

The Washington Post

October 23, 1994

Do We Have to Give Up?: No. We Know How to Get Smart about IQ

By DOUGLAS J. BESHAROV

It seemed like a simple enough project. Christmas was coming and the local mall had jobs for gift wrappers. What better way for mothers on welfare to earn a few extra dollars? So a local job training program decided to give a group of welfare mothers a quick course in gift-wrapping before sending them off to apply for a job. It wasn't that easy.

The first lesson was bows. The instructor asked the mothers to cut pieces of ribbon, each five inches long. The mothers quickly became confused—they did not know how to measure off the ribbon for cutting. There would be no jobs at the mall that season, because the mothers lacked the basic cognitive skills to wrap packages.

This true story illustrates a harsh reality: Long-term welfare recipients have extremely low cognitive abilities, at least as measured by traditional IQ tests. This is true for all races—the women at the training center just happened to be white. Almost 60 percent of women on welfare for five or more years are in the bottom 20 percent of intelligence, according to Richard Herrnstein and Charles Murray, authors of the controversial new book "The Bell Curve."

Herrnstein and Murray air social science's dirty little secret: IQ matters. As they document, using data for whites, high IQ is increasingly associated with economic and social success—and low IQ with poverty and a host of social problems, including out-of-wedlock births, welfare dependency and crime. This undeniable reality is stunningly ignored by just about every program designed to address such problems. No wonder they fail.

"The Bell Curve's" unflinching recognition of racial differences in IQ test scores has, of course, generated the greatest controversy. African Americans, as a group, consistently score 15 points below whites, 85 versus 100. According to the authors, "The average white person tests higher than about 84 percent of the population of blacks."

But, what, exactly, is IQ? And, how much of what we call IQ is attributable to inborn qualities and how much to environment and upbringing? This is, of course, the "nature" vs. "nurture" argument, which has been with us since before there were IQ tests. Reflecting the current scholarly consensus, Herrnstein and Murray say that "cognitive ability is substantially heritable, apparently no less than 40 percent and no more than 80 percent." For the purposes of their

argument, they adopt a mid-range estimate of 60 percent heritability.

Especially in light of black-white differences in measured IQ, the issue of heritability is enormously significant. In response to charges that the book overstates the genetic component of IQ, Murray has recently written that it does not matter whether nature or nurture causes IQ differences, because, either way, IQ is so difficult to raise. As evidence, Murray cites the failure of compensatory preschool and educational programs to raise IQs and to make meaningful changes in young people's lives. No clear-eyed reader of the research literature could deny these disappointing results.

But such programs hardly exhaust the possible interventions. Many linkages may exist between an individual's environment and his or her subsequently measured IQ, and these offer opportunities for intervention. Here are a few possibilities: What if IQ is affected by the mother's behavior during pregnancy?

In recent years, science has documented the importance of the fetal environment to later development. The message we try to give every pregnant woman is: "Eat well, don't smoke cigarettes, don't drink alcohol and, most importantly, don't use illegal drugs like crack cocaine." Prenatal exposure to cocaine results in newborns with smaller head circumferences, a sign of compromised brain development.

All of these harmful behaviors are far more widespread among disadvantaged mothers. But they seem to afflict some racial minorities even more than economic statistics would suggest. In a recent survey, for example, Hispanic women were almost twice as likely to use cocaine while pregnant than were white women; African-American women were 11 times more likely to use cocaine. What if the first years of life are crucial?

In the first months of life, the number of synapses in the human brain increases twentyfold, from 50 trillion to 1,000 trillion. The absence of intellectual stimulation during this period is now believed to impose a permanent limit on the number of synapses and, therefore, on intellectual potential. This phenomenon was demonstrated in a famous experiment in which the eyes of newborn kittens were covered for varying lengths of time. The longer their eyes were covered, the greater the permanent deficit in sight, not because their eyes were damaged, but because there were just fewer synapses in the areas of the brain responsible for processing visual images. As Jerry M. Wiener, chairman of the Department of Psychiatry at George Washington University Hospital and president of the American Psychiatric Association, explains: "What we call IQ is really the unfolding of innate abilities in response to environmental stimuli." Even smiling at a newborn may make a difference.

Again, it is disadvantaged families that are least likely to provide such cognitive cues. Numerous studies, for example, have described "lower-class child-rearing styles" as more angry and punitive, more humiliating, and less verbally interactive than middle-class child-rearing—and have correlated these differences to cognitive outcomes.

These developmentally stunting child-rearing styles tend to disappear as families become more middle-class, but, as Felton Earls, director of the Human Development and Criminal Behavior Program at Harvard University, explains, it can take two or three generations for the shift to occur. With so many African Americans only recently in the middle class, it should not be surprising that such behaviors have tended to linger on in what researchers consider middle-class households. What if preschool interventions could make a real change in a child's learning environment?

The Abecedarian preschool project in Chapel Hill, N.C., seems to have raised IQ scores by 16 points at the end of three years. Unlike Head Start, the Abecedarian project totally immersed children in a comprehensive developmental program that began within three months of birth—and provided nearly full-time care until they reached school age. Unfortunately, as the children got older—and they spent progressively less time under the influence of program staff—the gap between the experimental and control groups narrowed, to 7.6 IQ points at age 5, and 4.6 points at age 15.

"Other preschool projects have also made improvements of 10 or more IQ points," notes Ron Haskins, who was the coordinator of the Abecedarian preschool project in the late 1970s, and is now the chief welfare specialist for House Republicans. "In all these projects, however, the initial IQ gains for the children in the program compared to those in the control group also shrank over time."

So, we seem to be able to make early improvements in IQ; we just don't know how to make them stick. Some argue that this is the infamous "fade-out effect," with the children in the control group catching up with those in the program. It is just as possible, however, that other environmental factors, like neighborhood, had a supervening effect on the children in the program. What if good schools raise scores?

Forget about cultural bias in IQ tests. There is a bigger measurement problem. Most tests assess acquired knowledge as well as abstract thinking and problem solving, and that, of course, is where schools come in. A poor school environment, where discipline rather than learning is the first priority, could systematically depress test results. After all, if education does not matter, why are we so concerned about the quality of the schools where we send our children?

A change in the way schools teach could also narrow the black-white gap, according to Chester Finn, the founding partner and director of government relations for the Edison Project. "Conventional schools assume that all children learn one grade level a year, so they give both slow learners and quick learners the same 180 days of education. What if schools gave slow learners more time to learn? Would they do better? We cannot know until we try." What if neighborhoods dampen the desire of children to perform well?

Young people are particularly sensitive to environmental influences. Sadly, many disadvantaged communities discourage intellectual achievement. In African American communities, some good students are ostracized for "acting white." That's one reason why so many of the parents who can

do so move away from dysfunctional neighborhoods, and why so many of the parents who cannot leave do all they can to shield their children from neighborhood influences. Linda Burton, now a professor in human development at Pennsylvania State University, describes how she and her sisters were locked in their apartment after school to protect them from what was happening outside—and how the practice continues to this day in many inner-city neighborhoods. What if a child's entire neighborhood environment is improved dramatically?

We have a tantalizing suggestion from Chicago, where, as the result of the settlement of a housing discrimination lawsuit, *Gautraux v. the U.S. Department of Housing and Urban Development Chicago Housing Authority*, individual black families from housing projects could choose to participate in a program in which they would, by random assignment, be moved to either suburban white middle-class neighborhoods or to middle-class black ones within the city. Ninety-five percent of the black children who grew up in the suburbs graduated from high school and 54 percent went on to college, compared to 80 percent and 21 percent, respectively, of those who remained in the city. What if racial differences in IQ are the result of over 200 years of slavery and more than 100 more years of discrimination and oppression?

Since the 1950s, of course, black Americans have made major economic progress. Earnings for black men, for example, are now about 75 percent of those for white men, and the gap continues to close. But the figures for household wealth paint a much more dismal picture and show how far behind whites blacks still are: According to the Census Bureau, in 1988, the median net worth of white households was 10 times that of black and Hispanic ones, about \$ 43,000 compared to about \$ 4,000 and about \$ 5,500, respectively.

But household wealth is not just money. It is also a form of stored human capital that has been built up over generations. It is what Roger Wilkins, the Robinson professor of history and American culture at George Mason University, describes as "the accumulated ease in dealing with the wider society." These stark disparities give a sense of the remaining gap in human capital between the races. Might not this legacy take many generations to erase? If so, perhaps carefully targeted education and affirmative action programs could succeed in giving this generation a jump start toward equality—thus permitting the next generation to reach its potential. Herrnstein and Murray are right in saying that there is no proven way to raise IQs on a consistent basis. Indeed, doing something about the environmental aspects of low cognitive ability may be more difficult than any of us suppose and raises troubling questions about parental behaviors and the performance of public institutions. But just asking these questions demonstrates why identifying the origins of IQ differences is so important.

If IQ matters as much as it seems to, and if IQ is substantially affected by the environment or, as is more likely, is the result of a complex interaction between genes and environment, then we are morally bound to keep plugging away until we find something that works to raise it.

Douglas Besharov, a resident scholar at the American Enterprise Institute, was the first director of the U.S. National Center on Child Abuse and Neglect. His most recent book is Recognizing Child Abuse: A Guide for the Concerned.