PEOPLE WITH AUTISM

Courtney Love, singer, diagnosed with mild form of autism when she was 9,.
troubled home life
travelling back and forth between families
kicked out of various schools
history of drug use and other delinquent behaviours
she is a highly intelligent, if troubled, individual
Dan Aykroyd, diagnosed with Tourette's and Asperger's.
expelled from 2 schools for acting up
had a few tics and signs of obsessive compulsive disorder
Aykroyd states that two of his obsessions (common in Asperger's individuals) are with ghosts and policemen. The former obsession was his inspiration for the film *Ghostbusters*,
Daryl Hannah – actress and star of *Splash*, *Blade Runner* and *Steel Magnolias* – aspergers diagnosis
intensely shy as a child, rocked to self-soothe, and admits she still does.
never got used to being the centre of attention and refused to give interviews or attend her own movie premieres.
left the limelight, and though still dabbles in acting, works as a career environmentalist who has been arrested several times after protests. Hannah lives in a one-room house using solar energy and well water, and drives a truck fueled on french-fry grease.
Tim Burton has never had a formal diagnosis, but he and spouse Helena Bonham Carter both believe he, may have Asperger's, or at least that falls within the autism spectrum. While Bonham Carter was researching for a role where she played mother to several autistic boys, she recognized traits shared by her husband, saying in an interview that, "While making this drama, I realized he has a bit of Asperger's in him. You start recognizing the signs." Also, according to the *Daily Mail* Burton himself reportedly said to his wife while they were watching a documentary that the description given of autism was largely how he felt as a child. In fact, he claims *Edward Scissorhands*, his first film, is somewhat autobiographical, as it describes his life on the margins during his childhood
Vincent Van Gogh one of the greatest Dutch painters.. He had few autism traits like eccentricity.
Marie Curie She is the only person to have received two Nobel Prizes in two different fields of science. Once she said, "I feel everything very violently". She was very systematic and kept a record of all her expenditures. The way she perceived things was quite different. She found difficulty in greeting and dealing with strangers. She was even described as 'rather awkward in her movements'. She never really cared about her reputation and she was very reserved by nature
Michael Jackson – suspected of Aspergers

WHAT IS AUTISM?

A very complex, baffling developmental disability

The word "autism," in use for about 100 years
comes from the Greek word "autos," meaning "self."
describes conditions in which a person is removed from social interaction -- hence, an isolated self.
eminent Swiss psychiatrist Eugen Bleuler started using the term to refer to one group of symptoms of schizophrenia in 1911.

Autism is considered a new developmental disorder as it did not clinically exist until 1944.

a relatively new diagnosis first described in a 1943 case study by Dr. Leo Kanner, a leading child psychiatrist at the time.
He documented 11 cases of children with similar characteristics that could not be attributed to a single existing diagnosis.
They showed deficits in social interaction and language, as well as displaying a repertoire of stereotyped and repetitive behaviors.
Kanner described this seemingly new disorder as “inborn autistic disturbances of affective contact.”
In 1944, Hans Asperger, a scientist in Germany, identified a similar condition that’s now called Asperger’s syndrome.
‘**Both Kanner and Asperger choose the word ‘autistic' in order to characterise the nature of the underlying disturbance.**
Kanner’s paper has become the most quoted in the whole literature on autism.
Asperger’s paper, written in German, published during 2nd world war, largely ignored. Asperger’s work did not become known until end of the 1980s when his book was translated into English
For next 30 years autism considered an emotional disturbance. Until the 1960s Autism and schizophrenia remained linked in many researchers’ minds. It was only then that medical professionals began to have a separate understanding of autism in children.

Both Kanner and Hans Asperger believed that there was present from birth a fundamental disturbance which gave rise to highly characteristic problems. They saw cases of strange children who had in common some fascinating features. Above all the children seemed to unable to entertain normal affective relationships with people.

DONALD GRAY TRIPLETT OF MISSISSIPPI

Donald eldest son of an affluent family; his mother's family founded the local bank in Forest, Mississippi, and father was an attorney.
apparent at early age that social interaction was challenging and ultimately uninteresting to him; he fixated on certain objects and displayed knack for memorization. did not show an interest in others. He also engaged in stereotyped behaviours, like spinning blocks and jumping up and down, as well as engaged in repetitive verbalizations and echolalia.
1937 (4) His parents, unable to cope committed him to a state institution but withdrew him a year later.
October 1938 Triplett examined by Austrian child psychiatrist Leo Kanner
Kanner was baffled by the boy's symptoms and, though he noted some similarities to schizophrenia, was unable to diagnose him. Kanner saw Triplett several more times and by 1943 had encountered 10 cases of similarly affected children. That year he published an article titled "Autistic Disturbances of Affective Contact" that outlined basic symptoms of the disorder later known as autism.
In the paper, Triplett was referred to as Case 1, Donald T- the first person ever diagnosed with autism
in 1944 At Kanner's urging, Triplett went to live with a couple who owned a farm near Forest. There his proclivities for counting and measuring were put to practical use on a daily basis as he helped with chores such as plowing. He returned to live with his parents four years later.
Donald was found to have an excellent memory and a knack for numbers and mathematics.
In 1951, a Hungarian-born psychologist, mind reader, and hypnotist named Franz Polgar was booked for a single night's performance in Forest. He lodged at the home of one of Forest's wealthiest and best-educated couples, the Tripletts
Donald was now 18. Oddly distant, uninterested in conversation, and awkward in his movements, Donald possessed a few advanced faculties of his own, including a flawless ability to name musical notes as they were played on a piano and a genius for multiplying numbers in his head. Polgar tossed out "87 times 23," and Donald, with his eyes closed and not a hint of hesitation, correctly answered "2,001."
Polgar wanted Donald to join his act, but his parent refused

Donald attended the local high school, where his disabilities were largely accepted, and in 1958 he received a bachelor's degree in French
He worked at the bank owned by his family. He retained many features of the disorder throughout his life, but learned to drive and travelled abroad extensively.
He thrived in a community that is completely accepting of him

WHAT IS AUTISM?

It falls in the diagnostic category Pervasive Developmental Disorder as opposed to Specific development disorders

There are 5 types of disorder under 'Pervasive Developmental Disorder' or PDD . Disorders characterized by delays in the development of multiple basic functions including socialisation and communication. They are

Pervasive Development Disorder Not Otherwise Specified

The term PDD first appeared in diagnostic manuals in the 1980s to define disorders with core characteristics overlapping with those described by Lorna Wing and Judith Gould as the Triad of Impairments: namely, those affecting social interaction, social communication and social imagination.

Pervasive Development Disorder Not Otherwise Specified (PDD-NOS), also sometimes incorrectly referred to as atypical autism, is one of a number of PDD, along with autism, Asperger syndrome, Retts syndrome, and childhood disintegrative disorder. Erroneously, PDD-NOS is often shortened to PDD (the umbrella category under which PDD-NOS is found). At present, the diagnostic criteria for all such disorders are under review as there is a need for greater clarity.

A child may be diagnosed with PDD-NOS if he or she shows some behavioural features of autistic disorder but does not meet the full criteria. All of the listed PDD are part of a spectrum of overlapping conditions. To illustrate this, a child may begin with a diagnosis of PDD-NOS, develop more autistic features with age, and be re-diagnosed with autism or another pervasive development disorder; conversely, a child with autism may improve and be re-diagnosed with PDD-NOS.

PDD-NOS is therefore a diagnostic category in its own right: a distinct developmental disorder. It is different from the, so called, broader autism phenotype:

Autism

a term used to describe individuals who exhibit differences with personality, language and social behaviour at a higher than average level but lower than that required to meet the diagnostic criteria for PDD.

Asperger's Syndrome

It differs from other autism spectrum disorders by its relative preservation of linguistic and cognitive development. Although not required for diagnosis, physical clumsiness and atypical (peculiar or odd) use of language are frequently reported.[1][2]

Rett Syndrome

originally termed **cerebroatrophic hyperammonemia**,[1] is a rare genetic postnatal neurological disorder of the grey matter of the brain[2] that almost exclusively affects females but has also been found in male patients. The clinical features include small hands and feet and a deceleration of the rate of head growth (including microcephaly in some). Repetitive stereotyped hand movements, such as wringing and/or

repeatedly putting hands into the mouth, are also noted.[3] People with Rett syndrome are prone to gastrointestinal disorders and up to 80% have seizures.[4] They typically have no verbal skills, and about 50% of affected individuals do not walk. Scoliosis, growth failure, and constipation are very common and can be problematic.

The signs of this disorder are most easily confused with those of Angelman syndrome, cerebral palsy and autism. Rett syndrome occurs in approximately 1:10,000 live female births in all geographies, and across all races and ethnicities.

Rett syndrome was formerly classified as a pervasive developmental disorder by the *Diagnostic and Statistical Manual of Mental Disorders* (DSM), together with the autism spectrum disorders and childhood disintegrative disorder. Some argued against this classification because RTT is similar to non-autistic spectrum disorders such as fragile X syndrome, tuberous sclerosis, or Down syndrome where one can see autistic features.[5] It was removed from the DSM-5 in 2013 because it has a known molecular etiology.[6]

Childhood Disintegrative Disorder.

Childhood disintegrative disorder is also known as Heller's syndrome. It's a very rare condition in which children develop normally until at least two years of age, but then demonstrate a severe loss of social, communication and other skills.

Childhood disintegrative disorder is part of a larger category called autism spectrum disorder. However, unlike autism, someone with childhood disintegrative disorder shows severe regression after several years of normal development and a more dramatic loss of skills than a child with autism does. In addition, childhood disintegrative disorder can develop later than autism does.

Treatment for childhood disintegrative disorder involves a combination of medications, behaviour therapy and other approaches.

The first three of these disorders are commonly called the autism spectrum disorders; the last two disorders are much rarer, and are sometimes placed in the autism spectrum and sometimes not

Characteristics include

- ✓ **engagement in repetitive activities & stereotyped movements,**
- ✓ **resistance to environmental change or changes in daily routines,**
- ✓ **unusual responses to sensory experiences.**

AUTISM FACTS

A lifelong developmental disability affecting 1 in 100 people in the UK.
It affects how a person communicates with, and relates to, other people. It also affects how they make sense of the world around them.
4 times more prevalent in boys
The probability of a second child being diagnosed with autism is 1 in 20
ASD females have male fingerprints

A condition with no known racial, ethnic or social boundaries, and there is no relation to family income or lifestyle
Research showed that there are 'clusters of autism' , but Ros explained that "crackpot professors" had churned out autism diagnosis, so that, depending on where these professors had practised, there were now clusters of ASD children – eg around Wakefield / Cambridgeshire / South East London / Southend and the Devon and Cornwall borders.

A condition very likely neurological in origin – it is not emotional, not the 'refrigerator mum'

It is a spectrum condition, which means that, while all people with autism share certain difficulties, their condition will affect them in different ways. Some people with autism are able to live relatively independent lives but others may have accompanying learning disabilities and need a lifetime of specialist support. People with autism may also experience over- or under-sensitivity to sounds, touch, tastes, smells, light or colours.

Asperger syndrome is a form of autism. People with Asperger syndrome are often of average or above average intelligence. They have fewer problems with speech but may still have difficulties with understanding and processing language.

THE TRIAD OF IMPAIRMENT

Social Communication Difficulties

For people with autistic spectrum disorders, 'body language' can appear

just as foreign as if people were speaking ancient Greek

Difficulty with Social Interaction

Socialising doesn't come naturally - we have to learn it

Difficulty with Social Imagination

Social imagination allows us to understand and predict other people's behaviour, make sense of abstract ideas, and to imagine situations outside our immediate daily routine

SOCIAL COMMUNICATION DIFFICULTIES

People with autism have difficulties with both verbal and non-verbal language. Many have a very literal understanding of language, and think people always mean exactly what they say. They can find it difficult to use or understand:

jokes and sarcasm

facial expressions or tone of voice

common phrases and sayings; eg 'It's cool', ‘we’re going swimming on the bus’

long and complex sentences

body language – frowning or upset faces mean little

Delayed speech development

Some people with autism may not speak, or have fairly limited speech. They will usually understand what other people say to them, but prefer to use alternative means of communication themselves, such as sign language or visual symbols. Photos are not good

Others will have good language skills, but they may still find it hard to understand the give-and-take nature of conversations, perhaps repeating what the other person has just said (this is known as echolalia) or talking at length about their own interests.

May have spoken language that is formal and pedantic

May repeating words and sentences

May have a voice that lacks expression or has unusual intonation

May take things literally Ros – taking off coat

May go off topic

May make limited or no eye contact

Difficulty expressing feelings, emotions or needs

It helps if other people speak in a clear, consistent way and give people with autism time to process what has been said to them

DIFFICULTY WITH SOCIAL INTERACTION

Socialising doesn't come naturally - we have to learn it

A **person with autism will have little understanding of the unwritten social rules** which most of us pick up without thinking:

They may not understand the unwritten social rules which most of us pick up without thinking:

they may stand too close to another person for example, or start an inappropriate subject of conversation

they often have difficulty recognising or understanding other people's emotions and feelings, and expressing their own, which can make it more difficult for them to fit in socially. They can **appear to be insensitive** because they have not recognised how someone else is feeling

They may call out inappropriate things at inappropriate times because most interactions are on their 'own terms' and to meet a specific need

Because they prefer to spend time alone rather than seeking out the company of other people **they may have difficulty interacting and playing with others** and prefer to spend time alone

They may not seek comfort from other people

They appear to behave 'strangely' or inappropriately at times, as it is not always easy for them to express feelings, emotions or needs.

Difficulties with social interaction can mean that people with autism find it hard to form friendships: some may want to interact with other people and make friends, but may be unsure how to go about this

Their Inability to understand rules of social behaviour leads to a tendency to be aloof, withdrawn and anti-social

They are disinterested in the behaviour of others, they have difficulty dealing with unstructured group situations and have difficulty making lasting friendships

They avoid making eye contact

DIFFICULTY WITH SOCIAL IMAGINATION

Social imagination allows us to understand and predict other people's behaviour, make sense of abstract ideas, and to imagine situations outside our immediate daily routine.

People with autism may :

Insist on rules and routines/ have resistance to change

Have repetitive behaviours/special interests

Have problems transferring skills from one setting to another.

Be unable to play imaginatively

People with autism may find it hard to:

Understand the concept of danger, for example busy roads understand the concept of danger, for example that running on to a busy road poses a threat to them

Engage in imaginative play and activities: children with autism may enjoy some imaginative play but may want to act out the same scenes each time

Prepare for change and plan for the future

Cope in new or unfamiliar situations.

Predict what will happen next, or what could happen next

Understand and interpret other people's thoughts, feelings and actions; the Theory of Mind understand and interpret other people's thoughts, feelings and actions

Difficulties with social imagination should not be confused with a lack of imagination. Many people with autism are very creative and may be, for example, accomplished artists, musicians or writers.

AUTISM

Development of fixed routines

Repetitive behaviour

Obsessive behaviour including an obsession with a particular topic or object

Difficulty managing anger

Hyper or Hypo sensitive to sounds, sights, smells and taste

Inability to be tactful often stating things exactly as they are

People with ASD find it difficult to multi task

People with ASD can be incontinent.

Bowel disorder is rife with autistic children. Going on a cafein free diet, removing gluten and cow's milk, makes children feel better and this in turn helps them behave better because they feel better – just like we perform when we are feeling fine.

Autistic children have PICA (the eating of inedible substances e.g. slug's / fluff on the carpet).

DIAGNOSING AUTISM

Parental/School Concerns

Poor eye contact.
Doesn't seem to know how to play with toys.
Doesn't smile.
At times seems to be hearing impaired.

The child doesn't point, make baby babble or gestures by one year of age.
Usually the child doesn't speak one word by 16 months of age (however, some have language and lose it around 2 years of age.).
Does not combine two words by 2 years of age.
Does not respond to name when called.

Loses language or social skills.

For a diagnosis to be made, a child must exhibit a certain number and severity level of these characteristics. "But lots of kids suffer from impairing autistic traits, even though they may not meet the full criteria," says Geraldine Dawson, Ph.D., chief science officer for the national advocacy group Autism Speaks. The good news is that there are excellent new treatment options for these kids. Follow your instincts, says Dawson, and talk to your pediatrician if you think your child has trouble in even just one of the following areas: "Parents are really good at recognizing symptoms early on. They just need to act on that gut feeling."

The CHAT Test – The Checklist for Autism in Toddlers

Different Diagnosticians using different methods but have to follow NICE Clinical Guidelines

Theory of Mind – The Sally and Ann Test

A common test used with children suspected of being autistic is called the *Sally and Anne Test*:

Most children will answer that Sally will look in her basket, because that's where she put it and that's where she expects it to be when she returns from her walk. Baron-Cohen discovered that only 20% of children with autism were able to answer correctly. A full 80% answered that Sally would look in the box, because that is where the marble is.

This test is often used to demonstrate the theory of mind deficits in children with Asperger's syndrome. They believe Sally will look in the box for her marble because they know that's where it is. They are unable to put themselves into Sally's mind in order to understand that from her perspective the marble should be right where she left it: in her basket. Can you imagine how unpredictable and irrational the world must appear to a child whose logic is denied in such a manner? This is the world of a child with Asperger's syndrome.

POSSIBLE AUTISTIC BEHAVIOURS

An insistence on sameness.- Development of fixed routines
Excessively lines up toys or other objects.
Is attached to one particular toy or object.
Has a routine and feels lost if the routine is changed.
Repetitive behaviour and Obsessive behaviour including an obsession with a particular topic or object

Difficulty managing anger

Attentional and perceptual abnormalities – notice fine details and very small changes in their environment.

Attentional and perceptual abnormalities – notice fine details and very small changes in their environment. Hyper or Hypo sensitive to sounds, sights, smells and taste

Hypersensitive to sounds:

Imagine chairs sliding on the floor, keys on a keyboard clicking, someone chewing, a fly buzzing outside the window all coming at you at one time.

Hypersensitive to touch.

Hypersensitive to light.

Difficulties generalising learning to new situations.

Takes language literally:

If a police officer says "freeze" the person with autism thinks: that's silly…it's not freezing.

Thinks in pictures.

Can have exceptional talents and abilities (savant abilities).

Inability to be tactful often stating things exactly as they are

Can have exceptional talents and abilities (savant abilities)

SAVANTS

Dr. J. Langdon Down, (n.b. he also originated the term *Down's syndrome)*. In 1887, he coined the term "idiot savant" - meaning *low intelligence*, and from the French, savoir, *knowing* or *wise*, to describe someone who had *"extraordinary memory but with a great defect in reasoning power."* This term is now little used because its inappropriate

"Autistic savant" refers to individuals with autism who have extraordinary skills not exhibited by most persons

It is estimated that about 50% of the cases of savant syndrome are from the autistic population, and the other 50% from the population of developmental disabilities and CNS injuries.

The most common forms involve mathematical calculations, memory feats, artistic abilities, and musical abilities. A mathematical ability which many autistic individuals display is calendar memory. They could be asked a question like: 'What day of the week was May 22, 1961? and they can determine the answer within seconds--Monday. Others can multiply and divide large numbers in their head – Donald Triplett -and can also calculate square roots and prime numbers without much hesitation.

First, the skills are almost always limited to a very narrow range of special abilities: music, art, mathematics including lightning calculating & calendar calculating; and mechanical or spatial skills. This narrow range of abilities is particularly intriguing when considering the wide range of abilities in the human repertoire. Second, Down

noted that these spectacular special skills are always linked to a phenomenal memory of a unique type — very narrow but exceedingly deep — often with little understanding or comprehension of that which is so massively stored, a characteristic he called “verbal adhesion” and others have called “memory without reckoning”. (Mention Ros Blackburn)

Third, Down noted that his cases were limited entirely to males. While not that stringent, over time the actual male:female ratio has turned out to be approximately six males for every female savant.

(Interestingly, savant syndrome is four times more likely to occur in men than women. This intriguing difference has sparked much interest in the scientific community, and subsequently the ‘right compensation theory’ of savant ability was established. It appears that during foetal development, the left hemisphere of the brain develops slightly slower than the right hemisphere, and is thus subject to detrimental influences at different stages. High levels of circulating testosterone makes the male foetus more susceptible to damage because this sex hormone can impair neuronal function and delay growth of the vulnerable hemisphere. It was proposed that the right hemisphere may then compensate for this impaired growth, by overdeveloping. So while savants may not be able to walk or talk, the skill development on the other side of the brain is highly advanced, and so may lead to these amazing ‘superhuman’ skills. Left hemisphere damage is often seen in autistic patients, so this theory of ‘left damage/right compensation’ may explain how the savant brain develops differently from others’. Although this theory seems credible, the highly diverse nature of savant syndrome means that no single hypothesis can explain every case)

The movie *Rain Man* exposed millions of people to autism as well as the autistic savant phenomenon. (Unfortunately, some people now have the impression that all autistic individuals have these abilities.) In the movie, Raymond Babbitt displayed a great memory for ball player statistics, memorized parts of the telephone book, and counted cards in Las Vegas.

The reason why some autistic individuals have savant abilities is not known. There are many theories, but there is no evidence to support any of them. For example, Dr. Rimland speculates that these individuals have incredible concentration abilities and can focus their complete attention to a specific area of interest. Admittedly, researchers in psychology feel that we will never truly understand memory and cognition until we understand the autistic savant.

Stephen Wiltshire was diagnosed as mute and severely autistic at an early age. Despite having no language or communication skills, at the age of 7, he began the first of many masterful detailed architectural drawings of cityscapes that were remarkably accurate. Known as the ‘Human Camera’ Stephen can draw these landscapes after only observing them briefly. In 2005, Stephen completed a 10m-long accurate drawing of a Tokyo skyscraper panorama from memory after just one short helicopter ride.

He was diagnosed autistic with Savant syndrome when he was 3; drawing became his way of communicating with the world.

Known as the “human camera”, he remembers what he sees by the memories that were provoked in the observation process — and he only has to see things once. At the age of 13, he was called “the best child artist in Britain” by the BBC and more recently he was named by Queen Elizabeth II as a Member of the Order of the

Kim Peek –original Rain Man Known by friends as ‘Kim-puter’, his astonishing powers of memory fascinated scientists for years. Quite literally, he had a phenomenal capacity to store extraordinary quantities of information in his mental ‘hard drive’. He also had a profound ability to recall information, close to the speed at which a search engine can scope the internet. In 2009, at the age of 54 he had read 9,000 books, all of which he could recite off by heart. He could simultaneously read the left page with his left eye, and the right page with his right eye. What seems quite unbelievable is that at the age of 58 he was still unable to perform everyday simple tasks such as buttoning his clothes. He could not comprehend simple proverbs and struggled greatly in social situations, yet is considered one of the most powerfully gifted savants of all time. Now not thought to have been autistic but it has been suggested he had had FG syndrome, a rare genetic syndrome linked to the X chromosome which causes physical anomalies such as hypotonia (low muscle tone) and macrocephaly (abnormally large head).[80]

Derek Paravicini is a musical prodigy and a blind autistic savant.

Paravicini has absolute pitch and such a strong musical memory that he can play a song on the piano after only hearing it once. Beyond that, he can transform a song into any style or key seamlessly. In his many performances, Paravicini will take requests to highlight this skill.

The same fingers that can play a piano perfectly cannot button a shirt or show a number.

Daniel Tammet

Daniel Tammet (born 31 January 1979) is an English writer, essayist, translator, and autistic savant. His 3 books have been published in 20 languages

Tammet’s skills reside in mathematics and language. He became famous for reciting Pi to the 22,514th decimal place. His mathematical abilities come from his synesthesia which enables him to “see” integers up to 10,000 as individual entities, with their own shapes, colors and textures. This same sight applies to the results of any calculation.

While every savant is amazing in some way or another, Tammet is by far one of the most incredible. What makes Daniel so unique is that he is able to tell people exactly how he does what he does. By describing what he sees in his head, he is able to further scientists’ knowledge and understanding of the savant syndrome. In that regard, he is not only remarkable, but invaluable.

Tammet is also able to speak eleven languages, most famously Icelandic, which he learned in seven days for a television show. He is even developing his own language, which he calls Manti.

George and Charles Finn, calendar calculating - known as the 'Bronx Calendar Twins' were both autistic savants. Their particular skill was being able to calculate the day of any date in the past and the future. This talent extended so far that they could accurately calculate any day 40,000 years backwards and forward

Ellen Boudreaux, special skills - despite being blind and autistic, could navigate her way around without ever bumping into things. As she walks, Ellen moves around using echolocation: – she makes chirping noises that bounce off objects in her path such that she can detect the reflected sound, a bit like human sonar.

PAST, PRESENT AND FUTURE

Treatments

In 1947 Donald sustained an episode of juvenile rheumatoid arthritis, from which he nearly died. Treatment with gold salts restored his health and, according to his younger brother, also seemed to alleviate some of his autistic behaviour, including his nervousness and unsociability. This later led some to cite his case in support of the controversial theory that autism was caused by external factors, as mercury poisoning was also treated with gold salts and was thought to be a possible cause of autism.

From the 1960s through the 1970s, research into treatments for autism focused on medications such as LSD, electric shock, and behavioural change techniques. The latter relied on pain and punishment.

Therapy

During the 1980s and 1990s, the role of behavioural therapy and the use of highly controlled learning environments emerged as the primary treatments for many forms of autism and related conditions. Currently, the cornerstones of autism therapy are behavioural therapy and language therapy. Other treatments are added as needed.

PUZZLE Pre School in Middle Claydon

Differing factions argue that the gluten in food causes autism; that the mercury used as a preservative in some vaccines can trigger autistic symptoms; and that the particular measles-mumps-rubella vaccine is to blame. Other schools of thought have portrayed autism as essentially an autoimmune response, or the result of a nutritional deficiency.

Unarguable that many asd children suffer dietary difficulties

The mainstream consensus today—that autism is a neurological condition probably resulting from one or more genetic abnormalities in combination with an environmental trigger—offers little more in the way of explanation: the number of

genes and triggers that could be involved is so large that a definitive cause, much less a cure, is unlikely to be determined anytime soon. Even the notion that autism cases are on the rise is disputed to a degree, with some believing that the escalating diagnoses largely result from a greater awareness of what autism looks like.