## Bell Curve redux: Is the science of intelligence too taboo to research?

There has been a growing awareness in recent decades about the role played by genetics in human intelligence. We don't fully understand it yet. We aren't even close. But a new study <u>published</u> in the prestigious journal *Nature Genetics* identified 52 genes affecting the brain in ways that influence intelligence. It was brought into the mainstream by science journalist Carl Zimmer <u>writing in the New York</u> <u>Times</u>. By all measures, these 52 genes are but the tip of the iceberg. Hundreds more are expected to be discovered in years to come, and — like height, hair color, diseases, and pretty much every trait — you can be sure the distribution of the underlying genetics won't be symmetrical across the human population, whether we are looking at families, nations or races.

How we as a society will handle this influx of genetic information is hard to predict. Over the past centuries, humans have come to accept a range of initially uncomfortable realities — including the non-centrality of our location in the cosmos, evolution of our species from other species and ultimately from non-living chemistry. But we need look no further than the backlash from a recent podcast interview by neuroscientist Sam Harris of political scientist Charles Murray, who authored the controversial 1994 book *The Bell Curve*, to question whether our society is ready to weather this new storm.

### Forbidden knowledge

The current feud is really between Harris and the writers and editors of an article that <u>appeared in Vox</u> last week in response to the interview with Murray, which tool place in April. Yet it illustrates the emotion found in the wider debates that have taken place between Murray and his critics over the past 23 years. The podcast interview happened about a month after Murray was attacked, verbally and physically, on the campus of Middlebury College, in Vermont, where he was scheduled to give a talk. Instigation of the protest started with faculty members who didn't want Murray to have a podium, but students carried it out, some with signs accusing Murray of advocating eugenics. Along with preventing the talk, the activities culminated with serious injury to Murray's faculty chaperone — for which the New York Times reported recently dozens of students are now going to be disciplined.

Murray, a political scientist currently at the American Enterprise Institute, wrote *The Bell Curve* with psychologist Richard J. Herrnstein, who died soon after the book was published in 1994. Since then, Murray has been the target of widespread scorn, but also of valid criticism, connected with the most widely publicized claim of the book: that there are heritable biological factors contributing to the finding that mean intelligence quotient (IQ) score for Caucasian Americans is a few points lower compared with Asians, and a few points higher compared with African Americans and Latinos.

The main complaint by the *Vox* writers, all psychology professors at top institutions, is that Harris was too easy on Murray. In the course of the two-plus hour interview, the writers suggested, Harris could have plastered his guest with more challenging questions. Instead, they said he gave Murray plenty of slack to say that the mathematical analysis and the conclusions of *The Bell Curve* had solid support among social scientists.

The strongest support for the Vox complaint is that, at one point, Murray likened his position to that of the educated people in Europe — in the days of Columbus — who believed the Earth was round, and his critics to those who believed it to be flat. If there was any time when Harris could have protested more, this was it. As a scientist, this writer can attest, and surely Harris would agree, that few debates in science are ever that lopsided. In the years following the Bell Curve's publishing, there have been challenges issued by serious social scientists, contesting various aspects of the work, including how different factors were weighted in the calculations. At the very least, we can say that these critics are not modern-day flat Earthers.

But then, neither is Murray a flat Earther. And that seems to be what Harris wanted to show. Listening to other episodes of his popular podcast, one can see that what motivated him to give Murray a stage was an opposition to branding in academia. Harris does not like the idea that a topic can be taboo. That is an approach to be commended, especially as we move deeper into the age of neuropsychogenetics, when there are bound to be revelations that make us uncomfortable.

In actuality — and this is a point that Murray made in the interview and in the book — the finding of a few points of difference between the MEAN IQ of different races, and an underlying genetic component of this finding, is meaningless, especially given that the differences of people within each race, and even within families, is much bigger. Controversy about the actual analyses notwithstanding, the dispute may simply stem from the fact that Murray and Herrnstein presented their work in a book weaved in with libertarian beofogy, with concrete programmatic implications. First and foremost of these, Murray opposes affirmative action, at least in its current form.

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On top of this, Murray and Herrnstein have been criticized for not getting

*The Bell Curve* peer reviewed, which would have been appropriate for this type of book. Not having that makes it all the more difficult for anyone, but especially those with a progressive socio-political perspective, to separate the real science from the policy and political ideas in any book. Such blurred distinctions often lead to accusations that somebody's science is pseudoscience, but it is important to

distinguish pseudoscience from mistakes in methodology, biases, and other problems that can afflict wellintentioned scientists. That's the reason why science depends on both peer review and repeatability, meaning that an experiment or other study should come out the same, no matter which research team carries it out.

In short, there were plenty of points that Harris could have raised, so this comes down to him giving a stage to someone that he thought needed a friend, given the history of how he had been treated. To illustrate the tone of that treatment, Harris brought up sociologist Steven Rosenthal, who once described *The Bell Curve* as follows: "A vehicle of Nazi propaganda, wrapped in a cover of pseudoscientific respectability, an academic version of Adolf Hitler's Mein Kampf".

## **Going overboard**

"[Murray] is not Heinrich Himmler", Harris said in his introduction to the podcast, in obvious allusion to the Rosenthal quote. And since the topic could indeed be taken to such an extreme, Harris titled the Murry episode of his podcast *Forbidden Knowledge*, which ties in with his idea about taboos.

To be sure, Harris did challenge Murray on certain points, particularly on why Murray and Herrnstein would have bothered looking into intelligence and race in the first place. Murray's response was that he thought the policies surrounding affirmative action could be harmful to the very people they were conceived to protect, and Harris did not actually sound completely satisfied with the answer, but he did move on.

If the *Vox* writers could make a case that Harris was too easy on Murray, they lost credibility when they brought up the Flynn Effect, wherein IQs and general intelligence increases over generations, implying that Harris did not bring this up. He actually did discuss it, for several minutes. Importantly, during that time it was noted that Murray and Herrnstein were the ones who pointed out that the Flynn Effect could weaken their thesis. They were the ones to name the phenomenon for the researcher Flynn. The *Vox* authors later noted that they had not intended the readers to think that they had meant that Harris has not raised that point.

Then there is the matter of the editing. Writers do not always get to choose the headlines on their stories. But somebody chose this headline for the Vox article: <u>Charles Murray is once again peddling junk</u> science about race and IQ: Podcaster and author Sam Harris is the latest to fall for it.

It is one thing to call Murray on his insistence that his thesis is well-established, taken for granted by the bulk of serious researchers. Over the years, there have been a range of criticisms, ranging from purely emotional to findings of specific problems with the methodology. Sadly, the *Vox* article, especially on account of the headline, falls on the emotional end of the spectrum. Labeling Murray a peddler of junk science, and suggesting that the interviewer who gave him a stage is a sucker is probably not a good approach to get people to have a rational discussion, and probably why Harris was motivated to address the criticism.

#### Much ado about a little bit?

Harris, in an email, said the Vox article attempts to distort what he called Murray's clearly-stated thesis:

"He doesn't know how much of interracial IQ difference is genetic and how much is environmental, and he suspects that both are involved. His strongest claim is that given the data, it's very hard to believe that it's 100 percent environmental. This could be said about almost any human trait."

Despite all of the discussion, there seems to be uncertainty regarding whether Herrnstein and Murray meant to propose that IQ was moderately heritable, such that genetics would contribute somewhere between 30-50 percent of the cause, or merely anything more than zero percent. The latter would mean simply that the intelligence does not depend entirely on environmental factors, such as upbringing, economics, education, and government policy.

murray

Image not found or type unknown Charles Murray

On the Harris podcast, Murray quoted the most controversial chapter in *The Bell Curve* to show that he meant the latter:

I want to stress that last point. Dick and I, our crime in the book, was to have a single, solitary paragraph that said: 'If we've convinced you that either the environmental or the genetic explanation has won out to the exclusion of the other, we haven't done a good enough job presenting the evidence for one side of the other. It seems to us highly likely that both genes and the environment have something to do with racial differences' and we went no further than that. There is an asymmetry between saying 'probably genes have some involvement' and the assertion that it's entirely environmental and that's the assertion that is being made. If you're going to be upset at The Bell Curve, you are obligated to defend the proposition that the Black-

White difference in IQ scores is 100 percent environmental, and that's a very tough measure.

It should be possible to accept this idea, as we accept it when it comes to height, athletic ability, risk for specific diseases, and so many other traits. Doing so, whether or not one is convinced by the math of *The Bell Curve*, Harris has noted that it would be surprising if such a trait were identical between any groups of humans that have been reproductively isolated, including the groupings of that have come to be known as races.

"It would be a miracle if the mean value for any heritable trait were precisely the same across two genetically distinct populations, generation after generation", Harris said in his email, and went on to say such differences should not matter anyway. "As Murray and I spelled out repeatedly, we still need to treat people as individuals....The [Vox] authors write as though any proven genetic difference in intelligence between races would be morally and politically catastrophic—and so the only remedy is to lie about the state of our knowledge and defame anyone not taken in by these lies as a "racialist" (really "racist) who is peddling "pseudoscience."

To bring the point home that the pseudoscience accusation is not likely to hold sway, Harris also wrote about an influx of support that he has been getting.

Many well-known scientists, academics, and public intellectuals have privately celebrated my podcast with Murray and bemoaned how he's been treated all these years, but they won't go on the record about it because they don't want their names dragged through the mud.



Sam Harris

But somebody might indeed get dragged through the mud, if social scientists don't ease up on the branding. One might be tempted to dream of a time in the future when continued intercontinental travel and marriage will rendered the classic three races a thing of the past, and that time will eventually come, but in the meantime we have to chill out for a couple of reasons. First, debates on Murray's methodology and calculations not withstanding, he has always accepted the nature-nurture concept of intelligence that the rest of us take as axiomatic. Whether he thinks the biological contribution is is just a few percentage points above zero, or much greater, he accepts that the environment also plays a role. This means that, despite his libertarian philosophy, accepting, and at least respecting, his proposals on the heritability of intelligence need not be mutually exclusive with a progressive policy outlook, including advocacy of affirmative action in its present form.

Second, with the brain-relevant genetic data coming in, there are bound to be surprises. Indeed, we have had some already, such as the finding that Caucasians and Asians have significant amounts of Neanderthal genetic sequences, whereas sub-Saharan Africans have almost none. But nobody is worried about how such a finding will influence social policy, and nobody is intimidating anyone out of giving lectures as a result. Let's hope that this attitude prevails as neuropsychogenetics advances, and that we don't see repeats of the incident at Middlebury College.

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