

# **Asperger's Syndrome: The Struggles of Cognitive Development**

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May 25, 2017**

Humans are social creatures, yet socialization is not innate to all human beings.

Asperger's syndrome is a developmental disorder which affects one's ability to socialize and communicate. Although there is still much to be desired in our understanding behind the causes of Asperger's syndrome, further understanding is necessary because of its serious negative effects of intense visuality, impaired nonverbal communication, as well as impaired social interactions with others.

Asperger's affects the majority of those with Autism spectrum disorder, or ASD. 75 percent of those with autism suffer from either Asperger's syndrome or Pervasive Developmental Disorder ("Statistics"). Both of these conditions fall on the high-functioning side of the spectrum. In the United States, 1 in 68 children have an autism spectrum related disorder. 1 in 42 boys and 1 in 189 girls are diagnosed with autistic spectrum conditions ("Autism Prevalence | Autism Speaks"). Autism more commonly affects males, as they make up the majority of the autistic population. Autism is diagnosed during the prime years of development, from as early as eighteen months to three years of age ("What Is Autism?"). This is because the recognizable symptoms of autistic behavior are marked delays in a child's communicative and social development. As those with ASD age, they experience difficulty sustaining a job like normal members of society. 80 percent of those with ASD are unable to be employed and grow up to live dependent on family members for support. Of those higher-functioning autistics with Asperger's, only 12 percent are able to maintain full time employment in adulthood ("Statistics"). This places the majority of those with Asperger's syndrome on the lower end of the socioeconomic scale, leaving them with little prospects for autonomy. Autism is defined as a developmental disorder, however these employment statistics suggests that adults with autism

are still severely affected. The majority of adults with autism remain unemployed, they were unable to cross their developmental chasm and transition to traditional grown up life. This demonstrates there is some sort of deficient characteristic that often times is not corrected with age in those suffering from an Autism spectrum disorder.

There is no concrete biological cause of Asperger's syndrome. It is believed that there is a neurological explanation to the development of Asperger's, and it lies in genetics. Scientists have suggested that "many of the genes found to be associated with autism are involved between the chemical connections between brain neurons (synapses)" ("Autism Spectrum Disorder Fact Sheet | National Institute Of Neurological Disorders And Stroke"). This theory is sound, as those with Asperger's characteristically have difficulty in making connections between explicit statements and their the implicit meanings. ("Autism Spectrum Disorder Fact Sheet | National Institute Of Neurological Disorders And Stroke") Furthermore, scientists have found that this disorder "may be the result of defects in genes that control brain development and how brain cells communicate with each other" ("Autism Spectrum Disorder Fact Sheet | National Institute Of Neurological Disorders And Stroke"). Almost as if the part of the brain which normal individuals access for cognition is impaired in those with Asperger's syndrome.

The psychological roots of Asperger's syndrome relates to the spectrum. Those on the autistic spectrum exhibit a vast range of symptoms, including sensory issues, communication issues, challenges developing social skills, rigidity in repetition of behaviors, as well as intense fascinations and obsessions. The accredited autism charity, Autism Speaks, defines the autistic spectrum as "the wide variation in challenges and strengths possessed by each person with autism" ("What Is Autism?"). The different conditions an autistic person experiences divides the

different subgroups within the spectrum. Autism is categorized by levels of functioning, or levels of disability. Those on the upper ends of the spectrum are considered high-functioning, including those with Asperger's. This is because the high-functioning autistic develops the use of language, "they can tell us of their experiences, their inner feeling and states, whereas those with classical autism cannot" (Sacks 247). Those with Asperger's are able to communicate with others at a fair level, and that is why they are categorized as high-functioning.

There are negative affects to the way those with Asperger's learn. They are "powerful visualizer[s]" and view the world through mental pictures. It makes visual learning the best way to teach a child with Asperger's a skill. Temple Grandin, a success story of Asperger's and a frequent orator on the topic of autism, did not learn to draw blueprints by taking a class on design. After meeting a draftsman and "watching him draw plans", Temple went and bought the exact tools he used, began pretending she was him, and very quickly became adept at drafting blueprints. She watched David, the draftsman perform the task once, and with that mental picture of him drawing in mind, taught herself the skill. Temple "appropriated" the identity of David, she adopted a pseudo personality to integrate his skills as a part of her abilities. By thinking in pictures, it carries the negative effect of a decreased non-visual comprehension. The intense visuality of the Aspergerian mind creates a lack of social presuppositions, the understanding that language provides human beings of those around us and life itself (Sacks 266-267). It leads normal individuals to question how large of a role the visual hard wiring of the Aspergerian brain plays in their difficulties communicating.

Those with Asperger's are able to speak, but they lack the ability to read between the lines. They take explicit statements literally, and do not try to read further into the situation. If a

child with Asperger's asked you, "How are you?" and despite intense stress you replied, "I'm fine," they would take your word for it. They will not register the nonverbal cues, you scratching your head or sighing heavily, as a sign that your reply may not truly reflect your feelings in that moment. They do not naturally assess from both a verbal and a nonverbal standpoint to grasp a better understanding of the present situation. 93 percent of the way humans communicate to one another is nonverbally ("Ubiquity: The 7% Rule"). Those with Asperger's have difficulty picking up on the simultaneous verbal and nonverbal responses. They have a tendency to solely process the verbal cues in human conversation, and therefore miss the majority of the message. This makes those with Asperger's susceptible to being taken advantage of, as they "[fail] to understand dissembling and pretense" (Sacks 260). They can't read the jealousy or malice on another's face, and therefore are often unaware of a person's true intentions. The inability to fully connect with others while speaking makes it difficult for those with Asperger's to manage social interactions.

Impaired nonverbal communication has the negative effect of strained social interactions. When you can not fully understand what a person is trying to communicate to you, it makes it difficult to know where you stand with others. Although Aspergians may be "socially interested," their impaired perceptions of social interactions makes them "socially inept" (Frith 12). Despite having a desire to connect with others on a deeper level, they have little ability to socialize. When one lacks the ability to socialize, their ability creating lasting relationships with others is extremely impaired. Often times those with Asperger's having a difficult times or do not understand the concept of making friends, this is because friendship requires personal regard

for another and mutual affection. The impaired communication with others hinders Aspergian social interactions, and has the negative effect of increased introverted behaviors.

A recent Harvard study on autism showed differences and similarities in the brain activity of those with autism and those with Asperger's. We now have a deeper understanding of the biological differences between the low-functioning and high-functioning members of the autistic spectrum. "All the children with autism – including those with Asperger syndrome – showed weaker connections in a language-associated region of the brain's left hemisphere" ("Study Supports View That Asperger Syndrome Is Distinct Form Of Autism"). Whether high or low functioning, all autistic children struggle with the implicit meanings of conversation. However, in children with Asperger's, the researchers found "distinctively strong activity in" region of the brains not associated with language ("Study Supports View That Asperger Syndrome Is Distinct Form Of Autism"). Perhaps this explains the Aspergian ability to maintain an obsessive interest on a topic, and how they are able to become a wealth of knowledge on the subject. Distinctive brain activity might be what separates children with Asperger's from the rest of the autistic spectrum, and solidifies their classification as high-functioning individuals.

There is no cure for Asperger's syndrome, only treatment through therapy and medication. Occupational therapy, or OT, is considered one of the best methods to help Aspergian children assimilate into normal society. It is "a discipline that utilizes...(purposeful activity) to obtain, regain and/or maintain one's highest level of function in [activities of daily life] ("Adults With Asperger Syndrome: Is Occupational Therapy Right For You? – The Asperger / Autism Network (AANE)"). OT is a behavioral therapy which teaches Aspergians the building blocks to acceptable social behavior that are not innate in them, such as grooming or

toileting. This is typically provided during school years to give children a better chance of proper development. Once they reach adulthood, medications are offered as a treatment option to quell the intense fixations and compulsive behaviors Aspergians often experience. Medications like some antidepressants will not cure the disorder, but they “can help people with Asperger’s function better” (Roberson). The current treatment options for Asperger’s syndrome focus on developing social skills and management of behavior.

I have an interest in Asperger’s syndrome because my younger brother, Maxwell, suffers from the disorder. It has been difficult to stand by and watch my brother struggle to understand behaviors that were inherent in other children. I desperately want to teach him about the world and how others work, but struggle to find the words to explain inborn social cues in a way he will understand. It is not easy to teach an introvert how to socialize.

Although a sweet boy, my parents noticed he was missing several developmental markers as a toddler. He personified the signs of an Aspergian child, sensory issues (auditory and tactile), speech and social impairment, disturbing eating patterns, and a lack of toilet training. He was diagnosed with Asperger’s syndrome at age three, and has been receiving occupational therapy since nursery school. My family has been very grateful that Max has responded well to the behavioral lessons.

As a family unit, we tried to best inform ourselves on how raise a child with Asperger’s. We did not want to traumatize him by forcing trying to force him to develop at a faster rate than he was capable of. Stress management techniques have had an enormous success on Max. He no longer bangs his head on the table when he can’t grasp a concept, or express how he feels. With time he’s grown out of many of the Aspergian symptoms he expressed as a child. Although he

still has a long battle ahead of him in terms of managing social interactions in the adult world, I have high hopes that he will be of the few Aspergians who successfully transition into adulthood.

As a society, we have more knowledge on how to treat children with Asperger's syndrome to give them the best chances of optimal development than ever before. There is still much to be learned about this disorder, as its effects on a person's methods of learning, communicating, and interacting with others are drastic. The struggles felt by Aspergian minds have a universal connection to the plights of the human condition. No person ever wants to feel like they are the outcast in the room, or feel unable to accurately perceive the world around them. As human beings, we all have a desire to belong in society. Further acquisition of knowledge on Asperger's syndrome is our best bet at giving these deeply affected individuals a chance to live productive and meaningful lives.



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