

AAAS MEETING

War of Words Continues In Violence Research



There are few certainties in life, but here's one: The uproar surrounding attempts to find biological causes for social problems will continue. Ample evidence for that proposition was provided by two panels that met at the recent annual meeting of the American Association for the Advancement of Science (AAAS, publisher of *Science*) in San Francisco to consider the same subject—research into the possible biological causes of violence. At one panel, new evidence for interactions between biological and psychosocial factors in crime was presented, research the investigator said he hoped would lead to “feasible, practical, benign ways” of preventing violence. The other panel was a unified and outspoken assault on biological research in this area as racist and ideologically motivated.

The researcher who presented the new findings was psychologist Adrian Raine of the University of Southern California (USC). Since the early 1970s, several psychologists have proposed that complications at birth may be linked to criminal behavior. The underlying idea is that birth complications may lead to cognitive impairment or neuropsychological deficit, which leads to social dysfunction, which in turn leads to violent crime. Many other researchers have charged that the studies were inadequately designed, based on unrepresentative samples, and, most important, they dismissed environmental factors such as conditions within the family.

In an effort to overcome such criticisms, Raine, Patricia Brennan, and Sarnoff A. Mednick—all of USC—investigated a cohort of 4269 consecutive males born in Copenhagen between September 1959 and December 1961. Because Danish record-keeping is exceptionally thorough, Raine and his colleagues were able to identify children who experienced both significant birth complications and early rejection by their mothers. They defined the latter strictly: The pregnancy was unwanted, the mother attempted to abort the fetus, and the child was sent to an institution for at least 4 months of its first year.

Some 3.9% of the children in this cohort met all the criteria—a relatively small proportion. Yet this small minority was responsible for a disproportionate 22% of the violent crimes committed by children in the entire birth cohort. Raine defined violent crime as murder, attempted murder, assault (including domestic assault), rape, armed

robbery, and illegal possession of weaponry —“not a terribly loose categorization,” he said later. Neither variable—birth complications or early rejection—by itself was associated with high levels of violent criminality, but together they were strongly correlated with later violent crime, said Raine. Since both were necessary, he concluded that “biological factors play some role in violent behavior—and the role is not trivial.”

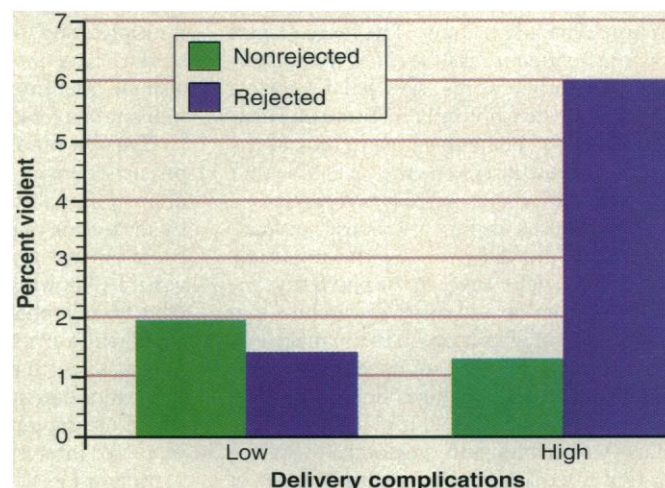
The implications are clear, Raine argued, although he cautioned against prematurely generalizing data from Denmark to the United States. As he put it, avoiding birth complications and unwanted births may “knock out” a large amount of violent crime. Noting that this would entail delivering better prenatal care, Raine hoped that this “eminently worthwhile” way to intervene shows that research into biological research on violence might cross the ideological divide and be embraced by its critics.

Judging from the tone of the other panel, however, that kind of reconciliation is far away. On the opposite side of the ideological divide stood Bonnie Blustein, an independent scholar in Chicago, who co-organized that session. In the past, fallacious “research” into the link between biology and behavior has been used to justify practices such as forced sterilization. Now, Blustein said, history may be repeating itself. As evidence, she held up a report from the National Research Council, published in 1992, called “Understanding and Preventing Violence,” which used contemporary findings from genetics and neuroscience to justify examining whether males and African-Americans are violence-prone. “The issue,” said Blustein, “is whether the new data justify the resurrection of the old paradigm.”

Absolutely not, responded panel member Steven P.R. Rose of the Open University in Britain, a neuroscientist. Such “neurogenetic determinism,” Rose argued, misguidedly reduces complex psychological, environmental, and biological interactions to the behavior of mythical entities “inside us.”

Biological influences on behavior exist, he conceded, but are secondary at best. The significant influences, Rose argued, are “outside”—in the form of oppressive social structures. If 25% of all poor, economically insecure British women are depressed, he asked, “Do we need to look for a genetic component?”

The rationale for trying to find biological roots of violence is ideological, charged panel member Peter Breggin of the Center for the Study of Psychiatry, who was instrumental in derailing NIH funding for a conference on violence that was to be held at the



Complicated subject. In a large Danish cohort of consecutive male births, only the combination of birth complications and maternal rejection was associated with increased violent crime.

University of Maryland in 1993. The recent efforts by several federal agencies to mount a “Violence Initiative” is a pretext for suppressing the black population, Breggin said. Instead of doing research into black violence, he asked, “Why not look at the genetics of white racism, which of course has led to enormous violence?”

If the research into violence is ideologically motivated, much of the opposition is also ideological, as was made clear by panel member Steven J. Rosenthal of Hampton University, a sociologist. In a speech that ranged from the crimes of Michael Milken to the involvement of the Central Intelligence Agency in the drug trade, Rosenthal charged that violence, as properly defined, is mostly caused by the privileged classes. Noting that violence in black ghettos decreased during civil rights protests, he argued that a “mass social movement” was the antidote to violence by minority group members. Given the distance between that prescription and Raine’s, there seemed little question that the controversy over violence research isn’t going away.

—Charles C. Mann

Charles Mann is a writer who lives in western Massachusetts.