THE SECRET OF SUCCESS

What does it take to succeed – and are we doing all we can as individuals and societies to help? **Michael Bond** reports

"WHILE we don't promise equal outcomes, we have strived to deliver equal opportunity – the idea that success... depends on effort and merit," President Obama said in a speech last December. Yet as Obama went on to acknowledge, success in the US is now more dependent than ever on being born into wealth and privilege.

Over in the UK, the mayor of London, Boris Johnson – seen by some as a future prime minister – also recently addressed the issue of growing inequality, but his vision was rather different. Success is all about IQ, Johnson suggested, so all we can do is give the brightest kids the best chance to succeed.

These speeches raise all kinds of issues, but at their heart are two opposing ideas about what it takes to succeed. To some, it's all about nature, that success is determined by genes. To others, it's all about nurture – just about anyone can succeed given a chance. So which of these ideas is closer to reality?

The truth, needless to say, is more complex. The genes people inherit matter, but so does their environment. Even IQ, which has been claimed to measure innate intelligence, can be changed by a person's upbringing. This means that there are plenty of things that can be done to make people more successful – but are governments, schools and parents doing the right things?

The debate about success has been fuelled by a recent twin study led by Robert Plomin of King's College London, which found that differences in children's academic performances in UK schools owe more to heritable traits than to teaching or other environmental factors. This result should not be too surprising, given that there is little doubt that intelligence depends in a large part on our genes, and that smart kids usually do better in school.

"Intellect and achievement are far from perfectly correlated"

But the results do not mean that teaching does not matter. That's like arguing that because differences in height are mostly down to genes food does not affect height in well-fed children. In fact, says Plomin, the large role of genes could be seen as a good thing because the more equal the environment, the more genes – as opposed to parental wealth, say – matter. Nor, he says, does it follow from his findings that we should pour resources into a small elite.

For one thing, children with the highest IQs aren't necessarily the greatest achievers in later life. In the 1920s, Lewis Terman, a psychologist at Stanford University, recruited 1528 children in California who had scored

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Obama is far from happy about falling social mobility

very highly on the Stanford-Binet IQ test. Like Johnson, Terman was convinced that IQ was the key to success in later life, defined in terms of earnings and achievements (yes, success could also be measured in terms of, say, happiness, but this article will focus on the narrower, materialistic definitions). He was right up to a point: by the middle of their lives, his "Termites" had published around 2000 research papers and articles, won at least 230 patents and written 33 novels and 375 short stories and plays. Their median income was around three times that of the US as a whole.

But this is not quite as impressive as it sounds. Even though the median IQ of Terman's subjects was 147, around a quarter ended up in less prestigious jobs, becoming clerical workers, police officers, salesmen or craftsmen. None of the group matched the academic output of Nobel laureates or others among the nation's intellectual elite at the time. Indeed, by focusing on IQ scores, Terman excluded children such as Luis Alvarez and William Shockley, both of whom went on to win the Nobel prize in physics.

What's more, none of the Termites went on to found leading businesses, so they were not great "wealth creators" – one of the arguments for favouring an elite is that they will create wealth for a country. Instead, after 25 years Terman had to acknowledge that "intellect and achievement are far from perfectly correlated".

Genes versus environment

While intelligence clearly matters, then, by itself it is no guarantee of success. There is also overwhelming evidence of the importance of environmental factors, particularly those related to socio-economic status. Children who grow up in poor areas with limited access to computers and books, and who may also have little routine and little parental attention, not only have worse health, but are also more likely to do badly at school. This makes it far harder for them to flourish in adulthood. By contrast, many successful entrepreneurs, leaders and artistic high achievers grow up in stimulating homes surrounded by a diversity of books and are party to inspiring meal-time conversations.

Children whose parents split up or who grow up in emotionally unstable homes also start out at a disadvantage, regardless of their social background. They tend to be more badly behaved and underperform at school.

Edward Melhuish of Birkbeck, University of London, who studies child development, warns that children under 5 who don't receive consistent affection and responsive communication from their parents or care-givers have impaired social and emotional development. Crucially, this affects their language skills, which Melhuish says is a major reason why children from disadvantaged families generally do poorly at school. ›