The Economist

Dealing with autism

Beautiful minds, wasted

How not to squander the potential of autistic people

Apr 16th 2016 | From the print edition

IN AMERICA in 1970 one child in 14,000 was reckoned to be autistic. The current estimate is one in 68—or one in 42 among boys. Similarly high numbers can be found in other rich countries: a study in South Korea found that one in 38 children was affected. Autism is a brain condition associated with poor social skills. It has a wide spectrum of symptoms, from obsessive behaviour to hypersensitivity to sound, light or other sensory stimulation, the severity of which ranges from mild to life-blighting. The range of consequences is also wide. At one end, the autism of a computer scientist may be barely noticeable; at the other, a quarter of autistic children do not speak.

Autism is a condition that defies simple generalisations. Except one: the potential of far too many autistic people is being squandered. Although around half of those with autism are of average intelligence or above, they do far worse than they should at school and at work. In France, almost 90% of autistic children attend primary school, but only 1% make it to high school. Figures from America, which works harder to include autistic pupils, suggest that less than half graduate from high school. In Britain, only 12% of higher-functioning autistic adults work full time. Globally, the United Nations reckons that 80% of those with autism are not in the workforce.

These numbers represent a tragic human toll, as millions of people live idle and isolated outside the world of work. Loving parents and siblings struggle to know how to help. Autism imposes hefty economic costs, reducing economic growth and swelling disability rolls. One American study suggests those costs could be as high as 2% of GDP. Fortunately, this need not be the case. Evidence, particularly from advanced economies, suggests there are plenty of things, from earlier screening to greater assistance with finding jobs, that could transform the lives of many autistic people (see Briefing (http://www.economist.com/news/briefing/21696928-children-rich-world-are-far-more-likely-be-diagnosed-autism-past-why)).

Pieces in the puzzle

Early screening is essential. There is no definitive test for autism. It can be diagnosed only by observing behaviour. Most babies learn by watching their parents smile, hug, eat and bicker; autistic children often fixate on inanimate objects or play with their toys in an oddly repetitive way. Relying on diagnosis by observation makes the statistics around autism slippery: one reason the condition's incidence has risen in recent decades is that doctors have changed the way they detect it. Yet there is little doubt that early diagnosis and intervention can help autistic children's brains develop better. If parents fill in a detailed questionnaire about what their children can and can't do, doctors can usually spot the symptoms by the age of two. Speech therapy and other intensive treatments can help an autistic toddler cope and encourage learning and interaction at an age when the brain is at its most plastic. A study in 2013 in Washington state found that, though costly, such early coaching paid for itself within eight years by reducing the need for extra help in school. Alas, the average age of diagnosis in the rich world is three and a half.

A second aim should be to provide autistic children with schooling that suits them. A debate rages about when and how to include autistic children in mainstream classes. The evidence argues against blanket rules. Some do better when mixed in with other children and given additional support. Some need to be taught separately, either for their own sake or because they are disruptive. Others need a bit of both. Whatever the degree of integration, teaching autistic children effectively will require more funding, to train both specialist and mainstream teachers. In one study 60% of British teachers said they felt unprepared to teach autistic children.

From genes to synapses

Maximising the returns from this investment in education means ensuring that autistic adults find work. Not all such people can hold down a job. But the high-functioning among them tend to be deft analysts. They can spot patterns or errors in data that are invisible to most non-autistics, making them attractive employees for software firms.

Even less gifted autistic people often have an extraordinary capacity to focus and an eye for detail that make them effective workers. Their desire for routine and dislike of change make them loyal ones, too. They can excel at jobs that require precision and repetition, such as updating databases, stocking shelves, organising libraries or tinkering with broken cars. Firms that set out to recruit autistic workers, such as Walgreen's, a big pharmacy chain, find them just as productive as their peers.

Plenty more companies could benefit from hiring autistic people. Agencies that specialise in recruiting them stress that even if they interview badly (not making eye contact, taking questions too literally), they may still be good workers. For autistic candidates, employers should consider replacing interviews with tests of relevant skills—filing tests for filing jobs,

coding tests for coding jobs, and so on. Once an autistic person is hired, small adjustments help employers to get the best out of him: for example, by providing a calm workspace and clear instructions, expressed textually or visually rather than verbally. (Teaching managers to give clear instructions is a good idea for other reasons, too.)

The final element of an ambitious autism agenda should be greater investment in research. Medical understanding of the condition has improved since 1949, when the psychiatrist who first identified autism blamed cold, unloving mothers for making their children withdraw into themselves. Scientists today are sure that genes play a role, as do environmental factors. Still, many questions remain unanswered, both about the condition's origin and its progression. The amount of public money spent studying autism is shockingly modest. Britain's government spends a trivial £4m ($5.6m) a year. America shells out around $200m a year—about what it costs to look after 100 severely autistic people for a lifetime. Such sums are dwarfed by the opportunity cost of having so many potentially productive people dependent on others. Beautiful or otherwise, an autistic mind is a terrible thing to waste.

From the print edition: Leaders