
BOOK REVIEWS

The Psychobiology of Aggression. By Marc Hillbrand and Nathaniel J. Pallone (Eds.). (New York, NY: The Haworth Press, 1994. Pp. 243)

When it comes to biology and criminal aggression, most books blame all of an offender's actions on "society." This book is therefore a breath of fresh air with 14 chapters reviewing the effects of testosterone, serotonin, alcohol, cerebral lateralization, traumatic brain injury, biochemistry, and diet on antisocial behavior. Other chapters consider measurement issues from neuroimaging and psychometric perspectives as well as the assessment of moods in cases of suicide and in chronically aggressive psychiatric inpatients. Finally, 3 chapters consider the role of psychopharmacology in controlling aggression.

The first chapter by John Archer, on the role of testosterone, is one of the best, perhaps because so many studies have demonstrated the role of testosterone in crime that some definitive statements are now possible. For example, testosterone differentiates men from women and distinguishes younger men from older men and from children, thus paralleling the well-known age and sex distributions in aggressive behavior. Young men with more testosterone, measured from blood or saliva, engage in more problem behavior than those with less testosterone. This relationship has been found in some impressive samples including one large-scale ($N = 4,462$) study of U.S. military veterans.

Another good chapter by Mills and Raine reviews 20 brain imaging studies using computerized tomography (CT), magnetic resonance imaging (MRI), regional cerebral flow (rCBF), and positron emission tomography (PET) techniques. The frontal lobes seem to be central to violent offending, as has been hypothesized for decades. Most of the studies were done on subjects who had been incarcer-

ated for a variety of serious offenses including murder.

Also supporting the role of the frontal lobes in self-control are studies reviewed by Laurence Miller. Traumatic brain injury, which accounts for an estimated 400,000 new hospital admissions per year, with approximately 1 million people suffering from the effects of brain injury at any given time, often leads to antisocial outbursts. Interestingly, head injuries that lead to outbursts typically do so in people who are already predisposed to impulsivity and violence.

Unfortunately, all of the authors are too circumspect about the role of genes in determining the psychobiological predictors of crime that they highlight in their chapters. The editors open with the encountered remark that "if you'd been in stir for a long time, your brain would look pretty peculiar too," implying that brain anomalies result from, instead of being antecedent to, incarceration. In regard to testosterone, Archer shows bidirectional causality by reviewing Kemper's work exploring the effect of winning or losing social encounters on testosterone levels and Meikl's twin studies demonstrating the heritability of testosterone.

There is little question that genes play a significant role in disposing to crime. Adrian Raine's 1993 book *The Psychopathology of Crime*, which is mentioned only in passing in Raine's work in the present volume, reviewed 13 twin studies using 202 monozygotic (MZ) and 345 dizygotic (DZ) twins. In every study, concordance was found to be higher for MZ twins than for DZ twins, giving mean values of 52 percent and 21 percent respectively. Corroborating the twins data is the evidence from adoption studies, where biological parents contribute heredity and adoptive parents contribute environment; the results show clear evidence of heritability.

Although there is no "magic bullet" to prevent aggressive behavior, and better designed, double-blind placebo controlled studies are clearly required to determine effectiveness, dozens of studies have shown the value of psychopharmacologic treatment. Karper, Bennett, Erdos, and Krystal of the Yale University School of Medicine review the use of antipsychotic drugs, lithium, benzodiazepines, and beta-blockers for treating psychiatric manifestations. For example, the benzodiazepines have replaced other sedatives such as the barbiturates and meprobamate as the first choice for the treatment of agitation. Thus, lorazepam can be injected intramuscularly in uncooperative patients in the emergency setting.

Overall, the editors have accomplished what they set out to do, to provide a comprehensive sourcebook for the increasing dialogue between psychobiologists, neuropsychiatrists, and those who are interested in a full understanding of the dynamics and control of criminal aggression. Unfortunately, as in so many edited books, the chapters stand in isolation from each other and neither a name nor a subject index is available to allow cross-referencing. Nevertheless, the book assembles important contributions that should prove useful to researchers.

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Young Victims, Young Offenders: Current Issues in Policy and Treatment. By Nathaniel J. Pallone (Ed.). (New York, NY: The Haworth Press, 1994. Pp. 237)

In the midst of America's frenzied discussions about juvenile violence and a concern that adolescents are increasingly involved in gun-related violence, both as offenders and as victims (J. C. Howell, 1995, *Guide for Implementing the Comprehensive Strategy for Serious, Violent, and Chronic Juvenile Offenders*; H. Snyder and M. Sickmund, 1995, *Juvenile Offenders and Victims: A National Report*), Nathaniel Pallone's edited book *Young Victims, Young Offenders: Current Issues in Policy and Treatment* seems oddly out of touch. Pallone's introductory chapter challenges much of the violence rhetoric by emphasizing the extent to which juveniles are involved in property offenses and their rela-

tively infrequent involvement in person offenses compared to adults. The data are interesting, but Pallone seems to be unaware of the significance of the challenges that he presents: (a) that academic scholars and government have invested little in learning about youths as victims, compared to the knowledge that has been accumulated about juvenile offenders, (b) that we know a lot about treating juvenile victims of crime, (c) that we know a lot about treating ordinary juvenile offenders, (d) that juvenile diversion can work, and (e) that institutional placements do not increase the likelihood of future delinquency. All of this information is presented in a policy void, and the overall tone of the book is flat when it should be forceful.

Although the first chapter claims to be an overview of the book as a whole, it fails to address the topics contained in the chapters that follow and provides no information on the design of the book. The authors, Pallone and Workowski, instead begin by integrating data on juvenile offenses from the FBI's *Crime in the United States* and the *Sourcebook of Criminal Justice Statistics 1991*. Their point is that these sources of official data demonstrate that juveniles are underrepresented in crime statistics. One can immediately see a flaw in their analysis. They compare rates of offending for all persons 17 and under with those for persons 18 and older. Because delinquent offending escalates rapidly after the age of 11 or 12, and a significant portion of young people are under 12 years of age, this comparison would have been more useful if younger children had been excluded. The same can be argued for persons beyond middle age. The authors' point that data on juvenile victims are rare is persuasive, however, as is their finding that the likelihood of a juvenile being the victim of homicide is low relative to that for adults. Pallone and Workowski conclude that juveniles, by and large, commit and are victims of minor offenses.

The second and third chapters of *Young Victims, Young Offenders* deal with legal responses to child abuse. Small and Wanke summarize state legislation and emphasize the need for a federal initiative to shape a child protection agenda. Kalichman, Brosig, and Kalichman provide a critique of child abuse reporting laws and their implementation and emphasize the need for professionals to focus on prevention of child abuse.

Chapters 4 through 9 address different aspects of sexual abuse committed by or