Drugging unruly children is a method of social control

SIR — Sahakian and Morein-Zamir’s reference to attention-deficit hyperactivity disorder (ADHD) as heritable and affecting 4–10% of children worldwide is contentious (*Nature* 450, 1157–1159; 2007). The claimed incidence of ADHD varies strikingly over time: less than 0.1% in the United Kingdom before 1990, and now generally claimed to be between 1% and 5%. This variation is equally dramatic by country: highest in the United States, followed by Australia and Iceland, but low in Italy, for instance.

The diagnosis is in many cases questionable, and evidence for its heritability is shaky except in highly selected groups. The marked increase in the number of prescriptions of methylphenidate (Ritalin) — from 2,000 a year in 1991 to more than 300,000 in the United Kingdom today — says more about fashions in the diagnosis and treatment of naughtiness, inattentive or badly parented children than it does about a genuinely heritable ‘disease.’

In the United States, the Federal Drug Administration has called attention to the ‘epidemic’ of schoolyard Ritalin use. As Sahakian and Morein-Zamir note, there is disturbing evidence of long-term, adverse sequelae associated with the use of such amphetamine-like drugs, especially on young and developing brains.

The assumption behind the cognitive-enhancer debate is that users are essentially making free choices about whether or not to take risks. But children being prescribed Ritalin are being drugged as a method of social control.

That, it seems to me, is a real ethical issue. If we don’t recognize the real-world situation in which drugs are bought, prescribed and used, then the ethical debate is vacuous.

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Humans have always tried to improve their condition

SIR — The Commentary ‘Professor’s little helper’ (*Nature* 450, 1157–1159; 2007) entreats us to consider how the non-medical use of cognitive-enhancing drugs such as modafinil and Ritalin might influence society as a whole. They note concerns that a ‘better, faster, stronger’ mentality might coerce individuals into taking these drugs so that they can give themselves an edge.

Science and technology will continue to generate all sorts of new enhancers, and the quest for enhancement is not necessarily unfaithful or unethical. We humans are invertebrate enhancers, striving to increase our intelligence and to improve our memory and powers of perception.

Consider spectacles: before they became commonplace, those who had good eyesight enjoyed an advantage over those who did not. Later, those who could afford spectacles joined those with naturally good eyesight — increasing (or decreasing?) natural unfairness. Enhancing technologies that improve eyesight are now widely available; we do not conclude that they are unethical because they are not globally accessible.

Before the invention of lamps or candles, most people went to bed at dusk; these inventions, and then electricity, enabled social life and work to continue into the night. Night owls can steal a march on their lazier or saner competitors, raising the bar and creating pressure for longer working hours. But such enhancement technologies are not considered unethical.

The same is and will continue to be true of cognitive enhancers. We must press for wider and more equitable access, turning our backs neither on technology nor on improving the human condition.

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Rationality is a better basis for ethics than repugnance

SIR — Sahakian and Morein-Zamir’s Commentary ‘Professor’s little helper’ (*Nature* 450, 1157–1159; 2007) makes an important contribution to the neuroethics of enhancement, as much for what it doesn’t say as for what it does.

Much of the debate over neurocognitive enhancement has been guided by the so-called ‘wisdom of repugnance.’ We are encouraged to focus on our gut reaction to perfectly healthy individuals drugging themselves (or worse, their healthy children) for the sake of satisfying oversized ambitions. This highlights issues such as the need to earn one’s success and self-esteem, and respect for our natural limitations.

Shouldn’t we attempt a more rational analysis of the different contexts, methods and motives for neurocognitive enhancement and their likely outcomes, including the likely impact on society and human values? Sahakian and Morein-Zamir provide a cautious yet open-minded assessment of risks and benefits, without any obeisance to the wisdom of repugnance. They have done us a service in framing the issues in this way.

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