The Flynn Effect vs. the Greatest Minds in History

Measured intelligence (IQ) rose markedly over the 20th century, a robust result widely dubbed the "the Flynn effect." But what do these rising IQs mean? The straightforward conclusion is unbridled optimism: just as human beings are taller than they used to be, they're also smarter than they used to be. Flynn himself is reluctant to draw this inference, but perhaps he's too cautious.

How could IQ go up while genuine intelligence stagnates? The simplest story is that modern societies somehow "teach to the test," leading to "hollow gains." People score higher today because they've been prepped better, even though they're no smarter than before. Flynn's moderately optimistic account is that today's humans are genuinely better at a narrow but important range of cognitive tasks. We're no smarter than we used to be, but we're much better at abstract and hypothetical reasoning.

What do rising IQs really show? I remain undecided, but here's an argument that strongly inclines me to pessimism. To wit: *When I read the smartest thinkers from the 17th, 18th, and 19th centuries, they seem roughly as smart as the smartest thinkers from the 20th century.* In fact, the same goes for the smartest Greeks from the 4th and 5th centuries B.C. What 20th-century thinkers credibly exceed the sheer intellectual firepower of Plato, Epicurus, David Hume, Thomas Reid, Descartes, or Gauss? Note: I'm not naively comparing the best living thinkers to the totality of earlier thinkers.* I'm comparing the best in *individual earlier* centuries.

The high relative quality of the top minds of the past is especially glaring when you consider two weighty factors that misleadingly tip the scales in favor of modernity:

1. Population is *much* larger than in earlier eras. So you'd expect the extreme tail of today's intelligence distribution to dominate even if mean intelligence stayed the same.

2. Modern thinkers build on the shoulders of past giants, making it easy for them to exceed the knowledge and avoid the errors of earlier generations. This in turn fosters the illusion that moderns are genuinely smarter, rather than advantageously positioned in time.

3. Women in earlier centuries would have had little opportunity to impress the world with their intellects. So the past is playing with only half its team.

My claim: Even if you *don't* bother correcting for these three confounds, the top thinkers of the past still seem every bit as brilliant as the most brilliant modern minds. And if you did run suitable corrections, you might well conclude that the smartest people since 1900 are decidedly inferior to their predecessors.

In light of international adoption research, the most promising way to resolve my puzzle is to attribute the Flynn effect to the gradual elimination of absolute poverty. Nutrition is the most obvious mechanism: Since history's greatest minds generally came from well-fed privileged classes, their intellectual development was barely stunted, leaving them mentally in the same league as today's top minds. The rest of mankind, however, has enjoyed massive cognitive gains due to massive growth in food availability. As Flynn explains the story:

The major argument for nutrition as a post-1950 factor rests not on dietary trends, but on the pattern of IQ gains. It is assumed that the more affluent had an adequate diet in 1950 and that dietary deficiencies were concentrated mainly in the bottom half of the population. This has been stated as a hypothesis about class: Over the last say 60 years, the nutritional gap between the upper and lower classes has diminished; therefore, the IQ gap between the classes should have diminished as well; therefore gains should be larger in the bottom than in the top half of the IQ curve.

But Flynn goes on to present strong evidence against not only the nutrition story, but *any* story that appeals to the decline of absolute poverty (references omitted):

There are seven nations for which we have the whole IQ distribution from top to bottom: France from 1949 to 1974; The Netherlands from 1952 to 1982; Denmark from 1958 to 1987; the US from 1948 to 1989; Spain from 1970 to 1999; Norway from 1957 to 2002; Britain from 1938 to 2008. Denmark, Spain, and Norway show gains either larger or almost wholly in the bottom half of the curve, but France, the Netherlands, and the US show uniform gains over the whole curve. Britain is a special case, which I will save for detailed analysis.

Where we do not have the full distribution, a sign that gains might be concentrated in the lower half would be that the range or variance (the S.D.) of IQ scores has lessened over time. If the lower half has gained, and the upper half has not, clearly the bottom scores will come closer to the top scores. A survey of the better data sets shows that Belgium, Argentina, Sweden, Canada, New Zealand, and Estonia have no pattern of declining variance. In Israel, males show no decline but females do; however, the female data are inferior in quality and it is hardly plausible that the latter had a worse diet than the former.

Therefore, as far as we know, nutrition is viable as a causal factor in only three nations post-1950. Even in those nations, it has merely escaped falsification.

You could maintain that *pre*-1950 Flynn gains were driven by nutrition; the data's probably not good enough to rule it out. But then I could just restate my puzzle by comparing earlier half-centuries to the 1950-2000 era.

My whole case admittedly rests on my personal impression of the intelligence of top thinkers, past and present. But my stance here is hardly eccentric. You're free to flatly insist that the sages of the past are, by modern standards, mediocre minds. But can you really bite that bullet in good conscience?

* Even that comparison makes the past look quite good, if you remember that, due to illiteracy, the vast majority of pre-modern human beings would have been unable to leave any lasting proof of their intellectual prowess.