

# Violent Offenders Get High on Crime

By Chi Chi Sileo

**Researchers are challenging the "society-as-cause" conventional wisdom on crime by exploring biological differences between criminals and noncriminals. They believe that early intervention and treatment could reduce the likelihood of antisocial behavior.**

In the movie *The Bad Seed*, a mother reluctantly comes to realize that her angelic-looking little girl is a cold-blooded killer. That was fiction, of course — a story that built on the notion that someone could be "born bad" — and was overly simplistic as an explanation of evil. But new research is suggesting that that notion might be closer to truth than previously believed.

Scientists have begun to ask whether there is something biologically "wrong," or different, about people who become violent criminals. And they are disclosing intriguing answers. Moreover, they say, criminal behavior can be spotted at a very early age — even as young as 6 years old, the age of the girl in the movie.

Theories about the causes of violent crime go all over the intellectual map, drawing from sociology, psychology, philosophy and religion. The question bedevils law enforcement workers, prison counselors, the criminal justice system and an increasingly frightened public. Is crime rooted in poverty, poor upbringing, exposure to "the underclass" or lack of exposure to moral teachings? Is evil, pure and simple, the "bad seed" come to life? And more disturbingly, is violence an innate drive, something held at bay by a fragile line separating most of us, perhaps only temporarily, from a violent few?

"It isn't all that hard to understand why some people use violence," says Robert Hare, a professor of psychology at the University of British Columbia and author of *Without Conscience: The Disturbing World of the Psycho-*

*paths Among Us*. "It's much more difficult to understand why we're so well-socialized not to."

According to Hare, most violent criminals, particularly "cold-blooded" psychopaths (see sidebar), are just living examples of natural human behavior carried to a logical extreme. "Criminals have not acquired the norms of society," he says. "To them, criminal behavior just makes sense. They haven't made a conscious choice to be bad, they're just doing what comes naturally and what most benefits them. They are doing what we all would do if we didn't have social controls."

In 1986, an international group of social scientists and biologists meeting in Spain issued the historic Seville Statement on Violence, which emphatically declared that aggression is not an innate human drive. Heralded as an optimistic statement about humanity, especially for its implication that war is not a necessary evil, the Seville Statement also helped to give scientific authority to the society-as-cause theories that have held sway in studies of crime for the past few decades. These theories indict society itself for peoples' violent choices and pin the blame on everything from unemployment and poor schools to television violence and rap-music lyrics.

"The conventional thinking is alive

and well," states Stanton Samenow, an Alexandria, Va., psychologist who works closely with different prison systems and has authored numerous books on crime. "It seems people are ready to blame everything but the federal deficit for crime — and that may be next."

Maybe not. A brave new field of genetic research is debunking those theories and unearthing evidence that the propensity for violence is, in fact, an elemental human trait — one of which some people just happen to have more.

"Of course this is all very 'un-PC.' But to say that all criminals are made and not born is nonsensical," says Hare. "People are born with all kinds of different propensities: fear, timidity, cheerfulness, as well as different physical traits. Why should it be any different for this particular trait?"

**A new field of genetic research is debunking theories and unearthing evidence that the propensity for violence is a human trait.**

"Violence is a normal human predisposition that exists to a higher degree in people who eventually become criminals," asserts psychologist Adrian Raine, whose groundbreaking studies are among the first to confirm what many crimi-

nologists long have suspected. Raine, an associate professor at the University of Southern California, recently completed a series of studies that show differences in genetic composition and brain functioning between criminals and noncriminals.

In one study, Raine used brain imaging to explore differences in the brains of violent offenders. Using a technique called positron emission tomography — which measures amounts of glucose metabolism pro-

duced when the brain is working — Raine found that violent offenders showed a marked dysfunction in the specific region of the brain that controls aggression.

“We know that violent offenders are impulsive, often don’t think ahead,” Raine notes, “and now we have a better understanding of why.”

In another study, Raine found that criminals have very low natural levels of physiological arousal measured by elements such as skin conductance (sweat), heart rate and electrical activity in the brain. Since low levels of arousal are uncomfortable, these people often look for external ways to get themselves “fired up.” Some will look for stimulation in sex, drugs, fast driving and high-risk sports such as bungee jumping, for example; some will turn to crime.

“Crime is an arousal jag,” Raine explains. “It’s very interesting; we found that when we interviewed burglars, for instance, the word that kept coming up was ‘exciting’ — breaking into houses was a real thrill for them.”

That jibes with the experiences recounted by Jeffrey Smalldon, a forensic psychologist in Columbus, Ohio, who has worked with violent criminals. “We talk about crimes being ‘motiveless’ or ‘senseless,’” he says, “but it just means that their motives are motives that don’t make sense to us. What they net is not necessarily money, it’s something more subtle and obscure. It’s in the process, the predation, the cunning, the pulling it off. That’s the high.”

Raine’s study looked at schoolchildren as well, since most indicators of criminal activity show up at very early ages. Many of these students had been branded “antisocial” by their teachers; however, even among that group of kids, the ones with naturally high arousal levels did not engage in criminal or violent behavior. “The protective factor here is high levels of arousal,” Raine reported. Some of the teenagers had natural levels of arousal that were higher than those of normal, or not antisocial, teens, and that seemed to be the factor that kept them in line.

The real importance of Raine’s stud-

ies is in the possibility of using this knowledge to nip crime in the bud. For example, Raine has been training people in biofeedback, an easy-to-learn technique that allows people to track and raise their arousal levels. Biofeedback is used medically with people who suffer from hypertension and can succeed in raising arousal levels in as few as 21 sessions. According to Raine, combining biofeedback training with

regions to take over those functions but adds that the research “is speculative at this point.”

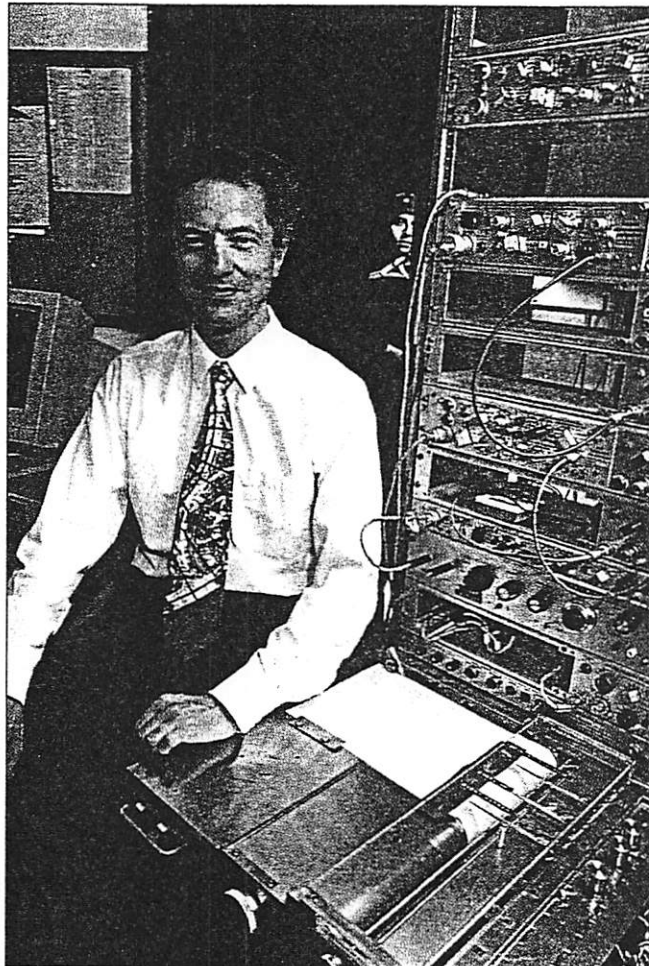
Still, he and other researchers are quick to point out that “biology is not destiny.” These genetic studies indicate only a predisposition to violence, not a predestination to it. To become a violent criminal, they say, the genetic predisposition must be fostered by the right environment: This comes down to the family.

Parental neglect, especially maternal neglect, is a key factor in destroying the ability to form attachments. And attachments — to family, to community, to outside goals — are what keep most people from becoming criminals. Maternal neglect, whether by accident or the mother’s choice, includes physical or emotional abuse, improper nutrition and even premature birth — anything that upsets the natural bonding process.

Physical abuse or harsh treatment are the primary factors that can confirm a predisposition to violence. “Aggression and harsh treatment at home works in two ways,” says Ervin Staub, author of *The Roots of Evil*, a study of genocide. “First, it makes the child less trusting, more hostile. Secondly, it demonstrates that aggression is a tool, and you need skills to use a tool. So the child learns very well how to use violence. This isn’t true in all cases, but enough to point to a definite trend.” That conclusion is echoed by virtually every researcher in the field.

Most of these experts also note that the most common kind of violence children face is agonizingly close to home: corporal punishment. According to Philip Greven, author of *Spare the Child: The Religious Roots of Punishment and the Psychological Impact of Physical Abuse*, many studies show that children who are physically disciplined are far more likely to become criminals and use violence against others.

“Both aggression and altruism are cases of ‘learning by doing,’” says Staub. “Children model the behavior they see and experience. If they are treated in a positive way, that’s how they’ll treat others. If they’re treated



Raine: Crime is exciting — “an arousal jag” for criminals.

educational programs would provide the best way to prevent at-risk adolescents from getting into trouble.

The study on brain imaging also has led to significant possibilities for intervention. Cognitive remediation, a type of therapy used to help stroke victims, the head-injured and others who have lost or damaged certain brain parts or functions, trains parts of the brain to take over the jobs performed by lost or weakened parts. Murderers have a marked lack of functioning, measured by glucose, in a very specific region of the brain, the region that controls aggressive behavior. Raine believes that cognitive remediation could be used to train other brain

harshly, that's how they'll behave."

That explanation, however, isn't universally observed.

"My theory is that it isn't the environment that determines how people behave," counters Samenow, "it's how people choose to respond to that environment." Samenow, who scorns what he calls a blame-the-parents mentality, points out that often what appears to be harsh and neglectful behavior by parents is actually a perfectly under-

standable response to children who have parents at their wits' end.

"Of course, environment can affect behavior," Samenow writes in his book *Before It's Too Late: Why Some Kids Get Into Trouble and What Parents Can Do About It*, "but the longer I have been involved in research and practice, the more I have been compelled to recognize an even more important fact: The environment from which a person comes is less crucial than the choice

the individual makes as he responds to that environment."

Samenow, like Staub, is not convinced that there are genetic bases for violent behavior, but he argues that it doesn't matter anyway; criminals, he says, simply think differently than non-criminals do. They see the world and their place in it in ways almost unrecognizable to the rest of us. "That's true across crimes. And even if they made certain things legal, say drugs, some-

## Psychopaths: The Most Fascinating Criminals

**O**f all criminals, none inspire the same fascinated revulsion as that mysterious, frightening breed called the psychopaths.

A common trait of psychopaths is their ability to charm others, to attract devoted partners or lovers. And one of their most devoted followers is psychologist Robert Hare, an expert who has performed brain imaging studies on members of this group.

Psychopaths generally are described as emotionless, amoral "shells" of humanity. They are usually the criminals who become serial killers, although not all psychopaths are violent. (In addition, they are found among con artists and white-collar criminals.)

The study that Hare conducted entailed a test in which subjects sat at a computer terminal viewing single words, some real and some nonsensical, as they popped onto the screen. For each word, they had to choose "yes" or "no" to indicate whether it was a real word. Some of the real words were neutral, such as *pencil* or *table*. Others were emotionally loaded — *rape*, *death* or *love*.

The results, he says, were "absolutely stunning." Normal people, Hare says, respond much more quickly to emotional

words. "Their EEG [electroencephalogram] shot up and they made the decision far more quickly. There was a lot of mental processing with those emotionally loaded words." Even "regular," or nonpsychopathic, criminals showed the same dramatic difference in brain functioning as did noncriminals.

But with the psychopaths, Hare discovered, there was no difference at all in the mental processes. The words *rape* or *murder* conjured up the same emotional response as words such as *table* or *chair*.

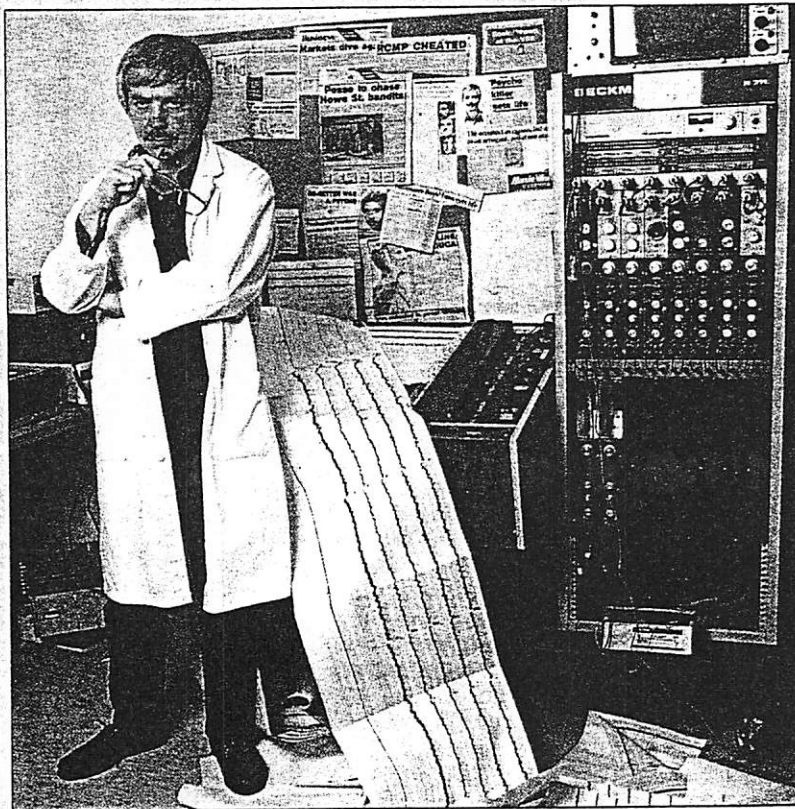
"That's the key," Hare says. "In a

psychopath, the parts of the brain that should be activated by emotion just don't work." Hare concedes that there might just be a difference in "hard-wiring" — that these criminals might just be processing emotions in a different way. But he adds that based on what we know about them, that explanation seems unlikely.

"The psychopath is like the character Data on *Star Trek: The Next Generation*," he says, referring to the intelligent android who cannot process human emotions. "Except Data has been programmed to follow the rules. A psychopath is like Data on different programming. In fact, there was an episode of the show when Data's wiring started to break down, and he became a criminal."

No one knows how psychopaths become the way they are, and most theories — such as abusive homes or not developing close attachments in childhood — have not held up under research. Because of this and because they are responsible for the most spectacular crimes, psychopaths are a subject of eternal fascination to researchers and the public.

"Part of our fascination with them," Hare says, "lies in the fact that deep down, they do a lot of things we would like to do. We don't because we're held back by



Hare: Brain parts affected by emotion just don't work in psychopaths.

one with that pattern of thinking would just find another law to break." Samenow believes that crime can be prevented by a two-part plan: stepping in early, when patterns of antisocial behavior start cropping up, and using the kind of tough-minded, confrontational "therapy" he uses in prisons.

Samenow does not actively oppose genetic research; but there are those who do. The field is ripe for controversy, and not just in theory: The 1992

appointment of Frederick Goodwin to be director of the National Institute of Mental Health almost was derailed because of Goodwin's work in genetic bases of violent behavior which was called racist because it discussed violence among inner-city minorities. A conference that Goodwin had planned on violence in the inner cities was canceled.

"The real irony is that it's the inner cities who are being most hurt by vio-

lent crime," Raine notes, although he acknowledges that this type of research must be performed with a constant vigilance against abuse.

**W**hen you talk about predispositions to undesirable behavior, you get into fears of genetic engineering, eugenics, genocide — everything associated with Nazism," says Raine. He understands allegations of racism but points out that every one of these studies has used whites as subjects precisely to avoid any taint of racial bias.

Ideological battles also are at stake. A majority of sociologists and criminologists still believe in society-is-all theories, and government crime-prevention programs reflect those beliefs. Raine predicts that by providing early care to at-risk mothers to reduce birth complications and maternal rejection, violent crime could be reduced by up to 22 percent. He acknowledges the ethical dilemma of targeting certain people for intervention but argues that this kind of specific intervention would be far more effective than current one-size-fits-all programs that address crime after it occurs rather than preventing it from happening.

"No one wants to hear this," says Smalldon, "but we can predict violent tendencies at a very early age. And that's when we should be stepping in, before these children go right over the edge. Of course, this is very controversial and highly charged, like we're saying that the 'bad seed' is a fact. But it isn't like that. The little girl in *The Bad Seed* was out-and-out evil; we know that we can intervene and people really can change their ways."

Raine, Hare and other researchers stress that criminal behavior is not purely a result of genetic makeup; rather, it's the lethal combination of a violent predisposition and childhood disruption that appear as constants among violent offenders.

The hope these researchers share is that ideological and political controversies won't put a stop to their work. They point out that far from expressing a "you're doomed" philosophy, these findings point to a future filled with hope. "We can change biology," Raine says. "We can change violence and crime." Rather than rail at these new studies, he notes, people should embrace the opportunity to replace the failed theories of the past with new and different ones that might just offer a better way out.

"When we close the door on biological research," he says, "we open the doors to a far greater tragedy." ●

laws, social censure, our feelings for others. We don't want to hurt others or let people down or act immorally. The psychopath has no such controls. He does what is most gratifying to himself without any other concerns. He's totally free."

Of course, that's what makes the psychopath scary, too. There's no appealing to the mercy or moral sense of someone without such attributes. It's also what makes the psychopath the least likely to reform or be a constructive — or at least, nondestructive — member of society. Almost all forms of rehabilitation or therapy to "fix" the psychopath have resulted in flat, resounding failure.

The harsh assessment of most experts in criminal psychology is that most psychopaths should be locked up. Even if they're not violent, they often become white-collar criminals.

"These are usually intelligent, good-looking, high achievers," says Hare. "The combination is absolutely devastating. They make bank robbers look small-time; they rip off corporations to the tune of millions and they make the lives of their colleagues, business partners and families an absolute living hell." Some may be in professions that value and reward ruthlessness, and their self-presentation as charming, hardworking and charismatic people can be so convincing that their victims have a hard time making others believe them. (Hare cites the case of a woman who went to marriage counseling with her psychopathic, abusive, embezzling husband; the counselor discounted everything the woman said and took sides with her far more charming and seemingly reasonable husband.) Many pimps, mercenaries and reckless drivers, Hare says, are psychopaths.

But many experts caution against lumping all criminals, even all violent

criminals, into the category. Psychopaths are a small subset — perhaps 20 percent of the criminal population — but include the perpetrators of the most gruesome of crimes. Other offenders, experts say, can be reformed and should not receive the same harsh penalties as psychopaths.

"It's too easy. It's a way of saying, 'Oh well, there's nothing we can do, so forget them,'" Hare stresses. "You can help other offenders, even other violent offenders. You have to differentiate."

Differentiation isn't helped by the fact that the DSM (the *Diagnostic and Statistical Manual* used by almost all mental health workers) description of psychopathy could be applied to any criminal. In addition, some courts employ psychologists who may not be well-informed about this particular group or who might be too eager to write off all murderers, for example, as psychopaths.

To address misunderstandings, Hare has developed his own diagnostic tool, the Psychopathy Checklist, which has been adopted by several states — and is being seriously considered by many others — as a way of determining who should receive the death penalty, life imprisonment or other maximum sentences.

What about the Jeffrey Dahmers, Ted Bundys and John Wayne Gacys of the world? Clearly without conscience or emotional bent, they also seem far from the "mask of sanity," to use a term coined by Hervey Cleckley to describe the seeming normalcy of the psychopaths.

"They're psychopaths, but they also seem to be psychotic on top of that," Hare says. In a thoughtful voice — that of the detached scientist meeting the curious layman — he adds, "You know, they are really quite strange."

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