

Abstract

Asperger Syndrome (AS) is a type of autism spectrum disorder (ASD) that was first described by the Austrian psychiatrist Hans Asperger. It is a common developmental disorder that is observed in children from early childhood and is recognized by significant impairments in communication skills and social interaction in general. Unlike true autism, this syndrome preserves speech and cognitive functions. It is often recognized as a mild form of childhood autism. Declaration Children diagnosed with AS usually have an average or above-average IQ, but they face special challenges in the school system. While they may achieve high grades and be gifted, they are often misunderstood, unaccepted by their peers, and feel lonely.

Keywords: Asperger Syndrome, Autism, Special Education, Learning Difficulties

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Evidence in Context

What Know: Asperger Syndrome (AS) is a type of autism spectrum disorder (ASD) that was first described by the Austrian psychiatrist Hans Asperger.

What New: Children diagnosed with AS usually have an average or above-average IQ, but they face special challenges in the school system. While they may achieve high grades and be gifted, they are often misunderstood, unaccepted by their peers, and feel lonely.

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Introduction

The World Health Organization (WHO) reports that 1 in 100 children is diagnosed with ASD. This disorder can cause social and communication skills challenges, so knowing how to spot the signs in your child is essential. Typically, severe forms of autism are detected and diagnosed in toddlers or before kids are two years old. In contrast, milder forms are diagnosed later when developmental delays become apparent at school (Webb et al., 2009).

The problems of AS children represent a specific category in the education system. Such children are often perceived by their classmates as eccentric and weird, and their poor social skills lead to other children bullying them, which might lead to depression and school phobia (Waldron et al., 1975). Clumsiness and obsessive, highly specialized interests complement their "strange" appearance (Weimer et al., 2001). Although AS children differ, they often do not understand human relationships and social conventions; many of them are naive and often lack basic common sense. Frequently, children request their parents to enroll them in homeschooling because of poor relationships with their classmates and teachers (McPherson, D. 2023).

As an alternative to homeschooling, such children are recommended to attend schools for students with special education needs (SEN). In Israel, one of chains of such schools is Beit Ekstein, one of my places of work. In the schools of aforementioned chain, there are no more than eight students are placed in each class, and teachers, assistants, educational therapists, and psychologists can pay much more attention to each student than in a regular school and try to meet their needs. Furthermore, each child is offered an individual learning program (Beit Ekstein, 2023).

How AS is Diagnosed

The research claims that gene disorders cause ASD. Such genetic mutations influence early brain development, as well as its formation, stabilization, and neurotransmission. Such early neural circuits are associated with autism. "The gamma-aminobutyric acid (GABA)-ergic system plays a crucial role in early neural development." (Warrier et al., 2013, p.3). AS is a sort of ASD as well as classic autism. Nevertheless, there are also some significant differences between two conditions. While classic autism can be recognized in babies and toddlers, AS is usually recognized and diagnosed much later (Harris, 2023), (Marks, 2022).

Thus, in preschool age, parents and kindergarten teachers may notice such prerequisites to AS and other ASD disorders as struggling to communicate with peers and difficulties in motor development. For instance, they manifest repetitive behavior, bicycle problems, and clumsiness when playing with a ball or running on stiff legs (Deweerdt, 2020). Furthermore, there are different perceptions of external stimuli, such as increased sensitivity to sounds or smells and selectivity in food (Morris, 2008). The average age of diagnosis of Asperger's syndrome in children is 7-8 years. Preschoolers are still rarely diagnosed, and earlier diagnosis and appropriate intervention are started, fewer problems there are in future (Marks, 2022). AS symptoms differently depend on the severity of the disorder, but the most common ones include difficulty with verbal and nonverbal communication, problems with social interactions, and repetitive or ritualistic behaviors (Deweerdt, 2020), (Webb et al., 2009).

Furthermore, AS is often accompanied by ADHD and other learning difficulties, such as dyslexia, or dysgraphia (Perritano, 2022), (Williams, 2001). ASD covers a range of symptoms, from mild to severe. Some individuals with high-functioning autism experience milder challenges, such AS, while others with severe impairments may experience difficulties with spoken language that interfere with their daily lives (Rudy, 2023).

Testing for Asperger's involves a team of medical and psychological specialists who evaluate a child's development, skills, and symptoms when interacting with others. They may also assess the child's language, intellectual abilities, and overall health. Testing tools help characterize the child's personality, behavior, math, and language skills, IQ, and mental health, and some tests overlap with those for classic autism (Marks, 2022). Very often, AS children have attention deficit hyperactivity disorder (ADHD), mood swings such as flashes of joy and sadness, depression, obsessive-compulsive disorder (OCD), and anxiety (Nationwide Children's Hospital, 2023). Furthermore, gifted people might also have AS (Little, 2002).

AS Children among their Peers

Usually, problems begin to arise when the child is among peers. They cannot make eye contact, do not understand jokes, struggle to respond to people in conversation, or cannot read their body language (Ellis, 2023). From an early age, children with AS may notice that they have poorer interpersonal skills, have difficulty playing with other children, and tend to impose their will on others. For this reason, they are rejected from an early age and are not understood by their peers. "Typically viewed as eccentric and peculiar by classmates, their inept social skills often cause them to be made victims of scapegoating." (Williams, 2001, p.287).

AS is a condition that affects communication, imagination, and relationship building, which can lead to rigid behavior and thinking patterns (Deweerdt, 2020). AS children usually show better age-appropriate speech development, have a greater interest in the world around them, and demonstrate proper cognitive development. This makes it harder to detect AS in young children as they may not stand out from their peers (Ellis, 2023).

Some communication-related symptoms of AS include using complex vocabulary, difficulty understanding jokes and metaphors, problems with eye contact, facial expressions, gestures, and body language that differ from other children (Nationwide Children's Hospital, 2023). Additional signs may include a preference for playing with real objects rather than engaging in role-playing, having narrow and unusual interests, getting angry when daily activities do not go according to pattern, and reacting with increased sensitivity or poor reaction to various stimuli (Morris, 2008). Individuals with as may experience challenges in being flexible and adapting to changes, leading to persistent sense of stress and emotional vulnerability (Ellis, 2023). They typically have difficulty regulating their emotions, so having an argument with friend or having to cancel birthday party due to illness can cause a lot of anger and resentment. Cope much better with familiar and repetitive activities. They like to know what awaits them and be prepared for it. Unexpected plan changes or new situations can also become problematic (Rudy, 2023).

Parents may notice that their as children struggle to adapt to rules and adjust their behavior to social situations (Deweerdt, 2020). For example, peers and teachers may complain that AS children only talk about things that interest them without considering whether others may find it tiring. Some students may even catch their teachers during breaks and want to discuss topics like aliens, space exploration, computers, or the legalization of marijuana and other drugs in their country.

Special Education for AS Children

Children with the same diagnosis are not necessarily alike. Each AS child has a unique personality, and the "typical" symptoms of AS appear differently for each child. As a result, there is no universal prescription for schooling that will suit every child with AS, without exception. Likewise, no single educational approach will suit every child without AS. While some parents prefer homeschooling, most psychologists claim that they should study with other children and get an appropriate way of teaching and treatment (Haas et al., 2019).

Many of these individuals possess a high IQ and even giftedness (Little, 2002), (Bainbridge, 2020). They often have exceptional memory, with some even having photographic memory. Their intense focus on specific interests and talents may also lead to great achievements in the future. It is worth noting that boys are more often diagnosed with autism than girls, approximately 4:1 (Autism Speaks, 2023). Thus, if someone is especially persistent in his interests, then the teacher should individualize learning tasks in such a way as to include the child's interest in them. They may also share their personal experience of traveling to a European country by plane if they have had such an experience.

Therefore, if a child is interested in dinosaurs, then teachers should provide them with the materials about dinosaurs, for instance, grammar sentences, math tasks, texts for reading. In Israeli schools, children are supposed to write projects in English on any topic that interests them. In this case, teachers introduce other topics into the assignments step by step. Students can do extra projects that link their interests to the learning topic. If a child is particularly interested in public transportation, they may choose to write an article about the transportation system in Europe during a geography lesson.

AS children often exhibit exceptional language skills and can use complex language at an early age (Everard, 1980). They tend to be strongly interested in specific hobbies or subjects, such as science, electronics, technology, mathematics, biology, or geography. Unlike other children, they may not be interested in fairy tales and prefer to study encyclopedias or watch science programs (Little, 2002). They are often more interested in numbers and letters than in socializing with other children and tend to learn to read and count faster than their peers. Parents should take note of these abilities and develop them or seek help if necessary. For instance, provide them with appropriate therapy.

Israeli SEN schools provide various types of therapy connected to music, animals, and speech (Beit Ekstein, 2018). One of these is music therapy, which can help people with various disorders. It involves activities such as listening to music, discussing it, singing, dancing, or creating music. By using music as a tool, therapists can help patients build appropriate relationships and facilitate the therapy process through music listening, singing, songs, and improvisation (Kim, 2016).

Animal therapy is also provided in Beit Ekstein schools so that children will learn to look after dogs, rabbits, and guinea pigs and be kind to them. In some SEN schools, children are also offered horse riding. Teachers and assistants say that aggressive children become calm and careful with pets due to animal therapy. While speech therapy is a purposeful treatment that improves children's ability to talk and use other language skills, animal therapy helps them develop social interaction and communication (O'Haire, 2013).

Conclusion

AS is typically diagnosed in elementary or junior high school when a child has trouble communicating with peers and teachers. The diagnosis is usually made by a team of specialists, including a psychiatrist and psychologist, who may also recommend additional neurological and speech therapy tests or sensory integration processes. Most often, therapeutic centers that treat children on the autism spectrum perform the diagnosis (Williams, 2001).

AS children generally have average or above-average intelligence but may struggle with abstract thinking and comprehension skills. They tend to take things too literally and have developed concrete thinking, but their ability for abstractions is reduced (Marks, 2022).

Their pedantic speech and extensive vocabulary can give the impression that they understand the topic at hand, but they may only be mechanically memorizing information. Children with AS may have a mechanical photographic memory, that plays everything in a certain sequence in their brains. Nevertheless, they may lack problem-solving skills (Autism Speaks, 2023).

In addition, individuals with ASD tend to exhibit a heightened sensitivity to environmental stress and often struggle to establish meaningful interpersonal connections. As a result, they may appear vulnerable, fragile, and immature. Everard (1980) has noted that these individuals stand out when compared to their non-disabled peers due to the significant efforts they exert to navigate a world that is not always accommodating to their needs. Additionally, society may place unrealistic expectations on them to conform to societal norms, which further exacerbates their difficulties. Nevertheless, inclusive education helps them adapt to society.

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