Lester B. Pearson School Board
Commission Scolaire Lester-B.-Pearson

Autism Spectrum Disorders Network News

DIFFERENT ROADS TO LEARNING
Autism Spectrum Disorders

May 1, 2008 Issue 15

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Asperger's Disorder and High Functioning Autism: Do they differ?

In the last ASD Newsletter, some of the reasons for the ambiguity in how the terms Asperger's Syndrome (AS) and High Functioning Autism (HFA)1 are used were explored. This article will review the scientific research which has addressed the distinction (or lack thereof) between AD and HFA and provide several clinical guidelines for distinguishing between the two.

Over the last decade or so several articles, chapters and books have been published which describe empirical efforts to reliably distinguish individuals with AS from those with HFA. The success of these efforts appears to be determined by whether the researcher and/or the reader is seeking characteristics that differentiate the two groups with a statistical degree of certainty or merely a clinical level of confidence. Representative of the research on this topic is Mayes, Calhoun, and Crites' (2001) study. Mayes et al. examined the clinical files of all children (n=157) between the ages of 1½ - 14½ previously evaluated at a university affiliated, psychiatric clinic who received diagnoses of autistic disorder or AS. Both a clinical psychologist and a board certified child psychiatrist who was not affiliated with the research team independently reviewed each child's chart to determine whether or not they met the DSM-IV criteria for autistic disorder (or HFA), AS, or some other ASD. Results revealed a 100% agreement between the psychologist and the psychiatrist that each of the 47 children with a pre-existing ASD diagnosis and normal intelligence met the criteria of autistic disorder while none met criteria for AS. Interestingly, of this group, 24 children had no significant delay in single word and communicative phrase use but 16 of the 24 met the DSM-IV criterion of "*... impairment in the ability to initiate or a sustain conversation*" and 23 of 24 met DSM-IV criterion of "*stereotyped ... or idiosyncratic language*." Both symptoms were present in 75% of the children and either or both symptoms were present in all 24 children. Thus, all ASD children with normal intelligence evinced social impairment, restricted and repetitive behaviors, and communication impairment, resulting in a diagnosis of autistic disorder.

Mayes, et al's (2001) findings are consistent with five other similar studies and 12/14 of the authors of the book *Asperger's Syndrome or High Functioning Autism?* (1998) who contend that AS and HFA are not distinct entities (Realmuto, 2002). Of this sample of research, Miller and Ornoff (1997) warrant particular mention because they retrospectively analyzed Hans Asperger's (1944) original cases and demonstrated that all 4 met the DSM-IV criteria for HFA and not AS. The results of Mayes, et al. (2001) are also consistent with several other investigations which examined whether delayed language in children with ASDs accurately predicted later symptoms and found that any differences in preschool language ability between children with HFA and children with AS largely disappeared by early adolescence (Eisenmajer, et al., 1998; Manjiviona & Prior, 1999; Ornoff, et al., 2000). Taken together these findings indicate that a DSM-IV diagnosis of AS is highly unlikely and raises the question of whether AS can be redefined by the DSM so that it is meaningfully distinguished from HFA (Mayes, et al., 2001).

Although results of empirical investigations tend not to support the AS-HFA differentiation, many clinicians continue to believe, contrary to DSM-IV, that if a child meets criteria for HFA and AS, they should be given a diagnosis of AS (Atwood, 2002; Mahoney, et al., 1998). This belief is motivated, at least in part, by their observations in working with children that AS and HFA have characteristic profiles that, while overlapping, reflect different strengths and weakness. The differences2 between the two groups that are often mentioned include that: (a) in AS early attachment patterns to family members are adequate and efforts to approach peers (though awkward) are apparent while in HFA, attachment is atypical and broader social patterns are marked by aloofness and withdrawal, (b) developmental difficulties (e.g., learning, self-help) emerge later in childhood among those with AS than among those with HFA, (c) social and communication deficits are less severe in AS, (d) special interests are more prominent in AS while sterotypies are more typical of those with HFA, (e) verbal IQ is usually higher than nonverbal IQ among children with AS but not those with HFA and those with AS have higher overall IQs relative to those with HFA, (f) children with AS have fewer sensory abnormalities than those with HFA but greater motor difficulties and clumsiness, (g) family history is more frequently positive for ASDs among those with AS, (h) neurological disorders are less common among children with AS than with HFA, and (i) children with AS have better outcomes as adults than those with HFA (see ex. Frith, 1991; Howlin, 1999; Klin, et al., 2000; Wing, 1991).

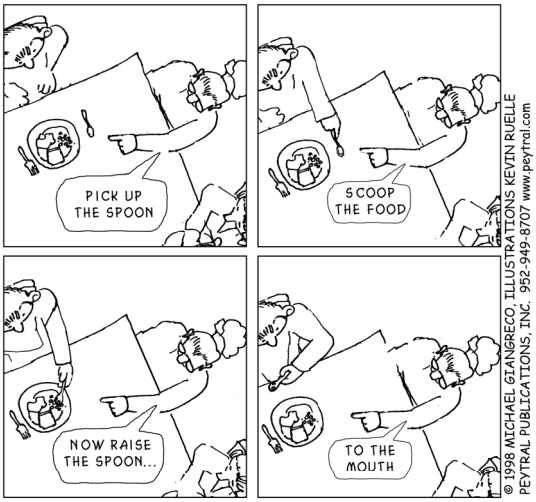
Given that the available empirical evidence does not provide compelling support for reliable group differences, it seems reasonable to ask "why should we continue to distinguish between AS and HFA?" There are at least three reasons why this effort is worthwhile. First, many parents of children with AS or individuals with AS themselves will find the diagnosis more acceptable than the diagnosis of autism because the latter is often associated by the general public with disability and highly atypical behaviours. Second, many children with milder forms of autism could be left without a diagnosis, and as a result without the services and understanding such a diagnosis typically provides. Third, as Gillberg (1998) states "*one of a clinician's most important goals is to arrive at a diagnosis, which at the time and in the demographic/cultural circumstances will be the most helpful to the individual and their family. This diagnosis has to be rooted in empirical knowledge but should not be used for splitting academic hairs*" (p.201).

By: Dr. Andrew Bennett

References available on page 4.

1 The diagnosis of HFA does not exist in the DSM-IV but is an informal term applied to individuals with autistic disorder who have an IQ of 80 or more and who have the ability to speak, read, and write.

2 It is worth noting that research has provided only mixed support for these *differences.*



RODNEY LEARNS NOT TO MAKE A MOVE UNTIL HE IS TOLD.

Top Shelf

Freaks, Geeks and Asperger Syndrome- A User Guide to Adolescence

Luke Jackson is a teen with Asperger Syndrome. In this honest, interesting and sometimes funny book, he opens an enlightening window into the world of a teen with AS. He discusses bullying, friendships, coping with homework, and relationships. This is a wonderful book to share with teens with or without AS. The book gives great advice on sharing the diagnosis with others. Luke highlights the strengths that come with his diagnosis, and offers practical suggestions to help deal with his social deficits.

This book is available on loan from the ASD library, or available to purchase from: www.autismawarenesscentre.org

Reference: Jackson, L. (2002). *Freaks, Geeks and Asperger Syndrome– A User Guide to Adolescence.* London: Jessica Kingsley Publishers.

Let's Talk O.T.: Movement Breaks

As mentioned in our last *OT corner*, sensory modulation challenges of students with ASD are generally, at least in part, at the basis of their difficulty maintaining functional attention, alertness and activity level necessary for productive interactions and learning. In addition to recommending embedded sensory-based activities throughout the student's schedule, a sensory diet also often includes implementation of *Movement Breaks* at specific times in the day. *Movement Breaks* are aimed at providing a high dose of sensory input needed to sustain functional participation at harder points of the day, and/or to prepare the student for upcoming tasks or events. As some types of sensory input are thought to have more impact than others when used in the context of activity, activities prescribed to be part of a movement break mostly include three types of sensory input: deep touch input for its calming effect, rhythmic movement input for its organizing, calming or alerting effect, and finally proprioceptive input (which includes resistance muscular activities and heavy work) for its calming, grounding and organizing effect. Deep touch activities need to be performed as taught by the therapist, with appropriate intensity, as they may cause negative reactions if done otherwise. Common activities recommended include bean bag squeeze, lying a few minutes between mats, deep pressure massage on the student's back and limbs using a therapy or medicine ball, and rolling up tightly in a soft fabric towel or blanket. As vestibular (movement) input can have a significant impact on the nervous system, movement activities are to be performed as prescribed, generally in a structured time-framed manner, and carefully supervised, to avoid sensory overload, noted through emotional responses and/or increased activity level. Examples of commonly used movement activities include: running back and forth for a short distance, jumping on a re-bounder or inflated inner tube, bouncing in sitting position or slowly rocking while prone (i.e. lying on tummy) on a therapy ball, performing an obstacle course or going across the gym while prone on a scooter board, log rolling on a mat or in a barrel, riding a tricycle/bicycle, swinging on playground equipment or hammock. When they respect the tone/endurance capacity of the individual, muscular/heavy work activities are the safest because proprioceptive input helps to prevent uncomfortable reactions to sensations, and is rarely overwhelming. Activities providing that type of input are therefore emphasized in a *Movement Break*. They include: stair/ladder climbing, crawling on all fours, wheelbarrow walking, wall push-ups, hanging from a trapeze or bar, Tug of War, catching/throwing a medicine ball, kicking a big ball, hitting a punching bag/tetherball, playing animal walks, etc. The order of activities presented within a *Movement Break* is important to consider. Often the therapist will recommend starting with one or two deep touch activities, following with movement based activities, and then completing with proprioceptive type activities. At other times, alternating between a movement and deep touch/proprioceptive activity is prescribed. Aiming for active participation of the student in choosing (use visuals) and participating in activities is essential to long term success. Varying the activities performed from session to session, rather than always following the same routine of preferred activities is essential to work on a variety of foundation skills, as well as to develop student's flexibility, and awareness that each activity has a different impact on his/her system. As well, ending with a proprioceptive-based activity is usually recommended. In general, the therapist suggests including a 10-20 minute *Movement Break* 2 to 4 times a day at school. However, the length and frequency of a *Movement Break* is always adjusted to the needs of the student and school schedule. Therefore, share with the occupational therapist the patterns of behaviours encountered daily at particular times of the day for your student. This will help the therapist adjusting your student's sensory diet, and to recommend appropriate activities to meet his/her needs. Make sure that the *Movement Breaks* are done as prescribed and consistently on schedule to ensure optimal impact on your student's overall functioning in school.

Joëlle Hadaya, erg.

Occupational Therapist

Communication Corner

Say What You Mean; Mean What You Say

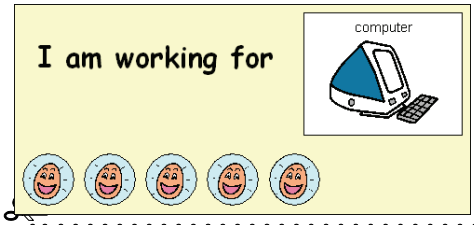
Students with ASD have great difficulty comprehending spoken language. Even those students who have superior vocabulary knowledge and who speak using complex language structure have difficulty interpreting the *intent* of your message. Our students interpret language in a very literal concrete manner. These difficulties are highlighted in the book *Ten Things Your Student with Autism Wishes You Knew* (Notbohm, 2006). The author points out that students with autism require adaptive communication, communication that makes sense to him/her. Here are the adaptations that are required:

- *Use concrete specific language.* Using slang, sarcasm and exaggeration only confuses the message that you are trying to convey. Idioms such as "you have ants in your pants" or expressions like "welcome back" when a student is daydreaming is confusing and can create anxiety.
- *Slow down your speech.* Slow down the rate of your speech. Insert pauses into your speech to allow your student time to process the message. Also, give your student adequate time to respond before jumping in.
- *Make specific requests.* Asking your student "Where's your pencil?" may not convey the message "You need to copy your homework into your agenda." Don't make your student guess what it is you would like him to do. Make clear positive statements such as "Please get your pencil so you can copy down your homework in your agenda." Also, be aware of non-specific speech. Avoid statements such as "Go get it," while glancing over your shoulder to the shelf. Your student may not understand that you mean "Go get your red writing duo-tang on the top shelf."
- *Don't offer a choice when there isn't one.* Asking a student with autism "Do you want to work with John's team?" implies that he has the choice to say "no". Avoid using these polite forms of requests when the student does not in fact have the choice to say "no."

Reference: Notbohm, E. (2006). Ten Things Your Student With Autism Wishes You Knew. Arlington, TX: Future Horizons Inc.

Behaviour Strategies

Students with autism will often have difficulty getting through a class activity or a worksheet. Many times, we will hear teachers and aides saying that the student is just "not motivated enough". This stems from the notion that children with autism lack intrinsic motivation to get things done. Most neurotypically developing children are able to complete their work because they want to feel internally satisfied at the fact of simply accomplishing a task. Children with autism often lack this feeling, therefore it is up to us to externally motivate them.



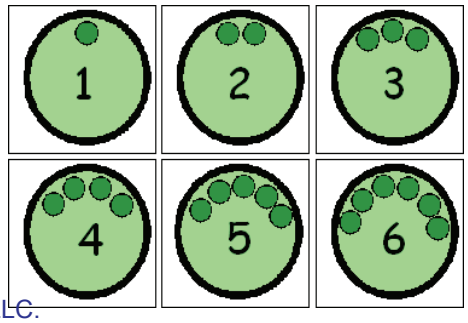
We do this by providing them with positive reinforcement at the end of a completed task. The key is to find out what the student will be motivated to work for. If you know you have a student with ASD in your class, find out what his or her interests are; these could take on various forms such as a favourite TV/movie character, favourite book, extra gym time, extra music time, computer time, a walk around the school, etc. If you are having difficulty finding this out, sit down with his/her parents and ask them what their child likes to do at home during free time. Parents are a great source of information. Once you've established the rewards, break the task down in small increments and reward the student for each completed chunk of work.

In the end, if the student feels they are working toward a reward, the task will become more meaningful to accomplish. Positive reinforcement also provides structure to the student by letting them know when the work is finished. Finally, it encourages positive behaviours, which is important as the student more often receives negative feedback.

Try This!

For those students who are having difficulty learning numbers, the "counting circles" activity is a fun and concrete way to teach this concept. This activity incorporates practicing fine motor skills because the student is asked to place clothes pins as he/she counts the circles. To create this simple activity, you can use either the Boardmaker software or simply do it by hand.

1. Target the numbers you would like the student to learn (ex. Numbers 1-10)
2. Cut out large circles for each number.
3. Write the number in the middle of the circle and draw the corresponding number of large dots around it.
4. Laminate the circles for extra durability.
5. As you go through each circle with the student, have them place one clothes pin on each dot they are counting.



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We're on the web!

http://www2.lbpsb.qc.ca/eng/asdn/index.asp

Our team is comprised of many professionals with a variety of specializations. Designated as a Centre of Excellence within the province, our mandate is to assist schools in the implementation of best practices for the inclusion of students with an ASD and to serve as a resource to the other English school boards in Quebec. Our team provides assistance to students and families and works to support educational personnel in developing their capacity to meet a wide range of needs in the classroom. We do this through direct intervention, coaching, consulting, professional development, and the sharing of materials.

Have a wonderful summer!

It has been a pleasure working with all the amazing school teams throughout this year. The Center of Excellence for Autism wants to wish you a relaxing summer. We look forward to many more collaborative experiences supporting our students with differences.

Coming Soon!

The **Abe Gold Learning and Research Centre** is proud to announce its **Second Symposium, October 30 and 31, 2008** at Le Chateau Royal with keynote speakers:

Ami Klin Ph.D., Laurent Mottron Ph.D.,

Cathy Pratt Ph.D. & Wendy Stone Ph.D.

Simultaneous translation is available. There will also be 20 breakout sessions in English and in French. Breakfast, health breaks, and lunch included.

For more information visit: www.goldlearningcentre.com or phone Allison Slopack at 514-345-8330 ext. 319.

WWW

http://www.preschoolfun.com/pages/teacch%20work%20jobs.htm

Visit this site for ideas for work jobs at various skill levels made with everyday materials--good for TEACCH work systems, but also for classroom centers.

http://www.hubbardscupboard.org/

A site which has a lot of applications for students with autism, but also a lot of wonderful activities and curriculum boosters for a classroom. A whole page is devoted to "math tubs" and math activities as well as hundreds of literacy activities, recipe ideas, themes and many original classroom ideas.

HOT OFF THE PRESS

The ASD Library in Student Services subscribes to the Autism Asperger's Magazine, a bimonthly periodical with many insightful and practical articles. In the Nov/Dec 2007 edition, the article "The Importance of What We Do and Say" by Ellen Mossman-Glazer, M.S. Ed, addresses the issue of words and actions which can inadvertently sabotage success. Although written for parents, it includes many tips that are helpful for educators. Among them are: do not get stuck in *My Way Mentality*, respect your child's preferences, but teach flexibility & avoid over-talking. ("Say one thing. Say it once!")

It is available for borrowing from the ASD Library or for a subscription go to: www.autismdigest.com

References: Asperger, H. (1944/1991). Die "autistischen psychopathen" in kind esalter. *Archive fur Psychiatrie and Nervenkrankheiten, 117,* 76-136. Translated by U. Frith (Ed.), Autism and Asperger's syndrome (1991, pp. 37-92). Cambridge: Cambridge University. Frith, U. (1991). Asperger and his syndrome. In U. Frith (Ed.), Autism and Asperger's syndrome (pp. 1-36). Cambridge: Cambridge University. Gillberg, C. (1998). Asperger's syndrome and high functioning autism. *British Journal of Psychiatry, 172,* 200-209. Howlin, P. & Asgharian, A. (1999). Diagnosis of autism and Asperger's syndrome: Findings from a survey of 770 families. *Developmental Medicine and Child Neurology, 41,* 834-839. Klin, A., Sparrow, S., Marans, W., Carter, A., & Volkmar, F. (2000). Assessment issues in children and adolescents with Asperger's syndrome. In Klin, A., Volkmar, F. & Sparrow, S (Eds.) Asperger's Syndrome (pp. 309-339).Manjiviona, J. & Prior, M. (1995). Comparison of Asperger's syndrome and high-functioning autistic children on tests of motor impairment. *Journal of Autism and Developmental Disorders, 25, 23-39.* Dickerson-Mayes, S., Calhoun, S., and Crites, D. (2001). Does DSM-IV Asperger's disorder exist? *Journal of Abnormal Child Psychology, 29,* 263-271. Miller, J. & Ornoff, S. (1997). Did Asperger's cases have Asperger's disorder?: A research note. *Journal of Child Psychology and Psychiatry, 38,* 247-251.Wing, L. (1991). The relationship between Asperger's syndrome and Kanner's autism. In U. Frith (Ed.), Autism and Asperger's syndrome (pp. 93-121). Cambridge: Cambridge University.

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