

## Malcolm Gladwell Looks at Intelligence and I.Q. Tests

In this fascinating *New Yorker* article, author Malcolm Gladwell begins by describing what he calls the I.Q. fundamentalists – those who believe that (a) intelligence tests measure an identifiable mental trait that predicts the quality of our thinking, and (b) that intelligence is innate – it's determined by our genes and can't be changed after birth. Among the fundamentalists are H. H. Goddard (who coined the word *moron* and wrote, "The people who are doing the drudgery are, as a rule, in their proper places"); Lewis Terman (who predicted that California children with the highest I.Q. scores would grow up to be the most successful in every profession); Arthur Jensen (who said that Head Start wouldn't work because I.Q. was mostly genetic); Richard Herrnstein and Charles Murray (authors of *The Bell Curve*); Richard Lynn (who believes that Asians are the most intelligent race because of the Himalayas, really cold weather, pre-modern hunting practices, brain size, and specialized vowel sounds); and James Watson (who recently told an English newspaper that he was "inherently gloomy" about the prospects for Africa because its people consistently score lower than Europeans on intelligence tests).

But those who believe that intelligence is inborn and fixed, says Gladwell, haven't contended with some stubborn facts. The most important is that I.Q. improves steadily from one generation to the next. For example, at the beginning of the nineteenth century, the children of U.S. immigrants from southern Italy scored in the high 70s and low 80s on I.Q. tests – a full standard deviation below American and Western European children. Gladwell reports that "there was much concerned talk at the time about the genetic inferiority of Italian stock, of the inadvisability of letting so many second-class immigrants into the United States, and of the squalor that seemed endemic to Italian urban neighborhoods." But in the decades that followed, something happened that allowed Italian-Americans to rapidly become "more intelligent" and assimilate into the undifferentiated mass of Americans, leaving no trace of this enormous I.Q. gap. Had their genes been magically altered?

James Flynn, a social scientist from New Zealand, has shown conclusively that I.Q. scores increase about three points a decade worldwide, and recently published a book on the subject, *What Is Intelligence?* (Cambridge, 2007). Flynn estimates that an American with an I.Q. of 100 will have children with I.Q.s around 108 and grandchildren with I.Q.s close to 120. "If whatever the thing is that I.Q. tests measure can jump so much in a generation," says Gladwell, "it can't be all that immutable and it doesn't look all that innate." Or could it be that I.Q. tests aren't a very good measure of intelligence?

To explore these questions, Flynn looked closely at actual intelligence tests. On the ten-part WISC (Wechsler Intelligence Scale for Children), the steepest intergenerational rise in scores has been in the section on similarities – questions like, "In what way are dogs and rabbits alike?" The correct answer to this question is that dogs and rabbits are both mammals, but Flynn points out that a nineteenth-century American would have said, "You use dogs to hunt rabbits." Gladwell explains: "Our great-grandparents may have been perfectly intelligent. But they would have done poorly on I.Q. tests because they did not participate in the twentieth century's great cognitive revolution, in which we learned to sort experience according to a new set of abstract categories." We have progressed from a concrete, experiential world and put on "scientific spectacles" (Flynn's term), enabling us to answer more abstract questions. "An I.Q., in other words, measures not so much how smart we are as how *modern* we are," says Gladwell.

An example from Africa: psychologists gave members of the Kpelle tribe in Liberia a version of the WISC in which they were asked to sort a basketful of food, tools, containers, and clothing into appropriate categories. The Kpelle chose functional pairings, for example, putting a potato together with a knife because you use a knife to cut a potato. A wise man would have no choice but to make this pairing, they explained. To the researchers, these were the wrong answers, but they asked, "How would a fool do it?" The Kpelle immediately rearranged the objects into what the scientists considered the right groupings.

“It could be argued,” says Gladwell, “that taxonomical categories are a developmental improvement – that is, that the Kpelle would be more likely to advance, technologically and scientifically, if they started to see the world that way. But to label them less intelligent than Westerners on the basis of their performance on that test, is merely to state that they have different cognitive preferences and habits. And if I.Q. varies with habits of mind, which can be adopted or discarded in a generation, what, exactly, is all the fuss about?”

Gladwell gives a third example from his own childhood: on long car trips, his family used to play Twenty Questions, but Gladwell’s father added a fourth category to the usual animal, vegetable, and mineral: abstract. This made the game more challenging, but Gladwell and his brothers caught on. “Flynn would say that my father was teaching his three sons how to put on scientific spectacles,” says Gladwell, “and that extra practice probably bumped up all of our I.Q. scores a few notches. But let’s be clear about what this means. There’s a world of difference between an I.Q. advantage that’s genetic and one that depends on extended car time with Graham Gladwell.”

Because everyone’s I.Q. is constantly creeping upward for these environmental reasons – and because I.Q. tests are periodically re-normed – Flynn says we should be very careful about using I.Q. scores to make important decisions. One such area is deciding if a child is mentally retarded, 70 being the usual cut-off score. In the 1970s and 80s, most states used the WISC-R to determine mental retardation – but since all children, even those with disabilities, score a little higher with every passing year, the percent considered mentally retarded was lower each year. Then in 1991, a re-normed version of the test, the WISC III, was introduced, and the percentage of “retarded” children shot up. One study estimated that if every state had switched to the new test simultaneously, the number of “retarded” children in the U.S. would have doubled overnight. “That is an extraordinary number,” writes Gladwell. “The diagnosis of mental disability is one of the most stigmatizing of all educational and occupational classifications – and yet, apparently, the chances of being burdened with that label are in no small degree a function of the point, in the life cycle of the WISC, at which a child happens to sit for his evaluation.”

Back to the supposed I.Q. advantage of Asians. Flynn looked closely at the work of Richard Lynn, and found that in his study supposedly proving superior Japanese intelligence, Lynn had compared average American schoolchildren with upper-income, urban Japanese children. Recalculated, the Japanese average fell from 106.6 to 99.2. When Flynn looked at Lynn’s study of Chinese-American intelligence, it turned out that Lynn had looked at 1975 Asian-ancestry San Franciscans using an intelligence test normed in the 1950s. When the subjects were reanalyzed using up-to-date intelligence metrics, their scores were 97 verbal and 100 nonverbal. “The Asian-American success story had suddenly been turned on its head,” says Gladwell. The Chinese-Americans had succeeded “not because of their *higher* I.Q.s, but despite their *lower* I.Q.s.”

Flynn then measured the I.Q.s of the children of the first, overachieving wave of Chinese-Americans – and it turned out that the next generation really did have I.Q.s higher than average – about 103. Why? Flynn believes it’s because the parents took note of how much the professions valued abstract thinking and made sure their children “wore scientific spectacles.” With Chinese-Americans, he argues, high achievement *preceded* high I.Q. It’s all about belonging to a culture that stresses hard work, higher education, and professional success, says Gladwell. “To ascribe Asian success to some abstract number is to trivialize it.”

So what about the black-white “intelligence gap”? Flynn recently debated Charles Murray at a forum in New York City, focusing on the question of why the I.Q. gap between African-Americans and whites narrowed considerably between 1945 and 1970, but then stopped narrowing with a chasm still remaining. Murray expressed pessimism that the gap would ever be closed.

Flynn took a different tack. The black-white gap is virtually non-existent for infants and much narrower among four-year-olds, he said (African-Americans score only 4.6 points below

whites). But between the ages of 4 and 24, the gap widens steadily, with blacks losing .6 of a point each year until their scores settle at an average of 83.4. Flynn attributes this entirely to the different cognitive environment in which many African-American children grow up – more single-parent homes (which are less cognitively complex than two-parent homes), less-demanding peer groups and classrooms, and a teenage culture that is often more negative about academic achievement. Flynn backs up his findings with adoption studies, which show clearly that the quality of the environment in which children grow up is key, not genes.

“The mind is much more like a muscle than we’ve ever realized,” Flynn concludes. “It needs to get cognitive exercise. It’s not some piece of clay on which you put an indelible mark.”

“None of the Above: What I.Q. Doesn’t Tell You About Race” by Malcolm Gladwell in *The New Yorker*, Dec. 17, 2007

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**Source:** The Marshall Memo