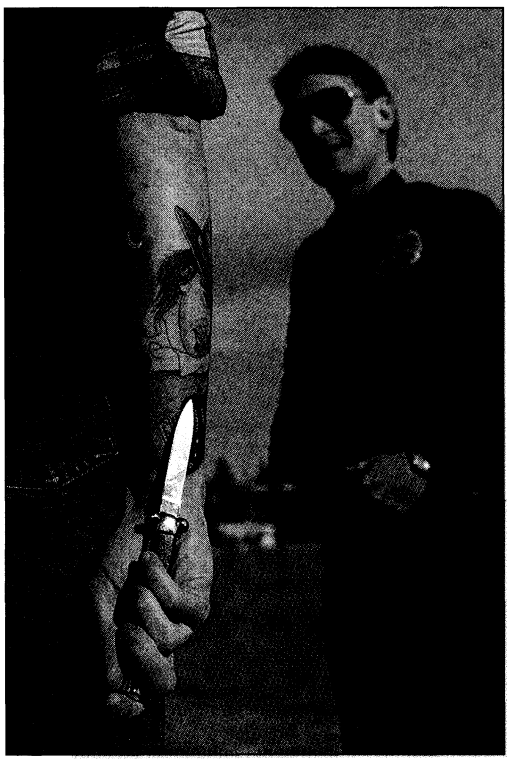
high risk for committing crimes. Without 1973's *Roe* v. *Wade* decision, the researchers reason, more potentially violent children would have reached their peak crime years beginning in about 1991—when crime rates started dropping. They estimate that legalized abortion accounts for 50% of the recent drop in crime.

"It takes great skill to write a paper that infuriates both the left and the right," says Blumstein of Levitt and Donohue's idea, "and I think they've done that brilliantly." But he cautions that they haven't addressed other factors that contribute to their 50% estimate. "To reach a conclusion as aggressive as this takes a much more subtle analysis," says Blumstein.

Although incarceration and abortion are debatable contributors to the decline in violent crime, perhaps the most important factor is a drop in the number of guns on the streets. Increased police aggressiveness in pursuing illegal guns led to a rise in weapons arrests until 1993, says Blumstein. Weapons arrests have since declined—probably not because police are paying less attention to weapons, but because fewer people are carrying them.

In Kansas City and Indianapolis, uniformed police worked overtime to seize more guns in some neighborhoods while continuing standard practices in others. Gun-related crime dropped 49% in the targeted Kansas City areas and 50% and 22% in the two areas of Indianapolis that received extra gun-oriented patrolling. Charleston, South Carolina, experimented with a bounty program offering payment for tips on illegal weapons; the program inhibited the brandishing of weapons and probably helped cut down the city's homicide rate, says Blumstein. Another major force in keeping guns off the streets is the Brady bill, which went into effect in 1994, that requires people to undergo a background check before they are allowed to purchase a gun from a licensed dealer. Convicted felons are prohibited from buying guns. In California and other states, more rigorous background-check systems deny guns to people convicted of misdemeanors involving violence.

Critics of the Brady bill, particularly the National Rifle Association, contend that such laws are counterproductive, as those who want guns can still get them illegally. To investigate whether the bill has had an impact on violent crime, Wintemute compared two groups of people: those who tried to buy weapons after the Brady bill went into effect but were denied due to a prior felony conviction and those who had been arrested for—but not convicted of—a felony and therefore were allowed to buy a gun. He analyzed their arrest records for the following 3 years. After adjusting for demographic variables and prior arrest records, he found that the people who bought guns were 25% more likely to commit crimes involving guns or violence.



However, sociologist Lawrence Sherman of the University of Pennsylvania in Philadelphia cautions that even the best background checks can't stop most gun violence, because statistics show that most gun homicides are committed by people with minimal criminal records. Sherman dismisses another popular gun-control strategy: gun buyback programs. Three studies have tracked gun violence in communities where large numbers of guns

What Makes a Police Officer a Victim?

The court hearing for armed robbery had finished, and the 26-year-old defendant was headed back to jail. Everyone knew he was dangerous. The man had a long rap sheet that revealed only a fraction of the crimes he would later admit to, including scores of car thefts, some 40 burglaries, and six armed robberies. But the deputy sheriff charged with transporting the prisoner was kind. He told the lanky defendant that because he was too tall to sit comfortably in the squad car's rear security cage, he could ride handcuffed in the front seat. For this small favor, the deputy said, all the defendant had to do was promise that he "would be good."

As they drove, the officer chatted constantly with the prisoner. He stopped the car when he saw two women walking away from a disabled vehicle on the side of the road, and he offered them a ride to town. But when he leaned back to unlock the rear door, the prisoner lunged and grabbed the gun from his holster. After a struggle the prisoner jammed his foot against the officer's throat, pinning him against the door. An instant later, he shot him in the chest. The identities of the victim and the perpetrator and the tragedy's location are kept secret, but the outcome is known: The 28-year-old officer died on the scene.

While many professions are hazardous to health, few jobs run a greater risk of enduring or inflicting violence than law enforcement. In the United States, about 150 officers die every year in the line of duty, and government figures suggest that some 350 suspected criminals are justifiably killed in confrontations with police. Seeking lessons behind these gruesome statistics and other disturbing trends in violent behavior nationwide (see main text) are researchers at the Federal Bureau of Investigation (FBI).

The FBI is perhaps best known for "profiling" serial killers—the kind of work made famous by the film *The Silence of the Lambs.* Beginning in 1979, a handful of agents at the Behavioral Science Unit at the FBI Academy in Quantico, Virginia, interviewed 36 imprisoned serial killers, from Charles Manson to Ted Bundy. They found behaviors, such as a tendency to return to crime scenes, that have helped law enforcement agencies around the country crack unsolved cases.

Profiling is now part of the FBI's National Center for the Analysis of Violent Crime in Quantico, which also studies everything from sexual killings of the elderly to serial bombings. With 13 full-time agents and crime analysts, it's the largest center in the United States that concentrates on finding ways to catch criminals, says William Hagmaier, who heads the unit's Child Abduction and Serial Murder Investigative Resources Center. "What we're trying to do," Hagmaier explains, "is learn all we can about criminals and some of their most heinous behaviors and share those insights with local investigators."

Unarmed victims aren't the only research subjects. In a unique study, an academy team has overturned common views of the kind of officer most likely to perish while enforcing the law. After interviewing offenders and colleagues of fallen officers, Anthony Pinizzotto and Edward Davis of the academy's Behavioral Science Unit identified, for the first time, behavioral traits of police officers likely to be killed. Their description of a classic vic-

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were purchased; in none did the buybacks appear to quench crime rates. He says that buybacks should be more targeted, focusing on high-crime neighborhoods and recent gun models.

For whatever reason, Wintemute says, "gun sales have gone right through the floor" in the 1990s. Fear sells guns, he says, and it's possible that declining crime rates have inspired fewer people to buy guns—which further reduces the crime rate and makes people feel less threatened. Gun sales did nudge upward in 1999, but he suspects that was a Y2K paranoia–related fluke. "The gun industry marketed the heck out of Y2K," he says.

The drug world has also quieted down, with fewer new drug users entering the market and thus reducing the demand for new dealers, says Blumstein. And thanks to the booming economy, unemployment is down to levels not seen since the 1970s, he says, even among high-school dropouts, teenagers, and racial minorities—people at highest risk for entering the drug market.

Future trends

The FBI Unified Crime Statistics report for 1999 suggests that the recent crime drop may be slowing in big cities. Blumstein used the FBI's numbers to examine murder rates for 17 large cities during 1998 and 1999. Of those, 12 had fewer homicides in 1999 but five had more. Big cities had the first crime booms and led the way in crime drops; Blumstein suggests we might now be seeing a leveling off of violent crime rates in big cities, and other regions may soon follow suit.

Rosenfeld holds out hope that some factors pushing homicide rates down are here to stay. He speculates that the United States is currently undergoing a "civilizing process." Historians have traced the rise of a cultural intolerance for interpersonal violence in Europe, he says, and the same phenomenon seems to be happening here. He sees it not as a moral process so much as an aesthetic change in which people disapprove of resorting to violence to settle disputes.

Sociologist Murray Straus of the University of New Hampshire, Durham, also discerns evidence that violence is increasingly not tolerated in the United States. He's seen substantial decreases in some forms of family violence since 1975. Fewer people report hitting their adolescent children nowadays, although 94% of parents still physically punish their toddlers. Fewer husbands hit their wives, down from 11% to 7% per year between 1975 and 1995, although 11% of wives continue to hit their husbands.

The most harrowing metric of domestic violence, what the FBI calls "intimate partner homicides," has also declined steadily in recent decades. The number of such slayings in 1996 (1842) was 36% lower than the total in 1976. Rosenfeld attributes much of this decline to decreased marriage rates. People are marrying later and divorcing more often, and thus are less likely to be trapped in violent relationships, he says. Marriage rates are continuing to decline, Rosenfeld adds, which will probably continue to dampen the rates of intimate partner homicides.

Not all factors that influence crime rates can be easily changed—"we can't institute a robust economy," says Wintemute. But the past decade's worth of research on the causes and inhibitors of violent crime offer hope that society can reinforce those factors that squelch violence, he says. Blumstein complains that currently, criminal justice policies "are driven by ideology instead of scientific knowledge." But as the field of violence research matures, he predicts, its findings will "eventually become compelling in the public debate."

–LAURA HELMUTH

tim surprises even the researchers themselves: Like the young deputy slain on the drive from the courthouse, police officers most at risk of death, they found, are ones who are friendly, trusting, reluctant to use force, and less likely to follow police procedures. Although critics point to several shortcomings in the study's design, the FBI researchers claim that findings from their ongoing 10-year-old project have already improved police training around the country.

Pinizzotto and Davis first selected 50 incidents between 1975 and 1985 in which a total of 54 police officers were killed while carrying out their duties—often while making an arrest or reacting to a crime in progress. The pair pored over court records, talked to police department colleagues of the slain officers, and traveled to 18 states to interview offenders. The duo had expected to find that aggressive policing triggered the murders. "It was a surprise," Pinizzotto says. "Not one offender said they were being abused or pushed to their limit." And police department colleagues described the fallen officers as good natured and conservative in their use of force.

The deadly situations tended to erupt when officers didn't follow the book. Many of the homicides took place, for example, when officers failed to call for backup while checking out a suspicious situation, didn't identify themselves as police officers, or neglected to call in a license plate number during a routine traffic stop. In two-thirds of the cases, the officer either failed to physically control the suspect or let the situation get out of hand. When combined with a violent offender looking for a chance to escape, such a situation can be deadly.

To prevent such deaths, the FBI issued a report, "Killed in the Line of Duty," that recommends better training. For instance, it advises police departments to train officers in ways to prevent suspects from grabbing police weapons and how to face a drawn gun—although Davis and Pinizzotto decline to give details to avoid giving criminals any tips. The report is not intended for public distribution, but about 150,000 copies were sent a few years ago to police departments around the country. "I teach a police class, and I always use their recommendations," says Laure Brooks, a criminologist at the University of Maryland, College Park.

But Brooks and other criminologists have concerns about the way the study was done. For example, there's no way to know whether the dead officers were really friendlier, harder working, or less likely to follow the rules than their peers, who were not assessed in the study. "Measuring the personality of dead cops is useless unless you're also measuring the personality of living cops," says William King, a criminologist at Bowling Green State University in Ohio. The assessment may also have been confounded by a halo effect, he adds: "How many of these cops are going to say bad things about a fallen comrade?"

Pinizzotto and Davis realize these shortcomings but say their conclusions are nonetheless valuable for training. Since then, they have addressed some of these issues and have drawn a more detailed picture of the personalities and behaviors of officers who were victims of violent assaults—but who lived to tell the FBI researchers about it. They selected 40 cases, interviewing the officers—most of whom had been shot—and their assailants. In their latest report, "In the Line of Fire," Pinizzotto and Davis noted that many survivors recalled knowing when *not* to use deadly force, but they couldn't recall being instructed on when it is appropriate.

Because many of the officers failed to realize that an escalating confrontation was potentially life-threatening, the FBI researchers are now examining how officers tell when they are in danger. They are also touring the country, lecturing to police departments about their findings. Their presentation includes videotaped interviews. "When you hear from a perpetrator who has killed an officer in cold blood," Davis says, "that has a chilling effect that most officers don't forget."

–ERIK STOKSTAD