psychologist, neurologist, psychiatrist, speech therapist to conduct a thorough neurological assessment and cognitive and language testing. Retrieved on 27 August, 2007 from <a href="http://www.ninds.nih.gov/disorders/autism/detail_autism.htm">http://www.ninds.nih.gov/disorders/autism/detail_autism.htm</a>

### Asperger's Syndrome

Description of condition	<p>A milder form of autism that typically affects a person's ability to communicate, form relationships with others, and respond appropriately to the environment. Sometimes known as "high – functioning autism". - Autism Society of America</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">Asperger's Syndrome</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">Autistic Disorder</div> </div> <p style="text-align: center;"> <span style="margin-right: 100px;">Mild autism</span> <span>Severe autism</span> </p>
Characteristics exhibited by students with Asperger's Syndrome	<ul style="list-style-type: none"> <li>• No clinically significant general delay in language.</li> <li>• No clinically significant delay in cognitive development or in age-appropriate self-help skills.</li> <li>• Good rote memory skills</li> <li>• Interests in a particular subject</li> <li>• Impairment in social interaction <ul style="list-style-type: none"> <li>○ multiple non-verbal behavior e.g. eye-to- eye gaze,</li> <li>○ failure to develop pure relationship</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ lack of spontaneous seeking to share enjoyment, interests, achievement with others.</li> <li>○ Lack of social or emotional reciprocity</li> <li>• Speech patterns are unusual, lack infection (maybe too formal, loud or high-pitched)</li> <li>• Cannot understand subtleties of language (eg, irony and humor)</li> <li>• Have motor skills delays</li> </ul>
Other Associated Characteristics	<ul style="list-style-type: none"> <li>• weak in comprehension</li> <li>• cognitively inflexible</li> <li>• needs support in helping the pupil make decision about his/her next step.</li> </ul>
Local internet resources	<p>Information on assessment of autism, schools with specific programmes for children with autism, support for parents and working professionals can be found in the following websites.</p> <p>a) Autism Association (Singapore)  <a href="http://web.singnet.com.sg/~autism/programmes.htm">http://web.singnet.com.sg/~autism/programmes.htm</a></p> <p>b) WeCan <a href="http://www.autism-we-can.com/HTML/index.html">http://www.autism-we-can.com/HTML/index.html</a></p> <p>c) SPED schools  <a href="http://www.moe.gov.sg/specialeducation/SPED%20Schools%20Table.htm">http://www.moe.gov.sg/specialeducation/SPED%20Schools%20Table.htm</a></p> <p>d) Autism Resource Centre <a href="http://www.autism.org.sg/public_html/html/index.html">http://www.autism.org.sg/public_html/html/index.html</a></p> <p>e) Pathlight School  <a href="http://www.pathlight.org.sg/Pathlight/content/content.asp?categoryId=3365285062108761&amp;contentId=3365282149190046">http://www.pathlight.org.sg/Pathlight/content/content.asp?categoryId=3365285062108761&amp;contentId=3365282149190046</a></p> <p>f) Dynamics OTC Pte Ltd  <a href="http://www.therapy.com.sg/?gclid=CI3mi7amml4CFRDVYAodeEuTSQ">http://www.therapy.com.sg/?gclid=CI3mi7amml4CFRDVYAodeEuTSQ</a></p> <p>g) Zee School <a href="http://www.zeeschool.com.sg">http://www.zeeschool.com.sg</a></p>
Overseas Internet Resources	<p>More information on autism, its assessment, support till adulthood in these websites</p> <p>a) Autism Society of America <a href="http://www.autism-society.org/site/PageServer">http://www.autism-society.org/site/PageServer</a></p> <p>b) Association for Science in Autism Treatment <a href="http://www.asatonline.org">http://www.asatonline.org</a></p> <p>c) Autism Network International <a href="http://ani.autistics.org">http://ani.autistics.org</a></p> <p>d) Autism National Committee <a href="http://www.autcom.org">http://www.autcom.org</a></p> <p>e) Autism Research Institute <a href="http://www.autismresearchinstitute.com">http://www.autismresearchinstitute.com</a></p> <p>f) Cure Autism Now (CAN) Foundation <a href="http://www.cureautismnow.org">http://www.cureautismnow.org</a></p> <p>g) Autism Speak/National Alliance for Autism Research <a href="http://maapservices.org">http://maapservices.org</a></p> <p>h) Institute of Mental Health  <a href="http://www.nimh.nih.gov/healthinformation/autismmenu.cfm">http://www.nimh.nih.gov/healthinformation/autismmenu.cfm</a></p>

## **Reference**

American Psychiatric Association. (1994). Diagnostic and statistics manual of mental disorders (4<sup>th</sup> ed.). Washington, DC: American Psychiatric Association

Autism Resource Centre (2007). *Special School In Singapore*. Retrieved on 27 August, 2007

from [http://www.autism.org.sg/public\\_html/html/index.html](http://www.autism.org.sg/public_html/html/index.html)

Autism Society of America (2007). The Voice of Autism. Retrieved on 27 August, 2007 from <http://www.autism-society.org>

National Institute of Neurological Disorder and Stroke  
National Institutes of Health  
Bethesda, MD 20892

Poon, K. K., & Khaw, J. (2007). *Supporting Students with Special Needs In Mainstream Schools*. Singapore: Pearson Prentice Hall.

Zee, P. *Provides parents with coping strategies for their children!* Retrieved on 27 August 2007 from <http://www.zeeschool.com.sg> and <http://www.nimh.nih.gov/healthinformation/autismmenu.cfm>

*Done by TSN*