

Don't Be So Fast to Dismiss IQ Tests

'IQ tests just measure how good you are at doing IQ tests.' This is the argument that is almost always made when intelligence-testing is mentioned. It's often promoted by people who are, otherwise, highly scientifically literate. You wouldn't catch them arguing that climate change is a myth or that vaccines might cause autism. But saying that IQ tests are useless is just as wrong as these notions: in fact, decades of well-replicated research point to IQ tests as some of the most reliable and valid instruments in all of psychological science.

So what does an IQ test – which might consist of, for example, shape-based puzzles, timings of how quickly you can check through lists of meaningless symbols, memory tests, and vocabulary measures – actually tell you? The strongest correlation is perhaps unsurprising: an IQ score is highly predictive of how people will do in school. One large [study](#) found that IQ scores at age 11 correlated 0.8 (on a scale of -1 to 1) with school grades at age 16. Surely this gives us some basis for calling these measures 'intelligence tests'. But that's just the beginning: higher IQ scores are predictive of more [occupational success](#), [higher income](#), and better [physical](#) and [mental health](#). Perhaps the most arresting finding is that IQ scores taken in childhood are predictive of mortality. Smarter people live longer, and this association is still there after controlling for social class.


Neuroscientists and geneticists have also made good progress in understanding human intelligence. Meta-analyses of hundreds of studies confirm that people with larger brains tend to get higher scores on IQ tests, and [research](#) on more specific brain regions and features continues apace. We know from studies of twins, and from studies done directly on DNA, that

intelligence test scores are [heritable](#): a substantial portion of the intelligence differences between people are due to genetics. We've already begun to find some of the [specific genes](#) that might be responsible for these differences, and further findings are on the way.

People make the mistake of assuming that intelligence is immutable because it has been linked to genetic and neural features, and because it seems highly stable across the lifespan. One's IQ score, they think, is set in stone, condemning you to a poorer life if it's below-average. This is a mistake. There's nothing in principle to suggest that we can't raise people's IQ scores, at least to a degree (though many recent attempts to do so have been [non-starters](#)). Indeed, IQ scores have been rising inexorably across the years, in a process called the [Flynn Effect](#), for (non-genetic) reasons that aren't yet clear. Another mistake is to think that anyone has ever claimed that an IQ score 'sums up' a person. This is another falsehood, since all IQ researchers would readily accept that personality, motivation, and a host of other factors – including luck – are all crucial for success in life.

It would be foolish to deny that there are any skeletons in IQ-testing's closet. Many, though by no means all, of the originators of the tests were involved with the eugenics movement in the early 20th century, and it's reasonable to be appalled at some of the uses to which IQ tests were originally put. But these concerns are irrelevant to the main question of whether an IQ score, taken today, can tell you anything about a person. Facts are facts, and the validity of intelligence test scores is amply backed by voluminous evidence.

As all the studies linked above show, IQ tests are useful in a wide variety of situations, from education to medicine to the world of work. We need IQ tests to help us understand how the brain ages, and how we can help it age more healthily. We need IQ tests to help us work out how to boost people's

intelligence, and thus to boost their productivity. Perhaps, above all, IQ tests are one of the tools with which psychologists can dissect and examine human intelligence: we'd be extremely unwise to continue to ignore their insights. 

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