

## **Discrimination Against the Female Brain**

By Caryl Rivers

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***It's not biology, child-rearing demands, or differences in ability that explain slower female advancement in scientific and technical fields. It is discrimination, pure and simple.***

Recently, a committee of specialists at the University of Miami found that it was not biology, hormones, child-rearing demands, or differences in ability that explained why women were not advancing as fast as they should in scientific and technical fields. It was discrimination, pure and simple. "It is not a lack of talent, but unintended bias that is locking women out," said Donna Shalala, president of the University of Miami and head of the committee that wrote the report. It was sponsored by the prestigious US National Academies of Science and Engineering and the Institute of Medicine.

This is not a new story. People familiar with the research know that for many years, studies have shown few gender differences that would account for women's lack of progress. They also know that the notion that "girls can't do math" starts as early as third grade and gets progressively worse. Harvard's Larry Summers got into trouble because - as he candidly admitted - he had gotten the science wrong. A quick check with some of his own faculty members could have saved him a lot of grief.

But the idea that women are uncomfortable with facts and systems dies hard. Cambridge University psychologist Simon Baron-Cohen ("The Essential Difference") says that males are good at leadership, decision making and achievement, while females are suited for "Making friends, mothering, gossiping, and 'reading' your partner." (He has been quoted in the New York Times, in a Newsweek cover story, in a PBS documentary and in many other major media outlets.)

Baron-Cohen bases his claims on one study (done in his lab in 2000) of day-old infants purporting to show that baby boys looked longer at mobiles, while day-old baby girls looked longer at human faces.

Elizabeth Spelke, the co-director of Harvard's Mind, Brain and Behavior Interfaculty Initiative, utterly demolished this study. It has never been replicated, nor has it appeared in a peer-reviewed journal, she reported. Furthermore, the study lacked critical controls against experimenter bias and was not well-designed. Female and male infants were propped up in a parent's lap and shown, side by side, an active person or an inanimate object. Since newborns can't hold their heads up independently, their visual preferences could well have been determined by the way their parents held them. Moreover, there's a long literature flat-out contradicting Baron-Cohen's study, providing evidence that male and female infants tend to respond equally to people and objects.

The idea that women are suited mainly for relationships keeps popping up all over the media. Best-selling author Michael Gurian ("The Wonder of Girls") claims that only 20 percent of girls have "bridge brains" that enable them to do math the way

males do, a claim so unscientific it takes your breath away. Gurian also claims that girls will be unhappy if they focus too much on achievement, and that instead their primary goal should be learning to form relationships. Gurian is often cited uncritically in the media and invited to speak to groups of teachers.

The Academies' report found that female performance in high school mathematics now matches that of males. But the media focus is not on female performance, but on female hormones.

["Is chemistry destiny?"](#) New York Times columnist David Brooks recently asked. His answer was a resounding vote in favor of sheer biological determinism. He blithely jettisoned a century's worth of research to chirp that "happiness seems to consist of living in harmony with the patterns that nature and evolution laid down long, long ago."

Long long ago, of course, was when men were in charge of the world and women knew their place.

Brooks was citing a new book titled "The Female Brain" by Louann Brizendine, a neuropsychiatrist at the University of California, San Francisco. The book claims that the female brain is wired for connection. But the author unfortunately makes huge, unsubstantiated leaps. Take, for example, this statement: "'Studies indicate that girls are motivated - on a molecular and a neurological level - to ease and even prevent social conflict.'"

But as Robin Marantz Henig points out in [her excellent New York Times review](#), the data for that statement is quite fuzzy. "The endnote lists nine scholarly articles, with no further explanation given. From the titles (which the reader has to look for in the bibliography), we can surmise that one study was on female mice, one on male and female rats, one (apparently) on female rhesus monkeys, and the other six on humans. But only one of those human studies explicitly mentions 'sex differences' in the title."

And long ago, "mean girls" were all the rage in media stories. What happened to the make-nice hormones in all those nasty high school kids?

The fact is that human behavior is an extremely complex mix of genes, hormones, environments, relationships, situations, drives, motivations - a vast, churning stew. There is huge variation among individuals; often, talking about how "men" or "women" behave has little bearing on what real people do. We are all products of both nature and nurture, constantly interacting.

But bits and pieces of this extremely complicated picture are teased out and used in a very simplistic - and very political - way. They are employed to argue that women can't do math, shouldn't be in the army, shouldn't be engineers, aren't natural leaders, aren't natural risk takers and so on, endlessly. The more that the actual behavior of women debunks such statements, the more widespread the statements become.

As the science of behavior becomes ever more nuanced and complex, the media notions about it become ever more conservative and simplistic. We should remember

that while biology is an important part of who we are, biological determinism has an unscientific - and unsavory - past.

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