

GIFTED CHILDREN WITH ASPERGER SYNDROM: Emotional and Social Implications

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Asperger's Syndrome is a pervasive developmental disorder characterized by deficits in social communication and by repetitive patterns of behavior or interests. It is observed in some gifted children. The gifted student with Asperger's Syndrome (AS) may be left to manage the best he or she can. In some cases, gifted students with the disorder may not be allowed to participate in their school's gifted program because teachers do not know how to make the necessary accommodations. Gifted children with Asperger's Syndrome may not be identified because their unusual behaviors may be wrongly attributed to either their giftedness or to a learning disability. All children with the disorder seem to have a special interest which enables them to achieve quite extraordinary levels of performance in a certain area. This study proposed to investigate nurturing in the family and education, and its implication on the emotional and social development of the children with asperger's syndrome in Indonesia. The participants were three boys; they were 8, 13 and 17 years old. They came from different family backgrounds.. Two were from a middle class and one from lower class family. Two boys still go to school, and one of them does not go to school, but is homeschooled..

Keywords: Gifted Children with Asperger Syndrom, Social-emotional

Background

Individuals with Asperger's Syndrome are truly an interesting population. Gifted individuals with Asperger's Syndrome are even more fascinating and confusing. They are highly verbal, have

obsessive interests in certain subjects, have exceptional memories, usually have above average IQ's, are hypersensitive to sensory stimuli and experience social isolation (Neihart, 2000). Gifted individuals can manifest these behaviors as well. However, even though children with Asperger's Syndrome manifest behaviors that are very similar to gifted children, upon closer examination, the *motivation* for the behaviors is quite different. For example, both gifted children and children with Asperger's Syndrome are highly verbal. Both populations usually have extremely advanced vocabularies and love to talk about their interests. The difference is that children with Asperger's are very literal and have a difficult time with abstract thought. This is not the case with the gifted child. The child with Asperger's will memorize a vast number of facts and parrot them back. The gifted child on the other hand, understands the concepts behind the words. There seem to be at least some characteristics common to gifted children and to children with AS. These commonalities have not been verified in any controlled studies, but are pulled from shared literature and clinical experience. For instance, verbal fluency or precocity is common to both, and both may have excellent memories (Clark, 1992; Silverman, 1993). Both may evidence a fascination with letters or numbers and enjoy memorizing factual information at an early age. Both may demonstrate an absorbing interest in a specialized topic and may acquire vast amounts of factual information about it (Klin & Volkmar, 1995). They may annoy peers with their limitless talk about their interests. They may ask endless questions or give such lengthy and elaborately specific responses to questions that it seems they are unable to stop. Differentiating between giftedness and AS is simplified by remembering that Asperger's Syndrome is a *spectrum disorder* - representative characteristics lying on a continuum.

This fact is pivotal for parents and professionals involved with gifted children because it allows for differentiation between behaviours typical of gifted children and the extremes of Asperger's Syndrome. Differentiating between giftedness and AS is simplified by remembering that Asperger's Syndrome is a *spectrum disorder*--representative characteristics on a continuum. An AS diagnosis is only warranted when the behaviours: 1) occur together and 2) are extreme. This fact is pivotal for parents and professionals involved with gifted children because it allows for differentiation between behaviours typical of gifted children and the extremes of Asperger's Syndrome.

Asperger's Syndrome

Asperger's syndrome is a neurological condition that is on the high functioning end of the autistic spectrum. It is characterized by problems with social skills, eccentric or repetitive behavior, communication difficulties, and limited (but nearly obsessive) interests. Asperger's sufferers also have high intelligence, exceptional focus, and extraordinary talents in one or more areas.

Asperger's Syndrome (AS) is one of a number of pervasive developmental disorders, a group of disorders that includes autism. Early on Asperger's Syndrome was referred to as "high functioning autism." Now AS is recognized as a disorder separate from autism, although the primary difference between the two is level of mental functioning: while autistic children tend to have lower than average measured intelligence, children with Asperger's Syndrome have average or above measured intelligence.

Clinical descriptions of AS children include the following characteristics: little to no empathy, monotonous speech patterns, highly idiosyncratic and intense interests (e.g., tide tables, a

specified cartoon character, maps), social isolation as a result of inappropriate social communication, and inflexible thoughts and habits (Atwood, 1998; Grandin, 1992). AS children are similar to children with other autism spectrum disorders in that they have problems with social communication and persistent idiosyncratic interests. Unlike many autistic children, however, AS children do not evidence delayed speech, the onset of their difficulties is somewhat later, and they more commonly experience motor deficits (Atwood, 1998; Grandin, 1992). They often have difficulty working with others and have odd speech; they cannot make small talk and may seem fanatically or obsessively interested in limited topics. The eye contact of AS children is often odd. They may seem to gaze off or stare straight through those with whom they are conversing. Others usually consider them "strange" or "weird"

Asperger's syndrome is a developmental disorder closely related to autism and hallmarked by difficulties with social interaction despite average to superior intellectual abilities. Individuals with Asperger's syndrome often have the following characteristics:

- ✚ In the area of social interaction: difficulty using and interpreting nonverbal forms of communication, such as eye contact, gestures, and facial expressions; difficulty with peer relationships; lack of shared interests with others; emotional aloofness and a lack of sensitivity to the emotional states of others;
- ✚ In the area of flexibility: obsessive interest in a particular subject matter or activity; strong interest in an extremely unusual topic or activity; rigid adherence to routines or rituals; odd hand mannerisms or body posturing.
- ✚ Children with Asperger's syndrome are often precocious in speaking and reading and tend to use sophisticated or formal language. They frequently have a remarkable

memory, particularly for rote, factual information, and they are often passionately devoted to and eager to expound on topics of particular interest to them. But while many gifted children's emotional and social development falls short of their intellectual growth, children with Asperger's syndrome are actually less mature emotionally and socially than most children their age. They typically show poor insight into their own and others' experience of emotion and may display emotions and facial expressions out of sync with what is happening around them.

Information on the prevalence of AS is limited, but the disorder is more common in boys than in girls (APA, 1994). Clinical descriptions of AS children include the following characteristics: little to no empathy, monotonous speech patterns, highly idiosyncratic and intense interests (e.g., tide tables, a specified cartoon character, maps), social isolation as a result of inappropriate social communication, and inflexible thoughts and habits (Atwood, 1998; Grandin, 1992). AS children are similar to children with other autism spectrum disorders in that they have problems with social communication and persistent idiosyncratic interests. Unlike many autistic children, however, AS children do not evidence delayed speech, the onset of their difficulties is somewhat later, and they more commonly experience motor deficits (Grandin, 1992; Klin, 1994).

In contrast to children diagnosed with autism, AS children speak before age 5; do not remain aloof and withdrawn, but express some interest in people as they get older; are of at least average intelligence; and may show dramatic improvement as they grow older. They do tend to remain socially isolated, egocentric, and idiosyncratic. They often have difficulty working with others and have odd speech; they cannot make small talk and may seem fanatically or obsessively interested in limited topics. The eye contact of AS children is often odd. They may seem to gaze

off or stare straight through those with whom they are conversing. Others usually consider them "strange" or "weird" (Atwood, 1998; Grandin, 1992i).

Emotional and Social Aspects of Asperger's Syndrome

There are several broad categories of difficulties falling under the general heading of impairment in social interaction. First of all, people with Asperger's have difficulty using non-verbal behaviors in social interaction. Eye contact may be impaired, meaning that the individual may not look at others upon greeting or during conversations and may not respond when others try to catch his/her eye. It is easy to see why others might inaccurately perceive the individual to be rude or not paying attention. Social smiling may be impaired. In this case, people with Asperger's may not smile back at someone smiling at them, may not smile during greeting or may not smile in response to something someone else said. Facial expressions used to communicate may be odd. Sometimes the expressions are limited or flat, sometimes they are inappropriate and at other times are exaggerated.

The second category of difficulties falling under the heading of impairment in social interaction is difficulty forming peer relationships. Some children with Asperger's seem to lack interest in others and may prefer solitary activities. Inappropriate overtures towards others or inappropriate responses to the approaches of other people are common occurrences. Difficulty forming friendships is a common fact of life for children with Asperger's. Interestingly, what these children mean by friendship may be decidedly different from what their typically developing

peers mean. Impairment in group play with peers is another common difficulty. Unfortunately, most of the team sports so common to school-age children are terribly difficult for children with Asperger's. Their troubles with social interaction and peer relationships make organized group sports a real challenge. Oftentimes, sports in which individual achievement is stressed (e.g., track, archery, fishing) are more successful.

The third area of impairment in this section is difficulty sharing enjoyment. Young children with Asperger's are less likely than their typical peers to share objects, such as food or toys, with others. Individuals with Asperger's are not as likely to show other people items in which they are interested. Lastly, they generally make more limited efforts to share feelings of enjoyment with others.

The fourth kind of social interaction impairment is a lack of social or emotional reciprocity. This area includes such difficulties as inappropriate or limited responses to the approaches of others, as well as limited offers of comfort shown towards others.

Gifted Children

The term "gifted and talented" when used in respect to students, children, or youth means students, children, or youth who give evidence of high performance capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities. Generally, gifted individuals learn more quickly, deeply, and broadly than their peers. Gifted children may learn to read early and operate at the same level as normal children who are significantly older. The gifted tend to demonstrate high reasoning ability, creativity,

curiosity, a large vocabulary, and an excellent memory. They often can master concepts with few repetitions.

Giftedness is frequently not evenly distributed throughout all intellectual spheres: an individual may excel in solving logic problems and yet be a poor speller; another gifted individual may be able to read and write at a far above average level and yet have trouble with mathematics. It is possible there are different types of giftedness with their own unique features, just as there are different types of developmental delay. Giftedness may become noticeable in individuals at different points of development. While early development (i.e. speaking or reading at a very young age) usually comes with giftedness, it is not a determinant of giftedness. The preschool years are when most gifted children begin to show the distinctive characteristics mentioned above. As the child becomes older, too-easy classes and emotional issues may slow or obstruct the rate of intellectual development. They may also be physically and emotionally sensitive, perfectionist, and may frequently question authority. Some have trouble relating to or communicating with their peers because of disparities in vocabulary size (especially in the early years), personality, and interests. As children, they may prefer the company of older children or adults. Parents and educators have long understood that social savvy and emotional intelligence are not to be taken for granted among gifted youths. Gifted children differ from other children in ways that are obvious both to themselves and to their classroom counterparts. Because they must learn to engage and play with others far less mature in their interests and capabilities, social interaction is rocky terrain for some gifted youths.

Gifted Children with Asperger's Syndrome

In addition to the clinical syndromes outlined by Dr. Webb, Asperger's Disorder is another that is becoming commonly misdiagnosed in gifted youth. Although there can be similarities between a gifted child and a child with Asperger's Disorder, there are very clear differences. Thorough evaluation is necessary to distinguish gifted children's sometimes unusual and sometimes unique social interactions from Asperger's Disorder.

Table 1

Proposed Characteristics to Differentiate Ordinary Gifted Children from Gifted Children with Asperger's Syndrome

Differentiating Characteristic	Ordinary Gifted	Gifted with Asperger's Syndrome
Speech Patterns	Normal, but may have language of older child	Pedantic, seamless speech
Response to Routines	May passively resist, but will often go along	Very low tolerance for change, agitation, aggression
Disturbance of Attention	If disturbance exists, it is usually external	Disturbance is internal
Humor	Engages in socially reciprocal humor	Can do word play, but typically doesn't understand humor that requires social reciprocity
Motor Clumsiness	Not characteristic of most gifted children	50-90 % of Asperger children manifest
Inappropriate Affect	Not a characteristic	Nearly always observed
Insight	Insight usually good	Usually remarkably absent
Stereotypy	Not a characteristic	May be present

(Source: Maureen Neihart, Source: National Association for Gifted Children Fall 2000 Vo. 44, No. 4, pp. 222-230)

Comparing and Contrasting Asperger's Syndrome and Giftedness

Gifted children with Asperger syndrome are often precocious in speaking and reading and tend to use sophisticated or formal language. They frequently have a remarkable memory, particularly for rote, factual information, and they are often passionately devoted to and eager to expound on topics of particular interest to them. But while many gifted children's emotional and social development falls short of their intellectual growth, gifted children with Asperger's syndrome are actually less mature emotionally and socially than most children their age. They typically show poor insight into their own and others' experience of emotion and may display emotions and facial expressions out of sync with what is happening around them.

Moreover, gifted children with Asperger's syndrome often take their passions to extremes, discussing the subjects incessantly and failing to develop other areas of interest. They have great difficulty engaging sensitively in conversations and tend instead to speak in one-sided monologues, with little or no emotional intonation. Finally, they may be prone to angry outbursts, especially when faced with unforeseen changes in their environment or routine.

To identify gifted children with asperger syndrom, two things are needed: a thorough developmental history and insight into the motivation behind certain behaviors (Atwood, 1998; Levy, 1988; Tsai, 1992). Without these two, there is a danger that AS will be over-or under-diagnosed. Symptoms of the disorder in a gifted child may be mistakenly attributed to the child's giftedness, rather than to the disorder. At other times, an AS child's giftedness may be discounted or considered irrelevant to his or her development. Accurate diagnosis of AS in gifted children

requires the participation of an experienced, interdisciplinary team. Parents should be actively involved in the assessment since developmental history is so important to confirming or ruling out the diagnosis.

METHODOLOGY

In May-July 2007, three children participated in this study. All of them are boys, age 8, 13, and 18 years old.

RESULTS

Case 1.

Ardi (a boy, 8 years old, third grade of elementary school, IQ 136), He has one sibling (younger brother). His father is working in a company, and his mother is a housewife. He has a good relationship with his parents and brother, although he is always busy with himself.

He is diagnosed with autism spectrum at 3.5 years old. He had attended autism therapy program (ABA therapy) for three years. At that time he had some characteristics of autism including odd behavior, social seclusion, and absence of vicarious emotion, social inactivity, motor clumsiness, narrowly focused obsessions (he is very obsessed about electronics, machines and so on), and poor eye contact. At 6 years old he stopped therapy, and he went to elementary school. He did well academically and was in the top academic stream. As a child he had delayed speech. Over the years, his speech improved, and he liked to talk, but had difficulty communicating his thoughts. He has a high-pitched voice with a flat tone. Up till today, he has no friends because he is unable to relate to others. He has a strong interest in television programmes and knows a lot

about them. In fact, he has learned a lot of "communication skills" like reflective listening, summarizing, and interpreting body language, from watching TV interviews. He has a very strong logical memory.

He showed much progress academically, he had very good memory and math, but is worse in some subjects. He learned to read and write when he was three. But other aspects of autism still appear such as self-stimulation (hand flapping), language development, interpersonal relationships or the lack thereof. Teacher considered Ardi a strange child, and said that it would be better if he goes to the special school, because he's just interested in some subjects. Another problem which bothered the neighbours was when he would go into their house without permission or saying anything, and then reading books or newspaper, or just watching TV/VCD. It shows that he has no understanding about social norms, and he has no empathy for other people.

Case 2

His name is Kevin, 13 years old, seventh grade. He has one sister (she is a gifted girl). He comes from an upper income family, and a harmonious family. His IQ is about 130. His parents have always thought there was "something" not right with him, but he is "normal" enough - just a difficult child. It started as a baby - he never played with toys. As a toddler he had to repeat things in 3's or a tantrum would follow. When he started school he had trouble making friends - would knock down a child's sand castle and then not understand why he got in trouble because he was only "trying to play with him". He has inability to socialize with children his own age. He has limited ability to establish relationships, poor non-verbal communication, and a lack of emotional

empathy. He did very well in class, he is gifted in math, and also very good in languages (now, he is good in English, Mandarin, and Dutch). Now he is thirteen, getting better socially and emotionally. He has initiative to communicate with his friends, but only with friend who has the same interest. Although getting better, he still has prosody-speech volume, intonation, inflection, excessively formal or pedantic language. He laughs at the “wrong time” at jokes or interactions, mainly has a good sense of humour, usually playing with words.

He is crazy about football. He does everything about football, he made some books about football. His parents know how to enjoy the child and are sensitive to read the child’s communication and attachment skills: Parents have the ability to engage in the kind of interactions that promote mutual satisfaction, develop attachment, and engender a system of communication: the parents can not only spend more enjoyable time with the child, they can read the child’s alertness signals and develop interactions around those. Now he does well in tennis, and in dance (at school, he gets high score). His parents always support him to be comfortable in his peer group/class. His teachers also support and protect him from bullying by his friends.

Case 3

Reine, 17 years old comes from middle income family, he is homeschooled, and has one younger brother, who is gifted. His mother works for a company and his father is jobless. His mother is a dominant mother. He cannot stand crowds, talks continuously about some subjects. Since preschool, he has a very good vocabulary and math. His I.Q. was checked at 144. He has very unpredictable temper and his thoughts do not make sense and he cannot tell if other people are mad at him or running out of patience with him. When he started school he had trouble making

friends - would knock down a child's sand castle and then not understand why he got in trouble because he was only "trying to play with him".

In Kindergarten, he didn't speak to friends. He is always the kid who has his name on the board - and sometimes he would get blamed for something when he wasn't even in school that day. Until he was in ninth grade he was still getting in trouble. He now has such a low self esteem and is starting to bully other kids. I have always suggested holding him back a grade because of his social immaturity, the teachers said that he would just cause more trouble because he would get bored. Finally, I pulled him out of the school and decided on homeschooling. He always does very well in math, language, and chemistry, He is also a very good organ player; he can arrange a nice melody. He likes very much drawing, he wrote some comics, and made a picture dictionary in English, Mandarin, and Bahasa. The certain problems at this time, is about ability to establish relationships, poor non-verbal communication, and a lack of emotional empathy. He still often throws temper tantrums, and has nightmares.

DISCUSSION

All the 3 gifted children with asperger's syndrome often display advanced abilities for their age in language, reading, mathematics, spatial skills, or music, sometimes into the "gifted" range, but this may be counterbalanced by appreciable delays in other developmental areas. This combination of traits can create problems with teachers and other authority figures. (It may be relevant to mention here that one of the social conventions many people with AS ignore is respect for authority. Attwood notes a tendency to feel that everyone should be treated much the same regardless of what social position they occupy; the gifted student with asperger's syndrome

may not give respect to an authority figure until he or she feels it has been earned, an attitude many teachers either do not understand or take strong exception to.) Like many other gifted children, a gifted child with Asperger's might be regarded by teachers as a "problem child" or a "poor performer."

The child's extremely low tolerance for what they perceive to be mundane and mediocre tasks (such as typical homework assignments) can easily become frustrating; the teacher may well consider the child arrogant, spiteful, and insubordinate. Meanwhile, the child sits mutely, feeling frustrated and wronged and often having no idea how to express these feelings. Gifted children with Asperger's syndrome often are the target of bullying at school because of their idiosyncratic behavior, language, and interests and because of their lower or delayed ability to perceive and respond in socially expected ways to nonverbal cues, particularly in interpersonal conflict.

Ardi and Kevin showed some progress in their social-emotional development. Ardi and Kevin begin to develop spontaneity in seeking to share enjoyment, interests, or achievements with other people (e.g., by showing, bringing, or pointing out objects of interest to other people), and develop social or emotional reciprocity. But Reine still has much difficulty in socialising. He has very unpredictable temper and his thoughts do not make sense and he cannot tell if other people are mad at him or running out of patience with him. The role of significant others and family members of gifted children with asperger's is very important in their emotional-social development, because gifted children with asperger's may not spontaneously show affection and can be very literal and hard to communicate with in an emotional way (Dewey, 1999). Kevin unfortunately only has good relationships with his mother; his mother is a very strong mother

because her jobless husband is always busy by himself and very often angry with his wife and children.

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