



IN A MILLION

Da Vinci, Mozart, Einstein... History may celebrate them but society tends to misunderstand them. For those living with the tag of "genius", life is not as easy as you might think.
By Claire Halliday.

As the smoke from his cigarette curls sideways around his computer monitor, the 25-year-old Melbourne man leans in and taps his fingers across his keyboard. "This is a story I wrote when I was six," he says. Sitting in the bedroom of his small apartment, he reads the story self-consciously – this tale of other worlds and complex human emotions – then pauses to flick his ash in the marble ashtray. *Holberon was a planet like no other. Here, anyone who wished to leave could do so without fear of punishment. They were free to explore the stars and search for something brighter. Still, many returned. Holberonians were not a race of dreamers.*

"My grade-two teacher thought I was a freak," he recalls, choking back a laugh. "So did my parents."

It was only when their firstborn son – a child who had always been emotionally and intellectually demanding compared to his two younger brothers – physically attacked a 12-year-old classmate at school that they decided to explore the reasons why and took him to see a psychologist.

"I wasn't one of these kids who could read the alphabet before they could walk or count to 100 before I was two but I had always been different," says Stephen, who has asked that his surname be withheld. While the other kids on his suburban Ashburton block were busy with football and video games, he was an astronomy-loving, cello-playing dictionary reader. "I used to get picked on a fair bit by the other children at school and then I tried to choke this kid in my class because he was teasing me. I got so frustrated."

Stephen's frustrations, his parents were told by the psychologist, were due to his remarkably high intelligence. He was given an IQ test as part of an overall assessment and returned a figure of about 200. This made him part of an elite slice of humanity whose intellect sets them apart from the majority of the population. At the age of 13, Stephen was officially a genius.

According to Trish Kennett, chairperson of Australian Mensa, which has 1200 members, "genius" is a label that society is reluctant to apply. Mensa members represent the

top 2 per cent of the population but Kennett won't be drawn into discussing numbers of members who fall into the range that officially defines genius. "You have to have an IQ above a certain level to join Mensa but outside of that, we don't discuss individual IQ numbers," she says. "We are a round-table society. We do not reveal scores to the test candidates. Therefore, they are unable to compare and judge."

In 1916, when US cognitive psychologist Lewis Terman adopted German psychologist William Stern's suggestions that the ratio between mental and chronological age be taken as a measure of intelligence, multiplied by 100, to result in the "intelligence quotient" – or IQ – Terman proposed classifying IQ scores. He suggested that anyone with an IQ of between 90 and 109 be rated as having normal or average intelligence; those with 110 to 119 as having superior intelligence; those with 120 to 140 as having very superior intelligence; and those with an IQ of more than 140 as a potential genius. Just how many people follow through to earn the genius tag, though, is something that Kennett says can't be estimated. "The word 'genius' is applied to those who have demonstrated application of their potential," she says. "Not all highly intelligent people will reach their potential." According to Dr Miraca Gross, director of the Gifted Education Research, Resource and Information Centre (GERRIC) at the University of NSW, fewer than one person in 1.1 million sit at the top of the IQ tree, the "very high genius" of 180-plus IQ.

Stephen, who is single and has found it difficult to sustain relationships, doesn't wear his genius on his sleeve. After a life of feeling ostracised by his chronological peers, he has learned to play down his intelligence for the sake of fitting in. But his dumbing-down techniques are the result of self-medication with what he wearily describes as "an overuse of alcohol and marijuana". The latter is a daily habit that "takes the edge off my annoyingly active mind".

Now working as a freelance computer programmer while developing his own software and gaming projects, Stephen has perfected ways to slow his exceptional brain over years of frustration. "I think about things in a way that I know



other people don't. You become aware of it when you have conversations and people just look at you like you're from another universe. People can start a conversation about an ad on TV that shows how bad it is for starving people in Africa and I find myself getting into the finer points of Third World debt and economic policies. I can't just look at the surface. I know that people don't understand the way my mind works. I spent years not understanding myself."

"I would say that there are definitely negative aspects of having extremely high intellect," says Trish Kennett.

"If you're 12 and you're highly gifted and talented, you're not thinking in terms of a 12-year-old. Your grasp of concepts is probably equal to an 18- or even 40-year-old. Because you don't fit intellectually with your peers, you often don't fit socially. If you don't fit socially, you can often be very unhappy." The desire by highly intelligent people to mask their intellect is something, Kennett believes, that is "very common", particularly among children.

Today's parents are also, she says, "more aware of the →



Tony Nolan - "one of the great minds of the 21st century" - was selected at NASA by mathematician and awarded the Archibald Prize.



INTELLIGENT LIFE

At the age of seven, Brenton Fletcher (right) had finished reading *The Lord Of The Rings* trilogy. At 11, he began to study computer programming through Open Universities Australia. Now 16, he's achieving a high-distinction average through the university program and has undertaken seven undergraduate-level units, focusing on computer programming languages and systems analysis.

It's been an unorthodox and challenging journey for Fletcher. When he was five, he was diagnosed with ADHD (attention deficit hyperactive disorder) and developmental co-ordination disorder. Then, when he was hospitalised after an acute asthma attack, he was identified as a gifted child. Further testing four years later revealed the extent of his genius: an IQ of 180-plus, putting him in that tiny band classified as "very high genius".

Fletcher never attended a regular primary school. He was six when his mother, Rosie Williams, 35, put her own study in sociology on hold and began to home-school him. "Home education was the best choice for me, especially considering that none of the schools available to us would have fulfilled my needs," he says. "If I was in school - from what I have heard from talking to other gifted children - I would probably be bullied mercilessly."

And, he adds, "given that the abilities afforded respect - athletics - are ones that I don't possess and the abilities derided - academics - are ones I excel at, school may have done me more harm than good."

It's clear there is a very special relationship between Fletcher and his mother, who live in Picton on the outskirts

of Sydney. Williams was 19 when she fell pregnant and has raised her son as a single mother. "Home-schooling has allowed me to be with my mum and enjoy a closer bond than I would have if we were apart every day."

For Williams, it has meant sacrificing a regular income and accepting welfare. But she doesn't begrudge a minute of the time she devotes to her son. "Brenton and I are like Yin and Yang," she says. "Our strengths and weaknesses are opposite but that means we collaborate and work together as a team very well."

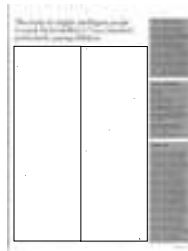
Home-schooling has provided flexibility to focus on Fletcher's interests. During the early primary years, he would spend three to four hours in the morning playing music - he plays violin and piano and began composing at the age of eight - and the afternoon on maths and English. Now, it's not unusual for him to spend the afternoon working on collaborative projects with statistics lecturers doing such things as "coding a program to generate musical harmonies using Markov chains". Other times, he'll hang out at the Australian Air League, which is an aviation-based youth organisation.

While his intelligence could take him anywhere, Brenton's focus is very clear: "I'm not sure what my greatest achievement will be. My first achievement, I hope, will be to escape the poverty cycle."

In the meantime, he's comfortable being one in 1.1 million. "I don't think there's anything bad for me having been gifted," he says. "It's given me the opportunity to work at things I love doing, at a rate that many other people wouldn't be able to. I guess some people would call that 'genius'." *Daniel Donahoo and Claire Halliday*



The desire by highly intelligent people to mask their intellect is "very common particularly among children.



dangers of allowing their children to be publicly declared as highly gifted – a term we use for children who have the potential to become adult geniuses”. Generally, “genius requires time to develop or become apparent,” she says but concedes that occasionally very young children display exceptional traits – much like Mozart tapping out symphonies on the piano as a child.

Throughout the centuries, the link between genius and insanity – or at least eccentricity – has often been discussed. The Roman philosopher Seneca said all geniuses had “some touch of madness”. In his book *The Genesis Of Artistic Creativity: Asperger's Syndrome And The Arts*, adolescent psychiatrist Michael Fitzgerald concluded that Mozart, Beethoven and Van Gogh all suffered from a form of high-functioning autism.

Professor Allan Snyder, the director of the Centre for the Mind – a joint venture of the Australian National University and the University of Sydney – believes that well-known brains have had some underlying mental health problem that has helped spark their genius, such as that of mathematical genius John Nash (portrayed in the 2001 film *A Beautiful Mind*), who suffered from schizophrenia.

But for most people with a high IQ, the problems are simpler. Sheer loneliness is an issue, says GERRIC's Miraca Gross, who is known for her work with children whose intellectual talents range from “gifted” to “genius”. “Having an extremely high IQ can be very socially isolating,” she says.

“I didn't have kids over to my house to play because I didn't want them to see that I didn't have the Hungry Hungry Hippos game,” recalls Stephen. “I didn't want them to know that I was different.”

“We don't have many geniuses in our society,” says Dr Leonie Kronborg from Monash University's Krongold Centre of educational and developmental psychology. “You're talking about a Mozart, a Freud, a da Vinci. When I think about genius in people, I think of people who have changed knowledge in a particular domain. Prodigies and geniuses may not have extremely high IQs. They may have developed knowledge in a particular field. True genius tends to manifest itself in adult form because you do need 10 years of working within a field so that you can understand and transform it.”

So does that mean that there is still hope for the highly intelligent among us to have a shot at sharing history with the Einsteins and the Stephen Hawkings of the world? According to Kronborg, the answer is an encouraging “yes”. “In the past we have tended to believe that you can't develop intelligence and although it's true that high general ability is independent of culture and context – and genetics do count for a lot – nurturing does make a difference. There are differences between potential and realised abilities. Just because you have a high IQ does not mean you will be eminent. The development of abilities is a lifelong pursuit.”

For 30-year-old Melbourne-based Shaun Hatley, that quest for knowledge is indeed ongoing. Hatley, who has

studied astronomy, physics and software engineering and worked in software engineering, design and testing fields, is doing a bachelor of education with a view to giving highly gifted children the assistance he feels his early school years lacked. “I'd been bullied all my life,” he recalls. “My parents were recommended to take me for testing to a psychologist. I think they thought there was something wrong with me.”

At just 12, Hatley had an IQ of 144 and was clinically depressed. “I have found it hard to make friends. When I was a child, it really hurt me. As an adult it doesn't bother me so much – I have a lot of contact with people on the internet.”

In the online world that he prefers to inhabit, Hatley, who's single, says that his intensity can be more measured and less confronting. “Because you're typing you realise when you are getting too intense and you can pull back and change it. You can't do that when you're talking. I look at people and the way they just seem to effortlessly get along with other people and I wish I could do that.”

“People who are very highly gifted have the highest suicide and depression rate per capita,” says Tony Nolan, who works at the Australian Taxation Office in Sydney. In 2001, Nolan was awarded the Order of Australia Medal for services to the local community and last year, he was named one of the great minds of the 21st century by the American Biographical Institute. Ask him why and he'll tell you it was for “mathematical stuff”. Press him further and he says that the nomination came about because of “my research work on artificial intelligence, fuzzy logic and complexity analysis, as well as my other achievements in art and writing”.

In his personal life, though, Nolan, 42, has suffered two broken marriages and has an educational record that shows three attempts at the Higher School Certificate and failed undergraduate courses in information science and education. So, four years ago, he started three email groups: HUB, for gifted adults; VS_SIG, for those interested in visual spatial issues; and Mutant G, to help gifted adults with the emotional reassurances that he believes people with high IQs sometimes need. “It's not based on just an IQ number,” he says of the groups that have about 100 active members worldwide, including a handful that he would dub “genius”. “Mensa is a different kettle of fish. They are mainly social and have a very rigid entry. My groups are much more open – primarily for support and advice, which is something Mensa tries to stay away from.”

Nolan believes that there should be a greater recognition of “multiple intelligences” and the awareness that profound giftedness – or genius – can show itself in some ways and not in others. “We're not freaks or monsters,” he says, adding that he is “sometimes unhappy” but that his intelligence is something that he has “come to terms with”.

“In a way, the label is good because it helps you understand yourself. Some people think I am freaky in that I have entered the Archibald and I have lectured at NASA on mathematics. I can't explain how I see things or why I am



able to extend myself in so many ways. It's like seeing colour in a black-and-white world and trying to explain that." ●

How IQ testing began

In 1904, the French Ministry of Public Instruction commissioned psychologist Alfred Binet to develop a method of identifying children who would need specialised education. In 1916, American psychologist Lewis Terman added the intelligence quotient (IQ), based on the formula: mental age divided by chronological age times 100 (where mental age is the level of intellectual performance and chronological age is biological age). To test your own IQ online, go to www.mensa.org/workcut2.php.

Levels of giftedness

Mildly gifted: 115-129, one in six to one in 40

Moderately gifted: 130-144, one in 40 to one in 1000

Highly gifted (genius): 145-159, one in 1000 to one in 10,000

Exceptionally gifted (high genius): 160-179, one in 10,000 to one in 1.1 million

Profoundly gifted (very high genius): 180-plus, fewer than one in 1.1 million

Source: Gifted Education Research, Resource and Information Centre, University of NSW

Great minds

Australian Mensa runs supervised tests at regular intervals in capital cities and, less often, elsewhere. Two tests are used at each session. A qualifying score in either test will get you an invitation to join Mensa. Applicants can also present evidence of a qualifying score in a standard IQ test taken elsewhere. A qualifying score is a result at or above the 98th percentile – that is, a score in the range achieved by the top 2 per cent of the population. Mensa members organise regular activities – including restaurant dinners, games evenings, barbecues and cultural outings – in Melbourne, Sydney, Perth, Brisbane and other centres. There is also a range of special interest groups (SIGs), in which members pursue, says the website (www.au.mensa.org), "common interests with like-minded people" including astronomy, chess, computers, law, philosophy, photography and Sherlock Holmes.