Elder Abuse Emerges From the Shadows of Public Consciousness

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Building Knowledge to Meet the Challenge of Crime and Justice

National Institute of Justice

Kristina Rose
Acting Director, National Institute of Justice

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800-851-3420
mail NCJRS
PO. Box 6000
Rockville, MD 20849-6000

World Wide Web address
http://www.ojp.usdoj.gov/nij/journals/welcome.htm

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http://www.ojp.usdoj.gov/nij/contact/welcome.htm

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Director’s Message

One of the most disturbing statistics to come across my desk is the sheer number of law enforcement officers who die in traffic accidents. Most years, we lose more officers to accidents than we do to shootings. Although some accidental deaths involve auto collisions, many take place when an officer leaves a vehicle and is walking or standing on the road. Firefighters and other first responders face similar hazards.

The National Institute of Justice has teamed up with the Department of Homeland Security’s U.S. Fire Administration to sponsor several scientific studies of roadside safety. This issue of the NIJ Journal presents important research findings that may help improve officer safety on the roads. We asked scientists and engineers to look at everything from what color of flashing lights will best alert drivers to an emergency to where reflective materials should be placed on vehicles to maximize visibility. We hope these studies will contribute to safer working conditions for law enforcement officers throughout the country.

In this issue, we also present a very different kind of study that could save lives. An intensive look at how terrorists learn — and fail to learn — the skills they need to launch “successful” attacks highlights certain weaknesses that law enforcement agencies can exploit as they try to detect and deter terror strikes.

For policymakers, this issue of the Journal presents research on the long view of crime and a review of the effectiveness of cognitive behavioral therapy. Both articles give insights into successful programs.

Finally, our cover story on elder abuse shows how NIJ forensic research is helping law enforcement document these horrifying crimes. We take an in-depth look at some special problems that prosecutors face when these cases reach the courtroom.

Kristina Rose
Acting Director, National Institute of Justice
Law enforcement officers who are the first to arrive at a crime scene increasingly come across electronic devices ranging from computers to cell phones. Making the wrong move could destroy valuable electronic evidence. If a computer is running, is it better to turn it off or leave it on? The frustrating answer is: It depends. NIJ has published a pocket size book that serves as a quick guide to electronic devices: Electronic Crime Scene Investigation: An On-the-Scene Reference for First Responders. Law enforcement agencies can order bound and laminated copies or simply download the text from NIJ’s Web site. See http://www.ncjrs.gov/pdffiles1/nij/227050.pdf.

Cell Phones Behind Bars looks at developments in cellular telephone technology that are of concern to corrections and public safety officials. Criminals in prisons and jails are taking advantage of the portability and written message, audio and video capabilities of cellular phones to plan escapes or harass and threaten their victims. High- and low-technology approaches for intercepting or blocking phone signals are being tested and used, and legislation is pending that would permit prison and jail officials to use cell phone jamming equipment.


NIJ holds and cosponsors events and training seminars about relevant and timely issues in criminal justice and technology research. For more information go to http://www.ojp.usdoj.gov/nij/events/welcome.htm

The NIJ Conference 2010
June 14-16
Arlington, Va.
NIJ’s annual conference brings together criminal justice scholars, policy-makers, and practitioners at the local, state and federal levels to share the most recent findings from research and technology. The conference highlights what works, what does not work and what the research shows as promising. It emphasizes the benefits to researchers and practitioners who work together to create effective evidence-based policies and practices. The DNA Grantees Workshop, formerly a separate event, is now an integral part of the NIJ Conference. Combining the former DNA Grantees Workshop with the NIJ Conference allows us to feature innovations in forensic sciences and related policy and resource issues.

2010 Innovative Technologies for Corrections Conference
June 21-23
Fort Lauderdale, Fla.
The 11th Annual Innovative Technologies for Corrections Conference will spotlight existing and emerging correctional technologies.

Impression & Pattern Evidence Symposium
August 2-5
Clearwater Beach, Fla.
The National Institute of Justice, the Bureau of Justice Assistance and the Federal Bureau of Investigation’s Laboratory Division will co-sponsor this event.
HOPE in Hawaii: Swift and Sure Changes in Probation

The Hawaii Opportunity Probation with Enforcement programs began in 2004, under the guidance of Judge Steven Alm, as a swift and sure consequences program. According to results from two evaluations, the HOPE program has achieved significant reductions in drug use, new crime and incarceration. The results from a randomized controlled trial of 493 probationers and a quasi-experimental study of 940 offenders showed that offenders assigned to HOPE had larger reductions in positive drug tests and missed appointments than offenders assigned to probation-as-usual. HOPE offenders who violated their conditions of release (such as failing to appear when ordered or failing a drug test) were jailed more swiftly and more often, but for shorter periods, and spent approximately one-third as many days incarcerated for either revocations or new crimes as offenders in the control group. The results of this rigorous evaluation demonstrate the potential of swift and certain sanctions for ensuring compliance with condition of release on probation.

Better Police Radio Communications

The Wisconsin State Patrol has devoted several years to developing a strategy for adopting the Project 25 radio interoperability standards. P-25 refers to a suite of standards for digital two-way wireless communications. The WSP ran a four-site pilot program that created P-25 capabilities across the network. The WSP ran into various glitches related to programming, and enjoyed some notable successes. NIJ will soon publish a short report on the pilot program for the benefit of other law enforcement agencies that are adopting P-25 products.

Identifying the Needs for Forensic Evidence Processing

Law enforcement agencies are consistently facing heavy forensic case loads. *Survey of Law Enforcement Evidence Processing*, a final report submitted to NIJ by RTI International, found that in 14 percent of open homicide cases and 18 percent of open rape cases, law enforcement agencies had evidence that was never sent to a crime laboratory for analysis. Another 23 percent of all unsolved property crimes also yielded unanalyzed evidence. These results indicate a need for a more uniform system for submitting evidence that prioritizes cases based on the seriousness of the offense. Further training in the benefits and use of forensic analysis is recommended. Other needs identified by the survey include information systems that can track forensic evidence by case and standard guidelines for evidence maintenance.

Go to the NIJ Web site at http://www.ojp.usdoj.gov/nij and subscribe to our e-mail alerts to be notified when the final reports are published.
Elder Abuse Emerges From the Shadows of Public Consciousness

by Philip Bulman

Two recent studies shed light on the prevalence and detection of an often overlooked crime.

Detective Cherie Hill was skeptical, to say the least.

An elderly woman was trying to convince her that her grandson, who lived with her, had not hurt her. Standing in the police station in Anaheim, Calif., surrounded by half a dozen family members, the woman told Hill that a cereal box had fallen on her wrist and caused a bruise. Hill, an experienced elder abuse investigator, looked closely at the bruising, which went all the way around her wrist. She surmised that a cereal box — even a large, airborne cereal box — would not likely wrap itself around someone’s wrist when it landed and cause that degree of bruising. Then there was the additional bruise on her face that police officers had noticed when they first responded to the call. The 23-year-old grandson had been arrested and was in jail. Hill suspected that family members were now pressuring the woman to recant to get the grandson released. She had initially told neighbors that her grandson had grabbed her and hit her.

Hill asked Dr. Laura Mosqueda to examine the bruises. Mosqueda is director of geriatrics at the University of California, Irvine Medical Center. She has also studied bruising in the elderly to determine a scientific basis for distinguishing accidental bruises from abusive bruises. Mosqueda believed the bruising was abusive. In addition, during the conversation the elderly woman, who had dementia, repeated that her grandson had grabbed her.
Prosecutors later charged the grandson with elder abuse. He was found guilty. The judge in the case placed the young man on probation and issued a protective order. Two pioneering studies of bruising in the elderly sponsored by the National Institute of Justice helped investigators in this and many other cases, Hill said.

“These studies are really important for law enforcement,” she said. “It has completely changed the way prosecutors handle these cases. It’s just really phenomenal.”

Many people believe that bruising in elderly people is normal because they are more likely to experience accidental falls. Indeed, a combination of factors such as thinner skin and less subcutaneous fat does make bruising more common among older people than their younger peers. So researchers decided to study “normal” bruising in elderly people and then follow up with a separate study of bruising that resulted from physical abuse.

**A Scientific Look at Bruising**

To learn what normal bruising looked like, researchers recruited 101 people, 65 and older, with an average age of 83. Trained interviewers went to their homes every day for six weeks. Participants undressed and were examined from head to toe for bruises. Each bruise was photographed, and the interviewers documented their location, size and color and noted how long it took for the bruises to fade. The researchers found that 90 percent of the bruises were on the extremities. Not a single accidental bruise was found on the neck, ears, genitals, buttocks or soles of the feet. Of the 20 large bruises (larger than 5 centimeters — about 2 inches — in diameter) only one occurred on the trunk of the body. Red and purple were the most common colors on the first day that a bruise appeared. However, some fresh bruises were yellow, a significant finding because many people believe that yellow bruises are more likely to be older. Indeed, yellow was the most common color in bruises that stayed visible for more than three weeks.

Once researchers knew what accidental bruising looked like, they turned their attention to deliberately inflicted bruising. Stark differences emerged. The team of researchers examined 67 people, 65 and older, who had been reported to adult protective services as possible abuse victims. An expert panel confirmed the abuse before including the people in the study. Seventy-two percent of those who had been physically abused within 30 days before examination had bruises. When compared with the previous group (who had not been abused), they had significantly larger bruises. Another important finding is that 91 percent knew what caused their bruises. Only 28.6 percent of the comparison group — those who had normal, nonabusive bruising — remembered the incident that caused their accidental bruises.

Abusive bruises are often larger. More than half are 2 inches or larger in diameter. The physically abused elders were much more likely to have bruises on the head and neck, especially the face, and on the posterior torso. Researchers also noted significant bruising on the right arm, perhaps because people raised their arms in an attempt to block an attacker.

Aileen Wigglesworth, a gerontologist and assistant professor at the University of California, Irvine, worked on both studies. Wigglesworth said that although the studies give police and prosecutors forensic markers that are vital tools in elder abuse cases, more work remains on other fronts, even on basic issues like the credibility of people who ask for help.

“People tend not to believe elders,” she said.

Some people assume that memory loss and dementia afflict all elders, making them unreliable witnesses. The reality is that even some people with dementia can talk about abuse; they may forget small details, but they are likely to remember emotionally charged events.

“With dementia, they don’t remember things with no emotional content,” Wigglesworth said.

People who work in the field face a host of other challenges as well. Elders typically want to protect family members and are reluctant to report abuse. Sometimes family members are striving to take care of an elderly person but fall short. This may not involve outright abuse, but neglect or the simple inability to care properly for an elderly person. In those cases social service agencies can often help, Wigglesworth said.

"These studies are really important for law enforcement. It has completely changed the way prosecutors handle these cases.”
The Prevalence of Elder Abuse

To find out just how widespread elder abuse may be, NIJ sponsored a study that involved an extensive telephone survey of older Americans. More than 5,000 people, 60 or older, participated. Interviewers asked participants about their experiences in the previous year, as well as their lifetimes overall. The prevalence of physical mistreatment was 1.6 percent. Of those who reported this mistreatment to interviewers, only 31 percent said they had reported the problem to police. Strangers accounted for only 3 percent of these assaults; family members were responsible for about half of the assaults.

Of those surveyed, 0.6 percent reported being sexually abused in the previous year. About 16 percent of these people said they had reported the assault to the police. Family members were responsible for about half of the assaults.

Other types of abuse include:
- Financial exploitation: 5.2 percent
- Potential neglect: 5.1 percent
- Emotional mistreatment: 5.1 percent

Overall, 11 percent of those surveyed reported some form of mistreatment in the previous year; 1.2 percent reported two forms of mistreatment, and 0.2 percent reported three forms.

For more information:
- The complete study can be found at: http://www.ncjrs.gov/pdffiles1/nij/grants/226456.pdf.

In July 2003, there were 35.9 million people 65 and older, according to the U.S. Census Bureau. If 1.6 percent of those were physically abused, the total number of cases would be 574,400. The older population is on the threshold of a boom, according to census projections. A substantial increase will occur during the 2010 to 2030 period. The elder population in 2030 is expected to be twice as large as in 2000, growing from 35 million to 72 million.

Mosqueda, who has worked on hundreds of elder abuse cases, said there are many obstacles, including hesitation by police and prosecutors because they do not know how to confirm a claim. “They say, ‘They said they were hit, but they’ve got Alzheimer’s; we can’t believe them,’” she said.

Or, sometimes people will assume that a death was due to natural causes because of a person’s advanced age. Mosqueda describes a common attitude in these terms: “Old people are supposed to die. Haven’t you heard?” As a result, doctors and others who suspect abuse often have trouble involving law enforcement in cases, Mosqueda said. “Many times we are just dragging the police, begging to get them involved,” she said.

One complicating factor in some cases is detecting negligence. Still, the results of negligence can be just as bad, Mosqueda said. “There are people who are being neglected to death, dying under horrible circumstances,” she said.

Some law enforcement agencies are developing expertise in elder abuse, but the field is in its infancy in many regions. Besides, while researchers have been able to recruit participants for bruising studies from local communities, these do not include the many elderly who live in nursing homes, Mosqueda said.

Although researchers and others concerned about elder abuse face many obstacles, they are gradually becoming more successful. Michael Uhlariik, a former prosecutor in Suffolk County, Calif. The center’s team includes doctors, law enforcement officers, prosecutors, adult protective services workers and others involved in elder abuse cases.

“Elder abuse was a topic at the 2009 NIJ Conference. To listen to a panel that discusses how much it occurs and how to measure it go to: http://www.ojp.usdoj.gov/nij/journals/media.htm.

“We need a whole lot more remedies than just going to court, and that’s something we’re really concerned about,” she said “We’re not out to put every caregiver in jail.”

Besides doing basic research, Wigglesworth and Mosqueda also work on active cases and provide training to law enforcement officers and medical examiners at the Elder Abuse Forensic Center in Orange County, Calif.
The victim-witness advocates may work on everything from trial preparation to helping someone find new housing. Higashi believes that their work has been critical to her office’s success.

U.S. Attorney’s Office, worked closely with the woman, even taking her to the courtroom ahead of time so she could see what it looked like and practice sitting in the witness stand. “It was a tough case because the defense grilled her for a day,” Shumar recalled. Still, the assailant was convicted.

While such cases involving assaults by strangers do occur, more often crimes against the elderly are perpetrated by family members or other people who know the victim. Some examples from Higashi’s office include:

- In 2008 Darryl Gaynor, 38, was sentenced to 24 years in prison for sexually assaulting his 72-year-old aunt in 2007.
- In 2008 Martin “Tony” Brown, 48, was sentenced to 24 years in prison for killing his 89-year-old grandfather in 2006.

The victim-witness advocates may work on everything from trial preparation to helping someone find new housing. Higashi believes that their work has been critical to her office’s success. “Having a good number of advocates and having them specialized and having them co-located is helpful,” she said.

A number of factors are now converging that may improve the outlook for elder abuse. Prosecutors have won high-profile cases in Washington, D.C., and other cities. Law enforcement officers are becoming increasingly aware of the elder abuse problem and now have solid forensic studies to rely on. Moreover, the public is growing more aware of this previously hidden problem.

“We have a window of opportunity like we’ve never had before with elder abuse,” Shumar said.

Philip Bulman is the editor of the *NIJ Journal.*

NCJ 229883

For More Information

Prosecuting Elder Abuse Cases

by Sarah B. Berson

Elder abuse presents many challenges to prosecutors — some of which are unique to elder abuse, some of which are familiar, if thorny, issues from child abuse and domestic violence (such as complicated family dynamics¹). Indeed, much of the system meant to protect elders is drawn from the child protective services system.² Child abuse is not, of course, a perfect analogy for elder abuse, and there has been debate over the functionality (for example, do compulsory reporting statutes work?) and ethics (for example, do they respect the autonomy of competent adults?) of these laws.³

The laws that protect elders specifically and the definitions of elder abuse itself vary from state to state, though all states have some form of legislation that addresses the issue.⁴ Laws that protect older adults (usually defined as those 65 and older) usually fall into one of three categories:

- Laws “that create and govern state [adult protective services] APS units, which are charged with providing services to vulnerable adults. APS agencies are generally viewed as the front-line responders to the problem of elder mistreatment because they investigate reports of elder mistreatment and offer victim services.”
- Reporting “laws that permit or require certain persons to report certain types of mistreatment to a government agency, typically APS.”
- Laws “that specifically prohibit or specially penalize (or both) certain treatment of older adults. Some create new crimes for which perpetrators of elder mistreatment can be held liable; others provide for enhanced penalties for those convicted of crimes involving elderly or otherwise vulnerable victims.”⁵

Recommendations by the American Bar Association for improving the handling of elder abuse cases by prosecutors include setting up special elder abuse units or special prosecutors. The ABA recommends training prosecutors on the kinds of crimes committed against the elderly and the particular issues the elderly may present as victims, improving victim aid services, educating the public and professionals, and forming multidisciplinary teams.⁶

When it comes to prosecuting elder abuse cases, multidisciplinary teams have been invaluable, said Tristan Svare, deputy district attorney with the Elder & Dependent Adult Abuse Prosecution Family Violence Unit, Central Division at San Bernardino County (Calif.) District Attorney’s Office. The teams, like APS units, are drawn from the child-abuse model for prosecuting cases.

“They are absolutely essential to work a case properly,” Svare said. He pointed to the role they play in gathering individuals with critical, specialized knowledge in a particular subject matter together in child abuse cases. “Without experts to say ‘this is truly abusive; this is what happens when you shake an infant,’ you won’t get anywhere on the case.”

The same is true in cases of elder abuse, Svare said.

The National District Attorneys Association policy position on elder abuse echoes Svare’s sentiment, stating that, “Frequently, a multidisciplinary approach may be a more effective means of prosecuting elder abuse cases, holding offenders accountable, protecting victims and preventing future abuses.

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The successful prosecution of elder abuse, neglect and exploitation requires the collaboration of specially trained individuals from multiple agencies and organizations within the community.7

Svare said he is in an unusual position. California has good, comprehensive laws about elder mistreatment; Southern California has excellent resources for dealing with the complexities of elder abuse cases. Of particular note is the geriatrics program at the University of California, Irvine, which started the country’s first Elder Abuse Forensic program at the University of California, Irvine, which started the program in May 2003.8 He is also part of an elder abuse prosecution unit (San Bernardino County has had a specialized prosecution team for elder abuse cases since 2000).9 Having a unit that is familiar with the special features and challenges of elder abuse prosecution can play an important role in moving cases forward, Svare said. Yet, he adds, such a unit is simply not practical in all offices.

The American Prosecutors Research Institute conducted interviews with elder abuse prosecutors and identified several barriers to prosecution:10

- “The priorities in a prosecutor’s office can change from elder abuse one day to gangs and drugs the next.”
- “Training of the prosecutors is spotty at best. The training has to be ongoing and reflect the needs of the current staff in the positions.”
- “Prosecutors will only take cases that they believe will result in conviction. These cases present complex issues and can be difficult to prove.”
- “There is a lack of public education or public outreach on the topic from most prosecution offices.”
- “There are systemic problems in the interplay between prosecutors, law enforcement, APS, nursing homes, and the roles each is to play.”

Svare similarly noted that prosecutors might hesitate to take elder abuse cases for many reasons. These include their overall complexity, because they often involve complicated medical and financial issues and concerns about victim competency. Also, elderly victims might have other special needs and may lack jury appeal.

“We need to teach prosecutors that they can do this,” Svare said.

Awareness among the public and among law enforcement is crucial. Prosecutors should take a leadership role in educating communities about elder abuse by raising awareness. It is a crime and should be treated as such, Svare said.

Police, for example, need to recognize elder abuse and treat it as potentially criminal and something that should be investigated. The key to this is, again, education and training — teaching officers and other first responders to identify and respond to signs of abuse and neglect among the elderly, Svare said.

Of course, prosecutors want to have a winning record, but that should not be the deciding factor, Svare said. “It can’t be about ego,” he said. “It has to be about the case — what’s the just thing to do.” Svare added that prosecutors were more likely to get a plea than in any other type of case — especially if it is a good case on paper. However, even if it goes to trial, if nothing else, “it’s good for raising awareness in the community.”

Sarah B. Berson is a staff writer for the NIJ Journal.

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Notes


3. See generally, for example, Barber, “The Kids Aren’t All Right: The Failure of Child Abuse Statutes as a Model for Elder Abuse Statutes.”


5. Ibid.


Keeping Officers Safe on the Road
by Beth Pearsall

Several reports highlight visibility issues for law enforcement and safety personnel responding to roadside incidents.

Oct. 21, 2008, began like any other day on the job for police officer David Tome. Early that Tuesday morning, Tome and the rest of the accident reconstruction team from the Northern York County Regional Police Department were on Route 15 in York County, Pa., investigating a fatal crash that had occurred days earlier. The team set up traffic cones to close the right lane of the road and began the investigation.

However, around 9 a.m., a passing sport-utility vehicle hit Tome where he stood in the right lane, sending him flying over a guardrail. Tome—a five-year veteran of the force, a husband and a father of two young children—died instantly. He was 31 years old.¹

David Tome’s story is tragic and sadly common. Every week, new stories emerge of law enforcement officers, firefighters and other first responders who are injured or killed in roadside crashes throughout the United States.

The National Institute of Justice has collaborated with fire service and automotive engineering agencies on several studies that address roadway safety. Increasing emergency vehicle visibility and developing training and tools aimed at keeping first responders safe on the road have emerged as next steps in the effort to prevent future tragedies.
Preliminary data for 2009 from the National Law Enforcement Officers Memorial Fund show that for the 12th year in a row, more officers were killed in the line of duty in traffic incidents than from any other cause of death, including shootings. These incidents comprise automobile and motorcycle crashes as well as officers struck while outside their vehicles. In 2009, 56 law enforcement officers had died in traffic-related incidents, accounting for close to 50 percent of officer deaths for the year.2

In the previous year, 28 out of the 118 firefighters who died while on duty were killed in vehicle crashes. Another five firefighters were struck and killed by vehicles.3

These sobering numbers clearly show the need to protect law enforcement officers, firefighters and other first responders as they perform their duties on the nation’s streets and highways.

Vehicle Visibility

Visibility is essential to roadside safety for emergency responders. Can drivers see and recognize an emergency vehicle as it navigates through traffic on its way to the scene of an accident or fire? When the first responder has reached the scene and is on the side of the road, can drivers clearly see both the person and the vehicle?

Several factors affect a vehicle’s visibility — its size and color, for example. Environmental conditions, such as the weather and time of day, also play a role in whether drivers can easily see emergency vehicles along the road.

Emergency vehicles have features designed to draw attention to their presence even when drivers are not actively looking for them. These include warning lights, sirens and horns, and retroreflective striping, which reflects light back to its source. Such features provide information about the vehicle’s size, position, speed and direction of travel so drivers can take suitable action.4

Although compliance with the NFPA standard is voluntary, vehicle manufacturers typically comply to limit liability and ensure the marketability of their products.5

Law enforcement does not have a similar national standard. However, many law enforcement agencies apply retroreflective markings to patrol cars, motorcycles and other vehicles.6

The demands of the law enforcement profession also create unique visibility issues. Sometimes personnel do not want their cars to be readily detectable. Officers may want to be almost invisible to other drivers under certain circumstances. The need for high visibility at certain times must be balanced against a need for stealth at other times.

Using Reflectors to Improve Visibility

A recent study took a closer look at some commercially available products to determine whether they help increase emergency vehicle visibility and improve roadway safety for emergency responders and the public. The NIJ-funded research was conducted by the U.S. Fire Administration and the International Fire Service Training Association.7

Looking specifically at retroreflective striping, high-visibility paint, built-in lighting and other reflectors on emergency vehicles, the researchers found that:

- Retroreflective materials can help heighten emergency vehicle visibility, especially during nighttime conditions.
- Using contrasting colors can help civilian drivers find a hazard amid the visual clutter of the roadway.
Fluorescent colors (especially fluorescent yellow-green and orange) offer higher visibility during daylight hours.

Researchers also identified ways for first responders to improve the ability of civilian drivers to see and recognize emergency vehicles during all phases of an emergency. These include:

- Using fluorescent retroreflective material when responders want a high degree of day- and nighttime visibility.
- Applying distinctive logos or emblems made with retroreflective material to improve emergency vehicle visibility and recognition.
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Warning Lights: Help or Hindrance?

USFA and the Society of Automotive Engineers conducted a separate NIJ-funded study to examine another important feature of emergency vehicles — warning lights.8

Researchers in this study looked specifically at how the color and intensity of warning lights affect driver vision and emergency vehicle safety during the day and night. They examined whether the lights alerted drivers to the presence and location of an emergency vehicle as intended or whether they unnecessarily distracted drivers or hindered their ability to detect emergency responders on foot.

"Right now, emergency lighting used by some departments is based on tradition and opinion ... with this study, we wanted to add some science to the ‘why’ of emergency lighting.”

The researchers asked study participants, who were representative of the driving public, to perform three tasks while viewing a simulated traffic scene:

- Look for emergency warning lights.
- Look for pedestrian emergency responders near the warning lights.
- Rate the ability of the warning lights to draw attention to the emergency scene.

During this field experiment, the researchers varied the color and intensity of the warning lights (using white, yellow, red and blue lights at low and high intensities). They also varied the location of the emergency vehicle (placing it to the left or right of participants) and the surrounding light (creating day and nighttime lighting conditions). The emergency responders wore two different sets of protective clothing. Both sets had standard retroreflective markings; however, the background material on one set was black, and the other was yellow.

The most significant difference occurred between day and night: Researchers found that participants’ ability to find warning lights at night was uniformly good and did not improve when they increased the lights’ intensity. During the day, however, a higher intensity of each of the four colors improved participants’ ability to spot the lights. Blue was the easiest light color for participants to see, day and night.

Even though the responders outside the emergency vehicles wore protective clothing with retroreflective markings, participants had substantially more difficulty finding the responders at night than during the day. Researchers found no difference in participants’ ability to find responders wearing the black versus yellow clothing in either the day or night. The warning lights had little effect on participants’ ability to see the responders during both lighting conditions.
Based on these findings, the researchers offered three recommendations for improving safety during roadside emergencies:

- **Consider different intensity levels of warning lights for day and night.** Researchers noted that finding a single intensity for warning lights — one that is intense enough for daytime conditions but not too intense for nighttime conditions — can be difficult. Using at least two levels of intensity might be a more effective choice.

- **Make more overall use of blue lights, day and night.** According to the researchers, strong agreement already exists about the advantages of using blue lights at night. In this study, they found that when participants searched for warning lights in the daytime, blue was more effective than any of the three other colors tested. This finding provides more evidence in favor of using blue lights during all lighting conditions.

- **Use color to make a clear visual distinction between parked emergency vehicles in two different paths.** Researchers suggest using one color of light for vehicles that are parked in the normal path of traffic (for example, red lights). Another color could be used for vehicles that may be near the normal path of traffic but are not obstructing it.

### More Tools to Improve Safety

Aside from research studies on vehicle visibility, NIJ also has supported developing Web-based tools that will help improve the safety of law enforcement officers, firefighters and other emergency responders on the roadways.

With support from NIJ, USFA collaborated with the Cumberland Valley Volunteer Firemen’s Association’s Emergency Responder Safety Institute to create ResponderSafety.com. This Web site contains the latest news and training on roadside safety as well as recent cases of responders who were injured or killed by vehicles while on duty. The site aims to be a place where...
Perhaps one of the most essential parts of the equation is the alertness of civilian drivers and their ability to recognize an emergency vehicle and take suitable action to avoid a collision.

For More Information


Notes

5. Ibid.
6. Ibid.
7. Ibid.
Finding Safe and Effective Alternatives to the Highway Flare

Law enforcement officers often use flares to point out an accident location or other traffic hazard and increase visibility. However, the magnesium-based highway flares traditionally used by law enforcement can create great risks for officers and the surrounding area. These flares burn at high temperatures for 15 to 30 minutes, creating smoke and fumes that can overwhelm the user. Once the flare has finished burning, the officer is left to dispose of the hot, melted remains. Besides the immediate risks, there are potential long-term effects on the surrounding environment. For example, the byproducts of burning flares can poison a nearby water supply.

“Most agencies do not have policies about the disposal of flares,” said Charlie Mesloh, director of the Weapons and Equipment Research Institute at Florida Gulf Coast University. “It’s completely discretionary. Officers frequently kick them to the side of the road, leaving sharp metal spikes that can create a future road hazard.”

With funding from NIJ, Mesloh and his colleagues assessed alternative highway flares that use chemical or electric sources of energy, thus reducing the risks posed by traditional flares.

The research team found the chemical and electric flares tested were less visible than the traditional flare when placed at ground level. Sometimes, minor depressions in the roadway were enough to obscure the alternative flares. However, when researchers lifted these flares off the ground — even by just a few inches — visibility increased by one-fourth of a mile. When placed on a cone, the alternative flares were visible at one mile or more.

“When you increase the ability of people to see at greater distances, you give them more time to react,” Mesloh said. “The most dangerous time for officers at an incident scene is when they are setting up the flares and cones.”

Officers need to be able to set up the flares quickly, efficiently and in such a fashion that drivers understand what to do.”

In addition, the researchers found that basic, uncomplicated designs for cones and flares were the most effective and visible. Arrangements using multiple flare types disoriented and confused other drivers.

For more information on this study, go to http://www.ncjrs.gov/pdffiles1/nij/grants/224277.pdf.
Indian Country Research

The Comprehensive Indian Resources for Community and Law Enforcement Project Evaluation

The CIRCLE Project was a collaborative effort between several Department of Justice agencies and three tribes — the Northern Cheyenne Tribe, the Oglala Sioux Tribe and the Pueblo of Zuni — to improve criminal justice systems within these communities by reducing crime and improving safety.

Tribes focused their CIRCLE funds on different objectives, depending on their needs. For example, the Pueblo of Zuni stressed building a management information system, expanding community policing, developing a model to decrease youth and family violence, and strengthening law enforcement, corrections and domestic violence service agencies. The Northern Cheyenne Tribe focused on creating a better tribal court system, building a juvenile detention and rehabilitation center, expanding victim services and expanding the police force. Finally, the Oglala Sioux Tribe worked on expanding youth services as well as the police force and improving the tribal court system and victim services.

How Effective Was the Program?
NIJ sponsored a 48-month participatory evaluation of the CIRCLE Project. All the project stakeholders were deeply involved in the evaluation work. Researchers worked closely with federal and tribal partners to learn how effective the CIRCLE Project was in improving tribal criminal justice systems and to what extent the Justice Department succeeded in helping the tribes.

Given the tribes’ diverse approaches toward the broad goals of reducing crime and improving safety, evaluators examined the accomplishments of each tribe individually and in significant detail. However, they did draw some general lessons from their specific findings.

They noted that addressing sustainability at the beginning helps tribes to plan their changes according to projected long-term effects. In addition, tribal partners wanted the CIRCLE Project to support self-determination. Participants wanted the freedom to shape tribal institutions and design changes tailored to the particular needs of their communities. Evaluators also recognized the great need, in system reform, for nation-building and creating criminal justice processes (not merely outcomes) that are culturally fitting. These tailored solutions, respecting self-determination and tribal sovereignty in creating institutions, nation building and designing culturally suitable processes, were identified as important for program momentum and sustainability.

Comprehensive change is possible, as shown by the successes of the Pueblo of Zuni. Although crime reduction cannot definitively be attributed to CIRCLE, such change can likely reduce crime. However, one of the most important lessons from this evaluation concerns the approach that agencies take to justice system enhancements in Indian Country. Local data-gathering and an understanding of conditions specific to locale help to identify opportunities for action. While not all tribes are ready for system-level changes, this should not deter them from making targeted changes on a smaller scale. This more incremental course saves money, time and effort and can lead to long-term success.

Read the full report: http://www.ncjrs.gov/pdffiles1/nij/grants/221081.pdf

To learn more about NIJ’s tribal crime and justice research go to:
Public Law 280

Passed in 1953, Public Law 280 drastically changed the role that some state governments play in Indian Country criminal justice systems. Before this law, criminal jurisdiction on reservations in all states was shared between federal and tribal governments. State governments were largely uninvolved. P.L. 280 mandated a transfer of federal criminal jurisdiction over Indians and non-Indians on reservations to state governments in six states. It also allowed other states to transfer law enforcement authority, without the consent of tribal members.

A 1968 amendment required future transfers to be approved by tribal members. It also allowed states to return jurisdiction — in full or in part — back to the federal government.

Systematic documentation of P.L. 280 did not begin until recently. An NIJ-funded study, Law Enforcement and Criminal Justice Under Public Law 280 by Carole Goldberg and Dr. Duane Champagne has shed some light on this area and helped to map out some of the contours of its effects.

In general, those tribes that are under state and tribal jurisdiction were less satisfied with both the availability and the quality of law enforcement than tribes that are under federal and tribal jurisdiction. P.L. 280 residents had a significantly less favorable view of the performance of non-tribal police than the state and county police themselves. All jurisdictions, however, rated the performance of tribal police higher than state, county or federal police in overall availability.

P.L. 280 reservation residents stressed the lack of resources as a significant limit on developing their own police and justice systems. In addition, they expressed concerns that players in the federal, state and county criminal justice systems lack respect and appreciation for tribal cultures.


—Sarah B. Berson

NCJ 229886

Mandatory and Optional Public Law 280 States

**Legend**

- Mandatory PL–280
- Optional PL–280
- Non-PL–280
Law enforcement may be able to exploit terrorists’ inexperience to deter attacks.

Like other forms of criminal deviance, terrorism requires expertise that combines knowledge with practice.

Terrorists with knowledge and practical experience are more likely to carry out “successful” attacks than those lacking both of these essential qualities. However, some extremists are more informed — and experienced — than others.

Well-educated people do not necessarily make good terrorists. The medical doctors behind the failed 2007 car bombings in London and Glasgow, Scotland, lacked the bomb-making skills of the petty criminals who killed 56 people in the London Tube and bus bombings two years before. Terrorism is a craft involving its own particular set of skills and knowledge that practitioners must develop to be good at it. This begs an important yet little understood question: How do terrorists get the experience — and expertise — they need to carry out acts of political violence?

To answer this question, I carried out five months of fieldwork on Islamic militancy in Britain and Spain, home to two of the most devastating terrorist attacks since Sept. 11. I interviewed many militants, including former Guantánamo Bay detainees and members of al-Muhajiroun. I also interviewed dozens of law enforcement officials and intelligence analysts from the Federal Bureau of Investigation, the London Metropolitan Police Service, the Spanish Civil Guard and other agencies. I complemented these interviews with news reports, studies and court documents from criminal proceedings in Britain and Spain.
While terrorists gain knowledge of their craft through formal study and practice, the method of diffusion depends on the knowledge being gained. Abstract technical knowledge, what the ancient Greeks called “techne,” can be codified in documents and communicated in “small, explicit, logical steps.” Islamic terrorists gain the techne involved in bomb making and weapons handling by reading manuals and other documents that provide detailed, systematic instructions. Alternatively, they attend training camps where experienced practitioners teach these clear, logical and deadly steps as part of their curriculum. This technical knowledge is universal; it does not vary across local settings. Would-be terrorists may gain abstract knowledge for carrying out attacks at a training camp in Waziristan, Pakistan; a farmhouse outside Madrid, Spain; or from an online training manual.

Not all knowledge can be gained in this manner. Practitioners of a specific tradecraft, such as medicine, law enforcement or terrorism, often rely on intuitive, practical knowledge, what the Greeks called “métis.” Practitioners develop métis gradually, by engaging in the activity itself, rather than by formal study. Terrorists may learn the techne involved in building bombs, shooting weapons and other activities by studying manuals or receiving formal instruction. However, to develop hands-on competence they must put the book down and practice. Practice may not make perfect, but it does build skills. To become a competent terrorist, one must build bombs, fire guns or survey targets, gaining the practical “know-how” that is essential for carrying out successful attacks. Unlike techne, métis is not “settled knowledge”; it varies across local contexts. What works in one location may not work in another. Street smarts in London are different from “cave smarts” in Afghanistan. The tradecraft needed to succeed in urban terrorism in the West is not easily gained from training in guerrilla warfare, even as taught at the best al-Qaida camps.

In fact, Islamic terrorists are often short on métis; the experiential knowledge needed to carry out attacks in local settings is far removed from their training sites. Even battle-hardened militants typically develop their violent métis by taking part in one or more jihads in Afghanistan, Bosnia, Chechnya, Iraq or Kashmir. Militants’ combat knowledge, however useful in those locales, is essentially limited to guerrilla warfare. Such métis does not necessarily translate into effective urban terrorism in Western countries, where success requires local knowledge, street smarts and a talent for clandestine operations.

The Sept. 11 attacks provide a striking and diagnostic case. The hijackers Nawaf al-Hazmi and Khalid al-Mihdhar were veteran jihadists who trained in Afghanistan and fought in Bosnia. For all their training and combat experience, both militants were unprepared for their original roles as pilots in the operation. Renting an apartment in southern California, lett alone learning English and completing pilot training, proved a daunting task, requiring the help of English-speaking residents who knew the area. Not coincidentally, those recruited to replace the duo, Mohammed Atta, Marwan al Sheh and Ziad Jarrah, lived in Germany for years before joining al-Qaida. These “educated, technical men … did not need to be told how to live in the West;” they already knew how. Atta and his colleagues drew on their English-speaking skills and experience from living in Germany to perform satisfactory, if imperfect, tradecraft in the operation.

Unlike the Sept. 11 hijackers, Mohammed Siddique Khan and his co-conspirators in the 2005 London bombings grew up in the country they attacked. Their knowledge of British culture and society and their natural command of English were instrumental in carrying out their suicide bombings. Two of the bombers, Khan and Shehzad Tanweer, received training in Pakistan. Yet any techne they gained there merely complemented the métis they already had from living in Britain for so long. The London bombers drew on their local knowledge and experience to move around the country and get the explosive materials they needed without being disrupted by law enforcement.

Similarly, the Madrid train bombers drew on their own métis, gained from living in Spain for many years, to carry out their attacks in 2004. Many conspirators, such as Jamal Ahmidan and Serhane ben Abdalmajid Fakhet, were originally from North Africa. Yet they settled permanently in Madrid and were fluent in Spanish, which helped them prepare for the operation. Other key participants, including José Emilio Suárez Trashorros, the former miner who provided access to the explosives, were natural born citizens who had lived in Spain their entire lives.
A number of NIJ-funded studies have contributed to our understanding of how terrorists learn:

Brian Jackson led a team of RAND Corp. researchers who examined how several terrorist groups gather information and develop tactical innovations in their attacks. The study suggests that counterterrorism efforts become more effective as law enforcement officers assess and anticipate terrorists’ efforts to change how they operate.

Mark Hamm drew on court documents from the American Terrorism Study and criminological literature on social learning to explore how terrorists carry out violent attacks. Other scholars have explored how terrorists train their supporters in the tactics and techniques of guerrilla warfare and terrorism. Combined with earlier literature on terrorism contagion and recent scholarship on suicide bombings, these studies are helping us develop more effective counterterrorism policies and practices, providing clues to short-circuit terrorists’ learning process.

Ahmidan, Trashorras and others had another critical source of métis: criminal experience in drug trafficking. Ahmidan was a veteran hashish and Ecstasy smuggler who had previously killed a man. Rafa Zouhier was an experienced drug dealer who provided Ahmidan the connection to Trashorras, who had a history of hashish trafficking. All of these criminals drew on their contacts and practical knowledge of drug trafficking and explosives to play essential roles in the bombings.

As in the United States after Sept. 11, today in Britain and Spain it has become increasingly difficult for would-be terrorists to acquire the métis they need to carry out attacks. Counterterrorism agencies have cracked down on militants following the London and Madrid bombings and other incidents. In recent years, law enforcement and intelligence officers in all three countries have created a hostile environment for Islamic terrorists, intercepting their communications, arresting them and disrupting their plots. Unlike techne, which can be gained from knowledge-based artifacts, métis is learned by doing. This presents militants with a dilemma. To develop hands-on knowledge for carrying out attacks, they must practice building bombs, using firearms and performing related activities. Yet in doing so, they expose themselves to potential surveillance and disruption by security officials.

The most important lesson is that terrorists’ chance of exposure grows as the counterterrorism environment around them becomes increasingly vigilant. The reason is simple: Lack of practice leads to a lack of métis that in turn leads to mistakes that alert law enforcement officers can detect. To remain below the radar of police officers and suspicious neighbors, militants have adopted security-enhancing measures. They may wait until the last day of training before allowing students to fire their weapons or detonate their bombs. These precautions help preserve security, but they do not allow participants to practice what they have learned. Yet gaining a feel or knack for terrorism comes from repeated practice and direct experience, not from abstract knowledge codified in documents, no matter how detailed their instructions and accurate their recipes.

Terrorists are not the only ones who rely on their practical knowledge of local areas. Law enforcement officers
draw on their own métis, developed from patrolling community beats, to identify and disrupt illicit activity. Law enforcement officers have detailed knowledge of local resources of interest to potential terrorists, including fertilizer suppliers, explosives manufacturers and gun dealers. Their routine policing activities and their contacts in the communities they serve also provide opportunities to note suspicious behavior among potential militants.10

Because they know when something is amiss in the neighborhood, local law enforcement officers play a critical role in counterterrorism. To improve their skills, officers must be able to recognize the warning signs of terrorism-related surveillance and other preparatory acts, such as building explosives. Dead flowers outside the covered window of an inner-city apartment, the gradual lightening of a young man’s hair color or apartment trash littered with empty containers of hydrogen peroxide are subtle signals. To the untrained eye these signs may not mean much, but to the knowing observer they can provide clues for identifying bomb-making laboratories. Law enforcement officers who can recognize and act on these warning signs will make a valuable contribution to counterterrorism in the months and years ahead.

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NCJ 229887

For More Information


Notes

Preventing Future Crime With Cognitive Behavioral Therapy

by Patrick Clark

One form of psychotherapy stands out in the criminal justice system.

Cognitive behavioral therapy reduces recidivism in both juveniles and adults.

The therapy assumes that most people can become conscious of their own thoughts and behaviors and then make positive changes to them. A person’s thoughts are often the result of experience, and behavior is often influenced and prompted by these thoughts. In addition, thoughts may sometimes become distorted and fail to reflect reality accurately.

Cognitive behavioral therapy has been found to be effective with juvenile and adult offenders; substance abusing and violent offenders; and probationers, prisoners and parolees. It is effective in various criminal justice settings, both in institutions and in the community, and addresses a host of problems associated with criminal behavior. For instance, in most cognitive behavioral therapy programs, offenders improve their social skills, means-ends problem solving, critical reasoning, moral reasoning, cognitive style, self-control, impulse management and self-efficacy.

Recently, Mark Lipsey of Vanderbilt University examined the effectiveness of various approaches to intervention with young offenders. His review analyzed the results of 548 studies from 1958 to 2002 that assessed intervention policies, practices and programs.
Lipsey grouped evaluations into seven categories:

- Counseling
- Deterrence
- Discipline
- Multiple coordinated services
- Restorative programs
- Skill building
- Surveillance

When he combined and compared the effects of these interventions, he found that those based on punishment and deterrence appeared to increase criminal recidivism. On the other hand, therapeutic approaches based on counseling, skill building and multiple services had the greatest impact in reducing further criminal behavior.

Lipsey also examined the effectiveness of various therapeutic interventions. In particular, he compared different counseling and skill-building approaches. He found that cognitive behavioral skill-building approaches were more effective in reducing further criminal behavior than any other intervention.

In a different research review, Nana Landenberger and Lipsey showed that programs based on cognitive behavioral therapy are effective with juvenile and adult criminal offenders in various criminal justice settings, including prison, residential, community probation and parole. They examined research studies published from 1965 through 2005 and found 58 that could be included in their review and analysis. The researchers found that cognitive behavioral therapy significantly reduced recidivism even among high-risk offenders.

**Perceptions Affect Behavior**

Beliefs, attitudes and values affect the way people think and how they view problems. These beliefs can distort the way a person views reality, interacts with other people and experiences everyday life.

Cognitive behavioral therapy can help restructure distorted thinking and perception, which in turn changes a person’s behavior for the better. Characteristics of distorted thinking may include:

- Immature or developmentally arrested thoughts.
- Poor problem solving and decision making.
- An inability to consider the effects of one’s behavior.
- An egocentric viewpoint with a negative view or lack of trust in other people.
- A hampered ability to reason and accept blame for wrongdoing.
- A mistaken belief of entitlement, including an inability to delay gratification, confusing wants and needs, and ignoring the rights of other people.
- A tendency to act on impulse, including a lack of self-control and empathy.
- An inability to manage feelings of anger.
- The use of force and violence as a means to achieve goals.

Therapy can help a person address and change these unproductive and detrimental beliefs, views and thoughts.

**Cognitive Behavioral Therapy and Criminal Offenders**

Landenberger and Lipsey found that even high-risk behavior did not reduce the therapy’s effectiveness. For example, some of the greatest effects were among more serious offenders. It may be that the therapy’s enabling, self-help approach is more effective in engaging typically resistant clients, that it increases their participation and therefore the benefits of participation. The therapy is more effective in reducing further criminal behavior when clients simultaneously receive other support, such as supervision, employment, education and training, and other mental health counseling.

The cognitive behavioral therapy approach has recently been used in many prepackaged, brand name programs, such as “Reasoning and Rehabilitation,” “Aggression Replacement Therapy,” “Thinking for Change” and others. The National Institute of Corrections recently

**Preventing Future Crime With Cognitive Behavioral Therapy**
published a thorough and comprehensive review of cognitive behavioral therapy, which provides detailed descriptions of these and other programs. Interestingly, although the Landenberger and Lipsey review showed these programs were effective, no single program was superior in reducing recidivism.

More research is needed to determine if it would be effective for offenders to receive cognitive behavioral therapy earlier in their criminal careers or as part of early intervention or parenting training programs.

Patrick Clark is a Social Science Analyst with NIJ’s Crime Control and Prevention Division.

Notes


What is CBT?

Cognitive behavioral therapy is a treatment that focuses on patterns of thinking and the beliefs, attitudes and values that underlie thinking. CBT has only recently come into prominence as one of the few approaches to psychotherapy that has been broadly validated with research, although it has been used in psychological therapy for more than 40 years. It is reliably effective with a wide variety of personal problems and behaviors, including those important to criminal justice, such as substance abuse and anti-social, aggressive, delinquent and criminal behavior.

Unlike other approaches to psychotherapy, CBT places responsibility in the hands of clients while supplying them with the tools to solve their problems, focusing on the present rather than the past. People taking part in CBT learn specific skills that can be used to solve the problems they confront all the time as well as skills they can use to achieve legitimate goals and objectives. CBT first concentrates on developing skills to recognize distorted or unrealistic thinking when it happens, and then to changing that thinking or belief to mollify or eliminate problematic behavior.

The programs, often offered in small group settings, incorporate lessons and exercises involving role play, modeling or demonstrations. Individual counseling sessions are often part of CBT. Clients are given homework and conduct experiments between sessions. These components are used to gauge the individual's readiness for change and foster engagement in that change. A willingness to change is necessary for CBT or any other treatment to be effective in reducing further criminal behavior.

Brand name programs often limit clients to 20-30 sessions, lasting over a period of up to 20 weeks. The more treatment provided or the more sessions participants attend over time, the greater the impact on and decrease in recidivism.

The typical CBT program is provided by trained professionals or paraprofessionals. Training for non-therapist group facilitators often involves 40 hours or more of specialized lessons and skill building. Licensed and certified therapists are often part of cognitive programs, especially those involving individual counseling.

Characteristics of the counselor are important to a program’s effectiveness. Counselor honesty, empathy and sensitivity are helpful traits. Support and encouragement, partnership or alliance, and acceptance are necessary in establishing effective rapport, which is especially important in CBT because counselors often take on the role of coach. It is important that counselors be consistent in modeling and expressing the pro-social attitudes and behaviors, moral values and reasoning that are often part of CBT with criminal offenders.

Positive findings from research on CBT are common. Over the years, studies have shown the therapy is effective with various problems, including mood disorders, anxiety and personality and behavioral disorders. Unlike other traditional and popular therapies, CBT has been the subject of more than 400 clinical trials involving a broad range of conditions and populations. It has successfully addressed many issues experienced by children, including disruptive or noncompliant behavior, aggressiveness, oppositional defiant disorder and attention deficit hyperactivity disorder. For adults, CBT has been shown to help with marital problems, sexual dysfunction, depression, mood disorders and substance abuse. It has also been shown to be as useful as antidepressant medication for individuals with depression and appears to be superior to medication in preventing relapses.
Many findings of longitudinal studies run counter to long-held beliefs about adolescent offending.

For a new edited volume, criminologist Akiva Liberman assembled an impressive group of scholars to present conclusions from more than 60 studies on crime and delinquency in adolescence. He collected their essays into a book titled *The Long View of Crime: A Synthesis of Longitudinal Research*. Many of the findings challenge the conventional wisdom and could have significant implications for future policy and practice.

Longitudinal studies, which follow people for extended periods, are valuable because they provide information about offending behavior over time. By contrast, cross-sectional studies provide information about one particular period. It is the difference between a panoramic view and a snapshot. The wide-angle lens of longitudinal research is a powerful tool for sorting out some of the chicken-and-egg, "which came first" issues at the heart of criminal research.

**Street Gangs: Why Do Gang Members Commit Crime?**

No one disputes that gang members commit more crime than nonmembers. Two schools of thought have emerged to explain why the crime rate is higher among gang members. One theory, the "selection model," suggests that adolescents who are already predisposed toward delinquency and violence are the ones most likely to join gangs. The opposing theory, the "facilitation model," assumes that gang members are no more disposed toward delinquency and violence than others are and would not contribute to
higher crime rates if they did not join a gang. However, when they do join a gang, peer pressures promote their increased involvement in delinquency.

Some longitudinal studies have tested these two competing approaches, and the uniformity of results is impressive. The studies show no evidence to support a pure selection model. The weight of the evidence favors the facilitation model, suggesting that street gangs promote delinquent behavior. A corollary finding that further supports the facilitation model is that delinquency (except that related to drug sales) typically declines after the member leaves the gang.

Longitudinal studies have exposed some other possible misconceptions about gang-related behavior. Several factors thought to be associated with gang membership, such as family poverty, family structure, low self-esteem and neighborhood crime, were not supported by the empirical evidence. Studies show that gang membership in “emerging gang” cities is transitory, typically lasting no more than a year. Traditional gang cities such as LA and Chicago were not included in the set of longitudinal studies and their gangs may function differently, with reports of long-duration and multigenerational gang membership.

These findings could have important implications for designing gang prevention and intervention programs. Delinquent behavior may stem more from gang membership than from any delinquent leanings of the gang members themselves.

**Arrest and Sanctions: Do They Deter Delinquency or Make It Worse?**

Two conflicting views have emerged about the effect of arrest on delinquent offenders. One is that arrest should deter or even end offending behavior because it makes offenders understand that their behavior is socially disapproved of and that they could be arrested again if they do not reform. The opposite view is that arrest increases offending behavior because arrestees begin to view themselves as bad people, which leads them to continue committing crimes. A similar debate rages about the deterrent effect of sanctions that might be imposed after arrest, such as fines, community service, making restitution, attending treatment programs or imprisonment.

The data from longitudinal studies on this question are robust and consistent. More than a dozen studies found that people who have been arrested are at least as likely to be arrested in the future as those who have not. Thus, rather than being a deterrent, arrest resulted in similar or higher rates of later offending. Fourteen studies that examined the effect of sanctions uniformly found that sanctions either had no effect on or increased later offending. Interestingly, as the severity of sanctions increased, later offending was flat or increased. In addition, several studies have suggested that arrest and sanctions have a negative effect on later employment and increase juveniles’ chances of becoming high school dropouts.

Several factors may help to explain why arrest and sanctions do not have the expected deterrent effect. On release, most offenders return to the same risky environment that influenced their delinquency. They already have a well-established history of offending before their first arrest, and some offenders have psychological characteristics that decrease their susceptibility to influence from a prior arrest.

The findings from these studies challenge some deeply entrenched notions about the deterrent effect of arrest and sanctions on offending adolescents. More longitudinal studies that employ samples from general populations and examine different kinds of offenders (e.g., classified by age, sex, social class or stage of delinquent career) are needed to inform policy discussions about the possible benefit of more lenient interventions.

**Hard Work: How Does Adolescent Employment Affect Offending?**

Employment has long been viewed as a solution to the problems of crime and delinquency. However, studies have shown that the relationship between work and crime is far more complex than originally thought. Longitudinal studies now show that employment effects are likely to depend on the age of the person, and the importance of work varies for different groups (e.g., at-risk adolescents as opposed to older former offenders) at different life stages.

One firmly fixed finding over the years has been that intensive work by adolescents (i.e., 20 or more hours per week) increases delinquent behavior. Researchers believed that intensive work made youths less engaged in school, less supervised by their parents and more likely to meet delinquent peers. However, even this formerly secure belief has been challenged by recent
longitudinal studies. They suggest that sample selection — that is, the characteristics of the adolescents studied — may have skewed the findings. Perhaps adolescents who work intensively were already poor students, unsupervised at home and prone to harmful behavior and were therefore likely to be delinquent even without work.

Longitudinal studies also show that employment quality may be more important for crime reduction than the simple presence or absence of a job. Those at high risk for crime have many opportunities to earn money illegally. Recent longitudinal studies on adolescent employment and delinquency suggest the old rules about how jobs affect delinquency may be too simplistic.

Growing Up: Does Moving to Adult Roles Affect Delinquent Behavior?

One observation that has stood the test of time is that the prevalence of criminal offenses rises during adolescence and decreases in the early twenties. This age-related crime curve has led researchers to examine the transition to adult roles, such as marriage, cohabitation and parenthood, as a potential explanation for giving up delinquent ways. Theories abound about why taking on adult roles might reduce offending. Some suggest the transitions themselves are the cause for the change in offending behavior because they reorganize adolescents’ lives in ways that limit unstructured socializing (i.e., time hanging out with deviant friends). Others postulate that a “cognitive shift” that precedes the transition, rather than the transition itself, causes the change in offending. They theorize that adolescents first must come to view their deviant lifestyles as undesirable. Only then can they embrace role transitions that will create conventional lifestyles.

Of all the role transitions examined, marriage most effectively and consistently reduces deviance.

Recent longitudinal studies have also examined the “parenthood effect.” Many theorists have expected a negative effect from parenthood on crime, either because new parents become invested in their children or, as with the marriage effect, because the demands of parenthood reduce unstructured socializing. However, the few studies that have looked at this role transition have not found that having children reduces offending. Although people intentionally enter marriage, the same is not always true of parenthood.

The Long View Ahead

Many of the longitudinal studies described in The Long View of Crime shed new light on or even skewer time-honored criminological theories. These findings may provide an impetus for further analysis of existing data. They may also spark a new wave of longitudinal studies that incorporate both advances in statistical methods and innovative designs. Structuring longitudinal studies to advance knowledge about the causes of delinquency could lead to a clearer understanding of the explanation, prevention and treatment of offending and antisocial behavior and more targeted policies to address them.

Pat Kaufman is a freelance writer and frequent contributor to the NIJ Journal.

For More Information

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