

Just as we have said the mind has powers beyond our ability to know. Way beyond the abilities of our verbal mind. For proof we see the savants. These people are called learning disabled when in fact they are learning different; they hold the key for opening our powers of mind. Please watch the videos of Daniel and see what we mean. This article will open the door and if you are bold enough to step thru it then you will see the light. We are just tapping into the powers of the mind.

Savant Daniel Tammet "Sees" Numbers and Learns Complex Languages in a Week

What is the Limit of Human Intelligence?

Daniel Tammet holds the record for reciting Pi to 22,514 decimal places and has what is known as "Savant Syndrome". What makes Daniel unique from other Savants with extraordinary mind capabilities is he can explain to scientists what is going on in his head. Daniel explains his ability to memorize numbers is due to his mind perceiving numbers as complex multidimensional colored and textured shapes. Daniel is a unique example of savant syndrome because he is the only one so far that can describe his inner world. His ability puts a new spin on what is "intelligence".

"I was able to visualize the digits in my mind's eye as beautiful rolling numerical panorama, with prime numbers as signposts"

Be sure to watch the "Chess Hustlers" in Video 3 and the Japanese Students manipulating numbers with an "imaginary abacas" in their minds to do extraordinary calculations in their minds. The Japanese Children are not Savants as they have been practicing hours per day for years. If you only have time to watch 1 of the 5 parts below make it number 4!

In video #5 Daniel is given the ultimate linguistics challenge – Learn the Icelandic language in 7 days. And of course he does!

Note: There is another series of videos that are not the same but very close to this series. Search for "The boy with the incredible brain"

Daniel Tammet



While possessing Savant Syndrome, Daniel can describe his inner world to scientists.

When Dustin Hoffman starred in the 1989 Hollywood movie Rain Man the "autistic savant" was suddenly transformed from being a rare disability that few people had heard of into a familiar household term.

In fact the term savant syndrome is preferable to "autistic savant", as only about 50% of people with savant syndrome actually have autism. The others have a different cause of severe mental disabilities coexisting with some outstanding talent or ability. The "island of genius" is always linked to incredible memory capacity, and may involve musical, artistic, mathematical or mechanical talents. It is all the more remarkable as it exists within a sea of mental handicap.

Some History

The first recorded case of savant syndrome was the severely mentally handicapped Thomas Fuller, in 1789, who displayed remarkable lightning calculating abilities. When asked how long a man had lived who was 70 years, 17 days and 12 hours old, he gave the correct answer after 90 seconds, even correcting for the 17 leap years! Yet apart from this astounding ability, Fuller was able to "comprehend scarcely anything."

The term "idiot savant" was introduced in 1887, as at that time idiot was the term for anyone with an IQ of less than 25. "Savant" is derived from the French "savoir", meaning "to know". Like in Latin the word to know is SCIO. In fact, almost all cases occur in people with IQ over 40, and the current term savant syndrome is more accurate as well as being less offensive.

How Common Is It?

About 10% of people with autistic disorders have savant abilities, and in the non autistic population, including those with mental retardation, the prevalence is less than 1%. It's much more common in men than in women.

Some Examples of Savant Abilities

Impressive mathematical abilities that savants possess often include lightning calculation. Calendar memory is sometimes seen, whereby the savant is asked a question like what day of the week was January 14th 1973? and can give the answer within seconds. At the 1964 American Psychiatric Association Annual Meeting, two autistic identical twin brothers were presented who had a calendar calculating span of over 40,000 years backwards and forwards. Others can multiply and divide huge numbers and calculate square roots in their heads, yet often have difficulty with simple arithmetic and are unable to accomplish simple mathematical transactions in daily life, like counting out change in a shop.

Some savants are incredibly talented artists and musicians. For example, the successful artist Stephen Wiltshire is a savant, with autism. He has been filmed completing a highly accurate and detailed sketch of London covering 4 square miles, 12 major landmarks and 200 other buildings, all drawn to scale and perspective, after observing it all during a helicopter ride that only took 12 minutes! Musically talented savants often have perfect pitch and remarkable musical memory.

Some savants have remarkable mechanical or spatial skills, like the ability to construct complex and detailed models, or to measure distances very precisely without instruments. The real savant who was the inspiration for Dustin Hoffman's character in Rain Man had memorized over 8600 books and possessed encyclopedic knowledge of geography, music, literature, history and sports. He also had a fascinating ability to read extremely rapidly, scanning one page with the left eye and the other with the right simultaneously.

Inside the Savant's Brain

Many researchers believe that the underlying cause of savant syndrome is left brain injury with right brain compensation. Brain imaging with CT, PET and MRI scanning often shows evidence of left brain deficits or damage in savants. The theory is also backed up by cases of acquired savant syndrome, where savant abilities appear after damage to the left side of the brain, either following trauma like a fall or gunshot wound, or after the onset of dementia that particularly damaged the left brain. The savant mentioned above, upon whom the Rain Man character was based, was found on MRI to have substantial brain damage, including entire absence of the corpus callosum, which normally connects the left and right hemispheres of the brain.

Research Directions – Can We All Find Our Inner Savant?

Ever since the existence of this remarkable syndrome was first recognized, people have been fascinated by how such prodigious talents can coexist with severe disabilities within the same individual. In recent years, researchers have begun asking whether they can reveal savant like abilities in healthy volunteers if they temporarily immobilize parts of the left brain with a technique called Repetitive Transcranial Magnetic Stimulation. In some people, there was an

improvement in savant type skills, like drawing and proofreading, but the improvements were not dramatic, and did not occur in everyone. Some subjects even experienced temporary short term memory loss afterwards.

The existence of savant syndrome remains a conundrum that fascinates us and challenges our understanding of what the human brain is capable of

Daniel Tammet, Boy with the Incredible Brain

Daniel Tammet --- Selected Bibliography



(Picture downloaded from http://www.smh.com.au/ffximage/2006/08/11/tammet_narrowweb__300x460,0.jpg 9/27/07)

Fall 2007 Cultural Events series continues with an informal conversation with Daniel Tammet on October 23, 2007. He is the author of *Born on a Blue Day: Inside the Extraordinary Mind of an Autistic Savant* and *Born on a Blue Day: A Memoir of Asperger's and an Extraordinary Mind*.

Daniel Paul Tammet is a British high-functioning autistic savant, gifted with a facility for mathematics problems, sequence memory, and natural language learning. As one of the world's high-functioning autistic savants leading a relatively normal life, he offers incredible insight into the world of autism, Asperger's syndrome and other severe cognitive impairments. He challenges us to think about how society treats those who are different and what tolerance and understanding really mean.

In conjunction with this event, we have compiled a bibliography consisting of books, journal articles and websites on Daniel Tammet, Asperger's syndrome, synesthesia and savant syndrome.

Books

Baron, M. Grace. *Stress and coping in autism*, Oxford; New York: Oxford University Press, 2006. RC553.A88 S85

Casanova, Manuel F. *Recent developments in autism research*, New York: Nova Biomedical Books, 2005. Available through [Interlibrary Loan](#).

Cytowic, Richard E. *The man who tasted shapes*, Cambridge, MA: MIT Press, 1998. RC394.S93 C96

Cytowic, Richard E. *Synesthesia: a union of the senses*, Cambridge, MA: MIT Press, c2002. QP435 .C97

Dann, Kevin T. *Bright colors falsely seen: synaesthesia and the search for transcendental knowledge*, New Haven: Yale University Press, c1998. BF495 .D36 1998eb

Fitzgerald, Michael, Dr. *Autism and creativity: is there a link between autism in men and exceptional ability?* New York: Brunner-Routledge, 2004. Available through [Interlibrary Loan](#).

Haddon, Mark. *The curious incident of the dog in the night-time*, New York: Doubleday, 2003. PZ7.H1165 Cu 2003

Howe, Michael J. A. *Fragments of genius: the strange feats of idiots savants*, London ; New York: Routledge, 1991. Available through [Interlibrary Loan](#).

Jackson, Jacqui. *Multicoloured mayhem: parenting the many shades of adolescents and children with autism, Asperger syndrome, and AD/HD*, London; New York: Jessica Kingsley Publishers, 2004. RJ506.A9 J325 2004eb

Mesibov, Gary B., Shea, Victoria & Adams, Lynn W. *Understanding Asperger syndrome and high functioning autism*, New York: Kluwer Academic, c2002. RC553.A88 M675 2002eb

O'Malley, Glenn. *Shelley and synesthesia*, Evanston, Ill.: Northwestern University Press, 1964. PR5438 .O4r

Smith, N. V. & Tsimpli, Ianthi-Maria. *The mind of a savant: language learning and modularity*, Oxford, UK; Cambridge: Blackwell, 1995. Available through [Interlibrary Loan](#)

Tammet, Daniel. *Born on a blue day: a memoir of Asperger's and an extraordinary mind*, London: Hodder & Stoughton, 2006. Available through [Interlibrary Loan](#)

Tammet, Daniel. *Born on a blue day: inside the extraordinary mind of an autistic savant: a memoir*, New York: Free Press, 2007. RC553.A88 T36

Treffert, Darold A. *Extraordinary people: understanding savant syndrome*, New York: Ballantine, 1990, 1989. Available through [Interlibrary Loan](#)

Journal Articles

Barnhill, Gena P. [Outcomes in adults with Asperger syndrome](#). *Focus on Autism & Other Developmental Disabilities*, Summer2007, 22 (2) 

Beeli, Gian, Esslen, Michaela & Jäncke, Lutz. [Synaesthesia: when coloured sounds taste sweet](#). *Nature*, 3/3/2005, 434 (7029) 

- Birbaumer, Niels. [Rain Man's revelations](#). *Nature*, 5/20/99, 399 (6733) 
- Bock, Marjorie. [A social--behavioral learning strategy Intervention for a child with asperger syndrome](#). *Remedial & Special Education*, Sep/Oct2007, 28 (5) 
- Dowd, Rachel. [His beautiful mind](#). *Advocate*, 6/19/2007 (987) 
- Geipert, Nadja. [What color are your 2's?](#) *Science Now*, 3/24/2005 
- Greenwood, Veronique. [Head games](#). *Popular Science*, Oct2007, 271 (4) 
- Hornik, Susan. [For some, pain is orange](#). *Smithsonian*, Feb2001, 31 (11) 
- Kher, Unmesh. [Ah, the blue smell of It!](#). *Time Europe*, 6/18/2001, 157 (24) 
- Lehrer, Jonah. [Blue Monday, green Thursday](#). *New Scientist*, 5/19/2007, 194 (2604) 
- Leigh, Suzanne. [A long shadow is lifted on Asperger's in adults](#). *USA Today*, 07/24/2007 
- Lyall, Sarah. [Brainman, at rest in his oasis](#). *New York Times*, 2/15/2007, 249 (53856) 
- Miller, Greg. [The man who memorized pi](#). *Science Now*, 4/14/2005 
- Miller, Leon. [A memoir of the savant syndrome](#). *Lancet*, 8/11/2001, 358 (9280) 
- Miller, Leon K. [The savant syndrome: Intellectual impairment and exceptional skill](#). *Psychological Bulletin*, Jan99, 125 (1) 
- Murray, Stuart. [Autism and the contemporary sentimental: fiction and the narrative fascination of the present](#). *Literature & Medicine*, Spring2006, 25 (1) 
- Nakamura, Kazuhiko, Iwahashi, Kazuhiko, Fukunishi, Isao & Suwaki, Hiroshi. [Social skills training for a case of Savant syndrome and Asperger's syndrome](#). *Australian & New Zealand Journal of Psychiatry*, Aug2000, 34 (4) 
- Page, Tim. [Parallel play](#). *New Yorker*, 8/20/2007, 83 (24) 
- Prochazka, Helen. [Mathematics scrapbook](#). *Australian Mathematics Teacher*, Oct2006, 62 (4) 
- Ramachandran, Vilayanur S. & Hubbard, Edward. M. [Hearing colors, tasting shapes](#). *Scientific American Special Edition*, Sep2006 Special Edition, 16 (3) 

Simner, Julia. [C is for "colour"](#). New Scientist, 7/14/2007, 194 (2612) 

Snyder, Allan. [Paradox of the savant mind](#). Nature, 9/20/2001, 413 (6853) 

Tammet, Daniel. [What it feels like to be a savant](#). Esquire, Aug2005, 144 (2) 

Treffert, Darold A. & Christensen, Daniel D. [Inside the mind of a savant](#). Scientific American Mind, 2006, 17 (3) 

Treffert, Darold A. & Wallace, Gregory L. [Islands of genius](#). Scientific American Special Edition, Jan2004 Special Edition, 14 (1) 

Treffert, Darold A. & Wallace, Gregory L. [Living with savant syndrome](#). Scientific American, Jun2002, 286 (6) 

Tsai, Luke Y. [Asperger syndrome and medication treatment](#). Focus on Autism & Other Developmental Disabilities, Fall2007, 22 (3) 

Ryder, Nicola, Pring, Linda & Hermelin, Beate. [Lack of coherence and divergent thinking: two sides of the same coin in artistic talent?](#) Current Psychology, Summer2002, 21 (2) 

Websites

Brain Man: one man's gift may be the key to better understanding the brain - <http://www.cbsnews.com/stories/2007/01/26/60minutes/main2401846.shtml>

Daniel Tammet - The Incredible Brain - <http://www.mymultiplesclerosis.co.uk/misc/danieltammet.html>

A genius explains - Interview of mathematical and linguistic whiz Daniel Tammet by Richard Johnson - <http://www.guardian.co.uk/weekend/story/0,,1409903,00.html>

Optimnem: The official website of Daniel Tammet - <http://www.optimnem.co.uk/>

If you watch the videos of Daniel it will show you a new way of seeing things. Please take the time for my words cannot capture the way your perceptions of thought will change. The above article points out some very interesting and unavoidable truths for the world today.

First what we know about thought and the human mind is all wrong.

Second the verbal area of the Brain is not only very limited it is extremely limited and there are capacities in the brain way beyond verbal capacities. The verbal brain is but a tool for our real bodies. It is the language interface. It is not the master, it is not the intellect we thought it was, it is not the height of the mind. It is a tool. The mind has capacities unknown.

The Buddhists have many quote major unknowables , one the beginning of all things. If we think too much on the beginning of all things we will get a headache and still not know. Second is the power of the Buddha mind to see and affect things at a distance. And third is the power of any human mind. Its capacities are quote unknowable. There is always more we can do once we transcend the limitations of our doubting self limiting verbal mind. As Helen Keller once said “the only obstacles are in the human mind”. And she ought to know, and we ought to listen.