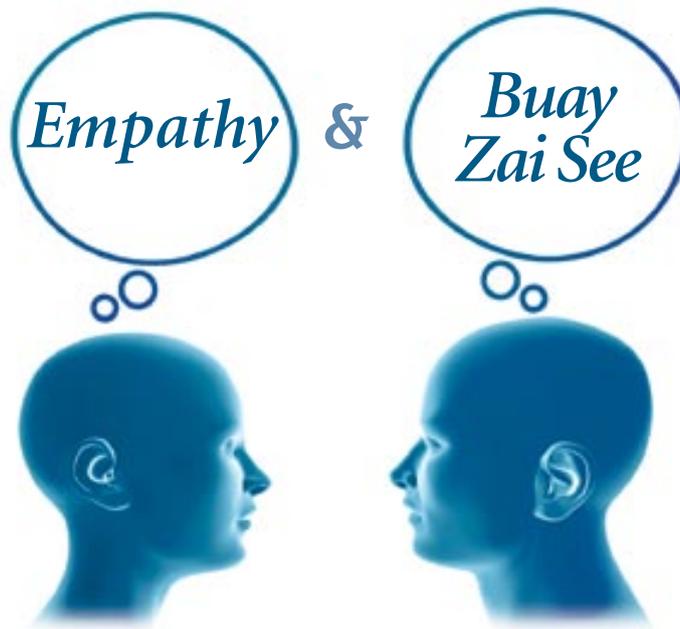


By Dr Toh Han Chong, Editor



We all admire fellow doctors who have an extra serving of that special bedside touch and empathy for patients. Is empathy a quality that is inborn or acquired?

Recently, a group of us were discussing a junior doctor who seemed less than able to express empathy towards patients and their relatives, who too frequently received complaint letters against him and who displayed some persistently odd behavior even after much counselling. And at a Christmas gathering, the topic was a bogus doctor who surfaced in the Singapore health system years ago, who apparently expressed dollops of EQ and empathy and often hugged his patients and their relatives in times of grief and suffering. One female doctor joked: “Aiyah, sure to be a bogus doctor lah, how many of us hug our patients and relatives so much?”

In his seminal book, *The Essential Difference – Male and Female Brains and the Truth about Autism*, Professor Simon Baron-Cohen, Director of the Autism Research Centre at Cambridge University, wrote that the female brain is more of an empathiser and the male brain is more of a systemiser. Indeed, how many times have I heard friends gush about their daughters who would bounce up to their

daddies after a hard day’s work, hug them and maybe even pour out their favourite drink, while their sons would stare blankly at the TV or computer game, and grunt when asked how their day went.

Professor Baron-Cohen postulates that autism and Asperger’s Syndrome represent an extreme form of the male brain. Autism affects up to four males to one female, and has been related to higher testosterone levels in the foetus. Features such as social awkwardness, lack of eye contact, the need for routine and sameness, lack of empathy, singular intense interests and dysfunctions in social and sensory integration are all part of the autistic spectrum disorder. (Baron-Cohen S, Knickmeyer RC, Belmonte MK. *Sex differences in the brain: implications for explaining autism. Science* 4 November 2005; 310:819-823.)

As I write this sentence, a good friend of ours, whose son is autistic, literally just short-messaged me about a proposed fishing outing. Increasingly, I have encountered more friends with autistic children and have often wondered about the causes. Certainly, genes are involved and autistic children tend to come from parents who are serious systemisers. For instance, there is an unusually high number of such children in Silicon Valley in the United

States, the mecca of techie geeks.

A lot more care, strength and support from loved ones is required for autistic children, who may be subjected to greater cruelty in their misunderstood childhood, worsening their isolation. But before we start to believe that those with autism and Asperger's Syndrome are only a burden to society, individuals who have profoundly changed our world such as Isaac Newton, Michelangelo, James Joyce, Albert Einstein and Bill Gates are all suspected to have suffered from some degree of autism spectrum disorder. Isaac Newton was a social oddball who disliked small talk, was prone to tempers, depression and paranoia, and was known to have faithfully delivered lectures even to an empty room. The young Einstein, a late-speaking, extremely logical, analytical and perseverative loner with a strong family history of autism, was described by his teachers as "mentally slow, unsociable and adrift forever in his foolish dreams".

Is it possible that the absent-minded Professor of Medicine who seems to be staring at an invisible fly when he is teaching his favourite (and only) topic, "The Crewmasteric Reflex", who rocks weirdly by the patient's bedside, whose one of many pet blue-tongued skinks is peeping out of his white coat pocket during his tutorials, and who demonstrates the crewmasteric reflex fumblingly with little regard for his aghast patient, and who only eats *mee pok tar* alone in a corner of the Houseman's Canteen may well have Asperger's Syndrome?

And what about that very shy prize-winning medical student with no savoir faire but who can name every part of the human, mouse and *Caenorhabditis elegans* anatomy, draw the entire molecular circuitry of the cell by heart, but who clumsily bombs out as a junior doctor from the total experiential overload of the real medical world exploding with contradictions, absurdity and bodily fluids?

Mind you, it is good to have a logical, systemising and compulsive mind in medicine that pays attention to details. Like the consultant physician who calls you every four hours to ask: "Have you checked the

repeat potassium level?" Or the obsessive, supremely skilled master surgeon who understands the intricate nitty-gritty 3D anatomy of his operation site. His FRCS disciples would bow worshipfully after his every master-stroke, exclaiming: "We're not worthy! We're not worthy!" Who cares if those namby-pamby touchy-feely MRCPs complain that his ritualistic ward rounds lack empathy as he snorts and grunts his way through all his post-op cases like a Neanderthal mumbling: "Off drip, off drip, off drip!"

"People with the balanced brain make the most wonderful medical doctors, as comfortable with the details of the biological system as with the feelings of the patient."

– Professor Simon Baron-Cohen, *The Essential Difference – Male and Female Brains and the Truth about Autism*

Does this mean that medical school interviews should make greater attempts to select those Most Balanced Brain Students (aka MBBS) by making them go through an assessment like the BBC Sex ID Test at

http://www.bbc.co.uk/science/humanbody/sex/add_user.shtml?

One cannot help but see some uncanny features of the extreme male brain in the alter ego of Professor Baron-Cohen's cousin – Sacha Baron-Cohen as Borat, the extreme journalist from the Glorious Nation of Kazakhstan:



INDISCRIMINATE SOCIAL INTERACTION, ODD MONOTONOUS PROSODY OF SPEECH AND OVERLY FORMAL AND PEDANTIC LANGUAGE, AND A STRANGE WALK

Borat indiscriminately greets and kisses every American he meets in a parodied Kazakh accent, bouncing about with a spastic gait and carrying a shabby suitcase that contains a live chicken.



**THE OBSESSIVE
HYPER-FOCUS ON
ONE SUBJECT WHILE
WEARING PECULIAR
CLOTHING**

Borat perseveres across America in pursuit of Pamela Anderson (of Baywatch fame) to marry, wearing either a loose-fitting suit or a tight-fitting lime green spandex swimsuit showing off his extreme hairy maleness.



**MIND-BLINDED
INDIFFERENCE TO
THE FEELINGS OF
OTHERS, A POOR
ABILITY TO MAKE
FRIENDS AND ALSO POOR USE
AND UNDERSTANDING OF
NON-VERBAL COMMUNICATION**

Borat manages to totally piss off the Veteran Feminists of America, train commuters, genteel Southern society, politicians, a Pentecostal church congregation, a Texas rodeo show audience, an old Jewish couple and many more Americans in some of the most politically incorrect on-screen behaviour in movie history. He inadvertently exposes the hidden bigotry, racism and small-mindedness of apparently normal, decent and respectable Americans. But Borat also crudely exploits American goodness, generosity and hospitality.



**ECCENTRIC AND
INAPPROPRIATE
BEHAVIOUR,
ECHOLALIA,
PALLILALIA AND
EXHIBITIONS OF A NARROW
AND LIMITED INTEREST IN
COMPLEX SUBJECTS**

One of the grossest scenes from the film was of Borat chasing his short and fat friend Azamat through a packed convention ballroom – both stark naked – and then wrestling each other to the ground in *Kamasutra*-like positions. Borat also single-mindedly sought to understand some of the most complex subjects in the Universe – women, and the United States.

And he repeatedly exclaims in the film: “Very nice!” and “I like sex!”

Unlike Borat, who asks American feminists: “But is it not a problem that the woman have a smaller brain?”, Professor Simon Baron-Cohen carefully stresses that there is no superiority of one brain type over another.

As Singapore shifts some of its strategic focus from manufacturing and services to higher level R&D, innovation and creativity especially in the digital field, environmental technologies and biomedical sciences, we may see an increase in talented people who are hard-wired towards a more male brain pattern that will contribute to a changing local gene pool. One certainly hopes that a conducive nurturing ecosystem would maximise the utility of a biodiversity of people on our island.

“...individuals who have profoundly changed our world such as Isaac Newton, Michelangelo, James Joyce, Albert Einstein and Bill Gates are all suspected to have suffered from some degree of autism spectrum disorder.”

I recently saw a detached young boy who did not speak much, had poor eye contact and who was transfixed in moving his toy car back and forth throughout an entire children’s party. He smiled at his mother occasionally and she hugged him a lot. One could tell that she was thankful that she had her son and was admirably determined to give him her best. It must be difficult to empathise with those who are trapped in a different inner world. Those afflicted and their caregivers who go through this “Dark Night of the Soul” must surely be delivered as better, stronger people.

And I am sure our politicians are just thankful that Borat decided not to visit Singapore instead of the United States. ■