

STERNBERG VS. MURRAY ON INTELLIGENCE

The following letter by Robert Sternberg, Ph.D., was written in response to the first of three articles written by Charles Murray, one of the authors of *The Bell Curve*. Murray's articles were published in the *Wall Street Journal* in January 2007. Links are available at the end of Sternberg's letter.

Much to my chagrin, but not surprise, Sternberg's letter was never published.

I include the letter among research papers on the site because it provides an excellent scientific summary of the cutting-edge research on intelligence—your brainpower. Sternberg is an internationally known researcher, author of many books and former president of the American Psychological Association.

From: Robert Sternberg [Robert.Sternberg@tufts.edu]
Sent: Wednesday, January 17, 2007 6:27 AM
To: dan@danerwin.com
Subject: Intelligence in the Classroom by Charles Murray (fwd)

fyi.

----- Forwarded message -----

Date: Wed, 17 Jan 2007 07:25:16 -0500 (EST)
From: Robert Sternberg <Robert.Sternberg@tufts.edu>
To: wsj.ltrs@wsj.com
Cc: Robert Sternberg <Robert.Sternberg@tufts.edu>
Subject: Intelligence in the Classroom by Charles Murray

Charles Murray's "Intelligence in the Classroom" is an article by a non-scientist filled with serious distortions and misunderstandings of the current state of scientific theory and research on intelligence.

First, Murray is roughly correct in the assertion that "Half of all children are below average in intelligence." This is true in the same sense that half of today's children are below the median (not average) in height, or below the median age of the population. But median heights have risen greatly over the past several generations, as have median age spans. Indeed, research by James Flynn shows conclusively that median IQs have risen as well since 1900.

Contrary to the tone of Murray's comments, most of the increase is due to the so-called general factor, not to other factors. So Murray's comments regarding possibilities for educational achievement make no sense. A child of today with an IQ of 100 would have been scored as having a substantially higher IQ 100 years ago. Given that the increase in IQs has been about 9 points per generation, that person would have had an IQ in excess of 127 at that time, which would have led to educational predictions very different from Murray's doom-and-gloom predictions. Similarly, a 6-footer today is not much above average and would not be considered particularly tall, whereas 100 years ago, he or she would have been looked at as exceptionally tall.

Second, IQ is NOT a "ceiling," and I don't know of any responsible psychologist who believes it is. IQ gives rough prediction of a child's school performance, as does socioeconomic status, motivation, and any other number of variables. But none of these variables sets a ceiling on children's performance. First, they are all highly imperfect predictors--success is multi-factorial. Second, they are subject to error of measurement. Third, they are not etched in stone. Research by Stephen Ceci and others has shown that IQ increases as a function of schooling, and that it is the schooling that is responsible for the increase, not the other way around.

Third, the temporary effects of interventions to increase intelligence are in large part because the interventions themselves are temporary and usually extremely short-lived. If you have a child living in extreme poverty, in a challenging and possibly dangerous environment, and with parents who are not in a position to provide the best possible education for their children, it is not surprising that short interventions--the kinds most easily funded by grants--are difficult to maintain. Consider an oft-made analogy to exercise. You can exercise to improve your muscles. But if you stop exercising, your muscles revert to what they were before. The same is true of your intelligence, and research by Carmi Schooler and others shows precisely that.

Fourth, it is fallacious to believe that brain development is etched in stone. Research by William Greenough, Marian Diamond, and others has shown that learning changes the brain--permanently. Experience matters for brain development. Charles Murray had the good fortune to be exposed to experiences that children in many parts of the United States and elsewhere never will have. Indeed, children growing up in war zones often need to devote all their resources just to staying alive. They cannot have the kind of schooling that optimizes their scores on the tests of which Mr. Murray is so fond.

Fifth, our own peer-reviewed, published research has shown that broader measures of abilities--based on the "multiple intelligences" that Murray disdains--can substantially improve prediction of academic success at the college level at the same time that they reduce ethnic-group differences. These assessments do not replace traditional measures--they supplement them. They are not "refutations" of the existence of the analytical skills measured by tests of general ability, but rather, demonstrations that such measures are relatively narrow and incomplete in their measurements of abilities. These conventional tests measure important skills, but not the only skills that matter for academic and other forms of success. Indeed, teaching to a broader range of abilities, our research shows, also can significantly improve school achievement over teaching that is more narrowly focused.

In sum, Murray's column gives a false and misleading view of the state of research on intelligence. I believe responsible scientists will not take it seriously. Unfortunately, many laypeople will not be in a position to realize that the statements are seriously misleading and paint a picture of research on intelligence that does not correspond to reality.

Robert J. Sternberg

(Robert J. Sternberg is Dean of the School of Arts and Sciences and Professor of Psychology at Tufts University. Previously, he was IBM Professor of Psychology and Education and Professor of Management at Yale University and President of the American Psychological Association.)

Dan Erwin, Ph.D.
651-638-9898

www.danerwin.com
info@danerwin.com

The relevant articles by Charles Murray
Links to the Wall Street Journal (WSJ)

January 16, 2007, WSJ

Intelligence in the Classroom

<http://www.opinionjournal.com/extra/?id=110009531>

January 17, 2007, WSJ

What's Wrong with Vocational School

<http://www.opinionjournal.com/extra/?id=110009535>

January 18, 2007, WSJ

Aztecs vs. Greeks

<http://www.opinionjournal.com/extra/?id=110009541>