

# 30 Minute Lesson: Asperger Syndrome

## Participant Version

### *Lesson Summary*

Asperger Syndrome is characterized by sustained impairment in social interaction and the development of restricted, repetitive patterns of behavior, interests, and activities; in the absence of delays in language or cognitive development. <sup>1</sup> This lesson focuses on building an understanding of this disorder.

### *Learning Objectives*

- < Build an understanding of Asperger Syndrome and high-functioning autism: causes, prevalence, characteristics, support strategies
- < Consider the difference between disability and difference
- < Review information about successful approaches to supporting employment and independence

### *The Ideal Participant*

- < Works with individuals with autism spectrum disorder in an employment context

### *Prep activities and time required*

10-20 minutes, including reading the lesson, making copies of handout exercises, and organizing.

### *Lesson length, other requirements*

30-45 minutes. Can be adjusted by eliminating or modifying exercises

Does not require an overhead or LCD projector. A flip chart or whiteboard is handy but not necessary. All handouts are ready to use, or can be modified by user to meet specific needs.

### *Other related lessons*

Developmental Disabilities and Intellectual Disability (Mental Retardation)

Epilepsy

Cerebral Palsy

Autism

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<sup>1</sup> American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders (DSM-VI-TR) 2000

## Test Your Knowledge!

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What are three of the conditions generally included in the category of autism spectrum disorders?

Is Asperger Syndrome the same thing as high-functioning autism?

- a. Yes
- b. No
- c. The debate is still continuing on this question

True or False: men and women are equally likely to be diagnosed with Asperger Syndrome.

Place a check by the areas in which a person with Asperger Syndrome is likely to have difficulty:

- Social interactions
- Intelligence
- Language
- Physical strength
- Rote memory skills

True or False: A person with Asperger Syndrome's single-minded pursuit of his or her interest can lead to great achievements later on in academic and professional life.



# Asperger Syndrome

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Asperger Syndrome (AS) is considered a pervasive developmental disorder at the higher functioning end of the autism spectrum. Asperger Syndrome (or Asperger's Disorder) is one of five Pervasive Development Disorders (PDDs) which also includes Autism, Rett's Syndrome, Childhood Disintegrative Disorder, and PDD-Not Otherwise Specified (PDD-NOS).

AS was first described in the 1940s by Viennese pediatrician Hans Asperger, who observed autistic-like behaviors and difficulties with social and communication skills in boys who had normal intelligence and language development.

Many professionals feel AS is simply a milder form of autism and used the term "high-functioning autism" to describe these individuals. Others feel that high-functioning autism is different in some way from AS. This debate is still continuing. Some professionals feel it is more accurate to use the description "Nonverbal Learning Disability."

Here is one take on the difference between AS and high functioning autism (from

<http://www.aspergers.com/aspdiff.htm>)



It is believed that in Asperger's Disorder

- onset is usually later
- outcome is usually more positive
- social and communication deficits are less severe
- circumscribed interests are more prominent
- verbal IQ is usually higher than performance IQ (in autism, the case is usually the reverse)
- clumsiness is more frequently seen
- family history is more frequently positive (that is, AS tends to run in families)
- neurological disorders are less common

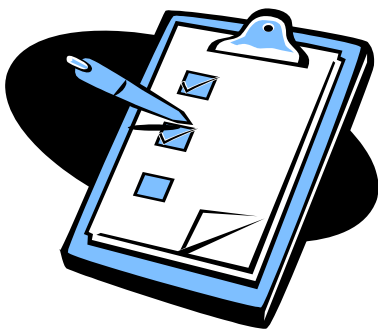
## Causes and Diagnostic Criteria

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“Researchers and mental health experts are still investigating the causes of autism and AS. There seems to be a hereditary component to AS, and research indicates that in some cases AS may be associated with other mental health disorders such as depression and bipolar disorder. Researchers are also looking into whether environmental factors that affect brain development might play a role in the condition.

Contrary to assumptions some may make about people with AS, it is not caused by emotional deprivation or the way a person has been brought up. Because some of the behaviors exhibited by a person with AS may be seen by others as intentionally rude, many people wrongly assume that AS is the result of bad parenting, but it isn't. It's a neurobiological disorder whose causes are not yet fully understood.”<sup>2</sup>

Boys are four times as likely than girls to be diagnosed with AS, but it remains unclear whether this is because they are four times more likely to develop it, or if the different socialization processes for girls and boys improves girls' social abilities so that they become indistinguishable from others without AS.



Diagnosis of Asperger's Disorder is on the increase although it is unclear whether it is more prevalent or whether more professionals are labeling it. It is common for a child who was initially diagnosed with ADD or ADHD to be re-diagnosed with AS as he/she reaches young adulthood.

The Cambridge Lifespan Asperger Syndrome Service (CLASS), an organization in the United Kingdom that works with adults (age 18 or older) with AS, has developed a simple checklist to help identify those individuals who fit the common characteristics of people with Asperger's: ([http://autismresearchcentre.com/autism/as\\_hfa.asp](http://autismresearchcentre.com/autism/as_hfa.asp))

- *I find social situations confusing*
- *I find it hard to make small talk*
- *I did not enjoy imaginative story-writing at school.*
- *I am good at picking up details and facts.*
- *I find it hard to work out what other people are thinking and feeling.*
- *I can focus on certain things for very long periods.*
- *People often say I was rude even when this was not intended.*
- *I have unusually strong, narrow interests.*
- *I do certain things in an inflexible, repetitive way.*
- *I have always had difficulty making friends.*

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<sup>2</sup> <http://www.kidshealth.org/parent/medical/brain/asperger.html>

Asperger's Disorder was added to the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) as a separate disorder from autism in 1994. Here are the diagnostic criteria:<sup>3</sup>

### **Diagnostic Criteria for 299.80 Asperger's Disorder**

- A. Qualitative impairment in social interaction, as manifested by at least two of the following:
1. marked impairments in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction
  2. failure to develop peer relationships appropriate to developmental level
  3. a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g. by a lack of showing, bringing, or pointing out objects of interest to other people)
  4. lack of social or emotional reciprocity
- B. Restricted repetitive and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:
1. encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
  2. apparently inflexible adherence to specific, nonfunctional routines or rituals
  3. stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole-body movements)
  4. persistent preoccupation with parts of objects
- C. The disturbance causes clinically significant impairment in social, occupational, or other important areas of functioning
- D. There is no clinically significant general delay in language (e.g., single words used by age 2 years, communicative phrases used by age 3 years)
- E. There is no clinically significant delay in cognitive development or in the development of age-appropriate self-help skills, adaptive behavior (other than social interaction), and curiosity about the environment in childhood
- F. Criteria are not met for another specific Pervasive Developmental Disorder or Schizophrenia

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<sup>3</sup> DSM-IV-TR, p. 84

## Characteristics of People with AS<sup>4</sup>

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People with AS generally have significant limitations in social skills, have difficulties with transitions or changes, and prefer sameness. They often have obsessive routines and may be preoccupied with a particular subject of interest. They have a great deal of difficulty reading nonverbal cues (body language) and very often have difficulty determining proper body space.

Often overly sensitive to sounds, tastes, smells, and sights, the person with AS may be bothered by sounds or lights no one else seems to hear or see. It's important to remember that people with AS perceive the world very differently. Many behaviors that seem odd or unusual are due to those neurological differences and not the result of intentional rudeness or bad behavior, and most certainly not the result of "improper parenting."

### Language:

One of the major differences between AS and autism is that, by definition, there is no speech delay in Asperger's. In fact, people with AS frequently have good language skills; they simply use language in different ways than other people. Speech patterns may be unusual, lacking inflection or having a rhythmic nature. Speech may be formal and too loud or high pitched; the voice may seem flat and emotionless.

People with AS generally do not understand the subtleties of language, such as irony, metaphors, and humor, or may not understand the give and take nature of a conversation.

### Social:

People with AS have difficulty with managing social interactions and understanding unspoken social cues. They are often isolated because of their poor social skills and narrow interests. They may approach other people, but make normal conversation impossible by inappropriate or eccentric behavior.

People with autism are frequently seen as aloof and uninterested in others. In contrast, individuals with Asperger's Disorder usually want to fit in and have interaction with others; they simply don't know how to do it. They may be socially awkward, not understanding conventional social rules, or may show a lack of empathy. They may have limited eye contact, seem to be unengaged in a conversation, have trouble judging proximity to others, and not understand the use of gestures. They appear often to talk 'at' rather than 'to' you, giving information rather than holding proper conversations. Teens and adults with Asperger's Syndrome are often unable to discern that they are talking too loudly for the



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<sup>4</sup> <http://www.aspergersyndrome.org/>

circumstances. They also develop monomaniacal interests in esoteric topics, and cannot understand that others are less interested. Clues that they are boring someone with the depths and details of their interests pass them by.

**Thinking:**

Another distinction between AS and autism concerns cognitive ability. While some individuals with autism experience mental retardation, by definition a person with AS possesses average to above average intelligence. People with AS tend to have excellent rote memory and abstract thinking skills, and often have above average intelligence.



## Disability or Difference?

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With the growing frequency of the Asperger Syndrome label, many people casually label any one with odd social behavior as having this disability. You hear comments about Boeing and Microsoft being full of people – generally male engineers – with AS.



Does this man have Asperger Syndrome?

In his 2000 article, "Is Asperger's syndrome/High-Functioning Autism necessarily a disability?," Simon Baron-Cohen of the University of Cambridge provides these points in favor of considering AS/HFA as a difference rather than a disability:

***The neurobiology of AS/HFA is not better or worse than in typical development.*** (Neural abnormalities signal differences between brains of people with and without AS/HFA, but they cannot be taken as evidence that one type of brain is better or worse than the other.)

***'Difference' avoids value-laden judgements.*** For example, the AS/HFA cognitive style may be described as being more object-oriented, and more focused on detail.

***The difference view is more compatible with the 'continuum' concept.*** The notion of a continuum assumes that there is an underlying dimension or set of dimensions along which all people vary.

The author further considers these points in support of viewing Asperger's as a disability:

***Differences are caused by cognitive deficits.*** Perhaps people with AS/HFA show differences precisely because they suffer cognitive deficits, etc. However, there is a chicken-and-egg problem in the logic. For example, is their "mindblindness" the cause of them being less socially-focused/more object-focused, or a consequence of it?

***Lack of social interest reflects disability.*** A lack of normal sociability or communication may be seen as a sign of disability. But this calls attention to what someone does not do well or often, when we do not do this in the case of people without AS/HFA. For example, I do not spend much time thinking about mathematics problems, but I spend quite a lot of time thinking about people. In contrast, the person in the next-door office spends a lot of time thinking about mathematics problems, and hardly any thinking about people. Yet I do not describe myself as having a disability in mathematics. I would instead say that I simply prefer to spend time thinking about people: they are more interesting to me.

***AS/HFA is a disability when viewed from the family or peer perspective.*** A child's inflexibility or antisocial behaviour should clearly not be given free reign if it is interfering with other people's liberty, safety, hygiene, etc. But this is no more justified than saying that your neighbour is disabled simply because his behaviour interferes with your privacy. Individuals clearly need to accommodate to each other, since there may be a clash of interests or styles, but is one disabled? Not necessarily.

*AS/HFA is a disability because of its associated medical conditions.* One might argue that some associated conditions are clearly disabilities. For example, many young children with HFA have little language. The combination of an autistic lack of social interest, together with little or no language, can be seen as a major disadvantage in a world of other people. But whilst the notion of a disability may reasonably apply to extreme cases, the earlier point remains valid: that individuals with HFA need not necessarily be viewed as disabled as most of them will eventually develop enough language.

*AS/HFA is a disability because it involves special needs and extra support.* Perhaps the most compelling reason for viewing AS/HFA as a disability is that such individuals clearly have special needs (they may require different kinds of teaching methods or schooling, or specific kinds of treatment) and access to such support in the present legal framework only flows to the person and their family if the case can be made that autism is a disability. Special funding does not automatically flow simply because one regards the person as 'different'.

Read the whole article at <http://www.geocities.com/CapitolHill/7138/lobby/disability.htm>

**What do you think? Is AS a disability, or just a different way of operating in the world? What does the DSM tell us? Is it possible that some people with AS are disabled and some are not?**

## Employment and Independence

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As always, employment should take advantage of the individual's strengths and abilities. Temple Grandin, Ph.D. suggests, "jobs should have a well-defined goal or endpoint," and that your "boss must recognize your social limitations."<sup>5</sup> Individuals with AS may be successful in careers that require focus on details but have limited social interaction with colleagues such as computer sciences, research or library sciences.

Many people think of adulthood in terms of getting a job and living in a particular area, but having friends and a sense of belonging in a community are also important. Individuals with Asperger's Disorder may need assistance in encouraging friendships and structuring time for special interests. Many of the support systems developed in the early years may continue to be useful.<sup>6</sup>

People with AS can be taught to decode social cues intellectually, rather than instinctively. This is a fairly lengthy and frustrating process, because most people cannot verbalize what they understand instinctively, but recruiting friends and family to help is useful. A worker with AS might ask a trusted coworker, for example, to give him a particular hand signal when he is speaking too loudly, or a different signal when he is belaboring a topic that no one else is interested in.<sup>7</sup>

Supports and interventions may include:

- Teaching skills and concepts in naturally occurring situations and across settings to maximize generalization
- Providing a predictable environment with consistent daily routines and minimal transitions
- Role playing social situations in which the individual with AS is taught how to react to social cues
- Teaching social awareness, taking the perspective of another, and interpretations of non-literal language
- Teaching appropriate nonverbal behaviors such as eye contact, gestures, proximity to others and correct posture,
- Teaching how to read the nonverbal communications of others
- Restricting the discussion of the individual's special topic to specific times and/or places
- Creating a buddy system in which a coworker can help with staying on task, social cues<sup>8</sup>

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<sup>5</sup> <http://www.autism.org/temple/jobs.html>

<sup>6</sup> [http://www.autism-society.org/site/PageNavigator/about\\_what\\_is\\_asperger](http://www.autism-society.org/site/PageNavigator/about_what_is_asperger)

<sup>7</sup> <http://www.wisegeek.com/what-is-aspergers-syndrome.htm>

<sup>8</sup> Center for Autism and Related Disabilities; <http://card.ufl.edu/handouts/fs5english.pdf>

# Choosing the Right Job

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In 1999, Temple Grandin (Assistant Professor at Colorado State University and a person with self-described high-functioning autism) wrote an article called "Choosing the Right Job for People with Autism or Asperger's Syndrome."<sup>9</sup> In the article, she makes these specific suggestions about job types for people with autism spectrum disorders. What do you think?

## Bad Jobs for People with High Functioning Autism or Asperger's Syndrome: Jobs that require high demands on short-term working memory

- *Cashier* -- making change quickly puts too much demand on short-term working memory
- *Short order cook* -- Have to keep track of many orders and cook many different things at the same time
- *Waitress* -- Especially difficult if have to keep track of many different tables
- *Casino dealer* -- Too many things to keep track of
- *Taxi dispatcher* -- Too many things to keep track of
- *Taking oral dictation* -- Difficult due to auditory processing problems
- *Airline ticket agent* -- Deal with angry people when flights are cancelled
- *Future market trader* -- Totally impossible
- *Air traffic controller* -- Information overload and stress
- *Receptionist and telephone operator* -- Would have problems when the switch board got busy

## Good Jobs for Visual Thinkers

- *Computer programming*
- *Drafting* -- I have observed that most of the people who draw beautiful drawings on a computer learned to draw by hand first. People who never learn to draw by hand first tend to leave important details out of their drawings.
- *Commercial art* -- Advertising and magazine layout can be done as freelance work
- *Photography* -- Still and video, TV cameraman can be done as freelance work
- *Equipment designing* -- Many industries, often a person starts as a draftsman and then moves into designing factory equipment
- *Animal trainer or veterinary technician* -- Dog obedience trainer, behavior problem consultant

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<sup>9</sup> <http://www.autism.org/temple/jobs.html>

- *Automobile mechanic* -- Can visualize how the entire car works
- *Computer-troubleshooter and repair* -- Can visualize problems in computers and networks
- *Small appliance and lawnmower repair* -- Can make a nice local business
- *Handcrafts of many different types* such as wood carving, jewelry making, ceramics, etc.
- *Laboratory technician* -- Who modifies and builds specialized lab equipment
- *Web page design* -- Find a good niche market can be done as freelance work
- *Building trades* -- Carpenter or welder.
- *Video game designer* -- Stay out of this field. Jobs are scarce and the field is overcrowded.
- *Computer animation* -- Visual thinkers would be very good at this field, but there is more competition in this field than in business or industrial computer programming.
- *Building maintenance* -- Fixes broken pipes, windows and other things in an apartment complex, hotel or office building
- *Factory maintenance* -- Repairs and fixes factory equipment

Good Jobs for Non-Visual Thinkers: Those who are good at math, music or facts

- *Accounting* -- Get very good in a specialized field such as income taxes
- *Library science* -- reference librarian. Help people find information in the library or on the Internet.
- *Computer programming* -- Less visual types can be done as freelance work
- *Engineering* -- Electrical, electronic and chemical engineering
- *Journalist* -- Very accurate facts, can be done as freelance
- *Copy editor* -- Corrects manuscripts. Many people freelance for larger publishers
- *Taxi driver* -- Knows where every street is
- *Inventory control* -- Keeps track of merchandise stocked in a store
- *Tuning pianos and other musical instruments*, can be done as freelance work
- *Laboratory technician* -- Running laboratory equipment
- *Bank Teller* -- Very accurate money counting, much less demand on short-term working memory than a busy cashier who mostly makes change quickly
- *Clerk and filing jobs* -- knows where every file is
- *Telemarketing* -- Get to repeat the same thing over and over, selling on the telephone.

Telephone sales avoids many social problems.

- *Statistician* -- Work in many different fields such as research, census bureau, industrial quality control, U.S. Dept. of Agriculture, etc.
- *Physicist or mathematician* -- There are very few jobs in these fields. Only the very brilliant can get and keep jobs.

#### Jobs for Nonverbal People with Autism or People with Poor Verbal Skills

- *Reshelving library books* -- Can memorize the entire numbering system and shelf locations
- *Factory assembly work* -- Especially if the environment is quiet
- *Copy shop* -- Running photocopies. Printing jobs should be lined up by somebody else
- *Janitor jobs* -- Cleaning floors, toilets, windows and offices
- *Restocking shelves* -- In many types of stores
- *Recycling plant* -- Sorting jobs
- *Warehouse* -- Loading trucks, stacking boxes
- *Lawn and garden work* -- Mowing lawns and landscaping work
- *Data entry* -- If the person has fine motor problems, this would be a bad job
- *Fast food restaurant* -- Cleaning and cooking jobs with little demand on short-term memory
- *Plant care* -- Water plants in a large office building

Read the whole article at <http://www.autism.org/temple/jobs.html>

- 1. What do you think about making employment recommendations for people with specific disability labels? What about for people who share a sensory style or skill set?**
- 2. Have you ever helped someone access jobs like those in the first three sections? What would be the obstacles in you doing so?**

## Internet References on Asperger Syndrome

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<http://card.ufl.edu/handouts/fs5english.pdf>

<http://card.ufl.edu/> Center for Autism and Related Disabilities

<http://www.wisegeek.com/what-is-aspergers-syndrome.htm>

<http://www.ninds.nih.gov/disorders/asperger/asperger.htm>

[Asperger Syndrome Fact Sheet](#)

<http://kidshealth.org/parent/medical/brain/asperger.html>

<http://www.udel.edu/bkirby/asperger/> Online Asperger Syndrome Information and Support OASIS

[http://en.wikibooks.org/wiki/A\\_survival\\_guide\\_for\\_people\\_on\\_the\\_autistic\\_spectrum](http://en.wikibooks.org/wiki/A_survival_guide_for_people_on_the_autistic_spectrum)

[What is Asperger Syndrome?](#)

Vocational Supports for Individuals with Asperger Syndrome (Muller, Schuler, Burton, and Yates); <http://www.autastics.org/JVRpaper.htm>

# 30 Minute Lesson: Feedback Form

Please let us know what you think of this product, so we can continue to better meet your training needs. Fax or mail to Laurie Ford at 6912 220<sup>th</sup> SW, Suite 105, Mountlake Terrace, WA 98043; Fax (425) 774-9303

Topic of Lesson \_\_\_\_\_

- Facilitator Version
- Participant Version
- Non-Facilitated Group Version
- Self-Study Version

1. On a scale of 1 to 5, please rate the relevancy of these materials to your job \_\_\_\_\_ (1 is worst, 5 is best)
2. On a scale of 1 to 5, please rate the positive impact of these materials on your professional skills, knowledge, and abilities (1 is worst, 5 is best) \_\_\_\_\_
3. On a scale of 1 to 5, please rate the positive impact of these materials on your organization (1 is worst, 5 is best) \_\_\_\_\_
4. What was the most useful part of the lesson?
5. What was the least useful part of the lesson?
6. How could this lesson be improved?
7. What additional topics would you like to see in a 30 Minute Lesson?