## RESEARCH REPORTS

Reviews of new research at public agencies and private institutions

## "Understanding and Preventing Violence."

National Research Council, National Academy Press, 2101 Constitution Ave., Box 285, Washington D.C. 20055. 464 pp. \$49.95

Editors: Albert J. Reiss, Jr., and Jeffrey A. Roth

he United States needs to find new weapons to fight the war on crime. Its latest effort, increasing the prison population, apparently has not been much of a deterrent. While average prison time served per violent crime roughly tripled between 1975 and 1989, notes a National Research Council (NRC) panel, corresponding crime rates, after declining during the early 1980s, went up after 1985. The panel of 19 scholars and scientists, headed by Yale sociologist Albert J. Reiss, Jr., concludes that efforts to prevent crime eventually may prove as valuable as police work, prosecutions, and prisons.

Gun control is one often-debated crime-prevention measure. Research has not shown any link between the availability of guns and the number of violent incidents or injuries, the panel says. But since guns tend to be more lethal than other weapons, keeping them out of the hands of unsupervised juveniles and out of homes with histories of family violence may reduce the number of violent incidents that end in death.

Abetterunderstanding of why

some individuals behave violently, while others do not, the panel believes, is essential.

Those who commit violent crimes are overwhelmingly male (89 percent of those arrested), disproportionately drawn from racial and ethnic minorities, and likely to be in their late twenties. The profile of their victims is much the same.

Aggressive behavior in childhood is linked to a greater likelihood of adult violent behavior; but little is known about why a few aggressive children turn into violent adults while most do not. Some individuals, it is thought, may have a biological or genetic predisposition to violence. As yet, no biological patterns have been found that are precise and specific enough to serve as reliable "markers" for violent behavior. But the NRC panel says that research may discover such patterns, and preventive treatments could be devised.

That prospect alarms some critics, who fear that black Americans will be branded as inherently violence-prone and that "problem" black children will be forced to take pacifying drugs.

The statistical fact making research extremely sensitive is that black Americans account for a disproportionate share of those arrested for violent crimes (45 percent), especially for homicide (55 percent) and robbery (61 percent). Blacks are also more likely to be *victims* of violent crime.

Data from Scandinavian studies, reports the NRC panel, strongly suggest that "antisocial personality" in adults has a genetic link; however, evidence of a genetic tie specifically to *violent* behavior is mixed.

There is no indication that any simple "crime gene" exists. "If genetic predispositions to violence are discovered," the NRC panel notes, "they are likely to involve many genes and substantial environmental interaction rather than any simple genetic marker." Not just a genetic inclination to violent behavior but other factors-how parents responded to such behavior in their children; how available weapons were, and what punishments (and rewards) were meted out by society—would help to determine whether the individual finally turned to violence.

## "Interim Findings on a Welfare Initiative to Improve School Attendance Among Teenage Parents: Ohio's Learning, Earning, and Parenting Program."

Manpower Demonstration Research Corporation, 3 Park Ave., New York, N.Y. 10016. 22 pp. \$12 Authors: Dan Bloom, Veronica Fellerath, David Long, and Robert G. Wood

since mid-1989, Ohio has been using a straightforward incentive to encourage teenage mothers on wel-

fare to attend school. It has been paying them hard cash. The hope is that they will graduate, find jobs, and get off welfare. The state's Learning, Earning, and Parenting (LEAP) program already appears to be having a significant impact, according to a preliminary study by the nonprofit Manpower Demonstration Research Corporation.

All Ohio teenage mothers and pregnant women under 20 who do not have a high-school diploma or the equivalent and are on welfare are obliged to take part in the program (which is only the second such effort in the nation). The teenagers attending school get an additional \$62 in their monthly welfare check; those who fail to enroll or have too many unexcused absences lose \$62. Thus, a teenage mother living on her own with one child, who is eligible for a monthly welfare check of \$274, can instead get \$336-or, with a sanction, only \$212. Each LEAP teenager is assigned to a case manager, who monitors compliance and helps her overcome barriers to school attendance.

The 18-month MRDC study (part of a six-year evaluation) began in 1989 and focused on some 7,000 youths in Cleveland, Columbus, and Cincinnati, as well as suburban and rural areas. The teens involved were assigned, at random, to a LEAP group or to a control group whose members received no incentives or help from LEAP staff.

Among teenagers already enrolled in school when they became eligible for LEAP (about half), 61.3 percent of those in the program stayed in school,

compared with only 51.1 percent in the control group. Among teens who were dropouts when they became eligible for LEAP, 46.8 percent of those in the program enrolled in a high school or adult-education program, compared with only 33.4 percent in the control group. Even with the LEAP incentives and help, however, more than half of the dropouts did not go back to school.

Early evidence, MRDC says, suggests that LEAP's success may eventually translate into comparable increases in highschool graduation. But then, of course, will come the big test: whether that translates into more work and less welfare.

## "Casualties and Damage from SCUD Attacks in the 1991 Gulf War."

Defense and Arms Control Studies Program, Center for International Studies, Massachusetts Institute of Technology, 292 Main St., Cambridge, Mass. 02139. 51 pp. No charge. Authors: George N. Lewis, Steve Fetter, and Lisbeth Gronlund

uring the 1991 Persian Gulf War, Iraq fired more than 80 Scud missiles at Israel and Saudi Arabia, causing 31 deaths. Twenty-eight of those deaths, and injuries to 98 people, resulted from the single missile that struck an American barracks in Dhahran, Saudi Arabia. Otherwise, the casualties from the Scud attacks were surprisingly low. At that time, much of the credit for neutralizing the Scuds was given to the U.S. military's Patriot missile-defense system. After examining what happened in Israel, however, Lewis, a Fellow in MIT's Defense and Arms Control Studies Program, and his colleagues conclude that the Patriot's role was not very significant.

The Scud attacks in Israel killed two people, seriously injured 11, and slightly hurt 220. (In addition to the casualties at the U.S. barracks, Scud attacks in Saudi Arabia killed one person and injured at least 77.) Of the 39 Scuds that reached Israel. 12 were fired before the first Patriot battery became operational. These caused 52 casualties, or 4.3 per Scud. Seventeen Scuds later fell into areas protected by Patriots, causing two deaths and 179 other casualties (or 6.6 per Scud). Ten other Scuds fell outside the areas covered by the Patriots. They produced few casualties. According to revised U.S. Army estimates, the Patriots brought down only seven, at most, of the 17 Scuds they engaged.

If the Patriot system was not responsible for keeping the casualties so low, what was? Lewis and his associates say that a big factor was the inaccuracy of the Iraqi missiles. Also, the Scud warheads were small, and at least four of the warheads that landed in Israel were duds.

Defensive measures helped, too. U.S. satellites able to detect missile launches in Iraq gave the Israelis a few minutes' warning in which to take cover. Use of reinforced concrete in modern apartment buildings in Tel Aviv reduced casualties. Another major factor, according to the authors, was sheer luck. "Even a single direct hit on a densely occupied residential building could have drastically altered the casualties in Israel."