

SOCIETY

Race, Aids, and Sexual Behavior

by J. Philippe Rushton

For the past decade or so, my research has focused on assessing racial differences in brain size and intelligence, sexual habits and fertility, personality and temperament, and speed of maturation and longevity. Startling and alarming to many people is my conclusion that if all people were treated the same, most racial differences would not disappear. I have found that Asians and Africans consistently average at opposite ends of a continuum ranging over 60 anatomical and social variables, with Europeans intermediate. Based on my studies, I have proposed a gene-based evolutionary theory of racial patterns.

The political fallout from my work has been intense. After my findings became public at the 1989 meeting of the American Association for the Advancement of Science, the premier of Ontario called for my dismissal. The Ontario Attorney General's office launched a six-month investigation of whether I had contravened "hate laws." I was excoriated in the media, and disruptions at the university culminated in my being forced by the administration to teach classes by videotape. (Of course, it could be worse. In many countries, people are jailed or executed for voicing unacceptable scholarly opinions.)

All the above is by way of introduction to the most recent statistics I have compiled on race and AIDS. (Some of the most ferocious attacks on me have come as a result of my studies of race differences in sexual behavior.) In 1989, I published a paper in *Social Science and Medicine* examining the worldwide distribution of 100,410 cases of AIDS that had been reported as of July 1, 1988, to the World Health Organization. By April 1, 1990, that figure had grown to

237,110, showing an 18-month doubling time and a crystallization of the racial pattern of the pandemic. Subsequent calculations published by me in the 1990 issue of *Social Science and Medicine* showed that black Caribbean countries had as high an incidence of AIDS as did African countries. When the figures were calculated on a per capita basis, the three most affected countries in the world were in the Caribbean—Bermuda, the Bahamas, and French Guiana.

The fast rate of increase continues (currently 20 percent a year) and, as of January 3, 1995, World Health Organization figures showed that over one million adult cases had been reported from 192 countries since the onset of the pandemic. Allowing for under-diagnosis and incomplete reporting, the true figure is estimated to be over 4.5 million, and nearly 20 million people are estimated to have the human immunodeficiency virus (HIV) that causes the disease.

While modes of transmission are universally the same—through sex or blood or from mother to fetus—it is clear that HIV has spread disproportionately among racial groups. Because of political sensitivities, many deny that AIDS originated in Africa, and African and Caribbean countries report only a fraction of their actual number of AIDS cases. But countries with large numbers of people of African ancestry have a disproportionate AIDS problem. In some urban areas of Africa, well over one in four adults are infected.

In African and Caribbean countries, the AIDS virus is transmitted predominantly through heterosexual intercourse. The age and sex distributions of HIV infection rates are similar to those of other sexually transmitted diseases, with higher prevalence among younger sexually active women. At the other extreme, it is a characteristic feature of AIDS in China and Japan that most sufferers are hemophiliacs. An intermediate amount of HIV infection is apparent in Europe and the Americas, where it has occurred predominantly among homosexual men.

Specifically, I computed the number of cases per 100,000 people to give an indication of the relative seriousness of the epidemic between countries with different population sizes. On this measure,

Canada has a rate of 38 cases per 100,000 people, making it the 39th most infected country in the world. Of the other leading countries, 22 are in Africa, 11 are in the Caribbean, four are in Europe, and the other is the United States. None are in Asia. The 2,000-mile swathe of infected Caribbean countries from Bermuda in the Atlantic through the Bahamas off the coast of Florida to French Guiana in South America is especially striking and has rarely (if ever) been explained.

I have also examined the most recent figures from the United States (Centers for Disease Control and Prevention, HIV/AIDS Surveillance Report, Vol. 6, No. 2). Data as of January 1, 1995, confirm that blacks are overrepresented in every exposure category. The nearly 30 million blacks in the United States, with a cumulative total of 146,283 cases, have a rate of 488 cases per 100,000 population (one out of every 205 black people). This rate is equivalent to that of the black populations of Africa and the Caribbean. Though only 12 percent of the population, blacks accounted for 33 percent of the AIDS figures. Black men accounted for 34 percent of all male cases, including 20 percent of the "Men Who Have Sex With Men" category; black women accounted for 55 percent of female cases; and black children accounted for 56 percent of all pediatric cases. Whites and Asians in the United States have rates of 107 and 41 per 100,000 people, somewhat higher than, but proportionately comparable to, their counterparts in Europe and the Pacific.

One suggestion often made is that blacks in the United States have such a high prevalence of AIDS because of intravenous drug use. Among black men, 36 to 43 percent did acquire the disease in this way, but between 50 and 57 percent acquired it through sexual transmission, eight percent heterosexually (compared to one percent of whites). Of all 24,358 adult cases transmitted heterosexually (seven percent of the total), 14,143 (or 58 percent) involved blacks, with another 20 percent being Hispanic. Hispanics, of course, are a linguistic group; racially a proportion is black or partly black, especially in New York and Puerto Rico. Overall, since my 1989 publication, the proportion of blacks in

U.S. AIDS figures increased from 26 to 31 percent, Hispanics increased from 14 to 17 percent, Asians and Amerindians combined held at less than one percent, and whites decreased from 59 to 51 percent.

In my book *Race, Evolution, and Behavior*, I documented numerous surveys carried out around the world showing racial differences in frequency of sexual intercourse. The results show that both before and after marriage, people of African ancestry are more sexually active than Europeans, who are more sexually active than Asians. Concomitant racial differences are found in sexual attitudes, with Asian groups being least permissive and African groups most permissive, and European groups in between. Typically, black samples are found to have had intercourse earlier, with a greater number of casual partners and with a more positive attitude to sexual display than either white or Asian samples. I suggest that these differences in sexual behavior are the cause of racial differences in the prevalence of AIDS.

J. Philippe Rushton is a professor of psychology at the University of Western Ontario in Canada. His latest book is Race, Evolution, and Behavior (Transaction).

EDUCATION

Whatever Happened to the New Math?

by Ralph A. Raimi

School math textbooks 50 years ago were not written by mathematicians. The typical author was the chairman of a school science department somewhere, in a district large enough to make writing a textbook remunerative even if nobody else in the country used it. That he was ignorant of mathematics was unnoticed by an ignorant public and cadre of teachers, and that his prose was abominable was perhaps admired, so strong was the general (mistaken) belief that mathematics is not written in prose.

Teachers, mainly trained in schools of

education, knew little about mathematics to begin with; many habitually ignored anything demanding in their textbooks and took refuge in teaching the algorithms they had themselves learned as children. Textbook publishers wouldn't dare print a book containing something its predecessors did not contain, because no school would buy it. And what real mathematician would spend his time writing a school textbook that nobody would use?

Euclid's *Elements*, for example, history's greatest textbook of reason, had been bowdlerized, reduced, or supplanted by products that were sold as more practical, when the real attraction was their supposed "teachability": interest rates, surveyors' triangles, and rigid algebraic rituals for the college-bound. Anyone with half a mind could recite them, but neither teacher nor student wasted a minute on their meaning or utility. Worse, each generation's authors added a bit of new misunderstanding to what might have been right in earlier editions.

Sputnik gave us a chance to break this gridlock. The 1945 atom bomb had already given physical scientists and mathematicians a prestige without precedent; now the Russian success of 1957 added fear, which paid better. The year 1958 therefore kicked off the largest and best financed single reform effort ever seen in mathematics education, the School Mathematics Study Group (MSG), upon which the National Science Foundation (NSF) spent millions of dollars over a 12-year period.

Edward Begle, a professor of mathematics at Yale University, was chosen to head the new organization, and gave up topology for this new and unfamiliar calling. The existing professional education bureaucracy, later called "the PEB" by William Duren, a reform mathematician of the time, was thus suddenly outflanked by a new party. That is, the teachers' colleges, the National Council of Teachers of Mathematics, and all the state and federal departments of education and nurture, who though loosely organized did still govern all teaching below the college level, were compelled to follow our lead.

What Begle saw in the schools could not be cured by a friendly environment, good lighting, or deep pedagogical insight, so long as the textbooks, and the mathematical conceptions of thousands of teachers, amounted to a pack of lies. He first assembled several separate teams

of mathematicians to write exemplary textbooks, eventually covering all grades from one to 12 and a bit more, that would be free of the ignorance, ambiguity, opacity, irrelevance, and tedium of the traditional curriculum. He included practicing schoolteachers in each writing team, hoping (vainly as it turned out) to keep his textbooks within the realm of the classroom possible; but the mathematicians drove the effort. MSG invited all commercial publishers to study, copy, or plagiarize these texts, which MSG placed in the public domain as models.

Simultaneously, MSG established hundreds of institutes, i.e., special college courses for existing teachers, some in the summers and some on Saturdays, to which eventually thousands (paid by the NSF) came to study the new material, to practice its pedagogy under the eyes of MSG authors and master teachers, and then to carry the books back into the world for classroom testing on a nationwide scale. The writing groups would reassemble summer after summer, study the reports from the field, and revise the texts and the teachers' guides for the next set of institutes and experimental classes.

Almost half of the nation's high school teachers of mathematics attended at least one such institute during the 12-year life of MSG; but an equivalent seeding was impossible for elementary school teachers, who outnumbered the high school math teachers ten to one. While there were some institutes for elementary school teachers, these were mainly for experimentation. The MSG books themselves achieved unexpectedly wide circulation, and were indeed, as Begle had urged, enthusiastically if often ignorantly imitated, even (or especially) at the more elementary levels. And the research literature produced in the colleges of education, and the journals of classroom practice written and read by teachers, were marked throughout the 60's by obeisance to the MSG program.

The result, after 12 years, was total failure. By any reasonable measure, and measures were taken, school mathematics was worse off in 1975 than it had been in 1955. The idiocies of the older curriculum had in most places been removed, but often to be replaced with new ones. Tom Lehrer's 1965 song "New Math," lampooning the pretentious language used to justify an inability to calculate, had the mathematical com-